Volume III
Response to Comments
Certified Final
PROGRAM ENVIRONMENTAL IMPACT REPORT
For the Plan Santa Barbara General Plan Update

SCH # 2009011031

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September 2010
RESPONSE TO COMMENTS ON DRAFT EIR

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INTRODUCTION

RESPONSE TO COMMENTS ON DRAFT EIR

Copies of all written comments received during the public review period, as well as summaries of the April 28-29, May 6, and June 3, 2010 Planning Commission hearings on the Draft EIR held during the public review period, are provided in this section.

Responses to these comments have been prepared to address the environmental concerns raised by the commenter and to indicate where and how the EIR addresses relevant environmental issues. Responses to comments are keyed to the written comment using an abbreviation for the commenting agency or individual. Comments specifically addressing the City’s General Plan Update have been identified “(Plan SB GPU).”
May 17, 2010

Ms. Barbara Shelton
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93102

Subject: Draft Program Environmental Impact Report for the Plan Santa Barbara General Plan Update SCH #200901103181011147

Dear Ms. Shelton:

The Department of Fish and Game (Department) reviewed the Draft Program Environmental Impact Report (DPEIR) for the Plan Santa Barbara General Plan Update (Plan) relative to impacts to biological resources.

The Plan update components include an updated Land Use and Growth Management Element and Land Use Map, an updated Housing Element, and additional policy updates for other General Plan Elements. An Adaptive Management Program (AMP) is also proposed to provide monitoring of policy implementation and effectiveness. Under the proposed policies, additional growth projected to occur over the next two decades would include up to an estimated 2,795 additional residential units and a limitation of no more than 2.0 million square feet of non-residential growth. The DPEIR also evaluates full build-out of the proposed Plan over the next 40 or more years, which could include commercial/institutional growth of up to three million square feet and residential growth of up to 4,260 units over this planning horizon.

Implementation of the plan update has the potential to affect 27 special status plant species and 30 special status wildlife species within the city limits and sphere of influence. Proposed mitigation includes policies addressing upland habitat and species protection; wildlife corridor protection; creek channel restoration; riparian woodland habitat restoration; creek setback standards; coastal habitats and species protection; and urban forest and individual specimen trees protection.

The following statements and comments have been prepared pursuant to the Department’s authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Guidelines §15386(a)) and pursuant to our authority as a Responsible Agency (CEQA Guidelines §15381) over those aspects of the proposed project that come under the purview of the Fish and Game Code Section 1630 et seq. As trustee for the State’s fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species.

California Wildlife Action Plan

The California Wildlife Action Plan, a recent Department guidance document, identified the following stressors affecting wildlife and habitats within the project area: 1) growth and development; 2) intensive agriculture; 3) Excessive livestock grazing; 4) water management.
conflicts and degradation of aquatic ecosystems; 5) Recreational pressures; and 6) Invasive species. Recommended actions which address these stressors include:

- Coordination between wildlife agencies and land use planning agencies;
- Coordination between local agencies and private landowners and land managers to implement agricultural land and rangeland management practices compatible with wildlife and habitat conservation;
- Protection of large, unfragmented habitat areas, wildlife corridors, and underprotected ecological community types;
- Protection of sensitive species and important wildlife habitat on public agency lands;
- Restoration of fish passage in aquatic systems important for anadromous and wide-ranging fish populations;
- Providing and/or protecting adequate water for wildlife instream uses; and
- Eradicating or controlling existing occurrences of invasive species and preventing new introductions.

The Department recommends utilizing these policies in the community planning effort, and looks forward to working with the City to minimize impacts to fish and wildlife resources for individual development projects, pursuant to the updated plan, as they arise.

**Biological Resources Setting**

In Section 7.1.1- Habitats, the DPEIR states that “habitat acreage was calculated based on the city’s MEA habitats map” and indicates that there are 172.9 acres of California annual non-native grassland and 3.4 acres of native perennial grassland. The DPEIR classifies native perennial grassland as “grasslands with at least 10 percent cover of native grasses such as purple needlegrass (**Nasella pulchra**).” The Department requests clarification as to how these habitats were originally mapped for the city’s MEA habitats map. Please describe what surveys were conducted across the landscape to determine the percent cover of native grasses within the non-native grassland area on the map.

The Department is concerned that future project impact analysis may rely on these mapping classifications, and not conduct the appropriate surveys necessary to determine the percent cover of native grasses if their project falls within the non-native grassland classification. The Department recommends adding language within the PEIR directing a project applicant to adequately survey to determine percent cover of native grasses for a project that falls within the California non-native annual grassland map classification.

Section 7.1.3 defines Special Wildlife Areas as “habitats for wildlife nesting, foraging, congregation, and movement by special status species.” Various riparian corridors are then referenced as well as habitat for “potential southern steelhead rearing, tidewater gobies, and riparian birds.” The Department recommends including California red-legged frog and southwestern pond turtle in this list based on staff observations and knowledge of the drainages listed.

Table 7.2- Special Status Wildlife Species classifies the brown pelican (**Pelecanus occidentalis californicus**) as state endangered and federal endangered. The brown pelican was “delisted” from state listing on June 3, 2009 and “delisted” from federal listing on December 17, 2009.
Ms. Barbara Shelton
May 17, 2010
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Table 7.2- Special Status Wildlife Species indicates the potential for occurrence of California
red-legged frog in the San Marcos foothills. The DPEIR does not indicate if surveys were
performed to determine the distribution of red-legged frog within the city limits. There is a
potential for red-legged frog to occur in other drainages within city limits that contain the
preferred habitat of “emergent riparian vegetation and still or slow-moving freshwater areas.”

Table 7.2- Special Status Wildlife Species indicates the potential for occurrence of southwestern
pond turtle in Lauro reservoir, lower Mission Creek, Goleta Slough, Sycamore Creek, and
Laguna Creek. The DPEIR does not indicate if surveys were performed to determine the
distribution of southwestern pond turtle within the city limits. There is a potential for
southwestern pond turtle to occur in other drainages within city limits that contain the preferred
habitat of “freshwater riparian areas with slow-moving water, wetlands.”

On page 7-15, the DPEIR includes a table of Relevant Plans and Regulations and lists “State
Fish and Game Code Section 1600 requires obtaining agreements from CDFG for disturbance
to riparian areas.” This should be revised as the code regulates more than just riparian areas.
Section 1600 of the Fish and Game Code also regulates alteration to the “bed, bank, and
channel” of streams.

Impacts to Biological Resources

Impact BIO 1.3 Grasslands
This section states “the estimated 197 acres of annual non-native and perennial native
grasslands within the city...” The Biological Resources section of the DPEIR listed 172.9 acres
of annual non-native grassland and 5.4 acres perennial native grassland, which would total
178.3 acres. The Department requests clarification on whether the city contains a combined
197 acres or 178.3 acres of grassland habitat. As previously stated, the Department requests
that the DPEIR state how these grassland classifications were quantified. Please describe what
surveys were performed to determine that less than 10 percent of native grassland species
occur within the entire 172.9 acres of annual non-native grassland.

Cumulative Impacts to Biological Resources

Creek and Riparian Habitats and Species
This section describes the potential for cumulative impacts to riparian woodlands and creek
corridors and the species they support, as a result of various future potential developments.
The Department requests this section include flood control measures in the list of potential
development. Past flood control measures within the city have included channelization (with
concrete) of various drainages which substantially decreases their habitat value and function.

Mitigation Measures

MM BIO-1 Upland Habitat and Species Protection
The proposed language in 1.b Wildlife Corridor Protection is to “foster urban wildlife linkages
and corridors by preserving existing trees within identified wildlife corridors, planting new trees,
and using appropriate native landscaping in new development within or adjacent to important
upland wildlife corridors and all streams.” This measure focuses on trees as a component of
corridors, however this may only provide for movement of certain species, such as birds. The
Department requests this policy also focus on minimizing disturbance to other key components
of a wildlife corridor including understore vegetation, soils, and any aquatic habitats that are
present below the trees in order to provide for movement of all species.
Ms. Barbara Shelton  
May 17, 2010  
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MM BIO-2 Creeks, Riparian Habitat, and Species Protection
Policy 2.a- Creek Channel Restoration Policy and Program would “set a goal to restore or daylight a total of at least 0.5 miles of surface water drainages over the life of Plan Santa Barbara.” This policy would improve stream function, habitat for a variety of species, and provide for wildlife movement through improved corridors. The Department recommends the city explore opportunities to increase the number of miles to be restored over the proposed 30 year life of the plan.

Policy 2.c- Creek Setback Development Policies would be updated to include “a creek setback of greater than 25 feet from the top of bank shall be established for new structures and hard surfaces adjacent to creeks and wetlands.” This policy is also cross-referenced in the Hydrology and Water Quality section on Flood Hazard Mitigation (RM-HYDRO-1) which recommends a 50 foot setback for new development adjacent to creeks with natural creek banks and a reduction to a 25 foot setback for development where “hard bank” protection is present. The Department is concerned that these policies may lead toward installation of hard bank protection measures in order for development to encroach to within 25 feet of a creek. This would result in degradation of aquatic habitat and corridor function.

RM HYDRO-1 Flood Hazards
This measure describes creek bank protection and recommends “non-intrusive bank stabilization methods such as bio-engineering techniques such as earth-filled gabions planted with native vegetation.” The Department discourages the use of gabions within streams containing anadromous species, such as southern steelhead. Gabions are prone to rust, scour, and subsequent failure, which can result in protruding metal wire that is harmful to wildlife. The Department recommends utilizing bio-engineering techniques and many recommended prescriptions can be found in the latest edition of the California Salmonid Stream Habitat Restoration Manual found online at: www.dfg.ca.gov/fish/REsources/HabitatManual.asp.

Thank you for this opportunity to provide comment. Questions regarding this letter and further coordination on these issues should be directed to Mr. Sean Carlson, Staff Environmental Scientist, at (909) 586-8120.

Sincerely,

[Signature]
Edmund Peri
Regional Manager
South Coast Region

cc:  Ms. Helen Biss, CDFG, Santa Barbara  
Ms. Betty Courtney, CDFG, Santa Clarita  
Ms. Natasha Lohmus, CDFG, Santa Clarita  
Mr. Sean Carlson, CDFG, La Verne  
Mr. Scott Morgan, State Clearinghouse, Sacramento
Response to Agency Letter # A1, California Department of Fish and Game (May 17, 2010)

A1-1: Comment noted. The EIR notes the State Department of Fish and Game’s role as a Trustee Agency for biological resources.

A1-2: Comment noted. Both the draft Santa Barbara General Plan Update policies and the required and recommended EIR mitigation measures include measures to improve coordination of habitat and wildlife protection, conserve important large unfragmented habitats and protect associated wildlife, protect aquatic systems, and restore degraded areas.

A1-3: Comment noted. The City Master Environmental Assessment (MEA) maps were compiled based on review of all available existing studies, aerial photo interpretation, input from local biologists, and limited field verification. Existing, ongoing City procedures for evaluation of individual development proposals use the MEA maps as an initial tool together with site visits and other available information to determine the need for site-specific biological surveys as part of CEQA review. Pre-development habitat surveys are conducted as needed prior to development of undisturbed habitats. In addition, MM BIO-1 (Upland Habitat and Species Protection, EIR section 7.8) requires protection of non-native grasslands larger than five acres and native grasslands of 0.025 acres or larger. However, this measure has been amended to add: Habitat surveys of such larger contiguous habitats shall be conducted as necessary prior to consideration of development or disturbance of such habitats.

A1-4: Comment noted. Table 7.2 (EIR section 7.1.2) already lists both the California red-legged frog and southwestern pond turtle and notes potential occurrences.

A1-5: Comment noted. Table 7.2 (EIR section 7.1.2) has been revised to note the status of the California Brown Pelican and the potential for more widespread occurrence of the California red-legged frog and southwestern pond turtle.

A1-6: Comment noted. Please see revised text in EIR section 7.2 in response.

A1-7: Comment noted. The figure in the text for estimated grassland acreage within the City is correct, when taking into account those small areas of grassland that occur in creeks and wetlands, and in the coastal zone. The grassland acreages that the DFG refers to in Section 7.1.1.1 are limited to only those in upland habitats. Please refer to response A1-3 regarding information used in habitat mapping. Annual grasslands on the South Coast of Santa Barbara County are typically dominated by non-native species, with the notable exception of the Ellwood Mesa, San Marcos Foothills, portions of Gaviota State Park, and smaller areas such as the porreros along Arroyo Burro Creek (refer to Figure 7.1).

A1-8: Comment noted. Existing City policy strongly discourages channelization of creeks and draft Santa Barbara General Plan Policies ER16–Creek Resources and Water Quality (previously numbered ER24-28 during DEIR) and ER18-Creek Setbacks and Restoration (previously ER27) further promote protection and restoration of creeks. In addition, MM BIO-2 (Creek, Riparian Habitat and Species Protection) in the EIR sets forth required measures regarding creek protection and channelization. However, the potential for flood control efforts to affect creek habitats has been noted; please see revised text in EIR section 7.5.

A1-9: Comment noted. Please see revised text in MM BIO-1.b (Wildlife Corridor Protection Policy) in EIR section 7.8.
# A1, California Department of Fish and Game (Continued)

**A1-10:** Comment noted. However, proposed mitigation measure BIO-2 (Creeks, Riparian Habitats and Species Protection) is worded as a goal with 0.5 miles as a minimum. The City may go beyond this level of effort. The measures also need to consider feasibility, given the costs and difficulty of restoring urban area creeks; a goal of 0.5 miles appears to constitute a feasible minimum goal.

**A1-11:** Comment noted. Please see response A1-8 above.

**A1-12:** Comment noted. Please see revised text in EIR section 11.9, RM HYDRO-1 (Flood Hazards) with expanded examples of bioengineering methods.
May 5, 2010

Mr. John Ledbetter, Planner
City of Santa Barbara
P.O. Box 1990
Santa Barbara CA 93102

RE: Comment Period City’s Draft General Plan Update and DEIR

Dear Mr. Ledbetter:

We appreciate the opportunity to review and comment on the City’s Draft General Plan Update and DEIR. While we commend those involved in this effort for the work that has been accomplished to-date, we have a number of comments and concerns with these documents. California State Parks, as landowner, the Santa Barbara Trust for Historic Preservation as the longtime local operator and both as joint stewards of El Presidio de Santa Barbara State Historic Park (El Presidio) submit the following comments.

DRAFT GENERAL PLAN

Application of current MODA principles within El Pueblo Viejo – While infill is a proven method for creating sustainable downtowns with strong pedestrian circulation, respect and protection for the City’s unique downtown historic core should be paramount. The area radiating from the four city blocks central to El Presidio and the values of this core area deserve more than a simple evaluation of neighborhood character and design when considering new projects. The Plan currently states, “The design challenge is to integrate the MODA principles into each project in such a way that the character of El Pueblo Viejo is not compromised” (p. 60).

We propose something firmer in its commitment to the preservation of El Presidio, the 228 year-old birthplace of the City, and to the surrounding historic downtown core. While this commitment appears intrinsic to our City’s policies for nearly a century, the revised General Plan must contain a solid affirmation that transcends politics and trends in order to continue the preservation of the City’s heritage and historic roots.
Clear policy statements must be included in the General Plan’s Land Use and Housing Elements to ensure protection of the historic downtown core of El Pueblo Viejo. This is not about making the downtown core “fit” with the MODA principles; rather it is about preserving the historic core from the application of MODA principles. While we encourage and support the timely development and adoption of an Historic Resource Element, absent this key document and its guidance, it is imperative that policy statements to effect and ensure a high level of protection be adopted within the current General Plan Update. The City has a responsibility, to the current and future residents of our City, to ensure protection and preservation of this area, its “sense of place” and the history that has occurred in these spaces. Our heritage should not be placed in “balance” or weighed against anything but time and its preservation.

The policy statements should require the delineation of the historic downtown core and its designation as a non-MODA preservation zone. It is paramount that until such time as a public process can be convened to study and determine the appropriate boundaries, the areas surrounding the downtown historic core area resources be protected from the application of MODA principles. We recommend the area inclusive of and surrounding El Presidio with a full one-block buffer be used as an interim non-MODA preservation zone.

**Land Use Designations** - On page 62 of the Draft Land Use Element we find the statement that “The Parks land use designation on the Draft General Plan Land Use Map includes public parks as well as two large privately owned recreation facilities.” At the core of El Pueblo Viejo is El Presidio de Santa Barbara State Historic Park. This unit of the State Park System recognizes activities at the heart of the City’s beginning in 1782 up and through the 1940’s. El Cuartel, the oldest building in the City is within the unit. The properties that define El Presidio have been designated by the State Parks Commission as an historic park. It is reasonable and appropriate for the designation of “park” to be applied by the City in its Land Use Map and the properties within it reserved as such.

**Neighborhoods** - At a minimum the presence of El Presidio within a designated neighborhood and its contributing values should be noted. We strongly recommend the development of a policy statement be included in the revised General Plan that directs the definition of a historic downtown core within El Pueblo Viejo. We recommend that this core be added as a unique and standalone neighborhood. In this way, its importance and the appropriate application of policy and guideline interpretation would occur without question or compromise.
Housing Element – Parcels, identified within the Park Unit’s General Plan that was supported by the City Council in February of 1984 by virtue of the Memorandum of Understanding signed by then Mayor, Shelia Lodge, should not be considered for housing or development. The proposed housing bubbles should be removed from lots owned by the State of California that are a part of El Presidio. This includes properties that are currently in use by tenants. The attached Land Ownership Record provides a listing of all parcels in ownership by the State that are considered part of the park unit. We are also providing an aerial map which delineates the same parcels. We respectfully request that the correction be made to the Housing Element narrative and all appropriate General Plan maps.

DRAFT ENVIRONMENTAL IMPACT REPORT

Relevant Plans and Regulations – Include PRC 5024 compliance for properties within El Presidio.

The DEIR casually states,

The City has 89 structures designated as City Landmarks and 120 designated as Structures of Merit, along with 549 other potentially historic structures and sites. Most of these heritage resources are located within the MODA and contribute to the City character and appeal as a historical small city. Continued new development within the MODA, with some new development potentially located within the Brinkerhoff Avenue and El Pueblo Viejo districts, could continue the potential that some historic buildings and structures could be altered, relocated, or removed.

We do not believe that the proposed mitigation measures coupled with current or proposed City policies and regulatory requirements reduce the risk or threat of significant impact to a Level Two. Without the inclusion of policies that designate and protect the historic downtown core of El Pueblo Viejo and the reduction or elimination of MODA principles from this area, we believe impacts will be significant. We, as a community—a city, can never recapture what was. We can certainly protect and preserve the historic resources we have today. The values and the sense of place that our historic downtown core brings are essential to the fabric and patterns that make Santa Barbara the City that it is.
Mr. John Ledbetter
May 5, 2010
Page 4

Merely matching period, style, size, stories or bulk will not protect and preserve what we as a community value in our historic downtown core. Proposed language such as, “Provides guidelines for development within the El Pueblo Viejo Landmark District to ensure continuation and enhancement of City’s Hispanic architectural tradition,” will not keep projects from having a significant impact on historic resources.

While the statements cited above appear to be inconsistent with the spirit of the mitigation measure below, we support inclusion of Mitigation Measure HER 1.b. and suggest strengthening it to read:

**Modified Density and Design Policies for Landmark and Historic Districts.** Identify existing and potential Landmark and Historic districts (or sub-areas within such districts) including creation of a historic downtown core within El Pueblo Viejo and buffer areas, to be exempted from MODA density policies or to be subject to more stringent density and design controls to provide added protection for historic resources.

**Maps** – Please correct all appropriate maps to show the full extent of the State Park per the provided attached ownership record.

**CLOSING REMARKS**

The City’s historic downtown core, of which El Presidio de Santa Barbara State Historic Park is a part, serves as a destination for many local, out-of-state and out-of-country day and overnight visitors. Visitors can park and easily walk, as did those before them, from the Presidio to the El Paseo Complex, the De La Guerra Plaza on down to State Street to the Arlington or the Granada stopping along the way for lunch or for some shopping. An evening event in El Presidio Chapel or other downtown venue brings hundreds to dine, to walk, to be entertained. Clearly, the historic downtown core is a contributing factor to the City’s reputation as the “American Rivera” and to the millions of dollars generated in the City annually from tourism.

Making the City affordable and walk-able for residents should not be at the expense of the resources that have taught us about our City’s history and that will be teaching and reflecting the times gone by to our grandchildren’s children.

In closing, California State Parks and the Santa Barbara Trust for Historic Preservation have made a commitment to implement and move forward with the El Presidio de Santa Barbara General Plan. Millions of dollars in Park-designated state bond funds
have gone into the acquisition of parcels identified as critical for protecting, preserving
and telling the story of early California and how it unfolded in the City of Santa
Barbara. By having this resource within its historic downtown core the City has a clear
focus around which to protect and celebrate its heritage. This is the time and there is a
clear opportunity to commit to the path of Pearl Chase and others who have cherished
the City. We urge you to modify the Draft General Plan and DEIR in ways to embrace,
preserve and protect the historic downtown core of El Pueblo Viejo.

We are available to work with staff and others to make the needed revisions to these
documents.

Sincerely,

[Signatures]

Richard Rozzelle
District Superintendent
California State Parks

Dr. Jarrell C. Jackman
Executive Director
Santa Barbara Trust for Historic Preservation

Attachments:
Land Ownership Map (2 pages)
Land Ownership Aerial (1 page)
Listing of Historic Resources - Designation Status
Inventory of California State Park and Santa Barbara Trust for Historic Preservation Properties

cc. Santa Barbara City Planning Commissioners
Response to Agency Letter # A2, California State Parks/Santa Barbara Trust for Historic Preservation (May 5, 2010)

A2-1 (Plan SB GPU): Thank you for your comments. The City appreciates the concerns of California State Parks and the Santa Barbara Trust for Historic Preservation regarding the need for protection of El Presidio State Historic Park, El Pueblo Viejo, and associated historic resources. Existing historic protection policies of the City within the Charter, General Plan Conservation Element, Ordinances, and Guidelines and the project permitting, design review, and environmental review processes will continue. Nothing in the draft Santa Barbara General Plan Update (GPU) or the EIR suggest or direct that the City retreat from its longstanding commitment to protect historic resources. Rather, the City is seeking with the GPU to refine and strengthen its approach to historic resource preservation while accommodating compatible in-fill development, as embodied in land use sustainability principles. This approach is consistent with State mandates such as those contained in SB 375 to diversify mobility options, strive for a balance between jobs and housing, and thereby reduce commuting, energy demand, generation of greenhouse gases (GHGs), and associated contributions to global climate change.

The draft Santa Barbara General Plan and the EIR provide substantial background on and analysis of the importance of the City’s historic resources, particularly those in El Pueblo Viejo, as well as multiple policies to protect these resources. For example, Land Use Element Policy LG13-Community Character (previously numbered CH8-10, CH 14 during DEIR) requires that size, bulk, and scale standards be strengthened to “ensure compatibility with surrounding uses, particularly historic resources...” while Policy LG14-Historic Structures (previously CH10) specifically requires protection of “historic structures through building height limits and other development standards in Downtown.” Historic Resources Element Policy HR3 (Development Adjoining Designated Historic Structures) requires that “developments on parcels adjoining designated historical structures be designed, sited and scaled to be compatible with their historic neighbor and public enjoyment of the historic site.”

The City believes that careful implementation of land use sustainability principles, in concert with the historic resource protection policies outlined above and the City’s existing comprehensive design review process and historic resource protection standards can result in an appropriate balance between new sustainable development and conservation of historic resources. The City is committed to working with California State Parks and the Trust and other community groups to identify and implement an appropriate balance between these issues. However, it is premature at this time to identify the historic Downtown core and the block surrounding El Presidio as a complete “non-MODA zone.” Rather, existing and proposed standards would be vigorously applied to ensure protection of historic resources in this area pending development of a full Historic Resources Element and other policy implementation measures. In addition, please see proposed additions to LG14 regarding buffers around historic structures, and to Historic Resources Element policy HR5 regarding establishment of historic districts.

A2-2 (Plan SB GPU): Comment noted. The Land Use Map in the Land Use Element of the draft Santa Barbara General Plan Update depicts El Presidio as a park. See also text additions to the Land Use Element Downtown Neighborhood Description.

A2-3 (Plan SB GPU): Comment noted. The presence of El Presidio de Santa Barbara State Historic Park within the Downtown, its management and importance are described in the Downtown Neighborhood Description in the Land Use Element of the draft Santa Barbara General Plan Update. Discussion of El Presidio and associated historic structures is included in section 10.1.3 of the DEIR with a photograph of the
# A2, California State Parks/Santa Barbara Trust for Historic Preservation (Continued)

Presidio on page 10-1. Although the size and population of El Presidio de Santa Barbara State Historic Park do not support its identification as a separate stand-alone neighborhood, additional language has been added to Section 10 of the EIR describing the importance of this park which is now also depicted on Figure 10.1 of the EIR.

A2-4 (Plan SB GPU): Comment noted. The Land Use map in the Land Use Element of the draft Santa Barbara General Plan Update has been updated to more accurately reflect the boundaries of El Presidio de Santa Barbara State Historic Park. At the State’s request, the “bubbles” depicting potentially developable sites located on State owned property in El Presidio have been removed from the Housing Element Inventory sites map in Appendix F.

A2-5: Comment noted. Please see the revised Relevant Plans and Regulations discussion in the EIR section 10.2.

A2-6: Comment noted. The EIR provides detailed discussion of the City’s historic and design districts and describes potential impacts of new development within El Pueblo Viejo. The EIR analysis accounts for policies LG13, LG14, and HR3 and HR5, which require protection of historic buildings/districts, and provides two additional mitigation measures to further reduce potential impacts to these resources: MM HER-1a (Construction Adjacent to Historic Structures) and -1b (Protection of Landmark and Historic Districts). The letter recommends changes to MM HER-1b, but does not provide facts or analysis as to why such impacts would remain significant after application of proposed General Plan policies and required EIR mitigation measures.

Existing City policies, ordinances, and development review procedures provide for a high level of review of proposed development with the El Pueblo Viejo Design District. The policies within the draft Santa Barbara General Plan Update and the EIR mitigation measures would further strengthen such protections. These measures and those proposed to reduce the density and impact of new structures with the most historic areas of the City and adjacent to landmarks and other historic buildings would ensure that affects of new development would be fully mitigated. The City would coordinate with California State Parks and the Trust to ensure that their concerns are considered during any upcoming implementing ordinance changes and review of future development projects. In addition, please see refinements to the draft Land Use Element and Historic Resources policies to further address buffering of historic resources, and establishment of historic districts.

A2-7: Comment noted. EIR Figures 3.2 (draft Land Use map), 10.1 (Historic Districts), and 14.1 (Public Services) have been updated to reflect the location and extent of El Presidio State Historic Park.

A2-8 (Plan SB GPU): Thank you for your comments. The City recognizes the high cultural and economic value of the historic nature of its Downtown Core. Existing and proposed City plans and policies recognize and protect the value of the City’s historic resources, especially those within the Downtown core. The City looks forward to working with California State Parks, the Trust and interested citizens to balance protection of these with reasonable levels of infill development needed to meet City needs, State Housing Element mandates, and assist in meeting the State goals of SB 375 and AB 32.
AGENCY LETTER # A3

May 13, 2010

Mr. John Ledbetter, Planner
City of Santa Barbara
P.O. Box 1990
Santa Barbara CA 93102

RE: City’s Draft General Plan Update and DEIR

Dear Mr. Ledbetter:

This letter is meant as a follow-up to the Planning Commission’s discussion and interaction with City staff at the Commission’s meeting of May 6, 2010. As several Commissioners noted the “Plan Santa Barbara – Key Decision Options” matrix provided by staff for the Commission to use as a tool in their discussion fell short in recognizing historic resources/heritage impacts.

We offer the following considerations for use by the Planning Commissioners and City staff as they continue their deliberations and for the upcoming workshop with the City Council.

EL PUEBLO VIEJO IS INTEGRAL TO THE CITY’S SENSE OF PLACE
To begin, on September 24, 1959 the City-Council adopted Resolution 3902 which designated the area known as El Pueblo Viejo. The text of that Resolution states,

...the charm and beauty of Santa Barbara is the outgrowth of its historic background ... the preservation of this intangible but precious heritage is possible only by common recognition and community effort to protect and preserve the natural and historic charm and beauty of the City of Santa Barbara.

Ordinance 2758 followed ensuring conduct by the City in its governance of the El Pueblo Viejo area by providing ...
... conditions and regulations for the protection, enhancement and perpetuation of adobe buildings and other structures and places in the City of Santa Barbara which have special historical and/or aesthetic interest or value, and to provide for the appearance of structures on neighboring property within public view.

No present existing building of adobe structure or of special historic or aesthetic interest or value situated within the area hereinbefore designated as “EL PUEBLO VIEJO,” or fronting upon any of the streets bounding said area, shall be torn down, demolished or otherwise destroyed.

THE BUILT ENVIRONMENT AND HISTORIC PRESERVATION:
PREVENTING THE SHADOW FAN/SHADOW TRACE EFFECT ON HISTORIC BUILDINGS & SITES

Buildings exist in micro-climates that have been created over time by the built and natural landscapes that surround them. Like a plant or instrument, a structure adjusts and adapts to its neighborhood and its location, the space it occupies. When the micro-climate conditions change due to a change in the surrounding – say a new development, it causes a change in the micro-climate causing changes to the fabric of the building. Simply put, “It is introducing a new element into an environment that has existed in equilibrium for a very long time.” Unintended harm can befall an historic building. We know from the stewardship of many different types of historic buildings that this is true.

The concerns for historic resources within the City and for the preservation of El Pueblo Viejo and the downtown historic core must embrace design and the current design guidelines for new development that consider micro-climate. Implementation of a policy limiting the size, bulk and height of new construction to that which would not create a Shadow Fan/Shadow Trace, the maximum extent of all project-related shadows from one hour after sunrise to one hour before sunset for an entire year, over any historic resource or open public space within El Pueblo Viejo would afford significant protection to the character and sense of place while ensuring protection of the micro-climates in which these buildings currently exist. At a minimum we strongly recommend that such a policy be adopted for the footprint and a one block buffer around El Presidio de Santa Barbara. Similar action has been taken in the City of San Francisco to protect outdoor public spaces and parks.
ADDITIONAL ANALYSIS OF THE HOUSING ELEMENT MAP
IN RELATION TO HISTORIC RESOURCES
Absent a clear understanding of the actual location of all listed and eligible for listing historic resources in El Pueblo Viejo, it is difficult for the Public, Planning Commissioners and the City Council to actually envision and understand the proposed housing and land use proposals contained in the General Plan and DEIR documents. We strongly recommend that City staff prepare for the current review and deliberation process and for inclusion into the General Plan and Final EIR, a GIS generated map of the listed and eligible for listing historic resources. We further recommend that those structures in the downtown historic core that are contiguous to El Presidio de Santa Barbara SHP and its buffer, receive a unique designation on the map. The City’s “Guidelines for Archaeological Resources and Historic Structures and Sites/ Master Environmental Assessment,” 2002 with updates, is a ready source of this data.

This effort must lead to the comparison of the proposed Housing “bubble” map with the newly generated historic resources map.

CLOSING REMARKS
The matrix with the boxes identifying planning and development options needs to be placed in the context of protection of historic resources. We believe that absent a Historic Resources Element the General Plan will not adequately address potential threats to the unique historical and architectural character for which Santa Barbara is well known and unique.

We stand by the recommendation made in our letter dated May 5, 2010 and the recommended revision to the proposed Mitigation Measure HER 1.b.:

Modified Density and Design Policies for Landmark and Historic Districts. Identify existing and potential Landmark and Historic districts (or sub-areas within such districts) including creation of a historic downtown core within El Pueblo Viejo and buffer areas, to be exempted from MODA density policies to provide added protection for historic resources.
Mr. John Ledbetter  
May 13, 2010  
Page 4

At this time, we suggest that the Commission exclude from the application of MODA the area that includes all listed and eligible properties that are contiguous to El Presidio de Santa Barbara SHP and its buffer.

We further recommend the inclusion of a policy statement in the General Plan or, at a minimum as a mitigation measure in the final EIR that directs the development of a Shadow Fan/Shadow Trace Ordinance for the protection of all listed and eligible for listing historic structures.

It has been presented that sustainability is the focus of Plan Santa Barbara. Historic resources can be a valuable contributor to sustainability. At the Planning Commission’s meeting of May 6th, Commissioner Lodge expressed the opinion that over the next twenty years the City should expect that areas of existing development are more likely to be “re-developed.” With historic structures we often see buildings saved and exteriors restored because of new commercial uses. This supports the sustainability goal, while ensuring the protection and continued vitality of historic resources.

Upon further review of the lists provided with our previous letter we found the need to make some revisions. Attached to this correspondence you will find revised copies of those lists.

We remain available to work with staff and others to make the needed revisions to these documents.

Sincerely,

Richard Rozzelle  
District Superintendent  
California State Parks

Dr. Jarrell C. Jackman  
Executive Director  
Santa Barbara Trust for Historic Preservation

Attachments:
Listing of Historic Resources - Designation Status - Revised  
Inventory of California State Park and Santa Barbara Trust for Historic Preservation Properties - Revised

cc. Santa Barbara City Planning Commissioners
### Listing of Historic Resources - El Presidio de Santa Barbara SHP

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<th>Street No.</th>
<th>Street Name</th>
<th>A.P.N.</th>
<th>Property Description</th>
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<td>9 thru 19</td>
<td>E. De la Guerra St.</td>
<td>037-052-027</td>
<td>Casa de la Guerra</td>
<td>1818-1828</td>
<td>City Landmark, 3/15/1983</td>
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<td>California Register, 5/1/1991</td>
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<td>National Register, 2/2/1977</td>
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<tr>
<td>126</td>
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<td>031-011-003</td>
<td>Jimmy's Oriental Garden</td>
<td>1946</td>
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</table>
### Inventory of DPR and Trust Properties

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<thead>
<tr>
<th>Street No.</th>
<th>Street Name</th>
<th>A.P.N.</th>
<th>DPR Property Description</th>
<th>Facility Use</th>
<th>Tenants/Businesses</th>
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<tr>
<td>900</td>
<td>Anacapa St.</td>
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<td>Anacapa St. Parking Lot</td>
<td>Parking lot</td>
<td>Santa Barbara Bank &amp; Trust</td>
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<td>914-18</td>
<td>Anacapa St.</td>
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<td>320</td>
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<td>Trust</td>
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<td>117</td>
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<td>Canon Perdido St. Parking Lot</td>
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<td>122</td>
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<td>Museum</td>
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<td>123</td>
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<td>Cafiero Adobe and Pache's Quarters</td>
<td>Parking lot</td>
<td>Trust</td>
</tr>
<tr>
<td>133</td>
<td>E. Canon Perdido St.</td>
<td>029-292-023</td>
<td>Chapell, Conmandancia, Northwest Corner</td>
<td>Museum</td>
<td>Trust</td>
</tr>
<tr>
<td>209</td>
<td>E. Canon Perdido St.</td>
<td>029-292-031</td>
<td>Alhacama Complex Bldgs</td>
<td>Commercial/Restaurant</td>
<td>Zaytoon Mediterranean Restaurant Trust</td>
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<tr>
<td>209-A</td>
<td>E. Canon Perdido St.</td>
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<tr>
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<td>E. Canon Perdido St.</td>
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<td>Ensemble Theatre Company Trust</td>
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<td>215-B</td>
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<td>029-292-031</td>
<td>Alhacama Complex Bldgs</td>
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<td>811</td>
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<td>Coastal Graphics (burned 2007)</td>
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<td>Christopher Dentzel, Architect</td>
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<tr>
<td>834</td>
<td>Santa Barbara St.</td>
<td>031-012-001</td>
<td>Moullet House</td>
<td>Commercial/Restaurant</td>
<td>Panino's Deli</td>
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<tr>
<td>830</td>
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<td>S. ½ Castagnola Lot</td>
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<tr>
<td>900</td>
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<td>131</td>
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<td>Residential</td>
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<th>Street No.</th>
<th>Street Name</th>
<th>A.P.N.</th>
<th>Trust Property Description</th>
<th>Facility Use</th>
<th>Notes/Comments</th>
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<td>9 thru 19</td>
<td>E. De la Guerra St.</td>
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<td>Casa de la Guerra</td>
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<td>126</td>
<td>E. Canon Perdido St.</td>
<td>031-011-003</td>
<td>Jimmy's Oriental Garden</td>
<td>Commercial/Rest./Museum</td>
<td>Three Pickles Deli</td>
</tr>
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</table>
A3-1 (Plan SB GPU): Thank you for your comments. The City’s existing plans, policies, and ordinances, as well as those provided in the March 2010 draft Santa Barbara General Plan and new policy language for historic resource buffers all recognize the importance of and provide protection to the historic and aesthetic resources within El Pueblo Viejo. The EIR also addresses this issue and provides impacts analysis and mitigation measures to further protect such resources. Please see text additions to General Plan Land Use and Historic Resource Element policies and to EIR Historic Resources impact and mitigation discussions (EIR sections 10.4 and 10.8).

A3-2: Comment noted. EIR Heritage Resources Impact HER-3 identifies potential impacts to historic structures, including those caused by adjacent construction, as well as change in historic context. No substantial evidence exists in the literature that addresses the effects of a change in micro-climate on historic structures. Changes in micro-climate and associated potential alterations to moisture content in older adobe and potentially wooden buildings from increased shading might theoretically have the possibility of affecting structures, however no substantial evidence has been presented or exists in the literature or consultant team’s experience that such impacts would be considered likely to occur, or that stringent measures beyond those already proposed as part of the draft Santa Barbara General Plan are necessary. Although the potential for impact appears to be low, Impact HER-1 has been modified to address this issue and Mitigation Measure MM HER-1a (Protection of Historic Structures and Buildings) has been amended to include requirements for study and mitigation where appropriate (e.g., older adobe structures). Please see the revised text in EIR sections 10.4 and 10.8.

A3-3 (Plan SB GPU): Comment noted. The EIR notes that the potential exists for the development/redevelopment of some new multiple-story buildings within El Pueblo Viejo including on parcels near to historic structures. At the State’s request, the “bubbles” depicting potentially developable sites located on State owned property in El Presidio have been removed from the Housing Element Inventory sites map in Appendix F. As noted throughout EIR Sections 3 (Project Description) and 4 (EIR Growth and Policy Assumptions), it remains uncertain if, when, or where development could occur under the draft Santa Barbara General Plan and how many of or even if these Housing Element potential opportunity sites would actually be proposed by land owners for redevelopment. This level of analysis is sufficient to disclose potential impacts at a Program EIR level for CEQA purposes.

However, in addressing potential impacts on historic structures, the EIR acknowledges the role of existing policies and proposed Santa Barbara General Plan Update policies in protecting historic structures; and the EIR also identifies mitigation measures addressing construction and density and design policies to further reduce potential impacts.

For planning purposes, the City proposes to further refine its approach to protection of the historic resources of El Presidio and areas of the Downtown core by applying buffers and limiting the potential density and size, bulk, and scale of new structures, through adoption of new form-based codes and floor-to-areas ratios that are more restrictive within these areas. Additional policy language has been added as Land Use Element LG14.5 and Historic Resources Element HR5 to establish buffers around historic resources (also reflected in Mitigation Measure MM HER-1). When combined with existing City policies and review processes and proposed new polices and mitigation measures, these measures would ensure protection of critical historic resources. Please see revised text in GPU Land Use and Historic Resources Elements, and EIR sections 10.4 and 10.8.
# A3, California State Parks/Santa Barbara Trust for Historic Preservation (Continued)

**A3-4 (Plan SB GPU):** Comment noted. The City remains committed to working with California State Parks and the Trust and other interested parties to protect historic resources, while accommodating reasonable amounts of well-designed in-fill development within the Downtown commercial core areas. Additional policy language has been added as Land Use Element LG14.5 and Historic Resources Element HR5 to establish buffers around historic resources (also reflected in Mitigation Measure MM HER-1). The City policies also direct that the City will move forward with adoption of form-based development codes and floor-to-area ratios, a Historic Resources Element, and other tools to ensure that new development respects and protects historic resources and the City’s character. The City would monitor these measures and new development to ensure that they are utilized to provide sufficient protection to resources in and around El Presidio. However, as noted in responses A2-6 and A3-2 above, proposed severe restrictions on new development in the blocks around El Presidio or extraordinary and untested ordinances regarding the shadow fan/shadow trace effect on historic structures appear unwarranted at this time.

The City would utilize the Adaptive Management Plan and mitigation monitoring as tools to review the effectiveness of historic resource protection policies and programs and progress adopting new resource protection tools. If this review indicates that existing and proposed tools require further readjustment or are somehow ineffective, the City would revisit these issues as required to ensure proper protection of historic resources.
May 17, 2010

Barbara Shelton, Environmental Analyst
City of Santa Barbara Planning Division
PO Box 1990
Santa Barbara, CA 93102-1990

Subject: Plan Santa Barbara Update Draft Program Environmental Impact Report

Dear Ms. Shelton:

Thank you for the opportunity to review and comment on the subject Draft Program Environmental Impact Report. The subject project will govern the City’s growth for the next 20 years. The Department recently published Smart Mobility 2010, a framework and vision for transportation that recognizes future mobility challenges and sets the conditions to integrate multiple transportation sustainability strategies. This framework emphasizes travel choices, healthy & livable communities, travel time reliability and safety for all modes and users. The Smart Mobility vision actively supports the goals of social equity, climate change intervention, energy security, and economic sustainability.

In large measure, it appears that Plan Santa Barbara is in the vanguard both in terms of General Plans and of the Smart Mobility vision and framework. The goal and policy of Plan Santa Barbara, “Living within Our Resources” and the depending policies resonates within Smart Mobility that advocates for a sustainable balanced transportation system that meets present needs without compromising the ability of future generations to meet their own needs. Plan Santa Barbara concepts of Mobility Oriented Development Areas (MODA) and Adaptive Management Program (AMP) are both consistent with Smart Mobility 2010 principles and appear to be very compelling and powerful tools. Both concepts have the potential to validate cutting edge planning concepts by measuring a project’s actual, future performance.

The Department offers the following comments:

1. Project Description: Plan Santa Barbara. Once it is institutionalized, for what applications will the Adaptive Management Program (AMP) be used other than trending growth patterns? Caltrans has in the past encouraged jurisdictions to conduct post-development assessments to validate project level planning assumptions that were relied upon to minimize or avoid project impacts. For example, do mixed use development assumptions with respect to choice of uses actually result in the tangible benefits or effects that are posited in the project’s environmental documents and conditions of approval? Particularly with respect to transportation.

2. Project Description: Plan Santa Barbara. How active will the AMP remain in terms of periodic reassessment benchmarks? Will this be based on time period in terms of years, in
terms of percentage build-out relative to residential unit numbers and non-residential square footage, or other quantitative metric?

3. Project Description: Land Use and Housing Elements. Given the acknowledgement that infill and affordable housing are priorities within the context of limited resources and the MODA concept, Caltrans is supportive of density bonus or other strong incentive that rewards non-motorized centric development. We encourage this land use policy both within and outside MODA boundaries.

4. Project Description: Land Use and Additional Policy Directives. Within this discussion, the City indicates the need to work with Santa Barbara City College and UCSB with respect to housing opportunities and economic & employment development, Caltrans strongly encourages the City to exercise leadership with these institutions particularly with respect to developing institutional policies for student transportation restrictions and staff & faculty on-campus housing incentives.

5. Transportation / Circulation. Plan Santa Barbara promotes aggressive objectives that include a 50/50 mode share between SOVs and all other modes by 2020 and a decrease/no increase in traffic congestion beyond that present in 2008. However, the Plan also expresses a forthright discussion that, over time, both the Plan’s effects and regional growth will have an adverse effect upon US 101 and adjacent facilities (ramp nodes, interchanges, city street approaches). The Plan offers specific mitigation measures that, though encouraged, could be very costly. In addition, the Plan places great reliance upon Transportation Demand Management (TDM) tools to minimize effects generally, and parking management specifically. Some TDM measures will take time for results to be realized. Some measures may take much time to implement. Some measures will affect local patterns and others will affect regional trips. The AMP can be used aggressively to determine what is or is not beneficially working. It appears however that very little to no attention is given to Transportation System Management (TSM) strategies. Plan Santa Barbara acknowledges, for instance, that measuring improvement in transit choice, cannot be based on any one component, but that a combination of actions will work together to bring about the ability to obtain a measure of effectiveness. Likewise, it would be prudent to plan for and implement actions based in synchronized TDM and TSM strategies to achieve changes in mode choice, travel patterns, and trip reduction. This remains important since, as previously discussed in correspondence, the Department has no planned capacity increasing projects upon the regional routes in the foreseeable future (other than those south of Milpas, which are acknowledged in Plan Santa Barbara). Travel demand at all levels will require traffic management and optimization, mostly notably through use of comprehensive ITS strategies on the transportation system. TSM and TDM strategies working together may better lead to realization of the stated objectives.

Caltrans encourages the City to include in the Final EIR of Plan Santa Barbara, complementary traffic analyses using the City’s updated traffic model that incorporates assumptions of incremental and comprehensive freeway ramp metering within the Plan boundaries.

“Caltrans improves mobility across California”
6. Transportation/Circulation: Aggregate Effects of peak hour trip generation reductions, page 16-32. This section discusses the anticipated trip reduction of TDM and Plan Goals for all scenarios. It is assumed that the Plan's impacts are extrapolated from these reductions. Please discuss in the FEIR that, if these reductions are not realized, how and when will the Adaptive Management Program be used as a follow up?

7. Transportation/Circulation: Regional Highways, U.S. 101, page 16-56. The Plan states “as compared to existing conditions, fewer internal City trips are forecast to utilize the freeway under Plan Santa Barbara in the year 2030.” The assumption is that these trips are those that use the freeway essentially as an arterial to get from place to place, both the origin and destination being within the City boundaries. Within the FEIR, please quantify current and projected internal trips of this nature and by what analysis these numbers were obtained.

8. Transportation/Circulation: Mitigation Measures, page 16-67. Near the bottom of the page the Plan articulates three key mitigation measures to address congestion. Notably absent is Transportation System Management. As discussed in paragraph 5 above, TSM is a powerful strategy that the Plan does not appear to include. The FEIR should include discussion and analysis of TSM benefits, both of itself, and in synchronization with those included on page 16-67.

9. Transportation/Circulation, page 16-18, the description of the South Coast 101 High Occupancy Vehicle (HOV) project. A minor change to the description would be from “...between Bailard Avenue...” to “...North of Bailard Avenue...”.

Thank you again for the opportunity to provide comments. Plan Santa Barbara is a powerful concept and clearly holds that sustainability and resource management, including the built environment, are action oriented goals to be aggressively pursued. We look forward to receiving the FEIR and inclusion of the concepts and strategies discussed above. I can be reached at (805) 549-3632 if you have any questions about these comments.

Sincerely,

Chris Shaefler
Development Review
Caltrans District 5

Cc: L. Newland, CT

“Caltrans improves mobility across California”

29
Response to Agency Letter # A4, California Department of Transportation (May 17, 2010)

A4-1: Thank you for your comments.

A4-2 (Plan SB GPU): Comment noted. The Adaptive Management Plan (AMP) is proposed to track progress toward implementing Plan policies and achieving Plan objectives, and to effect policy refinements and course corrections as needed through the 20-year Plan period. The AMP monitoring procedures will employ methods such as statistical evaluation, technical measurements, and the use of surveys, and will set out a schedule of regular reports. The EIR Mitigation Monitoring and Reporting Program (MMRP) directs that updates of the traffic model occur every three years to monitor traffic growth and effects on road and intersection congestion. General Plan Implementing Action LG 3.1a-Adaptive Management Program (previously numbered AM1-4 during DEIR) directs that the City monitor resource capacities for appropriate measurable community indicators, including transportation mode shifts at meaningful intervals. Policy LG 3.1b requires community indicator assessment every 4-8 years for various indicators, with comprehensive review in 2020 and 2030, while the MMRP requires review of the effectiveness of Transportation Demand Management (TDM) Programs. Under these measures, the City would monitor transportation performance, including specific developments if warranted, and provide for consideration of adjustments in programs every 4-8 years. Taken together, the AMP and MMRP measures would ensure ongoing monitoring, review of and potential adjustments to Transportation Demand Management programs and the assessment of mixed-use development projects. Additional information and outline of the Adaptive Management Program is found in the Staff Report of September 24, 2009 on the web site www.YouPlan SB.org.

A4-3 (Plan SB GPU): Comments noted and will be forwarded to decision-makers. Proposed draft Santa Barbara General Plan Update polices strongly encourage incentives for in-fill and affordable housing, as well as coordination on employer housing opportunities.

A4-4 (Plan SB GPU): Comment noted. Circulation Element Policy C1.5-Optimize Capacity (previously C12 during DEIR) requires that the City utilize Intelligent Transportation System (ITS) strategies to optimize system capacity, while Policy C2 (previously C6) directs that the City coordinate with other agencies on regional transportation and commuter transit. Under these policies, the City would coordinate with Caltrans on ramp metering for new interchange or onramp improvements (e.g., as done at Carrillo and Garden streets) or if required by major development projects. Citywide ramp metering at this time may not be warranted at the City’s less heavily utilized onramps (e.g., Arrellaga Street) or may cause secondary surface congestion that would require further review (e.g., Haley or Castillo streets). Under the proposed polices, it may be more appropriate for the City to coordinate with Caltrans as part of future ramp improvements than on a citywide basis.

A4-5: Comment noted. The trip reduction assumptions for traffic generation under the draft Santa Barbara General Plan are relatively modest and would be substantially increased by the additional trip reduction measures required as part of mitigation measure MM TRANS-2c (Expand TDM Program) and -2f (Parking Management). Please see response A4-2 for a discussion of the role of the Adaptive Management Program (AMP) and Mitigation Monitoring and Reporting Program (MMRP) in the monitoring of and potential future adjustments to TDM programs.

A4-6: Comments noted. The following estimates of the total freeway volume composition, prepared using the City’s General Plan Traffic Model, are also available in the EIR Technical Appendices, along with analysis methodology (please refer to Appendix J).
# A4, California Department of Transportation (Continued)

<table>
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<th>Existing Percentage of Total</th>
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<td>Internal Total</td>
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</tr>
<tr>
<td>Internal to External Total</td>
<td>19%</td>
<td>15%</td>
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<tr>
<td>External to Internal Total</td>
<td>36%</td>
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<td>Plan Santa Barbara Study Area Total</td>
<td>79%</td>
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<tr>
<td>Through Trips</td>
<td>21%</td>
<td>26%</td>
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<tr>
<td>Total Freeway Volume</td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
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A4-7: Comment noted. Please see response A4-4 and the discussion of Intelligent Transportation System (ITS) measures in section 16.4 of the EIR (Citywide Transportation Impacts).

A4-8: Thank you again for your comments. Please see the revised text in EIR section 16.1.9 (Pending and Planned Improvements) regarding the High Occupancy Vehicle (HOV) project boundaries. The City looks forward to working with Caltrans in improving regional coordination to manage traffic congestion through application of sustainable techniques and tools.
May 18, 2010

Barbara Shelton
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102-1990

Subject: Plan Santa Barbara General Plan Update (Policy Amendments including General Plan Framework, Land Use Element, Housing Element) and Associated Rezone
SCH#: 2009011031

Dear Barbara Shelton:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on May 17, 2010, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Acting Director, State Clearinghouse
In December 2006, City Council directed environmental review to proceed on a set of Draft Policy amendments that would provide the basis and directives for updating the City General Plan. The initial General Plan update documents will include the overall General Plan Framework and Policy Update, Land Use Element/Map Update, Housing Element Update, and an Adaptive Management component. The draft policies pertain to sustainability and living within our resources, circulation, historic resources and community design, environmental resource protection, public services and safety, and economy and fiscal health.

Lead Agency Contact

Name: Barbara Shelton
Agency: City of Santa Barbara
Phone: 805-564-5470
Fax:
Address: P.O. Box 1990
City: Santa Barbara
State: CA
Zip: 93102-1990

Project Location

County: Santa Barbara
City: Santa Barbara
Region:
Lat / Long:
Cross Streets: Citywide
Parcel No.:
Township:
Range:
Section:
Base:

Proximity to:

Highways: US101, SR154, SR225, SR192, SR144
Airports: City of Santa Barbara Airport
Railways: SPRR
Waterways: Pac Ocean, SB Cr Channel, SB Harbor, Sycamore Cr, Mission Cr, Arroyo Burro Cr, Shoffield & Lauro
Schools: SBSD ES, MS, HS/ SB City College, Numerous Private
Land Use: Citywide Land Use Element/Zoning

Project Issues: Air Quality; Archaeologic-Historic; Coastal Zone; Drainage/Absorption; Economics/Jobs; Fiscal Impacts; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Septic System; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual; Other Issues

Reviewing Agencies: Resources Agency; California Coastal Commission; Department of Fish and Game, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 5; Department of Housing and Community Development; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission

Note: Blanks in data fields result from insufficient information provided by lead agency.
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Note: Blanks in data fields result from insufficient information provided by lead agency.
Response to Agency Letter # A5, Governor’s Office of Planning and Research, State Clearinghouse and Planning Unit (May 18, 2010)

A5-1: No response required.
May 6, 2010

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93102

Dear Ms. Shelton:

Re: SCH# 2009011031; Santa Barbara General Plan Update

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings.

The Commission Rail Crossings Engineering Section (RCES) is in receipt of the Notice of Completion & Environmental Document Transmittal-Draft EIR from the State Clearinghouse for the proposed general plan update. As the state agency responsible for rail safety within California, RCES recommends that the City add language to the plan so that any future planned development adjacent to or near the railroad right-of-way be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings. This includes considering pedestrian circulation patterns/destinations with respect to railroad right-of-way.

Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and continuous vandal resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad right-of-way.

Language should be in place so that any traffic impact studies undertaken should also address traffic increase impacts over affected crossings and associated proposed mitigation measures.

If you have any questions, please contact Sergio Licon, Utilities Engineer at 213-576-7085, sal@cpuc.ca.gov, or me at rxm@cpuc.ca.gov, 213-576-7078.

Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division
Response to Agency Letter #A6, California Public Utilities Commission, Rail Crossings Engineering Section (May 6, 2010)

**A6-1:** Comment noted. Please see text addition to EIR section 9.2 (Applicable Plans and Policies, State Regulations and Agencies).

**A6-2:** Comment noted. The City has several at grade road and sidewalk crossings of the existing Union Pacific Railroad corridor, as well as multiple road and pedestrian bridge over and under crossings. The City’s existing Circulation Element requires design of safe roads and pedestrian facilities and the standard City review process requires consideration of pedestrian and vehicular safety as part of approval of any new development project. Standard City review procedures will continue to require review of rail crossing safety issues, including increased vehicular and pedestrian traffic at grade crossing, as well as the potential for trespassing along the rail corridor associated with new development projects. Thank you for your comments.
May 6, 2010

Barbara Shelton  
City of Santa Barbara  
630 Garden Street  
P.O. Box 1990  
Santa Barbara, CA 93102  

Dear Ms. Shelton:

CITY OF SANTA BARBARA PLAN SANTA BARBARA DRAFT GENERAL PLAN UPDATE  
POLICY DOCUMENTS AND DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF SANTA  
BARBARA, FILE NO. 420410CG04

Thank you for the opportunity to comment on the Plan Santa Barbara Draft General Plan Update (Update) and the associated Draft Environmental Impact Report (DEIR). Central Coast Regional Water Quality Control Board (Water Board) staff understands that this project involves proposed policy amendments to guide growth in the City of Santa Barbara (City) to the year 2030.

The Water Board is a responsible agency charged with the protection of the Waters of the State of California in the Central Coast Region. Waters of the State include surface waters, groundwater, and wetlands. The Water Board is responsible for administering regulations established by the Federal Clean Water Act and the California Water Code (Porter-Cologne Water Quality Control Act). The Water Board also administers regulations, plans, and policies established by the Central Coast Region Water Quality Control Plan and the State Water Resources Control Board to protect watersheds, their resources, and their beneficial uses. These regulations cover discharges to surface water and groundwater, as well as discharges to land that may affect groundwater quality.

Water Board staff commends the many environmentally sound and protective policies contained in the Update. It is clear that the City is committed to growth that minimizes environmental impacts. Therefore we offer the following comments to further improve the Update and the DEIR.

Water Quality Impacts

The Update describes policies intended to guide growth in the City through the year 2030. In general, the policies will control growth and associated environmental impacts by focusing growth in the Mobility-Oriented Development Area (MODA), increasing allowed development density ranges in the MODA, and decreasing allowed density ranges outside the MODA. Focusing development in this way can avoid many of the environmental impacts associated with
conventional growth patterns. However, increasing development density in the urban core through infill and redevelopment creates its own set of environmental impacts. Increased impervious area, population, traffic, and commercial activity across the full mixed-use spectrum can increase the volume, rate, "flashiness," and pollutant load of municipal stormwater runoff. These effects, in turn, can exacerbate the water quality and geomorphological degradation already present in the City’s surface waters.

The DEIR states that impacts to hydrology and water quality of the growth plan would not be significant with mitigation (DEIR Executive Summary, p. 18). However, the DEIR includes only two mitigation measures to address hydrological and water quality impacts: MM HYDRO-1.a, which addresses the impact of sea level rise; and MM HYDRO-1.b, which analyzes the water savings of water conservation measures. Neither of these measures provides any mitigation for impacts to surface waters caused by increased stormwater runoff volume, rate, "flashiness," or pollutant load. According to the DEIR, the justification for this is that the citywide effects on hydrology and water quality due to future growth under Plan Santa Barbara policies are identified only in comparison to existing conditions (DEIR Section 11.3.2). This conclusion is inadequate for two reasons. First, the City is responsible under CEQA regulations to identify the cumulative impacts of growth and development, not just the incremental impacts of potential future development. Second, the DEIR does not provide sufficient support for the suggestion that additional development of a kind similar to that which has produced the level of degradation already present in the City’s surface waters would somehow not produce a significant level of additional impacts. For both these reasons, these additional impacts have the potential to be significant, and should be addressed more specifically in the Update and mitigated more effectively in the final EIR.

Opportunities Provided by the Project

The nature of this project—updating the land use and development policies of the General Plan—provides a range of opportunities to avoid or reduce the impacts of additional development and increased development density in the MODA; reduce the hydrologic and water quality impacts of existing development; and restore water quality, geomorphological stability, and beneficial uses of the City’s degraded surface waters. Water Board staff offers the following recommendations for the City’s consideration.

Development In the MODA

1. Include policies intended to focus development, not just in the MODA, but away from environmentally sensitive areas and undeveloped watersheds. The Update currently includes policies to establish more protective stream buffers and to protect floodplains from development, but the development plan pays far more attention to transportation infrastructure than to environmental protection. Water Board staff recommends that the City conduct a comprehensive watershed analysis to characterize the sensitivity of the City’s surface waters to development. The City should then use the results of this analysis to focus development in areas identified as being least sensitive.

2. Take full advantage of density incentives to restore lost hydrologic functions of the developed landscape, and to protect against further loss of such functions. Water Board staff recommends that the City achieve this objective in two ways:

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1 Hydrologic functions of a landscape include its capacity to slow and decrease rainfall runoff through ground roughness, sheet flow, detention, retention, and infiltration.

California Environmental Protection Agency
- Include policies committing to establish numeric targets for infill development. These targets should establish numeric limits for effective impervious area, runoff volume and rate, infiltration, and pollutant loading in stormwater runoff.
- Include policies that require tangible improvements in runoff quantity and quality from redevelopment projects. These improvements should involve such things as reducing the quantity and rate of runoff, reducing pollutant loads in runoff, and reducing effective impervious area.
- Include policies that require hydrologically “self-sufficient” streetscapes—streetscapes which manage their own stormwater runoff through infiltration, retention, and evapotranspiration.
- Include policies that require “green” areas (parks, vegetated strips and medians, street trees, etc.) to serve stormwater management functions as well.
- Include policies that require pollution source controls.
- Include parking area reduction plans and policies that prefer and provide incentives for parking structures over parking lots.
- Include policies that achieve stormwater management retrofits to currently developed areas that reduce the volume and rate of stormwater runoff and pollutant loads. These policies should address incentives for privately-funded retrofits and the development of funding sources for publicly-funded retrofits.

Development Outside of the MODA
8. Include policies committing to establish concrete numeric targets for new and redevelopment projects, rather than simply requiring projects to include stormwater management BMPs. These targets should establish numeric limits for effective impervious area, runoff volume and rate, infiltration, and pollutant loads in stormwater runoff.
9. Include policies that require development projects to optimize retention of preddevelopment topography, vegetation, soil compaction levels, drainage density, and infiltration.
10. Include policies that establish setbacks from riparian areas and wetlands based on the type, density, and location of development, and that establish larger setbacks or “no development zones” for surface waters that are more sensitive to development.
11. Include policies that establish watershed protection as a primary value. While the Update describes policies intended to reduce or mitigate the environmental impacts of development, Water Board staff perceives that the primary strategy of the Update is to concentrate development in the MODA and to make the most efficient use of existing transportation infrastructure and options. One example of treating watershed protection as a primary value is to place the same degree of importance on the question, “How can the City keep development from impacting environmentally sensitive areas?” as the City places on the question, “How can the City focus development near existing transportation infrastructure?”

Overall
12. Include policies that incorporate all relevant features of the City’s Stormwater Management Program (SWMP) into the General Plan Environmental Resources Element, not just the SWMP’s guidelines for low impact development. Other features of the SWMP that should be incorporated into the Environmental Resources Element include stormwater pollution source controls for new and redevelopment, hydromodification control criteria, and long-term watershed protection measures.
13. Include policies to develop funding sources and incentives for projects that reduce the volume, rate, and pollutant loads of stormwater runoff.

California Environmental Protection Agency
Thank you again for the opportunity to comment on the City's Update and associated DEIR. If you have any questions or would like to meet to discuss these comments, please contact Jon Rohrbough at (805) 549-3458 or at jrohrbough@waterboards.ca.gov, or Phil Hammer at (805) 549-3882.

Sincerely,

Roger W. Briggs
Executive Officer

cc (by electronic mail):
Cameron Benson
Creeks Restoration/Clean Water Manager
City of Santa Barbara
cbenson@santabarbaracoca.gov
Response to Agency Letter # A7, California Regional Water Quality Control Board, Central Coast Region (May 6, 2010)

A7-1 (Plan SB GPU and EIR): Comment noted. Thank you for your comments.

A7-2: Comment noted. The EIR finds that impacts to water quality under Plan Santa Barbara would be less than significant not due solely to limited change from existing conditions as referenced in this letter, but is based on the following:

- The EIR considers the cumulative effect of existing baseline conditions and existing regulations together with projected future growth under proposed updated General Plan policies and programs.

- The City has an extensive network of programs and policies in place to regulate new development and protect water quality, including a Storm Water Management Program (SWMP), a Storm Water Best Management Practices (BMP) Guidance Manual, and Storm Water Pollution Prevention Program (SWPPP), etc. Taken together, these and other City programs provide very strong regulatory oversight over new development and imposition of extensive measures to control and treat runoff from new development to ensure that it meets rigorous water quality protection standards (refer also to the Relevant Plans and Regulations table in section 11.2 of the EIR). These regulations are implemented and overseen by the City’s Creeks Management Division together with staff of the Community Development, Public Works, Waterfront, and Airport Departments.

- The City’s Creeks Management Division is funded for approximately $2,000,000 per year to implement a range of water quality protection and improvement programs to actually improve existing water quality along a number of the City’s existing creeks and drainages. Recent examples of such measures include the daylighting and restoration of sections of Arroyo Burro and Las Positas creeks and installation of low-flow diversions into the sewer system along reaches of creeks.

- More than 60% of new development is projected to occur largely as redevelopment within the City’s urban core, with some limited net increases in structural square footage. As most of these sites are already covered with paved surfaces, and new development would be subject to more stringent water retention and treatment standards, the potential for increased “flashiness” and conveyance of polluted waters was judged to be limited or even to result in reduced amounts and improvements in the quality of runoff from newly redeveloped sites. The level of degradation present with the City’s existing surface water bodies is the product of historical development patterns and practices which led to creation of extensive paved surfaces, stream channelization, loss of riparian vegetation, and associated declines in surface water quality. Over the last decade, the City has moved aggressively to reverse this trend, and has adopted policies and programs to not only ensure that new development does not adversely impact water quality, but that such development and citywide practices actually improve water quality. The EIR does not ignore cumulative impacts to water quality (refer to Section 11.5), but addresses them in the context of what should be considered a model program for preventing increases in pollution and gradually reversing declines in water quality caused by past practices.

A7-3 (Plan SB GPU): Thank you for the suggested policies. Existing City policies and programs and measures proposed in the EIR already address many of the seven points related to development inside the core commercial mixed-use areas as follows:
• The Plan Santa Barbara draft General Plan Update policies were in fact based on constraints analysis (City Conditions, Trends, and Issues Report, 2005 and update of the City Master Environmental Assessment Maps, 2008-2009). Plan Santa Barbara policies aiming to direct more than 60% of new residential and commercial development to commercial core areas already direct intense development away from environmentally sensitive areas and undeveloped watersheds such as Arroyo Burro, Cieneguitas, Upper Mission, and Sycamore creeks. In addition to strengthening creek setback and restoration requirements, proposed mitigation measure MM BIO-1 also requires identification and protection of important upland habitat and corridors (i.e., watersheds), while MM BIO-2 restricts alteration of creeks, sets a goal to “daylight” 0.5 miles of stream, and restore 20 acres or 1 mile of riparian habitat. Finally, ongoing City Creeks Division watershed management planning is being used to address the sensitivity of various watersheds.

• Existing City policies require that new development limit impacts to hydrologic functions and address limiting impervious surfaces and associated runoff and improving the quality of runoff. The imposition of numeric standards may have the potential to require extensive research and has the potential to be arbitrary without such research. For the type of development anticipated under this General Plan (redevelopment/limited greenfield development) similar beneficial results can be achieved through thorough implementation of the City’s existing standards and pursuit of the additional identified hydrology and biological resources mitigation measures. Existing City policies already require that new streetscapes and parking areas be designed to limit and treat runoff where possible and that new development minimize or reduce runoff volumes and improve quality while the City considers incentives for homeowners to improve creekside habitat and water quality. Please refer to pages 64-97 of the City’s 2009 SWMP and Sections 4, 5 and 6 of the 2008 SWPPP. Please see response A7-2 regarding ongoing City creeks and water quality management funding.

A7-4 (Plan SB GPU): Comments noted. Concrete numeric standards limit design flexibility, restrict the City’s ability to balance competing factors, and may not improve water quality beyond those measures already required by the City’s adopted programs. Existing City policies already require that site alteration and grading be minimized and that new development respect site topography and significant areas of native vegetation. The City places an extremely high priority on protecting and improving watersheds and water quality as exhibited by its commitment of over $2,000,000 annually to protection, restoration, and enhancement of creeks and water quality. In considering potential project impacts, it is important to consider that the draft Santa Barbara General Plan and potential associated new development would move forward under the framework of one of the more stringent and best funded water quality protection programs in the State. As the City’s updates its storm water management programs and prepares watershed management plans, it will continue to consider RWQCB suggestions for improvements to these programs. Please also refer to response A7-3 above.

A7-5 (Plan SB GPU): Comment noted. Please note that Environmental Resources Management Element Policy ER17 already incorporates City SWMP policies into the General Plan, including those that would reduce the volume, rate, and pollutant loads of storm water runoff.

Thank you again for your comments. The City looks forward to working with RWQCB staff to seek continual improvements to water quality in the City and identifying the best available and practical means to achieve these benefits.
May 14, 2010

Mr. Jon Ledbetter, Principal Planner
City of Santa Barbara, Planning Division
630 Garden Street
Santa Barbara, CA

Re: Comment on Plan Santa Barbara and DEIR

Dear Mr. Ledbetter:

The Montecito Water District (MWD) has completed a cursory review of the Plan Santa Barbara draft EIR, and MWD was surprised to see that there was no mention of the Montecito Water District being the water service provider for the Coast Village Road commercial area. This is an oversight that should be addressed, as the DEIR does not differentiate between water provided by the City and that provided by MWD. For your information, the MWD water supply condition is constrained and limited and the District has adopted ordinances affecting the entire District service area, including the Coast Village Road commercial area, regarding available water supply and service.

As background information, MWD is the water service provider for Coast Village Road. The Coast Village Road distribution system is an integral part of MWD’s water distribution system that serves the communities of Montecito, Summerland and Toro Canyon. MWD has been proactive in water system operation, maintenance and replacement along the Coast Village and has spent considerable public funds in ensuring water service reliability for our commercial customers. All water delivered to Coast Village Road customers through MWD water mains is metered through MWD water services from MWD storage reservoirs and, more important, MWD water supplies owned, operated and maintained by MWD. With MWD water mains serving Coast Village Road, MWD also provides water for fire protection to all fire hydrants in the commercial area including water to commercial businesses with private firelines. Coast Village Road is a unique part of the District’s service area as it is also within the City of Santa Barbara. According to our historical records, the Coast Village Road area was annexed into the City of Santa Barbara in 1959. This area has quite a history regarding water supply as Coast Village Road business applications to the City have not always considered MWD’s limited water supplies.

MWD in March 2008 adopted Ordinance 89, a water limitation ordinance which provides water allocations to existing properties, including Coast Village Road businesses served by MWD. The water allocations are based on the historical average water use by property over the three year period beginning in the fiscal year 2003/04 and ending in 2005/06. MWD’s water supply condition is constrained and in order to provide balance between water supply and demand there is no extra water available for the expansion of water use by an existing customer and at the same time allow for a reasonable water allocation to undeveloped properties within the District’s service boundary. The water limitation ordinance was adopted to ensure that MWD could serve reasonable customer water demand levels and stay within the long-term reliability of its water supplies. The District
has a long history of water shortage conditions including a 20-year water service moratorium and allocation program that was suspended with the delivery of State Water to MWD.

MWD's concern with the DEIR is that there is no mention of MWD as the water purveyor for this particular commercial area within the City of Santa Barbara and that currently there is no mention of water service restrictions to the Coast Village Road properties. MWD is now assembling water use records for all Coast Village Road customers within the City of Santa Barbara and will provide you with more detailed information on water use for this particular area. MWD must assert that, with the current ordinances in effect, any proposed change in water use on Coast Village requires review and approval by MWD prior to a project approval and the issuance of any building permits. The District's approval is provided by a Certificate of Water Service Availability (CWSA) that is provided to the customer subject to satisfying the provisions and requirements of the District and is part of the submittal process for any change in use application either in the City or in the County.

By inadvertently failing to address that any expansion or change on Coast Village Road is subject to MWD's Certificate of Water Service Availability, a property owner may obtain a City permit, expand their property, and then find that they have no allowable increase in water.

MWD is available to work with you on correcting and properly addressing this oversight and any questions or request for additional information be referred directly to the undersigned.

Sincerely,

Tom Mosby
General Manager

c: Board of Directors
   Toni Bailey
   Chip Wullbrandt
   Rebecca Bjork
   Victoria Green
Response to Agency Letter #A8, Montecito Water District (May 14, 2010)

A8-1: Thank you for your comments. Section 15.1.1 of the EIR (Public Utilities/Water Supply and Services) has been revised to describe the Montecito Water District’s current role as a water purveyor and the current status of MWD water supplies.

A8-2: Comment noted. The EIR has been updated to address current MWD constraints on provision of water service and to provide a recommended measure (refer to Section 15.9, Recommended Measure RM PU-2-Montecito Water District Coordination) to ensure that water is made available to address any potential increases in new demand. This measure is reflective of existing City commitments to coordinate water supply issues with regional water purveyors as found in the City’s existing Long Term Water Supply Management Plan and the draft Santa Barbara General Plan (refer to Public Services and Safety Element Policy PS6).
May 17, 2010

John Ledbetter, Principal Planner
City of Santa Barbara Planning Division
630 Garden Street
Santa Barbara, CA 93101

Re: APCD Review of Draft Program EIR for the Plan Santa Barbara General Plan Update

Dear Mr. Ledbetter:

The Santa Barbara County Air Pollution Control District (APCD) appreciates the opportunity to provide comments on the Draft Program Environmental Impact Report (EIR) for Plan Santa Barbara General Plan Update. The Plan Santa Barbara General Plan Update includes new and existing goals and policies that will shape development over the next 20 years. Policy direction is proposed to manage both residential and non-residential growth, and new standards for residential development in the commercial and multiple family areas of the City. The Draft Land Use Map includes revised land use designations and in some areas changes to density allowances. The Update also proposes new goals and policies to be incorporated into other General Plan elements to be updated at a future time.

APCD staff offers the following comments on the Draft Program EIR:

1. **EIR Summary, Group 2: Impacts Less Than Significant With Mitigation, Air Quality, Page 13:** This comment applies to the discussion on Page 13, as well as the conclusions presented in Table ES-4 (Page 36) and under Air Quality Impact AQ-3 (Pages 6-18 to 6-20). The impact of locating sensitive receptors, such as residences, in close proximity to the U.S. 101 Freeway is discussed in these sections. Although Draft General Plan Policy ER7 discusses a 500-foot buffer for residential development, the analysis in the above-referenced sections of the EIR present a 250-foot buffer. In accordance with guidance published by the California Air Resources Board (CARB), APCD supports the use of a 500-foot buffer along the U.S. 101 corridor, as discussed in the attached document entitled “Public Health and High Traffic Roadways,” until a broad, peer-reviewed set of health studies, including health-based proximity studies, indicate that this health risk is no longer of concern.

2. **6.1.3, Existing Ambient Air Quality, Page 6-3:** The second full paragraph on this page states that, “At this time, there is not yet enough data to determine the County’s attainment status for the Federal or State PM2.5 standard, due to the recent change in the PM2.5 standards. However, according to the SBCAPCD, the County will most likely
be in attainment for the Federal standard based on the preliminary data collected from ambient air quality monitoring stations.” This language should be updated with the following information: “The County is in attainment for the federal PM\(_{2.5}\) standard and unclassified for the state PM\(_{2.5}\) standard (based on monitored data from 2006 – 2008).

3. **6.1.6, Climate Change, Page 6-8:** The last sentence in the first paragraph of this section states that greenhouse gases (GHG’s) include, “carbon dioxide (CO\(_2\)), methane, nitrogen oxides (NO\(_x\)), chlorofluorocarbons (CFC’s), ozone (smog), and water vapor.” This text should be changed to reflect the internationally-recognized set of greenhouse gases developed by the Intergovernmental Panel on Climate Change (IPCC). In particular, nitrogen oxides (NO\(_x\)), a criteria pollutant with health-based air quality standards that have been regulated under the federal Clean Air Act for decades, should not be confused with nitrous oxide (N\(_2\)O), which has more recently been acknowledged as a GHG with a high global warming potential (GWP).

4. **6.2, Applicable Plans and Policies, Page 6-9:** The second sentence in this section states that, “The primary responsibility for regulating air quality falls under the jurisdiction of the Santa Barbara County Air Pollution Control District.” In fact, APCD generally regulates stationary sources of air pollution, whereas the California Air Resources Board (CARB) has regulatory authority over air pollutants from mobile sources, such as motor vehicles and offroad mobile equipment. Please revise the text accordingly.

5. **6.3, Impact Evaluation, page 6-10:** Under Construction Emissions in the last paragraph on this page, the text refers to a “County of Santa Barbara Dust Control Ordinance.” Please provide a reference for this ordinance.

6. **6.3, Impact Evaluation, Page 6-11:** In the third paragraph on this page, subtitled Electrical Use (Indirect) Emissions, the following statement is made: “Indirect emissions from electricity usage were calculated using URBEMIS2007 (version 9.2.4) from energy usage data obtained from Southern California Edison (SCE) and Southern California Gas (refer to Section 17.0, Energy) and emissions factors from the USEPA.” The URBEMIS2007 program does not have the ability to compute electricity usage-based emissions. If the reference to the URBEMIS program were removed from this language, it would agree with the methodology that is presented in Appendix E, Page E-9, of the EIR. Please revise the text accordingly.

Also, current APCD guidance does not recommend that indirect emissions from electricity-generating sources occurring outside the county be counted towards project-related impacts of criteria pollutants. These air pollutant emissions from power plants are generally addressed in the CEQA process for the specific power plants, rather than for the end-user. With respect to climate change impacts, GHG emissions from electricity/energy usage are more commonly included in CEQA documents for end-users of electricity.
7. **6.3.4, City Impact Significance Guidelines, Page 6-12:** The significance thresholds that are presented in this section do not include APCD’s adopted project-specific significance thresholds (i.e., 240 lbs/day of NOx or ROC from all project sources or 25 lb/day of NOx or ROC from mobile sources). These APCD board-adopted significance thresholds should be applied to all projects, including plan-level projects such as the Plan Santa Barbara General Plan Update, as identified in Section 4 of the APCD’s guidance document (*Scope and Content of Air Quality Sections in Environmental Documents, June 2008*). We recommend that the air quality impact analysis be updated to reflect the use of these significance thresholds.

8. **6.4, Citywide Air Quality Impacts, Impact AQ-1: Citywide Growth and Consistency with Clean Air Plan, Page 6-12:** The last sentence on Page 6-12 states that, “Emissions associated with this level of growth were already analyzed in the Supplemental EIR associated with the Clean Air Plan, and were found to be less than significant.” This statement is inappropriate. APCD’s Clean Air Plan includes an analysis of mobile source emissions and how they will affect APCD’s clean air goals; however, the CEQA analysis for the Clean Air Plan considers the environmental impacts associated with the APCD’s discretionary action to adopt a Clean Air Plan. APCD does not have regulatory authority over land use decisions, and the discretionary action to adopt the Clean Air Plan does not involve or address the myriad of potential environmental impacts associated with regional growth. Please revise the language in the EIR to more accurately portray the context of the Clean Air Plan and its associated CEQA document. This comment also applies to the language in the second full paragraph on Page 6-16, that states, “Because the emissions forecast in the CAP were not considered a significant impact in the Supplemental EIR for the CAP (SBCAPCD 2007b), and growth under Plan Santa Barbara would be consistent with the CAP, impacts to regional air quality would be less than significant (Class 3).”

We hope you find our comments useful. Please contact me at 961-8838 or by e-mail at mmp@sbcapcd.org if you have questions.

Sincerely,

Molly Pearson  
Community Programs Supervisor  
Technology and Environmental Assessment Division

Attachment: Public Health and High Traffic Roadways

cc: TEA Chron File
Public Health and High Traffic Roadways

California Air Resources Board Recommended Policy:
Sensitive land uses such as residences, schools, day care centers, playgrounds, and medical facilities should not be sited within 500 feet of:

- A freeway
- Urban roads with 100,000 or more vehicles/day
- Rural roads with 50,000 or more vehicles/day

(Ref. "Air Quality and Land Use: A Community Health Perspective." California Air Resources Board. April 2005)

Reason for the Policy:
Many studies show that living in proximity to freeways and other high traffic roadways leads to adverse health effects beyond those associated with regional air pollution. A number of studies that focused on children have found slower lung development and significant increases in the incidence of lung disease, such as asthma, bronchitis, and decreased lung function, in children who live or attend school near heavily travelled roadways. In addition to children, seniors, and people with heart and lung conditions are considered particularly sensitive to effects of air pollution. Residence in high-traffic areas has been shown to increase the risk of mortality within a cohort of male veterans.

Health Studies:
The results of health studies suggest that it is important to avoid exposing children and other sensitive populations to the elevated air pollution levels near freeways and other high traffic roads. While particulate pollution is suspected as contributing the most to the adverse health effects, studies have not yet determined which specific pollutants and sources (cf. diesel particulate, re-entrained roadway dust particulate, NOx vehicle exhaust, diesel trucks vs. gasoline cars, &c.) are responsible. Additional studies are underway. While significant adverse health effects were observed in children who lived within 1,500 feet of a freeway (Gauderman, 2007), the studies indicate a substantial benefit to a 500 foot separation (McConnell, 2006).

Key Findings:
- Reduced lung function in children is associated with traffic density within 1,000 feet and the strongest association is within 300 feet of the roadway. (Brunekreef, 1997)
- Children living within 550 feet of heavy traffic have more medical visits than children who live further away from traffic. (English, 1999)
- Increased asthma hospitalizations are associated with living within 650 feet of heavy traffic. (Lin, 2000)
- Asthma symptoms increase with proximity to roadways and the risk is greatest within 300 feet. (Venn, 2001)
- Asthma and bronchitis symptoms in children are associated with proximity to high traffic in a community with good overall regional air quality. (Kim, 2004)
- Children living within 150 - 200 meters (~450 feet - 600 feet) of heavy traffic have higher rates of asthma than children living further away from traffic. (McConnell, 2006)
- Children living within 500 meters (~1,500 feet) of heavy traffic have significantly slower lung development than children living further away from traffic. (Gauderman, 2007)
- Survival of members of the Washington University-EPRI Veterans Cohort is strongly and robustly associated with county-average levels of traffic related air pollution and mortality relationships are stronger in the counties with higher levels of traffic density. (Lipfert et al, 2009)
Applicability to Santa Barbara County:
The studies covered children in a variety of urban environments living in proximity to roadways covering a wide spectrum of traffic volumes. The adverse health effects were measured at traffic volumes as low as 41,000 vehicles per day (English) and between 80,000 and 150,000 vehicles per day (Brunekeef). Highway 101, through Santa Barbara County, experiences traffic volumes within the range where health effects have been observed. Also, some parts of Highway 101 see over 7000 diesel trucks per day (SBCAG). Furthermore, running parallel to Highway 101 through the southern portion of Santa Barbara County is a rail corridor that contributes significantly to the pollution levels near the highway (cf., rail contributes an additional 10% or 0.07 tons per day to mobile source generated PM10 emissions in Santa Barbara County).

2006 Average Daily Traffic (ADT) Volumes for Highway 101 (SBCAG):
US 101 at Glenn Annie = 65,800 ADT
US 101 at Highway 150 = 68,000 ADT
US 101 at Las Positas = 140,000 ADT
US 101 at Highway 166, Santa Maria = 55,000 ADT

Conclusion:
In order to protect the public health, especially the health of children, from the adverse effects of air pollutants generated by traffic on Highway 101, land use policies should prohibit the construction of new residences, schools, day care centers, playgrounds, and medical facilities within 500 feet of Highway 101. No other roadways in Santa Barbara County currently have estimated traffic volumes at the magnitude for which the proximity studies have identified adverse health effects.

References:
Roseville Rail Yard Study. California Air Resources Board (October 2004).
“2007 Clean Air Plan.” Santa Barbara County Air Pollution Control District (August 2007).
“2007 Travel Trends Report for Santa Barbara County.” Santa Barbara County Association of Governments. (December 2007)
Response to Agency Letter #A9, Santa Barbara County Air Pollution Control District (May 17, 2010)

A9-1: Thank you for your comments.

A9-2: Comment noted. The draft Santa Barbara General Plan Policy ER7-Highway 101 Setback (previously ER12 during DEIR) was crafted based on the general guidance published by the California Air Resources Board (CARB). However, as discussed in Section 6.4 of the EIR (Impact AQ-3: Location of Residential Land Uses), City expert consultants completed a more detailed City-specific analysis of this general CARB statewide analysis and policy (report was reviewed by APCD staff). The CARB 500-foot buffer recommendation was based on 2000 information that included higher diesel particulate matter emissions. The EIR analysis employs CARB’s newer EMFAC2007 model, which shows that new vehicle standards, diesel fuel reformulation, and CARB-adopted Diesel Risk Reduction Measures have resulted in lower diesel particulate emissions. As a result, CARB’s published health risk maps show that potential cancer risk near freeways would be substantially reduced in 2010 as compared to 2000 levels. Based on these changes since the CARB buffer guideline was developed, as well as the level of traffic and meteorological conditions in the City, the City analysis recommended that the setback could be reduced to 250 feet, while maintaining the policy to track implementation of the phased CARB regulatory program. This City analysis is more current, specific, and detailed for conditions within the city of Santa Barbara than the general statewide guideline set forth by CARB in 2005 and as such, as the most recent and up-to-date technical information, is utilized as the basis for analysis in the EIR.

A9-3: Comment noted. Please see the revised text on EIR Sections 6.1.3 (Existing Ambient Air Quality), 6.1.6 (Climate Change), Section 6.2 (Applicable Plans and Policies), and 6.3.2 (Impact Evaluation/Construction Emissions).

A9-4: Comment noted. Please see revised text in EIR Section 6.3.2 (Impact Evaluation/Electrical Use). In the interest of full information, the EIR continues to identify power plant emissions for criteria pollutants, but separates out those for criteria source pollutants that are outside the South Central Coast Air Basin.

A9-5: Comment noted. The Programmatic EIR analysis methodology is consistent with direction from APCD staff prior to the EIR preparation. The analysis of criteria pollutants for citywide long-range development finds that the impacts of increased emissions of criteria pollutants are insignificant, as they would fall below those forecasted in the Clean Air Plan (CAP). The CAP EIR found that a substantially higher level of growth within the City than evaluated under the Plan Santa Barbara General Plan Update would be considered a less than significant (Class 3) impact. From a CEQA perspective, the original use of the EIR does not affect the validity of this conclusion. Therefore, as authorized under CEQA Sections 15150 and based on the findings of the previous CAP EIR, this EIR finds that criteria emissions pollutants for the lower level of growth contemplated by the Plan Santa Barbara General Plan Update would also be Class 3.
AGENCY LETTER # A10

May 17, 2010

John Ledbetter, Principal Planner
Planning Division
Department of Community Development
City of Santa Barbara
Santa Barbara, CA 93102

Re: SBCAG comments on Plan Santa Barbara

Dear Mr. Ledbetter:

SBCAG offers comments on the Plan Santa Barbara and Plan Santa Barbara DEIR, particularly the Transportation Section.

In general, SBCAG complements the city for enabling easy access to its reports via your well constructed web site. While SBCAG has some concerns about the analysis of regional transportation impacts, we also complement the Plan SB approach to examining the role of parking pricing and emphasizing the impact of land use design, density, diversity, and destination decisions on transportation. It is good to note that the report recognizes Santa Barbara is an important regional center attracting trips throughout the region for work, shopping, and tourism. Recognizing that prior and future land use decisions by Santa Barbara have significant regional transportation consequences is important.

While the following pages relate to the DEIR, a number of comments also tie back to the Plan SB proposed project.

Pg. 16-14 Correct description of train service, Santa Barbara does not have 19 trains each direction per day.

Correct description of Greyhound service, it only serves two communities, Santa Barbara and Santa Maria

Pg. 16-20 Delete reference to SBCAG 2005, MTP which has been replaced by the 2008 RTP, adopted in 2009

Pg. 16-23 and 36 Clarify if forecasts assumed 101 widening from Hot Springs/Cabrillo to Carpinteria which is part of our RTP planned project list. Since your “Gateway” area goes east to Sheffield and the Plan is a long term document, this project merits serious consideration. When SBCAG modeled the difference with and without the freeway widening project we found that the widened freeway attracts traffic back to the freeway from where they had been diverted to regional arterials.
The document needs to clarify the list of other assumed transportation improvements in the transportation analysis, e.g. additional regional transit services from Measure A, MTD projects such as Superstops, etc.

Pg. 16-26 Clarify the source of the elasticity’s. Most of the research we are aware of that examines the relationship of land use and transportation comes from larger urban/metropolitan areas with a relatively more transit options.

Pg. 16-30 contains a good list of TDM measures. Consideration of parking charges is a bold step to affect mode shift. Clarify if the Parking fee option would also apply to City College since this is another key destination.

SBCAG sees no reference to Transportation System Management as a means of addressing congested conditions. The analysis should consider other broad scale measures such as signal synchronization, ITS improvements for parking, among other TSM measures in addressing long term congestion.

Rail is conspicuously absent as a mode choice given the city’s interest in promoting this use. The role of commuter friendly and intercity passenger rail in the City’s transportation future needs clarification. This impacts both visitor and commuter traffic and the future of land use surrounding Santa Barbara Amtrak station. The potential for commuter friendly intercity rail should be considered given the Santa Barbara Amtrak station plays a critical role in addressing the needs of those who might travel by rail.

Pg. 16-32 A Commuter Trip Reduction Effect of 25 to 40 percent is likely largely dependent on the parking pricing policy applied to Areas A & B which financially penalizes individuals for single occupant vehicle travel. Enactment of parking and congestion pricing has proven to be a challenge nationwide. So, this individual effect should be isolated so decision makers can understand potential traffic increases based solely on other TDM measures, distinguished from parking pricing.

In addition, our Traffic Solutions Division of SBCAG has been involved in TDM Programs, including employer outreach, for some time and has met with some success; consequently more attention needs to be given to distinguishing between the assumed benefits of existing (and continuing) programs, vs. new or enhanced programs. If financial incentives to encourage participation are associated with these new programs, these incentives should be quantified.

The land use-transportation evaluation is incomplete in examining the future location of housing and businesses in close proximity to intermodal connections. It is surprising that more attention was not paid to the surrounding land uses of the Santa Barbara Amtrak train station and the SBMTD transit center and the benefits that can be achieved by increasing density within ½ mile of these important city and regional transportation facilities. The potential for mode shift associated with this change in uses surrounding these facilities should be considered. Perhaps it can even serve to mitigate impacts of impacted intersections. This specific land use-transportation connection merits further examination as it is a hallmark of the Smart Growth movement. This could be developed in the section on the 4-D process and feed back to the Plan SB proposals.

Figure 16.5 requires clarification. Is it a baseline or proposed project? While it appears to be a look at the future, forecasted traffic volumes are significantly lower than SBCAGs 20 year regional travel forecast for Highway 101 in the downtown and eastern corridor. The Plan SB Model ADT on 101 from n/o Sheffield to n/o SR154 shows significantly less traffic than forecasted in the SBCAG travel model. Given the potential for future regional growth outlined.
in the SBCAG Regional Growth Forecast 2007, the land use buildout potential of other south coast jurisdictions, growth in statewide traffic, the forecasted traffic volumes on Highway 101 appear unrealistically low. If this reduction in the rate of growth is this significant, and due to the Plan SB scenario, more attention needs to be given to specifying the assumptions about increases in regional transit services, carpooling, vanpooling, or trip reductions and its impact on interregional travel. Indicate if those who are currently commuting from Ventura to Santa Barbara for work are assumed to now live in Santa Barbara based on the Affordable Housing scenario or take the bus? Are new workers associated with the additional 1 - 2 million sq. ft. under the Plan SB scenario not generating new trips on Highway 101 due to the assumptions of new housing and the 4-D approach? Between 1970 and 2000 interregional commuters between Ventura and the South Coast has nearly doubled in each of the ten year periods and is on track to double this last ten years, even given the current recession. Based on all the above factors, a forecast that shows little regional traffic growth on US 101 for the long term planning period, for both study area endpoints at Sheffield and 101/154 and limited growth through the corridor needs additional explanation as it contradicts historical trends and the regional forecasts.

Thank you for the opportunity to comment.

Sincerely,

Michael Powers
Deputy Director
Response to Agency Letter # A10, Santa Barbara County Association of Governments (May 17, 2010)

A10-1 (Plan SB GPU and EIR): Thank you for your comments.

A10-2: Comments noted. Please see revised text in EIR sections 16.1.5 (Transportation Setting/Public Transit) and 16.2 (Applicable Plans and Policies).

A10-3: Comment noted. Because the widening of US Highway 101 from Hot Springs/Cabrillo to Carpinteria was not fully funded during preparation of the forecast, faces a number of technical challenges, and is still undergoing environmental review and public scrutiny, this project was not included in the 2030 forecasts. This approach provided an appropriately conservative CEQA reasonable worst-case assumption for transportation analysis purposes. While additional regional transit service from Measure A would help reduce future congestion, trip reduction from this service was also not included in model inputs, as available research generally supports that trip reduction would occur, but does not identify specific quantifiable trip reductions to this service. Please see the revised text in EIR section 16.3.3 (Plan Santa Barbara Traffic Model/Roadway Network Improvements), which further explains roadway network and transportation assumptions for the analysis.

A10-4: Please refer to Appendix J for a more complete discussion of elasticities. The elasticity values used in this analysis were based on a research synthesis of more than 25 academic studies prepared by Fehr & Peers for the United States Environmental Protection Agency. The studies included a wide variety of urbanized areas with a wide variety of available transit options.

A10-5: Comment noted. The parking pricing proposed under Plan Santa Barbara would apply only to public on-street parking; City College manages its own parking supply and the City does not have regulatory authority over the College. However, a parking cash-out ordinance as proposed MM TRANS-2.c would potentially provide a means of influencing private parking at City College.

A10-6: Comments noted. Please note that existing City policies and Transportation Division programs have long utilized transportation system management measures and supported regional commuter transit and rail. Please see revised text in EIR sections 16.4 (Citywide Transportation Impacts) and 16.1.5 (Transportation/Public Transit), which expand upon the role of Intelligent Transportation Systems (ITS) and the importance of expanding regional commuter rail service. In general, the EIR mitigation measures focus on transportation improvements where trip reduction benefits can be quantified based on available data and research. However, mitigation measure MM TRANS-2g (Improve Transit Services) has been revised to now specifically reference expansion of commuter rail service. Please also see General Plan Update Circulation Element Policy C2 (Regional Transportation and Commuter Transit) and Implementing Action C2.2 (Commuter Transit), as well as response to comment A4-4. As discussed in detail in Appendix J, while the City strongly supports expansion of commuter rail service, trip reduction benefits could not be accurately quantified based on available research and data within the project budget.

A10-7: Comments noted. Please refer to Appendix J for a complete discussion of TDM related issues, as it is not practical to comprehensively discuss every element of the Transportation Model within the text of the EIR while keeping the document to a manageable length. Please also see blue box discussions in section 16.8 (Transportation Mitigation Measures; MM T-2.f) regarding the relative effectiveness of improved parking management. Parking management can be controversial, however City decision-makers and stakeholders
are actively discussing the benefits, trade-offs, costs, and issues associated with such programs. It is worth noting that programs such as pricing for on-street parking are practiced successfully in Downtown San Luis Obispo and other comparable California cities such as Santa Monica and Pasadena.

**A10-8:** Comment noted. A central goal of the Santa Barbara General Plan is to focus growth within the City’s commercial core areas adjacent to transit service. Existing City practice, proposed General Plan Policy LG4 (Mobility Oriented Development Area) and Implementing Action LG4.2 (Focus Growth), and mitigation measure MM TRANS-2b (Increase Percentage of Downtown Housing Occupied by Downtown Workers) all direct the City to concentrate housing around transit nodes. The benefits of increased density are calculated for the entire Plan SB study area, including areas surrounding the Amtrak Station and SBMTD transit station. The Plan SB travel model is calibrated to account for the extent to which the inter-modal nature of these facilities influences current mode split. As such, development in the adjacent areas will capture the current level of mode shift benefit being experienced here. Precise adjustments to transit service at these facilities are not known for future conditions, and in order to provide a reasonable worst case analysis, the EIR analysis therefore does not assume particular transit service changes at these facilities.

**A10-9:** Comment noted. EIR Figure 16.5 (Future Study Intersections Level Of Service and Average Daily Traffic Volumes) identifies future traffic volumes based on the Santa Barbara Transportation Model and is labeled as such. The differences between horizon year forecasts for the SBCAG regional model and the Plan SB model are attributable to different post-processing methodologies. When comparing raw model output from the City model to raw model output from the SBCAG model, the horizon year forecasts are quite similar. For this analysis, the model volume post-processing methodology described in National Highway Cooperative Research Program (NCHRP) Report 255 was used. The NCHRP 255 method is the accepted professional standard, and post-processing model volumes is the typical approach to preparing traffic forecasts for sub-regional models, however it is by no means required and in certain situations it may be appropriate to use raw model output as opposed to post-processed count volumes. SBCAG, in *The Travel Forecast for Santa Barbara County*, did not post-process counts and instead reported raw model volumes. The differences between freeway volumes reported here, and those reported by SBCAG, are generally attributable to this difference in methodologies. Differences between forecasts in this case are logical and both approaches are technically correct. The reasons for SBCAG’s decision to report model volumes can be found on page 12 of *The Travel Forecast for Santa Barbara County* (SBCAG, 2004).
May 10, 2010

Santa Barbara General Planning Commission
Honorable Members of the City Council

RE: Draft Santa Barbara General Plan

Dear Members of the Planning Commission and City Council:

We greatly appreciate the defined goal of public health in the Draft Santa Barbara General Plan documents. Research and scientific data have revealed that most preventable health problems, including more than half of all premature deaths, are caused by personal behavior and the environment. We can prevent a great deal of premature death and disease, increasing both the quality and length of life in Santa Barbara County. Prevention can be addressed through a number of factors such as transportation and mobility, built environment, access to health care, housing, nutrition, and physical activity. By including public health as a primary goal of the general plan, the City of Santa Barbara is assuring consideration of impacts to health in future development and taking steps to improve the health of all residents.

Introduction Section

In the introduction to the General Plan, there is a discussion of the goal of Public Health. We recommend the inclusion of language on the overarching ways to improve public health through the built environment such as:

• Creating neighborhoods that are safe for walking and biking by people of all ages
• Creating neighborhoods that promote physical activity
• Ensuring convenient access to affordable and healthy food
• Reducing air pollution, including increased protection from exposure to secondhand smoke in all venues where the public has access or congregates.
• Providing a wide variety of housing options for people of all income levels to help address the need of the local healthcare workforce and access to healthcare providers.
Goals and Policies

There are many areas in the policy sections that reflect consideration of health related elements. We support these elements in the General Plan such as land use policies (e.g. mixed-use development, walkable places, and reducing the need for parking), environmental resource policies, (e.g. air quality, food and agriculture), and circulation policies (pedestrian and bicycle infrastructure).

Sometimes it is challenging to move from the high level policy discussion to the implementation level where policy is translated into practice. In the policy sections of the Draft Santa Barbara Plan, it may be helpful to provide some examples of actions that are within the role and authority of the city. Some actions that have been taken in other communities and may be modified for Santa Barbara include:

- Promoting new grocery stores in underserved communities
- Examining current zoning codes and policies to increase opportunities for physical activity and access to healthy food
- Conducting an audit to determine if local government owns land that could be made available for community gardens
- Reviewing existing vending machine contracts and eliminating the unhealthy snacks or balancing the number of unhealthy snacks or sugar-sweetened beverages in local parks and recreation centers
- Developing streets that enable safe access for all users, including pedestrians, bicyclists, bus riders, and people with disabilities
- Creating a healthy food zone around schools by regulating the location of fast food restaurants
- Restricting the number of liquor and/or tobacco retail outlets, adult businesses, or mobile food vendors located near schools
- Providing economic development or zoning incentives for healthier food purveyors
- Developing an obesity prevention resolution to promote obesity prevention policies
- Creating specific measures (e.g. rates of pedestrian injury) to measure impacts of changes
- Encouraging community centers, day-care centers, and after school programs to serve health, balanced foods
- Ensuring the availability of drinking water in schools, parks and city buildings
- Providing guidance and/or incentives for reducing exposure to secondhand smoke in multi-unit housing settings, including: affordable, subsidized and/or market-rate housing, or in a percentage of new units permitted, etc.

Some of these steps require careful balancing between the public’s interest (the harm to the public caused) and the economic impact on the property owner (allowing the owner to receive a fair return on his or her investment).

There are wonderful resources and examples through the National Policy and Legal Analysis Network to Prevent Childhood Obesity (NPLAN) at the website: www.nplanonline.org
Public Services and Safety

The Public Services and Safety section of the General Plan Summary document includes the goal of safety and preparedness. The description states "Emphasize safety and emergency preparedness as an integral art of land use planning."

We would recommend adding the following statements to PS12 and PS13:

- Ensure city employees have personal and family disaster plans and understand their role and responsibility as a disaster service worker.
- Promote public education on emergency and disaster preparedness to enhance community resilience.

The Santa Barbara County Public Health Department focuses on the community as a whole and recognizes the vital role a General Plan can play in the lives of all residents. We are committed to the well-being of county residents and wish to join with the City of Santa Barbara in the development and implementation of policies to achieve the goals of a healthier community.

Sincerely,

Takashi Wada, MD MPH
Director and Health Officer
Response to Agency Letter # A11, Santa Barbara County Public Health Department (May 10, 2010)

A11-1 (Plan SB GPU): Thank you for your comments.

A11-2 (Plan SB GPU): Thank you for your comments. These proposed goals are addressed throughout the draft Santa Barbara General Plan Update. In particular, refer to the Desired Neighborhood Qualities section, Land Use Element Policies LG1-Resource Allocation Priority, LG4-Mobility Oriented Development Area (previously numbered LG9 during DEIR), LG5-Community Benefit Housing (previously LG11), and LG17-sustainable Neighborhood Planning (previously LG15), and the Food and the Environmental Resources Element Agriculture Policies. While these suggested goals are consistent with the intent of the General Plan Update, such detailed policy statements are best included in the appropriate Elements rather than the overall introduction.

A11-3 (Plan SB GPU): Thank you for your suggested policy additions. Many of these ideas are consistent with the policy direction in the General Plan (please refer to the policy sections for Land Use and Circulation elements). In addition, please see additions and modifications to the Environmental Resources Element Food and Agriculture policies.

A11-4 (Plan SB GPU): Thank you for your comments. Please see modifications to Public Services and Safety Elements policies PS12-Emergency Workforce and PS13-Consideration of People with Disabilities in Emergency Planning.
May 17, 2010

John Ledbetter
Principal Planner
City of Santa Barbara, Planning Division
P.O. Box 1990
Santa Barbara, CA 93102

FAX: (805) 897-1904
EMAIL: jledbetter@santabarbaraca.gov

RE: Plan Santa Barbara Draft Program Environmental Impact Report

Dear Mr. Ledbetter:

Thank you for the opportunity to comment on the Plan Santa Barbara Draft Program Environmental Impact Report (DEIR). At this time, the County submits comments from the following County Departments for your consideration:

- Planning and Development Department
- County Fire Department

The County looks forward to continued dialogue on Plan Santa Barbara and future projects. If you should have further questions, please do not hesitate to contact my office directly, or Derek Johnson, Director in the Office of Long Range Planning at (805) 568-2072.

Sincerely,

Michael F. Brown
County Executive Officer

cc: Glenn Russell, Director, Planning and Development Department
Derek Johnson, Director, Office of Long Range Planning
Richard Todd, Fire Marshall, County Fire Department

enclosures: Planning and Development Department-letter dated May 17, 2010
County Fire Department-letter dated April 29, 2010
Covenant Restricting Use Elings Park South
Planning and Development Department letter
Dated May 17, 2010
May 17, 2010

John Ledbetter  
Principal Planner  
City of Santa Barbara, Planning Division  
P.O. Box 1990  
Santa Barbara, CA 93102

RE: Plan Santa Barbara Draft Program Environmental Impact Report

Dear Mr. Ledbetter:

Thank you for the opportunity to comment on the Plan Santa Barbara Draft Program Environmental Impact Report (DEIR). The Planning and Development Department, Office of Long Range Planning submits the following comments on the Plan Santa Barbara DEIR:

**General Comments**
The County supports the guiding goals and principles of Plan Santa Barbara to develop a policy framework to protect historic resources and community character; maintain a vibrant economy and diverse population; increase the supply of affordable housing to improve the jobs-housing imbalance; and broaden transportation and mobility options.

The Plan Santa Barbara DEIR has been reviewed by County staff, the County Planning Commission (PC) and Montecito Planning Commission (MPC). The PC expressed concerns regarding potential impacts of Plan Santa Barbara on adjacent unincorporated areas of the County. Of particular interest is the adequacy of water, traffic impacts, safe and convenient transportation options and methods to pace growth identified in the plan and discussed in the DEIR. The PC encourages the City to expand the traffic study in the DEIR to include adjacent areas in the unincorporated County and incorporate additional car free concepts into Plan Santa Barbara. Additionally, any other potential impacts associated with the unincorporated interface areas with Plan Santa Barbara should be analyzed in the DEIR.

The MPC encourages the City to consider potential traffic impacts in the adjacent unincorporated areas of Montecito that may occur as a result of Plan Santa Barbara. These include increased parking shortages and congestion on Coast Village Road and resulting spillover effects into residential areas, as well as Highway 101 spillover impacts into unincorporated residential areas. It is also suggested that a roundabout be considered for the mitigation proposed at the intersection of Coast Village Road and Olive Mill Road, as the document states that a project study report has been prepared for this improvement. Additionally, lighting reduction strategies should be considered for any traffic control measures developed for the proposed Plan. The MPC
also suggests that the City consider letting traffic normalize along Coast Village Road following completion of current Highway 101 improvement construction projects. Once a new baseline of traffic activity has been established additional traffic studies should be completed to determine traffic impacts of Plan Santa Barbara. Finally, the density associated with theoretical build-out on Coast Village Road should be analyzed to determine impacts to adjacent unincorporated areas. If those impacts are significant, additional mitigation measures should be considered.

The County and City of Santa Barbara entered into a Memorandum of Understanding (MOU) in January 2010 for the coordinated review of all future City projects along Coast Village Road that require City Planning Commission approval, or projects appealed to the City Planning Commission. The MOU provides a forum for County residents to provide input to the City for Coast Village Road Projects and also provides a formal structure to obtain comments from the Montecito Planning Commission and Montecito Bureau of Architectural Review. The County appreciates and expects to continue the implementation of this agreement into the future as Coast Village Road is one of the major commercial corridors within the community of Montecito.

The County is in support of the changes for the Upper State Street corridor proposed in Plan Santa Barbara. Additionally, the County supports the City of Santa Barbara Upper State Street Study (2006) that promotes street design, walkability, and public transportation enhancements. Furthermore, the County encourages coordination of roadway, transit, and streetscape improvements in conjunction with the proposed revisions to the Goleta Community Plan in upper State Street/Hollister/Modoc area (“State Street Bowtie”). This includes any future opportunities to develop a train/light rail station at State Street and Modoc.

The County also encourages and looks forward to close coordination with the City of Santa Barbara, other cities in the region and SBCAG on a Sustainable Communities Strategy (SCS) in compliance with SB375. On the County’s initial analysis, it appears that the direction of Plan Santa Barbara is consistent with the general mandates of SB 375.

The County appreciates the assurances provided by Mr. Paul Casey, Community Development Director that the City will honor the Covenant Restricting Use that currently applies to Elings Park South. The County recommends that the covenant be thoroughly summarized within the pertinent sections of the EIR, including the appropriate project alternatives. Additionally, the covenant itself should be reproduced in the document as an appendix. These covenants are provided as an attachment to this comment letter.

2.0 Environmental Setting and Existing Policies
Section 2.1.2 states that “[a]dditionally, coordinated planning efforts occur between the City and County within the City sphere of influence, located within the unincorporated regions of the County, as well as the joint City and County review process established for the Mission Canyon Planning Area (DEIR at 2-2).” The reference to Mission Canyon Planning Area should read “Mission Canyon Specific Plan.” Figure 2.2 incorrectly labels the location of Mission Canyon (DEIR at 2-5). Finally, please indicate how the DEIR has analyzed projects permitted, but not yet built, as well as those currently in an entitlement process.

3.0 Project Description
This section should include the actual number of residential dwelling units (2,795) identified throughout the DEIR as the proposed project build-out to 2030 based on the methodology discussed in Section 4.0. This section should also include the number of residential dwelling
units and amount of new non-residential floor area facilitated through new land use designations/zoning identified in Figure 3.2 Draft Plan Santa Barbara General Plan Map (DEIR at 3-9) at theoretical build-out.

4.0 EIR Growth and Policy Assumptions
The DEIR indicates residential growth under Plan Santa Barbara would be identical to growth under the no project alternative based on extrapolated historical growth rates. Section 4.1.1.1 asserts that “[t]he proposed amendments to the Land Use Map would not alter the City’s existing overall development potential, but would facilitate a change in density patterns within the City.” From the Land Use Map, it appears that new high density residential and mixed use land use designations increase densities and create significant new development potential within the City’s core. If in fact the existing overall development potential within the City would not change, the DEIR should identify those areas in the City where the plan reduces densities and development potential to compensate for increased densities and development potential in the core area. The DEIR should contain project-level analysis of this change.

While growth rates under Plan Santa Barbara may turn out to be comparable to existing growth rates, absent a growth management ordinance or other pacing mechanism, there is no guarantee that they will be equal. Measure E, which would be extended under Plan Santa Barbara, only applies to non-residential growth. Historic growth rates may be an indicator of future growth, but the land use changes proposed in the plan create new policy conditions that may change historical growth rates. Absent any similar pacing mechanism for residential growth, the DEIR should contain a more detailed, project level analysis of the new development potential created by Plan Santa Barbara at theoretical build-out of the plan beyond the limited, qualitative review given in the “Extended Range” analysis to 2050. The County is concerned that if the DEIR’s single growth rate assumptions are understated, the impacts of growth under the plan maybe understated in ways that might affect the County’s jurisdiction and provision of services. An example of potential understatement of impacts is the recommended parking management policies that call for projects to only meet a demonstrated parking demand instead of a code requirement. Relying only on demonstrated parking demand may worsen the parking overflow County residents have experienced on residential streets adjoining Coast Village Road.

The calculations used to identify sphere of influence development within the Mission Canyon Community Plan area should include the most recent build-out calculations contained in the Mission Canyon Community Plan Initial Study (June 2009).

6.0 Air Quality
This section should include a discussion of any air quality impacts associated with the transport of City of Santa Barbara-generated solid waste to the County of Santa Barbara Calle Real Transfer Station.

Mitigation Measure AQ-1 Location of Sensitive Land Uses proposes an interim prohibition of new residential development within 250 feet of U.S. Hwy 101 until the California Air Resources Board (CARB) phased diesel emissions regulations are implemented and diesel emission risks reduced (DEIR at 6-28). It is unclear if the potential 2,795 residential units presented as the proposed project and analyzed in the DEIR reflect development excluded from this buffer area. The DEIR should clarify whether these units include or exclude new residential units in the proposed buffer zone. If the units in the buffer zone were not included, the DEIR should include
an analysis of impacts associated with the new land use designations/zoning proposed in the Plan Santa Barbara Draft General Plan Map given that CARB has not adopted a regulatory requirement that prohibits development within 250 feet of U.S. Hwy 101 and given that the City’s own proposed 250-foot prohibition would be an interim measure.

7.0 Biological Resources
Mitigation Measure BIO-2 Creeks, Riparian Habitat and Species Protection proposes a creek setback standard which states that a creek setback of greater than 25 feet from the top of bank shall be established for new structures and hard surfaces adjacent to creeks and wetlands (DEIR at 7-36). The proposed mitigation measure should specify a minimum creek setback requirement and outline the criteria which establish a requirement for setbacks greater than 25 feet. As it is currently written, it is not clear how this standard will be applied.

The City should consider greater creek setbacks, particularly in the Foothills area adjacent to the Mission Canyon Community Planning area, which reflect critical habitat designations for steelhead and is the focus on-going projects to restore steelhead passage.

Mitigation Measure MM BIO-1 adds a policy to ER22-Native Species and Habitat Planning for important upland habitat protection to

Protect, enhance, and preserve contiguous areas of important upland habitats and wildlife corridors that merit long-term protection for habitat and wildlife values... (DEIR at 7-35).

The DEIR should discuss how this policy will be implemented as part of Plan Santa Barbara.

9.0 Hazards
Figure 9.2 Wildland Fire Hazard should clarify which High Fire Hazard areas on the map are State Responsibility Areas (SRA) designated by CalFire and which are within the Local Responsibility Area (LRA) for the City. The Mission Canyon Community Plan area encompasses both LRA and SRA responsibility areas which should be reflected on the map (DEIR at 9-11).

Impact HAZ-3.2 Emergency Response and Road Adequacy indicates the impact of the plan is less than significant (Class 3) as new development in High Fire Hazard Areas would be required to be consistent with City road requirements that allow for adequate responses to fire emergencies. The DEIR should direct the reader to the City policies and implementation measures that outline the road requirements for new development in High Fire Hazard Areas (DEIR at 9-21).

11.0 Hydrology and Water Quality
Coast Village Road and the Westmont College faculty housing both receive service from the Montecito Water District (MWD). The DEIR does not acknowledge that these areas receive water from the MWD nor is there any reference to a need for water conservation within its service boundaries. In addition, there is no discussion of the impacts or implications of MWD Ordinance 89 and Ordinance 90 for MWD service areas within the City. The DEIR should include a discussion and impact analysis associated with the provision of MWD water to areas within the City’s jurisdiction.
13.0 Open Space and Visual Resources
The DEIR provides a neighborhood “foothills” narrative that contains a description of rural
foothill neighborhoods north of the City which include single-family homes on 1 to 5-acre
parcels, including unincorporated Mission Canyon and Northside areas within the City’s sphere
of influence. The description should read that unincorporated Mission Canyon is designated by
the County as “urban” with a semi-rural character and that the majority of parcels in Mission
Canyon (76%) are less than 1-acre. The DEIR should also clarify any Northside areas within the
City’s sphere of influence that are not designated “rural” by the County (DEIR at 13-15).

Mitigation Measure VIS-1 Open Space Protection and Restoration calls for identification of key
open space areas for protection including areas within the City’s sphere of influence, and for
appropriate actions to preserve such areas as passive open space. Focus areas include the
foothills, particularly in lower Mission Canyon. The intent of this mitigation measure is unclear
as most parcels in the foothills of the lower Mission Canyon Community Plan Area are privately
owned and there are only a few undeveloped parcels remaining. The DEIR should explain what
the actions will be taken to preserve areas as passive open space for this mitigation measure
(DEIR at 13-38).

15.0 Public Utilities
The DEIR should clarify if increased water demand was analyzed for the residential and non-
residential development included in the sphere of influence discussions for all areas that receive
water and wastewater treatment from the City of Santa Barbara (DEIR at 15-22 and 15-28).
Additionally, it is not clear if the projected increase in wastewater demand generation includes
the portion of Mission Canyon that uses the City of Santa Barbara El Estero treatment plant for
wastewater services.

The DEIR should analyze any contribution of solid waste associated with Plan Santa Barbara at
the County of Santa Barbara Calle Real Real Transfer Station.

16.0 Transportation
From discussion in the DEIR, it appears that the DEIR traffic study studied and evaluated traffic
impacts only to roads within the City’s boundaries and sphere of influence areas. Consistent
with the SBCAG Congestion Management Plan (June 2009), which requires environmental
review to consider inter-jurisdictional effects, the traffic study should be expanded to encompass
adjacent areas in the unincorporated County, such as Montecito, Mission Canyon and the eastern
Goleta valley, and should evaluate potential impacts to key County roads and intersections.

In particular, the DEIR should disclose and mitigate traffic impacts to Hollister Avenue, Calle
Real, and Cathedral Oaks as major east-west connections to the City as a job center. Similarly,
the traffic study should be expanded to include major east-west and north-south connections in
Montecito, and evaluate impacts to East Valley Road, Jameson Lane, Hot Springs Road,
Sycamore Canyon and San Ysidro Road. The Plan Santa Barbara traffic study finds the existing
condition at Coast Village Road and Olive Mill Road to be at LOS B. However, preliminary
analysis by Fehr & Peers (F&P), the County’s traffic consultant for the County’s Montecito
Growth Management Ordinance (MGMO) Extension, found a lower existing level of service at
Olive Mill and Coast Village Road in the morning and in the afternoon. The SEIR for the
MGMO extension is expected to be released for review in mid-June. As part of the final EIR,
the City should review the discrepancy between the County’s recent counts by F&P and the City’s traffic study.

The Plan Santa Barbara Circulation Element policy C1 Reduce Transportation Energy Use contains implementation action C1.1 Pedestrian and Bicycle Infrastructure, which is identified as Mitigation Measure TRANS-2.d in the DEIR:

*Improve coordination between City, County, UCSB, SBCAG, and other South Coast cities and entities to improve and expand regional bike paths and routes that cross jurisdictional boundaries* (Plan Santa Barbara Circulation Element at 320).

The DEIR discussion for Mitigation Measure TRANS-2.d does not include or address the above language. The City should include a more detailed discussion of regional bicycle connectivity, focusing on the Coast Village Road/North Jameson corridor and linkages to Montecito.

The DEIR should analyze the impacts associated with the change in land use designation for the City of Santa Barbara Municipal airport identified in Figure 3.2 Draft Plan Santa Barbara General Plan Map. The DEIR should also analyze any contribution of traffic associated with Plan Santa Barbara at the County of Santa Barbara Calle Real Transfer Station.

18.0 Global Climate Change
The climate change policy examples provided in the DEIR do not match the policy references in the Draft Plan Santa Barbara General Plan Update documents. The DEIR should clarify the policy references to ensure they are consistent between both documents.

The County looks forward to continued dialogue on Plan Santa Barbara and future projects. If you should have further questions, please do not hesitate to contact my office directly, or Derek Johnson, Director in the Office of Long Range Planning at (805) 568-2072.

Sincerely,

Glenn Russell
Director, Planning and Development Department

cc: Michael F. Brown, County Executive Officer
    Derek Johnson, Director, Office of Long Range Planning

Enclosures: Covenant Restricting Use Elings Park South
County Fire Department letter Dated April 29, 2010
April 29, 2010

Ms. Susan Curtis
Senior Planner
County of Santa Barbara
Office of Long Range Planning
30 East Figueroa Street
Santa Barbara, CA 93101

Dear Ms. Curtis:

SUBJECT: City of Santa Barbara General Plan DEIR

Fire Department staff has reviewed the above referenced project and has one document correction comment.

1. Fire Department Headquarters, 4410 Cathedral Oaks Road is depicted as a fire station. At this time, there is not a functioning fire station at this location. See maps in Section 9 Hazards, Figure 9.2 on page 9-11 and Section 14 Public Services, Figure 14.1 on page 14-3.

The Fire Prevention Division must be notified of any changes to the project proposal. Further intensification of use or change in the project description shall require additional review.

As always, if you have any questions or require further information, please call 805-681-5523 or 805-681-5500.

In the interest of life and fire safety,

Richard Todd
Division Chief/Fire Marshal

RJ: mkb
Covenant Restricting Use Elings Park South
COVENANT RESTRICTING USE
APN 047-010-49
Las Positas Park Expansion

This Covenant Restricting Use (this "Covenant") is made and entered into by and between the County of Santa Barbara ("County") and the Las Positas Park Foundation ("Foundation") pertaining to restrictions on the use of 130.650 acres of real property located in the County of Santa Barbara, State of California, as shown on a Map of Survey recorded in Book 112, Page 43 of Record of Surveys, in the office of the County Assessor of said County (also known as APN 047-010-49) and more particularly described in the legal description attached hereto as Exhibit 1 ("Property"). The Foundation makes this covenant as an expressed condition to its receipt of that certain CREF grant of Five Hundred Twenty-Five Thousand Dollars ($525,000) provided by the County.

By this Covenant, the Foundation covenants and agrees that the uses of the Property shall be confined and restricted as follows for a period of thirty (30) years, commencing January 1, 1999:

(a) One hundred twenty (120) acres of the one hundred thirty (130) acres subject to this Covenant shall be restricted to passive recreation and the preservation of wildlife habitat. This portion of Property cannot be used for active recreation without the prior written approval of County Board of Supervisors.

(b) The remaining ten (10) acres of the Property, which is currently leased to and used by a third party for agriculture, may continue in its current agricultural use, may be converted to some other type of agricultural use, or may be converted to passive recreational uses or wildlife habitat. This portion of Property cannot be used for active recreation or other purposes without prior written approval of County Board of Supervisors.

(c) For purposes of this Covenant, passive recreation shall include activities such as hiking trails, horseback riding, jogging, hand-gliding, operation of radio-operated airplanes, picnic grounds, park benches, restroom, open public gathering in meadows, a road, and no more than 60 parking spaces cumulatively. Passive recreation shall not include activities such as ball fields, tennis courts, outdoor auditoriums, and other activities that require alteration of the natural land.

The Foundation further covenants that this Covenant shall be subject to previous covenants, conditions, restrictions, easements and rights-of-way of record, and shall supersede all rights recorded subsequent to this covenant, whether legal or equitable, whether voluntary or involuntary, to the Property in the next 30 years.
Upon any violation of the provisions of the Covenant, the County may apply to a court of competent jurisdiction for an injunction prohibiting any use of the Property in violation of this Covenant, or for any such other relief as may be appropriate. This Covenant shall be binding and effective upon its recitation.

IN WITNESS WHEREOF, the parties below agree to the terms and conditions set forth herein.

DATED: 2/3/98

THE LAS POSITAS FOUNDATION,
a California non-profit, public corporation

[Signature]
Frederick W. Clough, President
Las Positas Park Foundation
(signature must be notarized)

Dated: 2/3/98

COUNTY OF SANTA BARBARA

By [Signature]
Naomi Schwartz, Chair
Board of Supervisors

ATTEST:
MICHAEL F. BROWN
CLERK OF THE BOARD

By [Signature]
Deputy Clerk of the Board
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of CALIFORNIA

County of SANTA BARBARA

On 2/13/99 before me, MARY CARRALOJO

personally appeared FREDERICK W. CLOUGH

(Names of Officer)

☑ personally known to me – OR □ proved to me on the basis of satisfactory evidence to be the person(s)
whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the
same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s),
or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

(Names of Notary Public)

Mary Carralajo

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: COMMERCIAL DOCUMENT

Document Date: 2/13/99 Number of Pages: 3

Signer(s) Other Than Named Above: Yes.

Capacity(ies) Claimed by Signer(s)

Signer's Name: FREDERICK W. CLOUGH

☐ Individual
☒ Corporate Officer

Title(s):

Partner — ☐ Limited ☐ General
Attorney-in-Fact
Trustee
Guardian or Conservator
Other: 

Signer is Representing:

☐ Individual
☐ Corporate Officer

Title(s):

Partner — ☐ Limited ☐ General
Attorney-in-Fact
Trustee
Guardian or Conservator
Other: 

Signer is Representing:

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Prod. No. 3507
Reorder: Call Toll-Free 1-800/671-6627
ACKNOWLEDGEMENT

STATE OF CALIFORNIA
ss.
COUNTY OF SANTA BARBARA

On March 3, 1999, before me, the undersigned, personally appeared Naomi Schwartz, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal
this 3rd day of March 1999

MICHAEL F. BROWN
CLERK OF THE BOARD

By ____________
Deputy Clerk
Exhibit 1: Description of Property

That certain "130.650 A.C." Tract of land in the County of Santa Barbara, State of California, as shown on a Map of Survey recorded in Book 112, Page 43 of Record of Surveys, in the office of the County Recorder of said County.

Excepting therefrom that certain portion of Tract 5 of Rancho Las Positas y La Calera, County of Santa Barbara, State of California described as follows:

Beginning at the Southwesterly corner of Block V, Westwood Oaks Tract, as said Block is shown on a map filed in Map Book 15, Page 38 to 92, Santa Barbara Records, also being the Southerly terminus of course one of the City Sanitary Fill Site Annexation, City of Santa Barbara Ordinance No. 3166, adopted July 19, 1966. Thence, along the following course of the City Sanitary Fill Annexation South 79°29'00" East, 100.36 feet to a point on the line of the Mesa Annexation district in the City of Santa Barbara Ordinance No. 1066, adopted May 5, 1921, said point also being the most Southerly corner of Lot 1, Block H, Westwood Oaks Subdivision, above referred to, thence along the line of the Mesa Annexation District and the Westerly line of said Westwood Oaks Subdivision the following courses and distances; North 14°54'45" West, 82.93 feet, and North 14°31'00" West, 67.45 feet to the point of beginning, containing 0.3525 acres.
Response to Agency Letter # A12, County of Santa Barbara, Executive Office, Planning and Development Department, Fire Department (May 17, 2010)

A12-1: Thank you for your comments. The City looks forward to continuing discussion and cooperation with the County to address regional planning and environmental issues.

A12-2: Comment noted. The proposed Plan Santa Barbara General Plan Update (GPU) provides policy direction to foster interagency cooperation to address regional environmental and planning issues such as water supply and transportation. As such, the draft EIR provides a detailed review of citywide water and transportation impacts, and discusses the City’s potential impacts within the Sphere of Influence and other unincorporated areas, and contribution to regional cumulative impacts on the South Coast. In particular, the draft EIR provides discussion of potential impacts to US Highway 101, State Route 154, and the potentially affected segments of the regional arterial network. The GPU would continue the City’s long-term commitment to growth management, and when combined with the mitigation measures contained in the draft EIR, sets forth vigorous trip reduction programs (i.e., car free measures). The City looks forward to ongoing and expanded efforts with the County to address transportation and other regional issues.

A12-3: Comments noted. The primary focus of new growth and development under the Plan Santa Barbara GPU would be in-fill development within the commercial core areas and adjacent areas. Under these policies, well over 60% of new growth would be expected to occur within these areas, and only limited development/redevelopment is anticipated on Coast Village Road. Such development would be further limited under the continuation of Measure E nonresidential growth restrictions which would apply to the largely commercial land use designations along Coast Village Road.

The future benefits of the US Highway 101 HOV lane project through Montecito were not reflected in the EIR analysis, as that project is not yet fully funded and has not received final approval. Diversion of regional traffic, from the US Highway 101 mainline onto Montecito streets, would be expected to be reduced with the completion of this project.

The EIR addresses possible issues of concern to the community of Montecito. The EIR identifies existing and future traffic volumes on key Montecito roadway segments such as Hot Springs, Olive Mill, and San Ysidro roads (Please refer to EIR Figures 16.2 and 16.5). The EIR also provides detailed analysis of congestion issues at key intersections along Coast Village Road (refer to EIR section 16.4-Impact Trans-1.3, and section 16.5-Regional Impacts to Transportation). Discussion of potential impacts to North Jameson Road and the San Ysidro interchange are also provided and additional analysis and discussion has been added (please refer to Section 16.5 and Table 16.12). The EIR finds that traffic volumes on San Ysidro Road would experience minimal changes from 10,450 ADT to 10,460 ADT, while traffic on Olive Mill Road would increase over 20 years by less than 10% from 7,850 to 8,570 ADT. Hot Springs Road is projected to experience the greatest growth in traffic from regional sources, with traffic increasing by an estimated 28% over 20 years, from 16,730 ADT to 21,370 ADT. As discussed in the text, continued congestion growth on US Highway 101 from regional traffic growth would lead to local area trips starting and ending in Montecito, and currently using the freeway, to divert to local Montecito roads. These include trips by Montecito residents in addition to trips to Montecito destinations such as Westmont College, which is undergoing expansion. Please refer to EIR section 16.5 (Regional Impacts to Transportation) to see added discussion which further describes potential future transportation issues in the community of Montecito.
# A12, County of Santa Barbara, Executive Office, Planning and Development Department, Fire Department (Continued)

The City is aware of community concerns regarding potential parking spillover issues. However, please note that, consistent with recent amendments to the State CEQA Guidelines, parking supply impacts are considered to be a planning issue and not a CEQA issue. As such, consistent with City Ordinance requirements, future development projects along Coast Village Road would be subject to careful review for consistency with City parking standards, and potential for spillover of commercial/employee parking into residential areas would be considered at that time.

With regard to lighting issues, existing City polices and ordinances, as well as draft Environmental Resources Element Policy ER28 (Light and Glare) and Implementing Action ER28.1 (Lighting and Open Space) address outdoor lighting.

In addition, Plan Santa Barbara’s transportation analysis is based on traffic conditions prior to initiation of construction of the ongoing US Highway 101 improvements and as such, the analysis is not affected by short-term construction-related diversions and realignment of traffic patterns associated with US Highway 101 construction (refer to discussion in section 16.3.3 Santa Barbara Traffic Model).

The EIR provides assessment of potential impacts of the small amount of potential build-out on Coast Village Road anticipated over the next 20 years during the Plan time period, and a more programmatic discussion of citywide and regional impacts of build-out over the next 40 years.

The City also appreciates the County’s cooperation on improving coordination of regional planning issues along the Coast Village Road corridor. The City looks forward to working with the County to efficiently implement the new January 2010 MOU to ensure high-quality planning and appropriate community input for projects long Coast Village Road.

A12-4 (Plan SB GPU): Comment noted. The City looks forward to coordinating with the County on planning, transit, and streetscape improvements along the west end of Upper State Street and Hollister Avenue, particular during the Goleta Valley Community Plan update, as well as working on sustainable communities strategies and SB 375 issues.

A12-5: Comment noted. Please see revised text in EIR Sections 13 (Open Space and Visual Resources) and 14 (Public Services) regarding the Elings Park covenant.

A12-6: Comment noted. Please see EIR Section 2 revisions to Mission Canyon text and Figure 2.2 as suggested. Please see Section 4.0 for details on growth assumptions. Pending and permitted projects within the City that are not built or occupied as of 2009 are accounted for within the future growth forecast through 2030. For projects outside of the City, the EIR relies on information provided by the County, City of Goleta, and SBCAG, and pending projects are accounted for in the cumulative impacts analysis. Please see revised Section 4.0 (EIR Growth and Policy Assumptions) for a further explanation of this approach.

A12-7: Comment noted. Plan Santa Barbara is a policy-based document that does not set residential growth targets or restrictions. While adopted City policy controls the rate of nonresidential growth, these policies affect, but do not directly control the rate of residential growth. The amount of housing is identified is an EIR analytic assumption for purposes of impact analysis, and is based on long-term average historic growth trends and the City’s adopted and proposed policy framework. For example, City zoning ordinances limit residential growth permitted under existing zoning in many circumstances (e.g., areas with steep slopes), but
are also flexible and permit, but do not compel, development of residential uses as a dominant land use in many commercial zones. Further, Measure E and the City’s zoning ordinance strictly limited nonresidential growth to a maximum of 3,000,000 square feet over the last 20 years, regardless of the underlying zoning, with about 1.5 million square feet built. The EIR evaluates the range of 1-2 million square feet net nonresidential growth over the next 20 years. As such, the EIR focuses on realistic foreseeable development over the next 20 years while also providing a level of magnitude impact analysis associated with an estimated realistic full build-out which could potentially occur by 2050 or thereafter. As such, the EIR identifies residential growth and full build-out issues and analysis assumptions in Section 4.0, EIR Growth and Policy Assumptions rather than as part of the formal Project Description. Please refer to additional text in Section 4.0 which further explains build-out projects and the relationship of City ordinances to the Land Use map.

A12-8: Comment noted. Potential development and future build-out within the City is not based on the maximum of the designation range on the land use map alone, but would be substantially affected and often reduced by existing City ordinances and policy changes proposed in the Plan Santa Barbara GPU, including non-residential growth controls, environmental site constraints and ordinance requirements (density constraints, setbacks, FARs, parking requirements, etc.). The rate of residential build-out in the City has been remarkably stable over past decades. Individual property owner decisions and macroeconomic cycles and financing also affect build-out rates. Please refer to Sections 4.0 and 4.2.2 for a discussion of future growth and, in particular, the role of the City’s Variable Density Ordinance. Changes to the variable density provisions are intended to adjust existing provisions to influence the type, size, and location of units, not increase overall build-out potential. Potential build-out in the high-density/commercial zones is projected to occur at similar (although slightly higher) densities than what can, and has recently been, occurring under the existing commercial designations in combination with the City’s Variable Density Ordinance; as noted in Table 22.1, average densities in these commercial/high-density residential areas would increase from 20 units per acres under the No Project Alternative to higher potential densities within limited areas under Plan Santa Barbara. Thus, in this particular case, the new land use map is merely reflecting the actual existing potential to develop either commercial uses or higher-density homes in these areas as permitted under the existing Variable Density Ordinance. Therefore, Plan Santa Barbara is not anticipated to alter overall long-term City development potential.

To address the potential for growth under the Plan Santa Barbara GPU, the EIR provides both a 20-year horizon forecast, as well as a more programmatic full build-out analysis. This permits report reviewers to understand the implications of possible higher levels of growth without unnecessarily skewing the EIR’s analysis toward unrealistic high-growth projections, which in turn would lead to an overestimation of project impacts and unneeded or unrealistic mitigation measures. This meets CEQA mandates to provide for a reasonable worst-case analysis. Given the fact that the City is largely built out, and most growth therefore occurs as redevelopment, with some net increases, the stability of long-term City growth rates and the multiplicity of overlapping regulations that regulate and control growth, it is extremely unlikely that residential growth would exceed the 20-year forecast. Even if this were to occur, as disclosed in the Additional Housing Alternative and Extended Range Forecast, changes in impacts would be minimal or modest in most cases. Further, given the dearth of housing, particularly affordable housing, being produced elsewhere on the South Coast, the unlikely exceeding of the residential growth forecast could result in beneficial impacts in
such areas as regional jobs-housing balance, energy, transportation, and global climate change as discussed in the Additional Housing Alternative. Please also see response A12-3 above for a discussion of parking issues.

In addition, the proposed GPU provides for Land Use policies that require adequate resources to support additional growth, and an Adaptive Management Program with monitoring of resources and growth.

A12-9: Comment noted. The EIR estimates total growth in the Sphere of Influence based on historical growth rates, without specifying growth rates for any individual location. Therefore, inclusion of updated build-out information for the Mission Canyon area would not materially change projected sphere growth and recalculation is not warranted.

A12-10: Comments noted. The EIR identifies estimated future direct and indirect emissions associated with all projected growth and development within the City. The incremental increase in transportation of solid waste to the County’s transfer station would be expected to involve several extra truck trips per day from various parts of the City, and would constitute an insignificant portion of overall increases in emissions.

The 2,795 new units is the total amount of residential growth projected to occur within the City over the next 20 years. The limited numbers of units potentially affected by a 250-foot setback from US Highway 101 would not affect this number, which is based on historic rates citywide and not the location of growth.

A12-11: Comment noted. The EIR mitigation measure BIO-2c does establish a required minimum creek setback standard of greater than 25 feet, which has been utilized as a standard City practice but only officially adopted in ordinance for Mission Creek. Please also see draft Environmental Resources Element policies ER16-Creek Resources and Water Quality (previously numbered ER24 during DEIR) and ER18-Creek Setbacks and Restoration (previously ER26-27). These policies provide for increased setbacks where appropriate and a process and criteria for developing more detailed guidelines. The City looks forward to working with the County on protection of Mission Creek and other streams, as well as on protection and restoration of steelhead populations, both as part of a future City policy review of setback requirements and individual projects.

Please refer to revised Policy ER13-Wildlife and Native Plant Habitat Protection and Enhancement (previously ER19). This measure would be implemented through a citywide mapping effort, coordination with private property owners, purchase or protection of habitats through easements where feasible, and review of individual pending development projects.

A12-12: Comment noted. The purpose of Figure 9.2 is to depict High Fire Hazard Areas and existing fire stations, not to show jurisdictional boundaries. Because the County, CalFire and the City all operate under mutual aid agreements, depicting such boundaries would not materially add to report reviewers’ understanding of fire hazards and existing physical facilities related to fighting wildland fires.

With regard to existing City policies that affect fire protection access, please refer to the City’s Fire Master Plan, the Wildland Fuels Management Plan on City Owned Lands, the Wildland Fire Plan/EIR, and City Municipal Code requirements, as discussed in section 9 of the EIR, and all available on the City web site (www.SantaBarbaraCA.gov/Departments/Fire).

A12-13: Comment noted. Please see revisions to Section 15.0 (Public Utilities/Water Supply). Please also refer to responses A8-1 and A8-2.
A12-14: Comment noted. Please see revised text in EIR Section 13.1.3 (Open Space and Visual Resources Setting/Urban Visual Character/Neighborhoods/Foothills). However, it is important to note that the Existing Setting section does not describe County land use designations, but the actual current visual conditions and character of the broad reach of foothill neighborhoods which extend for several miles along the northern boundary of the City.

A12-15: Comment noted. Mitigation Measure VIS-1 (Open Space Protection and Restoration) applies to the broad reach of foothill neighborhoods which extend for several miles along the northern boundary of the City, and that support a wide range of parcel sizes, levels of development, slope, habitat types, etc. Implementation approaches for this measure are specified in the bullet points listed in MM VIS-1.

A12-16: Comment noted. With regard to water and wastewater services, the Cumulative Section 15.5 clearly identifies the amount of sphere of influence area for nonresidential and residential development forecasted to be served by the City. This forecast includes all sphere area development (e.g., Mission Canyon) anticipated by the City over the next 20 years.

In regard to solid waste, the EIR provides analysis of the City’s potential contribution to the regional solid waste stream and effects on the Tajiguas Landfill. While no capacity constraints or issues appear to be associated with the County Transfer Station, please see added text in section 15.1.3 (Public Utilities Setting/Solid Waste Management) which further describes the role of the Transfer Station.

A12-17: Comment noted. The EIR describes regional transportation issues in some detail, including effects on County roadways and intersections including Hollister Avenue and Calle Real west of State Route 154 and the San Ysidro interchange. Please refer to Section 16.5 (Regional Impacts to Transportation), Tables 16.8 through 16.11 and new Table 16.12, and the discussion of Regional Roads and Intersections. The Congestion Management Plan (CMP) is discussed in sections 16.2 (Applicable Plans and Policies), 16.3.5 (City Impact Significance Guidelines), and 16.5 (Regional Impacts to Transportation/Congestion on Regional Highways). Please see Table 16.12 and the added text in Regional Roads and Intersections for further discussion of forecasted increases in regional traffic volume on County streets.

In terms of differences between recent County studies and this EIR for existing traffic levels of service (LOS) at Montecito area intersections, traffic counts for Plan Santa Barbara and associated calculation of LOS were taken before the Milpas to Hot Springs Road reconstruction of US Highway 101. Differences in LOS can be explained by construction-related changes in traffic patterns, by daily fluctuations or gradual changes in LOS over a two-year period between counts. Please see added discussion in Section 16.5 and added footnote on Table 16.6. While it is appropriate for the EIR to discuss this information, caution must be exercised in comparing the results of traffic studies undertaken under widely different circumstances.

With respect to improved coordination on bike paths, mitigation measures need not repeat existing policy, as such policy is already in effect and has the force of law. The EIR impact analysis includes reference to existing Circulation Element policies and the Bicycle Master Plan as part of the impact analysis. Mitigation Measure MM TRANS-2.d (Enhance Bicycle and Pedestrian Access and Infrastructure) expands on additional City actions to further enhance bicycle infrastructure and programs which can certainly include regional connectivity.
A12-18: Comment noted. No major land use changes are identified for the City Airport, and the EIR analysis includes impacts associated with the Airport. The EIR discusses anticipated future traffic increases on Calle Real west of State Route 154. The limited increase in trash hauling vehicles would constitute an insignificant percentage of traffic increases.

A12-19: Comments noted. Please refer to the policies as numbered and described in the Draft Plan Santa Barbara General Plan Update (March 2010), as these are most current.

The City also looks forward to continuing dialog and regional coordination with the County.

A12-20: Comment noted. Please see revised figures in Sections 9 (Hazards) and 14 (Public Services) in response to the comment.
May 14, 2010.

Mr. John Ledbetter
Principal Planner
Planning Division
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102

RE: Comments on Draft General Plan and Environmental Impact Report

Dear Mr. Ledbetter:

The Santa Barbara Metropolitan Transit District (MTD) appreciates the opportunity to comment on the Draft Santa Barbara General Plan Update (Plan SB) and the Draft Environmental Impact Report (DEIR). We have the following comments on these documents.

Comments on Draft General Plan Update

MTD appreciates that, throughout the document, Plan SB is supportive of public transit to provide mobility options for residents and visitors. The future demand for MTD's public transit service, as well as the availability of the resources necessary to meet that demand, will be affected by the Plan's proposed goals and policies, such as prioritizing affordable housing and encouraging development in the urban center.

We note that the Santa Barbara Traffic Model analysis conducted as part of the Plan SB process found that Transportation Demand Management (TDM) measures, such as improved transit service, are the most effective tools available to address increased congestion. However, the Plan SB scenario currently assumes only a "Modest" TDM program, rather than a "Robust" TDM program as was analyzed under the "Additional Housing" alternative. A "Robust" TDM program would likely show a substantial reduction in future congestion under Plan SB.

Comments on Draft Environmental Impact Report

The Plan SB Draft Environmental Impact Report (DEIR) includes transit improvements as one method to mitigate increased congestion and increased greenhouse gas emissions. The DEIR includes two proposed Mitigation Measures (MM) for these impacts. The elements of these proposed mitigation measures that may affect MTD are discussed below.
MM TRANS-1 "Intersection Level of Service and Arterial Congestion"

Proposed Mitigation:

1.b. - Implement a "Friction"-Reducing Program for City Streets

MTD Comment:

Mitigation 1.b includes additional bus turnout pockets on Upper State Street. However, the mitigation measure does not mention the importance of pursuing changes in State regulations to require motorists to yield to a merging bus. (The Circulation Element changes proposed in Plan SB do recognize this importance.)

MM TRANS-2 "Reduction in Traffic Demand"

Proposed Mitigation:

2.c. - Expand TDM Program

MTD Comment:

Mitigation 2.c includes "Transit Pass Program Enhancement," which would require new developments to provide subsidized bus passes to employees and residents. It would also require that the fare media used by the subsidized transit pass programs be compatible with all transit services, including existing and future regional and interregional bus and/or rail transit services. Although there would be a substantial cost associated with providing these passes, and the required compatibility, potential sources of funding are not discussed.

Proposed Mitigation:

2.g - Improve Transit Services

MTD Comment:

Mitigation 2.g. reads as follows: "The City shall work with MTD and other regional partners to increase frequency of service during peak commute periods and expand non peak services, including to reduce peak period headways from 10 to 5 minutes on primary transit corridors, reduce non-peak period headways along primary transit corridors, increase frequency of MTD regional express lines, and substantially improve funding of regional bus services (such as the Clean Air Express)." Potential sources of the substantial capital and operating funding that would be required for MTD to provide this increased service are not discussed.

Recommendations

MTD recommends two policies for Plan SB: the first to require a "Robust" TDM program, including improved transit services; and the second to develop new sources of funding for improved transit services and the other TDM measures.
(The proposed additions to the Circulation Element currently include "Policy C.5 Transit Funding," which proposes to "study" transit funding. MTD proposes that the policy be strengthened to ensure that funding for the required enhancements is available.)

MTD looks forward to continuing our working partnership with the City of Santa Barbara to address these issues, as well as other Plan SB issues that will likely arise as this process continues.

Thank you,

Sherrie Fisher
General Manager
Response to Agency Letter # A13, Metropolitan Transit District (May 14, 2010)

A13-1 (Plan SB GPU): Thank you for your comments. The City looks forward to continued and growing cooperation with MTD to address local and regional transit needs. Please see response A15-4 regarding Transportation Demand Management (TDM) measures.

A13-2: Comment noted. Existing Circulation Element policy continues, and the EIR mitigation measures need not repeat existing adopted or proposed policy.

A13-3: Comment noted. The EIR acknowledges that added cost would be incurred to effectively implement new or expanded transit service and the draft EIR Mitigation Monitoring and Reporting Program (refer to Table 23.1) proposes that the City prepare a comprehensive update to the TDM program by 2015 and consider transit during update of the City CIP from sources such as the City General Fund, Road Fund, and State and federal grants.

A13-4 (Plan SB GPU): Comments noted. The Plan Santa Barbara draft policy update proposed implementation of a “modest expansion of TDM”. The EIR analyzed the impacts of this proposed Plan and identified mitigation measure MM TRANS-2.c (Expand TDM Program) which would add the robust TDM measures as part of the Plan Santa Barbara GPU. The City would adopt the additional mitigation and/or adopt a clear set of findings and/or overriding considerations as to why such measures cannot be fully implemented or provide for substitute mitigation measures. Please see also response A13-3 regarding required City pursuit of funding for TDM/transit.

The City looks forward to working closely with MTD to address the challenging issues associated with implementing continued transit improvements along the South Coast over the upcoming 20 years.
Hi Barbara,

When I looked at the EIR quickly the first time I only saw the map and overlooked tables 7.1 and 7.2. It looks like you have captured all of the federally-listed species in these tables. The only change I noticed is that the brown pelican has been removed from the federal endangered species list as of December 2009, and the nomenclature for the California red-legged frog changed to Rana draytonii (it was formerly Rana aurora draytonii) as of March 2010.

Thanks!
Jenny

Jenny Marek
U.S. Fish & Wildlife Service
Ventura Fish & Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003
(805) 644-1766 ext. 325
jenny_marek@fws.gov
Response to Agency Letter # A14, U. S. Fish and Wildlife Service (June 3, 2010)

A14-1: Thank you for your comments. Please refer to response A1-5. Text references have been revised in EIR section 7.1.
April 26, 2010

Comments to the Planning Commission for April 28 Hearing

RE: Plan Santa Barbara Draft General Plan Update and Draft Environmental Impact Report (DEIR)

Members of the Allied Board have been reading and analyzing the General Plan Update documents and we have reached agreement on a number of “big picture” issues.

General Comments
Allied has observed that for a process touted as being “citizen driven” the GPU has been anything but that. While there was a great amount of citizen participation, the public input was manipulated within a very constricting and almost self-determining format.

The documents that have been produced are just the opposite of “user friendly.” If those of us who have had years of experience dealing with such documents are having difficulty, we can only imagine how un-decipherable they are for the general public.

EIR’s Failure to Assess Assumptions
Many of the proposals presented in the project description for assessment of environmental impacts were based upon assumptions. We and others questioned the validity of these assumptions. We were led to believe that the EIR would have a discussion of these assumptions and provide some basis that they will work as proposed. This discussion is completely missing and assumptions are treated as givens.

For example, massing of high densities in certain locations, such as downtown, would result in beneficial transportation choices and would take commuters off of the roads; would provide housing that is affordable to substantial numbers of the workforce within the city; and that the proposed housing policies and incentives would have a positive effect on the jobs-housing balance. We are concerned that if these assumptions are incorrect and the policies do not work as proposed, there is the potential for environmental impacts.

The EIR must contain an impact analysis of this potential worst case scenario. This is not too speculative to be addressed. The documents themselves provide ample evidence that the new units will be expensive to build and there is no policy to guarantee that they will be affordable to the target group. There is no guarantee that the residents of these units can be required to work downtown or that they will abandon their cars. Related documents clearly state that reductions of congestion will be the result of TDM and not land use policies. The EIR needs to clearly state the impacts of the land use policies if the TDM is not implemented.
Measure E
We agree that new Measure E limits should be adopted that would include a maximum of no more than 1,000,000 square feet of new commercial development over the next 20 years.

Residential Density
We support that the following:
- Residential would be limited to no more than 140 residential units per year with no carryover of any shortfall.
- Maximum residential density should be limited to an average of 20 units per acre. The High Density Standard should be eliminated from the GPU. We oppose increasing residential densities beyond the Medium High Density limit without exception.
- New units should be spread throughout the city, subject to strict compatibility standards in existing neighborhoods, including fitting within their resources and existing zoning.

Design Standards
We call for the GPU process to include development of new design standards for buildings in commercial zones including such items as setbacks, open space, and height limits. This should be conducted in a special open public process.

Additional Allied Recommendations
- All references to increased density contained in the proposed changes to the General Plan be removed. The rationale for this is to remove any ambiguity and preclude any references that decision makers in the future could use as a basis for changing the zoning ordinance during the life of the GPU.
- Change the Variable Density Ordinance to limit the size of units in new residential developments. The density should vary with unit size according to the Medium High Density which maintains the current average of 20 units per acre.
- Encourage employer sponsored housing as the “tool of choice” for development of workforce affordable housing.
- Make protection of the character of existing residential neighborhoods an equal priority with affordable housing in accord with Plan Santa Barbara’s goal directive #2.
- Clarification in the GPU that affordable housing is a regional issue and not a quest or crusade which places greater responsibility on our city than is reasonable to expect from one of the size and character of Santa Barbara.

Cathie McCammon, President
Response to Organization Letter # O1, Allied Neighbors Association (April 26, 2010)

O1-1 (Plan SB GPU and EIR): Thank you for your comments. Your policy comments and recommendations will be forwarded for decision-maker consideration. The City has endeavored to maintain an open process to foster public participation and has held dozens of public workshops, outreach meetings to individual groups or organizations, and decision-maker hearings over the last three years. The City remains committed to obtaining maximum feasible public involvement during the General Plan adoption process and looks forward to continued Allied Neighbors Association involvement throughout this period.

The revised General Plan and EIR are formatted so as to be accessible to the public, and include the use of tables, maps, and graphs to concisely display information. However, because these documents deal with a citywide General Plan update with analysis and policy recommendations that span 20 years, a relatively substantial depth and complexity of analysis and supporting documentation is required.

O1-2: Comment noted. The assumptions within the EIR have been subjected to rigorous analysis for general feasibility as required under CEQA. In regard to the effects of downtown housing on trip generation, the EIR and the transportation studies and modeling provided in Appendix I provides extensive analysis of the trip generation characteristics of new housing in various areas of the City. Trip generation estimates for this type of development are based on empirical evidence. Under such circumstances, it would be inaccurate and misleading to show higher trip rates than shown by community-specific empirical analysis absent some compelling evidence that this would come to pass. No such evidence has been submitted. However, to foster improved understanding of the vigorous process used to derive project assumptions and to provide an overview of supporting evidence, please see the new “blue box in Section 4.3.1, EIR Growth Assumptions. Please also see response O3-7.

In the case of affordable housing, the EIR fully characterizes the challenges facing the City in managing the balance between jobs and housing and in providing for affordable housing. The EIR employs two methods to extensively analyze the overall jobs-housing balance and also assesses the balance of jobs and affordable housing based on employment types and relevant wages, not on assumptions of how much affordable housing might be yielded by higher-density housing. While the EIR concludes that the overall number of jobs and provision of housing will remain in rough balance under Plan Santa Barbara over the next 20 years, the EIR identifies a shortfall of an estimated 2,137 affordable units over the life of Plan Santa Barbara. The EIR further discusses the effects of several alternatives upon affordable housing, and considers regional cumulative effects on the South Coast.

The analysis within the EIR is fully consistent with the requirements of CEQA that EIRs employ a reasonable worst-case analysis. The law does not require a catastrophic worst-case analysis that disregards existing evidence. The EIR does not assume that all new high-density downtown units will be affordable, but discusses increased affordable housing demand based on employment projections and compares that to historic rates of City production of affordable housing. The EIR identifies the challenges faced meeting this level of housing production due to the expiration of the City’s Redevelopment Agency. Please see discussion in Section 19.4.2 of the EIR (Citywide Job Growth and Housing Affordability).

Similarly, the EIR does not assume that all residents of new housing will abandon their cars or work downtown; rather trip generation rates for new housing downtown are based on measuring the trip rates of existing housing downtown. In regard to the effectiveness of Transportation Demand Management (TDM), the EIR impact analysis assumes only a modest increase in TDM implementation as part of the analysis of Plan Santa
# O1, Allied Neighbors Association (Continued)

*Barbara* and recommends that a much more vigorous TDM program be implemented as mitigation. While substantial empirical evidence is provided in Appendix I that such TDM programs have a very high probability of success in reducing congestion, the EIR continues to identify traffic congestion as a Class 1 unavoidable and significant impact, even after application of TDM measures. In addition, the EIR requires that the City implement a vigorous TDM program and/or adopt a clear set of findings and/or overriding considerations as to why such measures cannot be fully implemented or which provide for substitute mitigation measures. Finally, the Mitigation Monitoring and Reporting Program and the General Plan Update policies and Adaptive Management Program call for regular monitoring of implementation and progress toward Plan objectives, and provide for policy adjustments and course corrections as needed.

**O1-3 (Plan SB GPU):** Comment noted. The EIR contains two alternatives which provide for a maximum of 1,000,000 new square feet of nonresidential growth.

Residential growth under the Plan Santa Barbara scenario would equate to an average of approximately 140 units per year; however, no formal growth management mechanism has historically been used or is proposed to “pace” such development. However, the draft GPU policy LG 1.2 (*previously numbered LG3b during DEIR*) provides that resource capacities to support new growth would be monitored and housing policies adjusted as needed.

The EIR provides a range of options for decision-makers and the public on residential densities and discloses the tradeoffs and impacts associated with various approaches. The EIR also reviews a range of growth options, although the majority of growth under all options would be directed to the commercial core areas; all such development would be subject to existing and proposed new City policies regarding compatibility with existing neighborhoods.

In regard to design standards, the draft General Plan Update provides for development of new standards to address setbacks, open space, and other redesign issues for compatibility of new buildings in commercial zones (refer to Land Use Element Policies LG13-Community Character and LG14-Historic Structures (*previously CH9 – CH14*). Creation of additional GPU implementation tools such as new overlays, form-based codes, and other tools would be subject to a full public review process.

**O1-4 (Plan SB GPU):** Comments noted. Initial Planning Commission recommendations to the City Council are to increase densities in the commercial and portions of multi-family areas of the City. The General Plan densities that are ultimately adopted by City Council are what will be referenced throughout the document. One of the goals of this General Plan Update was to be clearer on the General Plan Map and Land Use Element text as to the allowed densities throughout the City.

One of the initial implementation actions will be amendments to the existing Variable Density Ordinance to base density standards on unit size (instead of number of bedrooms). Amendments would reflect what the Council ultimately decides the density should be.

See implementation action added to LG5.1 Affordable Housing to include employer sponsored workforce affordable housing as Community Benefit Housing.

Plan SB Goal #2 as adopted by City Council in 2005 states that: Ensure affordable housing opportunities for all economic levels in the community, while protecting the character of established neighborhoods. While the provision of affordable housing is a top priority for the City, one of the challenges of developing the housing
# O1, Allied Neighbors Association (Continued)

is the protection of neighborhoods and compatibility with surrounding areas. The City has strict design re-
view and findings as part of the discretionary review of projects, and these issues would continue to be care-
fully considered as projects are reviewed.

The City recognizes that regional cooperation is necessary to help address the affordable housing issue. This
is discussed in the Introduction to the Housing Element under “City in Context of the South Coast Region.”
The Introduction to the Elements section of the General Plan has a discussion under “Regionalism” that ex-
plains the City’s role in the region and the need for a combined effort to address issues such as climate
change, affordable housing, and regional transportation. See also proposed GPU policies EF21 (Regional
Economic Strategy) and Housing Element Policies H22 (Work to Solve Regional Jobs/Housing Imbalance),
H23 (Sustainable Regional Housing Solutions), and H24 (Cooperation on Legislative Changes).
ORGANIZATION LETTER # O2

TO: Planning Commission, City of Santa Barbara
FROM: General Plan Update Committee, Citizens Planning Association
DATE: April 26, 2010
RE: Preliminary comments on Plan Santa Barbara and the Draft EIR

The Citizens Planning Association has been participating in the Plan Santa Barbara discussions with great interest. Our present remarks, made on behalf of CPA’s General Plan Update Committee, will be followed by a more detailed comment letter to be submitted on the Draft Environmental Impact Report.

As you know, our organization believes that the city's growth should be carefully planned in the interest of both its current and future residents. In other words, we want to ensure that Santa Barbara remains a socially diverse, economically thriving, and culturally vibrant city without exceeding the limits of its natural and infrastructural resources. To this end, we propose the following courses of action concerning

1. growth limits,
2. community benefits, and
3. environmental protection.

1. GROWTH LIMITS: To promote carefully managed growth, we advocate a combination of the numerical limits proposed in the “Lower Growth” alternative (no more than 1 million square feet of new non-residential development) and the Plan Santa Barbara “Project” (no more than 2,795 new dwelling units over 20 years within existing city limits). We urge that the proposed Adaptive Management program annually monitor the pace of growth, periodically readjust the pace with a view to yielding approximately 50,000 square feet of nonresidential development and about 140 dwelling units per year. We note that such moderate but steady growth does not warrant the up-zoning of dozens of city blocks to ‘High Density’ areas (23 to 33 dwelling units per acre). Hence we request that the impactful “high density” zoning designation be eliminated. Instead of such up-zoning, which would mostly yield market-rate housing, we support the present policy of occasionally permitting, after rigorous design and traffic impact review, exceptionally high densities for 100% affordable developments with exceptionally small units (as exemplified downtown in the attractive Casa de las Fuentes). Employer-subsidized rental or resale-restricted housing also deserves special consideration as a means of improving the city's jobs/housing balance.

2. COMMUNITY BENEFITS: When coupled with human-scale architecture and generous setbacks, modestly sized dwelling units show great potential for simultaneously improving the city’s jobs/housing balance and protecting our historic and visual resources. We therefore welcome the gearing of “variable density” limits in areas of “Medium High Density” (15 to 22 dwelling units per acre) to unit sizes rather than to the number of bedrooms. Indeed, we
recommend that the production of units made affordable by regulation and/or by design be annually monitored and, if needed, periodically adjusted to make up for any possible underachievement. We also urge increased efforts to establish new schools and neighborhood parks commensurate with the evolving population density of individual neighborhoods.

(3) ENVIRONMENTAL PROTECTION: The General Plan’s updated Land Use and Housing Elements should insist on our living within our natural and infrastructural resources (including water, public safety, and road capacity) and on avoiding excessive need for costly mitigating measures (for example, sea water desalination and major landfill expansions). In terms of public health, the city should show greater awareness of the nationwide “epidemics” not only of obesity and diabetes but also of asthma and other respiratory diseases. That is to say, the health benefits afforded by incentives to promote walking and biking to school or work should be supplemented by effective remedies against traffic-generated air pollution. For example, all new residential and mixed-use buildings should be set back from Highway 101 by the state-recommended 500 rather than only 250 or even fewer feet, and ample landscaped setbacks should also be required from heavily traveled commercial traffic corridors. In our letter to be submitted by the May 17 comment deadline, we will provide detailed information about recent scientific research on the serious health effects of traffic-related air pollution and about other environmental impacts that were ignored or insufficiently analyzed in the Draft EIR.

A final word about the very large number of errors, inaccuracies, and omissions in those portions of the two documents that pertain to the city’s proud history and planning background. We trust that some of these have already been or will soon be corrected. It would be most regrettable to leave them standing in the final versions of important documents published by the City of Santa Barbara.

We thank you in advance for your consideration and support.
Response to Organization Letter # O2, Citizens Planning Association (April 26, 2010)

O2-1 (Plan SB GPU): Thank you for your comments, which will be forwarded to decision-makers for consideration. The City adopted General Plan and the proposed goals and policy updates of the draft Plan Santa Barbara General Plan Update are in alignment with CPA’s broad goals to maintain social diversity, economic and cultural vitality, and protection of natural resources and infrastructure availability.

O2-2 (Plan SB GPU): Comment noted. Two alternatives within the EIR limit nonresidential growth to 1 million square feet, while both Plan Santa Barbara and the No Project Alternative limit residential growth to 2,795 units (at 140 units/year). As part of the final General Plan adoption process, the City will consider hybrid alternatives which may blend various characteristics of the EIR alternatives.

Please note that the proposed new high-density zones are intended to reflect the existing practice of locating multiple-family homes in existing commercial zone districts and that this high-density designation is intended to increase the feasibility of providing the units as affordable housing, not to accommodate an increase in overall growth. Proposed Land Use and Housing Element Policies LG13-Community Character, H11-Promote Affordable Units, H12-Market-Rate Affordable Housing, H13-Non-subsidized Rental Housing, and H14-Sustainable Housing (previously numbered CH9-14, H1-17 in Policy Preferences Report and DEIR) are intended to ensure that new projects in the high-density zones provide increased amounts of affordable housing. These proposed policies also support smaller unit sizes, employer provided housing, and resale restricted housing. However, as discussed in detail in Section 19.0 of the EIR (Population and Jobs/Housing Balance), substantial shortfalls of affordable housing needed to meet demand from increased employment in the City is projected to occur under all of the Project Alternatives. Therefore, if the City is to maintain or improve its historic commitment to provision of affordable housing, it will be important to keep as many tools available as possible, such as higher-density housing, while ensuring that such development reflects compatible design and minimizes or avoids environmental impacts.

O2-3 (Plan SB GPU): Comment noted. Housing Element Policy H18 (Monitoring of New Housing Gains and Losses) requires monitoring of affordable housing production while Land Use Element Policy LG3 (Live Within Our Resources) and Implementation Action LG3.1-Adaptive Management Program (previously numbered LG2 and AM1-4) also require monitoring of community indicators and policy adjustments as required. Please see response O2-2 regarding limitations on unit sizes and responses A2-1 and A2-6 regarding protection of community character.

O2-4 (Plan SB GPU): Comments noted. A major focus of the draft General Plan is “Living Within Our Resources”, and new policies to address public health are proposed to be added to the General Plan (please see Policy LG12-Healthy Urban Environment, and policy updates in the Environmental Resources Element). The analysis in the EIR indicates that reactivation of the Desalinization Facility would not be required to meet water demand of any alternatives; rather this facility would remain available as an emergency drought buffer or an option if climate change induced alternations in water supply were to occur. In terms of landfill expansion, the County is planning to close the Tajiguas Landfill during the life of Plan Santa Barbara. The City’s existing high level of waste diversion can help delay, but not avoid this closure and the need to explore other options for replacing waste disposal capacity, such as the waste-to-energy facility currently in initial planning stages for the Tajiguas site.

In regard to potential air pollution along roadway corridors, please see responses A9-2 and O3-8.

1 The 4,400 units forecast under the Additional Housing Alternative could potentially meet or exceed affordable housing demand of 1 million square feet of nonresidential growth, but only if 30% of all units were provided as affordable, a major challenge given loss of Redevelopment Agency funding.
# O2, Citizens Planning Association (Continued)

O2-5 (Plan SB GPU and EIR): Please see the revised GPU and EIR documents for corrected text and information updates. The City looks forward to working with CPA during the adoption phase of the General Plan Update as well as subsequent planning and implementation phases.
FROM: Citizens Planning Association’s General Plan Update Committee  
TO: John Ledbetter, Barbara Shelton, Rob Dayton, Bettie Weiss  
CC: Planning Commission and City Council  
RE: Plan Santa Barbara Draft Environmental Impact Report (DEIR)  
DATE: May 14, 2010

The present comment letter aims at helping to ensure that Santa Barbara remain true to its historic heritage as an attractive, socially diverse, economically thriving, and culturally vibrant city without exceeding the limits of its natural and infrastructural resources.

[A] THE DRAFT EIR (DEIR) COMPARES APPLES AND ORANGES AND NEEDS TO BE SUPPLEMENTED BY THE ANALYSIS OF A HYBRID SCENARIO

The DEIR compares the Project to three alternatives in a way that makes an evenhanded evaluation of the four scenarios very hard if not, indeed, impossible. To mention only the two most obvious factors leading to essentially lopsided comparisons:

1. The “Project” and “No Project” scenarios are based on the assumption of at least twice as much nonresidential development (2 million and 2.3 million square feet, respectively) as the “Lower Growth” and “Additional Housing” scenarios (1 million square feet).

2. The robust and potentially very consequential Travel Demand Management proposals are only considered with respect to the “Additional Housing” alternative.

Combined, these two factors have resulted in misleading comparisons among the scenarios. For example, Table ES-2 on p. 26 of the DEIR Summary unfairly characterizes the Additional Housing Alternative, which benefits from both factors just mentioned, as having “substantially less impact” in several issue areas than the other two alternatives to Plan Santa Barbara.
In oral statements made at various hearings, both staff and decision makers repeatedly said that the DEIR tends to compare apples and oranges and that it may be desirable for Planning Commission and City Council to explore a "hybrid" combination of different features chosen from the various scenarios. We agree and urge that the Final EIR

(a) state that the analyzed scenarios do not yield fair comparisons,
(b) evaluate a "hybrid" reflecting the most likely outcome of the community's multi-year discussions, and
(c) formally compare the chosen hybrid with the original "Project."

We believe that developing such a hybrid may even be necessary if the EIR is to include the reasonable range of alternatives required by CEQA; see especially Guideline 15126.6(a). Developing a well-designed hybrid could also yield an alternative that is environmentally superior to the Project and to all other alternatives considered so far while feasibly attainment the main project objectives.

Judging from the May 6th Planning Commission deliberations, the following combination of major features may emerge as a good candidate for such evaluation: most policy preferences of Plan Santa Barbara adjusted to the nonresidential development limit of 1 million square feet and supplemented by the majority of the analyzed robust Travel Demand Management measures. We prefer such a hybrid to any of the four scenarios analyzed in the DEIR but submit that it, too, may end up falling short of achieving the CEQA ideal of meeting all major project objectives with the minimal possible environmental impact. With a view to steering Plan Santa Barbara toward such a goal, we offer the following comments on the DEIR's discussions of impacts in four issue areas: jobs/housing balance, visual and historic resources, transportation, and traffic-related air pollution.

[B] THE DEIR UNDERESTIMATES SERIOUS IMPACTS IN AT LEAST FOUR ISSUE AREAS

We urge that the drafting of a hybrid scenario take the comments offered in this section of our letter into account.

B-1. As for the city's jobs/housing imbalance, we note that the controversial "High Density" areas proposed by Plan Santa Barbara would only reserve 15 or, at most, 25 percent of the new dwelling units for people who are economically eligible for
subsidized housing but may not be, let alone remain, employed within city limits. Since the proposed up-zoning of dozens of city blocks to 'High Density' areas would mostly yield market rate housing, the Final EIR (FEIR) should state that such blanket up-zoning is more likely to worsen than improve the city's jobs/housing balance. By contrast, a policy preference for the occasional approval of exceptionally high density overlay zones, to be applied only to 100% affordable condo or rental developments, could significantly improve that balance. Another promising approach that should be explored and explicitly analyzed in the FEIR is employer-supported housing, including subsidized housing for the city's critical work force (e.g., firefighters and police officers). Some remarks made by Assistant City Attorney Scott Vincent at the April 29th Planning Commission meeting seemed to indicate that it would be legally feasible for an entity he called “Santa Barbara Incorporated” to give such preferential treatment to certain groups of its employees.

B-2. As for the protection of visual and historic resources, we are puzzled by the DEIR’s insufficient attention to the scenic views and established architectural character of El Pueblo Viejo. Major residential and nonresidential developments in this area might benefit a few dozen property owners and developers, and they might also provide affordable dwelling units for a few dozen lucky winners eligible to participate in lotteries arranged by the Housing Authority. But the proposed overdevelopment of the EPV would make our city less attractive to residents, commuters, and visitors alike. Especially the Additional Housing scenario, which projects the “construction of 80 to 80 new multiple-story buildings within the MODA with many of these located within El Pueblo Viejo” (p.13-35), would imperil the sustainability of tourism as a major, if not indeed the most important, element in the city’s economic vitality. For additional comments on DEIR Sections 10 (Heritage Resources) and 13 (Open Space and Visual Resources), see the attached Appendix.

B-3. As for transportation, we note that the DEIR confusingly waives between addressing two very different problems: the number of job-related commutes to the city and the number of job-related commutes to the South Coast (including Goleta and Carpinteria) as a whole. This waiving, and the uncertain specificity and reliability of various quoted figures, is particularly manifested in Table 16.1, Figure 16.1, and the following two sentences quoted below from Section 16, p.3 (emphases added):

“In total, it appears that there are up to 32,000 commuter trips to the South Coast on a daily basis via automobile […]. Of this South Coast total, there are approximately
15,000 commuter trips to the City from the north, and 17,000 commuter trips to the City from the south."

The above sentences do not make it clear whether they refer to commuters to the South Coast or to the City and whether the numbers quoted include car trips sharing rides. Besides, both the City and SBCAG have listed quite different commuting figures on other occasions.

We also note that the DEIR unduly focuses on the PM rush hour of the most congested intersections. This approach leads to undesirable neglect of any increased congestion that would be experienced by residents, commuters, and visitors alike at all hours and at all intersections, as well as between intersections. One example of this neglect is the lack of quantifiable attention to mid-block travel time in commercial corridors with bus stops and multiple curb cuts between intersections. Especially in an arterial like Upper State Street, it would be important to quantify mid-block friction and that friction’s potential for intensifying stress, road rage, the temptation to phone and text, and the blocking of emergency vehicles. Yet, despite repeated community complaints, the pertinent maps do not even indicate the high Roadway Average Daily Traffic Volumes for Upper State Street between Las Cumbres and Las Positas Roads (see Figures 16.2 and 16.5 in DEIR Vol 1 , Section 16, pp. 9 and 39).

Furthermore, congestion is expected to increase under all four scenarios even at the most congested intersections. Therefore, the FEIR should consider that the Additional Housing Alternative’s rosy picture of minimal rush hour traffic increase (DEIR Vol 1, Section 16, pp. 64-66) may well prove to be illusory. For this to happen, all it takes is that some of the most aggressive measures of the proposed Travel Demand Management should run into insurmountable financial or political obstacles and/or that the residential trip-generation forecasts of the Travel Demand Model Overview’s Table 5 (DEIR Volume 2, Appendix I-3, p. 20 of the digital version) should fail to materialize. For this reason, the EIR must evaluate the likelihood that these programs will be effective mitigation, and if necessary develop additional mitigation measures. Additionally, prudence and due diligence demand that the FEIR take a more realistic comprehensive look than the DEIR did at congestion and its most serious consequence -- traffic generated air pollution -- to which we now turn.

B-4. As for traffic-related air pollution, we regret that the DEIR’s lopsided approach to public health results in inadequate treatment of air quality. The DEIR shows laudable interest in fighting the nation-wide epidemics of obesity and diabetes through the encouragement of walking and biking to work and school, but it shows no comparably
great interest in fighting the nation-wide epidemics of asthma and other respiratory diseases linked to living near freeways and busy arterials. This is especially deplorable because walking or biking to work or school in Santa Barbara is particularly problematic for "sensitive receptors" (children, seniors, and respiratory patients) during inversion effects and other adverse meteorological conditions, as well as on several days or even weeks after soot-generating wild fires.

To be sure, the most pertinent scientific study exploring interactions between neighborhood walkability and air pollution exposure was published less than a year before the completion of the DEIR. (See Julian D. Marshall, Michael Brauer, and Lawrence D. Frank, "Healthy Neighborhoods: Walkability and Air Pollution," Environmental Health Perspectives 117:1752–1759 [Online 20 July 2009]) Yet the potentially serious health impacts of outdoor exercise have long been known. (See, for instance, Christopher C. Daigle et al, "Ultrafine Particle Deposition in Humans during Rest and Exercise," Inhalation Toxicology (2003), 15:539-552; and J.E. Sharman et al, "Cardiovascular Implications of Exposure to Traffic Air Pollution during Exercise," Q J Med (2004) 97:637-643.) Furthermore, the disparate impacts of urban densification on regional versus local air quality are known to scientists and should have been fully acknowledged in the DEIR. As stated in Howard Frumkin, Lawrence Frank, and Richard Jackson, Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities (Washington D.C.: Island Press, 2004):

"On a regional scale, less driving would lead to less pollution, an improvement that would be especially marked for regional-scale pollutants such as ozone. But on a very localized scale -- alongside a street in a particular neighborhood -- greater traffic density could increase exposure to pollutants, especially locally scaled pollutants such as particulate matter and air toxics." (p.77)

The same book also suggests the need to be very cautious about locating residential developments near such traffic arterials as Carillo Street and Upper State Street with current (and increasing) traffic volumes of about 30,000 Average Daily Trips:

"Investigators in several countries carefully measured pollutant levels alongside streets and in homes to determine the exposures associated with traffic. One study, in Amsterdam, found that people who live near busy streets (defined as carrying more than 10,000 vehicles per day) were exposed to two-to-threefold higher levels of 'black smoke' (a measure of particulate matter), NOx, and carbon monoxide, compared to people who lived near a less busy street. [...] A more detailed study, also in
Amsterdam, compared homes in busy main streets with homes with lightly traveled side streets, measuring both outdoor air and indoor air. Levels of both PM (particulate matter) and VPCs (volatile organic compounds) were higher near the busy streets both outside homes as indoors" (p.76).

These and other studies (referred to in endnotes 8 through 15 on p. 234) indicate that a threshold of 10,000 vehicles per day may be necessary to capture the effects of pollutant levels on residents living near Santa Barbara arterials. We believe that the FEIR should recommend measuring outdoor and indoor pollutant levels near heavy traffic before the city adopts policies favoring residential densification in Santa Barbara's urban core and along traffic arterials. At the very least, policy recommendations for increasing residential density in the city's commercial areas ought to identify environment-friendly mitigating measures such as ample and generously landscaped setbacks (rather than energy-wasting requirements for mechanical air circulation and temperature control).

Instead of generally requiring strict and enforceable city standards for setbacks and landscaping, the DEIR even fails to heed the explicit guidance offered by the California Air Resources Board and endorsed by the Santa Barbara County Air Pollution Control District, according to which new residential developments should not be sited within 500 feet of freeways. We note that the attempted justification (see DEIR Volume 2: Appendix E, pp. 57-61 of the digital version) for disregarding state and county guidance is based on unknowable long-term results of prescribed statewide efforts and ignores at least two major relevant factors affecting air quality in the city blocks in question: the railroad tracks for diesel-powered trains run parallel to Highway 101 and the partially toxic pollution generated by ocean shipping along the California coast may or may not be enforceably regulated by international agreements in the foreseeable future. The overall result of the DEIR's approach to traffic-generated air pollution is a severe understatement of the potential impacts on the health of Santa Barbara residents caused by locating residential development in close proximity to Highway 101 and other arterials carrying over 10,000 vehicles per day.

We thank staff, consultants, Planning Commission, and City Council in advance for considering our input.

Attachment: FURTHER COMMENTS REGARDING SECTIONS 10 (HERITAGE RESOURCES) AND 13 (OPEN SPACE AND VISUAL RESOURCES) 2010-05-17 letter re DEIR pages
APPENDIX TO CPA GPUC COMMENT LETTER OF MAY 14, 2010: FURTHER
COMMENTS ON SECTIONS 10 AND 13 OF THE PLAN SANTA BARBARA
PROGRAM DRAFT EIR

COMMENTS REGARDING SECTION 10 (HERITAGE RESOURCES) IN PLAN
SANTA BARBARA PROGRAM DRAFT EIR

By Mary Louise Days and the Citizens Planning Assn. Committee on the City General
Plan Update

Page 10-1 The “Issues” paragraph could include a policy recommendation for continued
designation and preservation of historic resources.

The photograph caption should be re-worded to state that the Presidio was founded in
1782, not constructed then, and that it marked the beginning of the Spanish “settlement”
of Santa Barbara, not “occupation.” The same photo and caption appear on page 17 of
the March 2010 Draft EIR Summary. There was no Santa Barbara to occupy in 1782,
and the native village near West Beach was not “occupied.”

Page 10-5 First paragraph contains errors. Father Serra did not establish Mission Santa
Barbara in 1782, but he did accompany de Neve and Ortega during the founding of the
Presidio in that year. The Mission was founded in late 1786. Its location might better be
given as Laguna and E. Los Olivos Streets. Mission Canyon Road begins across the
Mission Creek bridge. East Los Olivos Street intersects with Alameda Padre Serra.
During colonial times there were also adobes on East de la Guerra Street. The last
sentence in the paragraph should be removed, as there was no Chumash village
established at the Presidio.

Second paragraph, fifth sentence, beginning “Spanish political influence…”
the words “and early American” should be inserted after “pre-American.”

Third paragraph, first sentence, insert “from the south” after “in 1887.” Also,
the should be noted that many brick and wood-framed buildings were constructed during
the 1870s, not solely after 1886.

Figure 10.1 In the table “Prominent Historic Structures” No. 1 is not located on E. De la
Guerra Street. The addresses of the Presidio are on E. Canon Perdido Street. Its
construction date is 1782 et seq or 1788 et seq. No. 6, El Paseo, also has an address on E.
De la Guerra Street. Its construction dates are 1922-24 and 1928-29. No. 8, the County
Courthouse, construction was completed in 1929.

Page 10-7 The caption for the Arlington Theater photograph should say “first greeted
guests in 1931.”
Second paragraph, the Hoffmanns did not found the Community Arts Association; they joined it. The Plans and Planting Committee of the association was led by Mr. Hoffmann, and Miss Chase was secretary, at the time described.

Third paragraph, it would be more accurate to say at the end of the second sentence “and they were semi-successful.” The correct name of the 1960 City committee was “Advisory Landmark Committee.” The Arlington Theatre should not be included in the list of buildings in the same sentence. The end of the last sentence should be changed from “…protect historic resources” to “…protect the site of the Royal Presidio.” Prior to that date El Cuartel had been a state historic monument.

Page 10-8 First full paragraph, third sentence, the reference to demolition projects should be deleted when in the same sentence as the words Historic Landmarks. In the same sentence insert “and Brinkerhoff Avenue Landmark District” before “to ensure…”

Page 10-9 First full paragraph, second line, insert “and survey forms” after “well as maps.”

Bottom paragraph, footnote 3, we are of the opinion that the Riviera Campus Historic District is not adjacent to the City’s core, and that the number “Four” at the beginning of the second sentence should be changed to “Three.”

Page 10-10 Table 10.4. The architectural styles listed for the Brinkerhoff Avenue Landmark District should be re-written to be more accurate. We suggest delete “Victorian-era” and name example styles from the Municipal Code, as was done for the other districts.

Second paragraph, first line describing El Pueblo Viejo, delete “and Downtown Core.” The original EPV encompassed sixteen blocks, but did not include or cross State Street. Third line, the district also includes the Museum of Natural History. Sixth line, delete reference to Santa Barbara Junior and Senior High Schools, as they are not located in EPV. The last sentence mentions a Historic Maritime Tradition within EPV, but Stearns Wharf and the Breakwater are not within EPV boundaries.

Third paragraph, second sentence, we suggest that the word “All” be inserted in front of “these guidelines…”

Page 10-11 First paragraph, second line, insert “College” after “Santa Barbara.” This was the school’s correct name in 1944. Third line, delete “commercial” and insert “school and office” before “development.” The campus did not possess a commercial land use zone classification; it received a residential classification with a research and development overlay zone.

Third paragraph, second line, we suggest insert “Anglo-American” before “physician” for Dr. Brinkerhoff. The as-is sentence ignores any colonial-period physicians who may have lived here.
Page 10-13 Second paragraph, delete “homes” after “2,795” and replace with “dwelling units.” This section 10.3.1 Project Components was written before some of the Plan Santa Barbara policies were amended, and many of the projected effects of extensive growth are “not known.” It does refer to “40 to 50 new three- to four-story buildings” within the MODA. There is no mention of a separate Historic Resources Element to assist in protection of historically significant and archaeologically important sites.

Page 10-14 Section 10.3.2, Important Heritage Resources, the last sentence refers to area maps used in the citywide Plan Santa Barbara analysis; however, an important State-owned resource located in downtown is not correctly identified on the plan’s maps. This is El Presidio de Santa Barbara State Historic Park, which is not specifically mentioned in this chapter of the DEIR.

Section 10.3.3, second paragraph, the reference to a Historic Resources and Community Design (CH) Element is now obsolete, because citizens’ groups and Planning Commissioners requested a separate Historic Resources Element. This comment also applies to page 17 of the March 2010 DEIR Summary.

Page 10-16 Adverse impacts to archaeological resources are possible in the downtown historic core near the Presidio and in the Mission Santa Barbara/Museum of Natural History area, as well as the waterfront area mentioned in this section 10.4. Recently approved projects have resulted in potential impacts that existing policies did not prevent.

Page 10-17 Impacts that are “less than significant” to archaeological resources will only occur if restrictions are tightened for so-called “in-fill projects” and if existing policies and procedures are followed religiously, including needed staff training.

Page 10-18 First paragraph, a potential for new development within the small Brinkerhoff Avenue Landmark District is mentioned. A special land use zone classification or an overlay zone should be considered for the Brinkerhoff district and its immediate environs. The DEIR could recommend this, as well as for parts of El Pueblo Viejo, especially as the impact offered for this section is “less than significant with mitigation.”

Second paragraph contains very good wording about the potential effects of additional development on historic districts.

Final paragraph is probably obsolete, as it does not mention a proposed Historic Resources Element.

Page 10-19 The third and fourth paragraphs refer to proposed density increases within the MODA, as well as 40 or 50 large buildings, but still the impacts are called out as “less than significant with mitigation.” This would necessitate very strict adherence to controls and to mitigation measures in Sections 10 and 13.
Sixth paragraph, it should be carefully noted that the DEIR states “...incremental alteration of the historic character of El Pueblo Viejo and other historic or landmark districts could contribute to cumulative changes in other downtowns along the South Coast undergoing modest redevelopment...where potential exists for demolition or alteration of historic structures.” This potential impact is then dismissed.

Page 10-21 Final paragraph sets forth the potential for increased danger to heritage resources under the Additional Housing Alternative. However, the DEIR goes on to assert on page 10-22 that “resource impacts would be potentially significant, but could be mitigated to less than significant levels...” with numerous mitigation measures. This seems to be a reach, as the description refers to “60 to 80 new multiple-story buildings within the MODA with some of these located within El Pueblo Viejo.”

Page 10-23 Section 10.8 Mitigation Measures should include a proposal for a Historic Resources Element, plus wording calling for participation by the Historic Landmarks Commission in the recommended policy regarding “Construction Adjacent to Historic Structures.”

COMMENTS REGARDING SECTION 13 (OPEN SPACE AND VISUAL RESOURCES) IN PLAN SANTA BARBARA PROGRAM DRAFT EIR

By Mary Louise Days and the Citizens Planning Assn. Committee on the City General Plan Update

Page 13-1 The general statement makes very good points.

Page 13-2 Second paragraph, it would be helpful to state that the airport is within the City Limits.

“Figure 13-1 Visual Resources” map, El Presidio de Santa Barbara State Historic Park is not shown correctly, nor is it identified as a resource. It is located on both sides of E. Canon Perdido Street and along Santa Barbara Street. Mission Historical Park is shown as a part of Santa Barbara Mission, which it is not. The surname “Park” should be inserted after “Alice Keck.” There should be no apostrophe in “Searns Wharf.”

Page 13-6, fourth paragraph, we suggest inserting “Pavilion and” between “Cabrillo” and “Bathhouse” as the more correct name of the historic structure.

“Figure 13.2 El Pueblo Viejo: Existing Building Height Limits and Tall Buildings” Why is No. 21 the Canary Hotel shown as 4 stories in height? It clearly has 5 stories to match the older hotel that was demolished. The same comments are made regarding the map’s omission of the Presidio State Historic Park and Mrs. Park’s name.
Fifth paragraph, first line, the name of the block-square garden is Alice Keck Park Memorial Garden. Her married surname was Park.

Photograph caption, is this really the intersection of Chapala and Haley Streets?

First paragraph, eighth line, suggest insert “historic” before “building types.”

Second paragraph, fifth line, it is misleading to say El Pueblo Viejo district is “centered” on State Street, as it only goes one and a half blocks west of State. It is more accurate to say that EPV is centered on El Presidio de Santa Barbara State Historic Park, if a center description is desired.

Fifth paragraph, first line, insert “Park” after “Alice Keck.”

Sixth paragraph, fourth line, delete “Landmark” and replace with “Notable.” The library and the shopping mall are not designated Landmarks.

First paragraph, tenth line, delete “Theater” and insert “Building (eight stories)” as being more accurate for the Granada Building.

First paragraph needs re-writing because much of the information about buildings, their heights and dates is not correct.

“Table 13.2: Taller Buildings in El Pueblo Viejo” We have several corrections to suggest and questions to ask regarding this table. Please contact the undersigned for more information.

Portions of the first paragraph do not appear to accurately describe the Milpas Street corridor.

Second paragraph, fifth line, the street passes next to Cabrillo Ball Park, not Dwight Murphy Field.

Third paragraph, sixth line, insert “Park” after “Alice Keck.”

Sixth paragraph, there is no Northside neighborhood listed in the March 2010 draft general plan document.

First paragraph, fifth line, we suggest delete “within the City” as Earl Warren Showgrounds is not located within the City Limits.

Bottom paragraph, second line, refers to the plan’s proposed policies as projecting an additional 2.0 million square feet of non-residential development, but a decision on acceptance of that figure has not been made.
Page 13-23, second paragraph, third line, suggest inserting "Hilda Ray" after "Elings." We do not necessarily agree with the assertion in the last sentence that an increase in the number of taller structures "would not substantially change or contrast with existing views." Stronger language for protection of views is needed in the document.

Page 13-24, second and third paragraphs, we agree that potential development under the policies could have cumulative impacts on views.

Page 13-25 to 13-31, we would like to see more analysis of how all these potential adverse impacts can be rendered "less than significant" through existing and proposed policies. It is interesting that Paseo Nuevo, which was planned by the City as a regional shopping center, is referred to in the DEIR as justifying or leading to the subsequent construction of "multiple four-story developments" along Chapala Street.

Page 13-27, third paragraph, sixth line, please explain how the Historic Landmarks Commission would have design review power in Outer State Street. Is this wording meant to refer to projects affecting historic buildings?

Page 13-28, second and seventh paragraphs, the same question that was asked for page 13-27.

Page 13-29, fourth full paragraph, the same question as above.

Page 13-30, second paragraph, the statement is made that new development in single-family neighborhoods "would not be expected to result in substantial changes" to their character. We believe that reductions in parking requirements and weakened zoning regulations, for example, could do just that.

Page 13-38, "Mitigation Measures" we suggest that the Presidio State Historic Park be included as a special type of active open space deserving of protection.

Page 13-39, "Scenic Views" and "Community Character" we make the same suggestion as above because the state park protects scenic views of and from Downtown and adds significantly to community character.

May 13, 2010
Response to Organization Letter # O3, Citizens Planning Association (May 14, 2010)

O3-1: Thank you for your comments.

O3-2: Comment noted. As required under CEQA Section 15126.6, the EIR describes a reasonable range of alternatives capable of fostering informed decision-making and reducing potential project impacts. EIRs often include a relatively wide range of project alternatives that do not always allow ready comparison of all impacts. For example, project-level EIRs often include alternative sites and uses. An alternative site may avoid site-specific impacts but raise different area-wide or cumulative impacts, such as impacts to different intersections, groundwater basins, or view corridors. Alternative uses may reduce or eliminate some impacts while changing or increasing other impacts. Assessing such a range of impacts permits decision-makers and the public to weigh and balance various issues. Further, based on such analysis, the EIR process often results in the blending or melding of various project alternatives in order to combine the elements of each that most successfully achieve the Lead Agency’s objectives while eliminating or reducing adverse environmental effects. A similar approach is being used for Plan Santa Barbara.

As discussed in Section 5 of the EIR, the City intentionally selected the range of EIR alternatives consistent with the range of growth and policy options under discussion by the community, to allow comparison of the outcomes of various growth level and policy scenarios and to foster public discussion on the range of potential impacts, ability to meet project objectives, and trade-offs between scenarios. For example, the range of non-residential growth considered among the alternatives is relatively small, between 1 -2.3 million square feet over two decades; much less than three million square feet the voters approved for the last two decades. The No Project and Project Alternatives both assumed the relatively larger amounts of non-residential growth, to ascertain if City economic vitality objectives could be better addressed while still minimizing potential impacts of traffic congestion, regional jobs-housing balance, and local resource and community character issues. The EIR analysis found that the No Project Alternative, absent improved Transportation Demand Management (TDM), yielded substantially more severe traffic impacts as well as somewhat more severe job-housing balance impacts and local resource impacts. The analysis of the proposed project revealed that application of even modest additional TDM measures resulted in measurable improvements in traffic operations as well as a general balance between jobs and housing due to lower commercial development (although not necessarily affordable housing).

The Lower Growth Alternative omitted expanded Transportation Demand Management (TDM) measures as inconsistent with the associated policy set which included maintaining or increasing parking requirements, and in order to test the efficacy of reduced development alone at avoiding or eliminating environmental impacts. The Additional Housing Alternative explored the effects of substantially increased housing development and stronger TDM measures on local and regional environmental issues. The exclusion of aggressive TDM from the Lower Growth Alternative, along with the No Project/Existing Policies analysis, clearly demonstrates that lower growth alone would not substantially reduce traffic congestion, while the outcome of inclusion of very extensive TDM in a higher growth scenario demonstrates the potentially critical role played by these measures in reducing congestion. EIR Section 16 (Transportation) clearly describes that the more extensive TDM is generally applicable to any alternative, as it achieves many of its benefits due to reductions in existing traffic, not just future traffic associated with net new development. However, the stronger TDM is most effective when accompanied by other Land Use and Transportation measures supporting convenient use of Alternative modes of travel.
# O3, Citizens Planning Association (Continued)

As required under CEQA Section 15126.6, the EIR clearly describes the differences in impacts of each alternative and compares them to the Plan Santa Barbara project, which assists the public and decision-makers in identifying elements of each alternative that may be blended to meet City objectives and reduce adverse environmental consequences. Thus, as is typical in the CEQA process, and contemplated by the State General Plan Guidelines, the EIR provides a basis for a hybrid alternative based upon public and decision-maker input. Please see the additional Hybrid Alternative Analysis of the Final EIR that provides a summary of impacts associated with the suggested hybrid alternative assuming a majority of Project (Plan Santa Barbara) policies, together with the lower non-residential cap and alternative density, Transportation Demand Management, and compatibility measures taken from the Lower Growth and Additional Housing Alternatives.

**O3-3:** Comment noted. Please recall that the 15-25% assumption for affordable housing does not reflect the City’s historic overall rate of providing 30% of new units as affordable, and accounts only for the City’s Inclusionary Housing Ordinance and not for production from Housing Authority-subsidized housing or that provided by affordable by design reduced unit size and incentive provisions of the City’s revised Variable Density Ordinance. While Section 19 (Population and Jobs/Housing Balance) of the EIR identifies the challenges faced by the City with future provision of affordable housing due to reduced funding (refer to EIR Section 19), Plan Santa Barbara and the Additional Housing Alternative both contain policies to increase densities, reduce unit sizes, and provide a mix of incentives (e.g., rental housing overlay) and disincentives to increase provision of affordable units and move away from production of high-end luxury homes. The EIR also provides recommended measures to maintain and improve provision of affordable housing.

The assertion that the Additional Housing Alternative would worsen the jobs-housing balance is not supported by substantial evidence. Please note that EIR Section 19 (Population and Jobs/Housing Balance) describes the potential for secondary employment growth associated with market-rate housing to worsen the jobs-housing balance, but concludes that such secondary increases in demand would be minimal and are assumed as part of the overall nonresidential component. The amount of additional residential development is small, such increases in secondary employment would be expected to be partially addressed by the existing labor pool, and demand would be expected to be minimized by changes to the City’s Variable Density Ordinance, which would direct housing construction away from higher-end units toward more affordable by design construction, with a resultant dampening of associated secondary employment growth.

Both Plan Santa Barbara policies and EIR Section 19 recommend exploration of measures such as employer-sponsored housing (Policies H22.6-Coastal Housing Partnership, 22.7-Employer Incentives, 22.9-Affordable Student Housing), and the use of a rental housing overlay to increase production of rental units.

**O3-4:** Comment noted. The EIR provides substantial discussion of scenic views within the Downtown and the visual character of El Pueblo Viejo (please refer to the EIR Open Space and Visual Resources Existing Setting Sections 13.1.2-Scenic Views and 13.1.3-Urban Visual Character, as well as Section 10-Heritage Resources). The EIR discloses the potential visual effects of new building construction within El Pueblo Viejo for both the proposed project and the Additional Housing Alternative, and how existing and proposed policies would protect important views and historic resources. The EIR also describes the importance of the City’s visual character with regard to tourism. Please also note the refined Mitigation Measure HER-1 - Protection of Historic Buildings, Structures, and Districts in EIR Section 10.8.
# O3, Citizens Planning Association (Continued)

O3-5: Comment noted. The interrelationship between the City and South Coast jobs/housing balance is a complex citywide and regional issue. As such, the EIR addresses both City-specific and regional issues. EIR Transportation Section Table 16.1 summarizes transportation mode choices within the City and provides comparison to County and nationwide data, to permit reviewers to understand the current status of City and regional commuters. Figure 16.1 clearly addresses this and is titled “Commuting on the South Coast.” However, one sentence in the DEIR incorrectly assigned South Coast-wide commuting to the City. Please see the revised text in Section 16.1.1 (Transportation Modes) and Figure 15.1 which clarifies the relationship between commuters in and out of Santa Barbara compared to the South Coast.

O3-6: Comment noted. The EIR transportation impact analysis focuses on peak hour congestion, as it is the recognized period where the vast majority of City roads and intersections experience the highest utilization, and is accepted as the City and industry standard for analysis of traffic congestion related impacts (Highway Capacity Manual, Transportation Research Board, 2000). Where appropriate, the EIR discusses roadway friction and mid-block volume issues such as along Upper State Street and identifies potential impacts and mitigation measures (please refer to Impact TRANS-1.4 in EIR Section 16.4-Citywide Transportation Impacts). Traffic volume changes along Upper State Street are disclosed in Table 16.7 (Vehicle Trips Added to Corridors Where Traffic Flow May Be Affected by ‘Friction’). Please also see revised Figures 16.2 (Key Intersections Level of Service and Roadway Average Daily Traffic Volumes) and 16.5 (Future Study Intersections Level of Service and Average Daily Traffic Volumes), which identify volumes along Upper State Street. Potential impacts have been described in Impact TRANS-1.4 (Increased Roadway Corridor Congestion). At a citywide Program EIR level, it is neither feasible nor required to analyze mid-block traffic volume issues in further detail.

O3-7: The TDM measures included in the Additional Housing Alternative were found to meet the basic CEQA test for feasibility; 1) they are generally within the control of the City as Lead Agency to implement; 2) they are technically feasible and, as thoroughly discussed in the EIR and Appendices, have been successfully implemented within the City and/or by other jurisdictions; and 3) they are potentially within the City’s financial capability to implement over the long-term 20-year life of this project.

These measures were carefully screened by staff and the consultant team for legal, technical, and general financial feasibility. Measures that did not meet these tests were excluded. For example, while greatly improved passenger rail or full rail commuter service is a City and regional priority, the EIR does not assume its implementation over the next 20 years, as it is largely outside the City’s control, may not be technically feasible within this timeframe due to inter-agency and railroad coordination issues, and may require as yet unsecured or currently forecast funding sources.

City decision makers have the final determination on feasibility of measures, including financial feasibility. In the case of greatly enhanced transit service, full implementation could require substantial additional funding sources (e.g., revenue from priced parking) or the reassignment of existing revenue streams. These types of decisions require decision-maker assessment of costs, benefits, and trade-offs between funding various programs. CEQA also permits decision-maker disagreement with and alteration of mitigation measures based on substitution of acceptable measures or as supported by findings, e.g. pertaining to feasibility, conflict with other planning objectives, and/or overriding considerations. These measures are identified by the EIR as feasible from a basic legal, technical, and financial standpoint, however the EIR cannot predict a particular decision-maker direction or outcome. The consequences of any such changes would need to be addressed as described above.
# O3, Citizens Planning Association (Continued)

**O3-8:** Comment noted. *Plan Santa Barbara* GPU policies and the EIR both recognize the importance of protecting public health. The EIR provides detailed analysis of this air quality issue based on a City-specific study, as well as data provided by the California Air Resources Board (CARB) (please refer to EIR Sections 6.1.4 (Sources of Air Pollution/Onshore Mobile Sources/Transportation Corridors); and Section 6.4 (Citywide Air Quality Impacts/Impact AQ-3 [Location of Residential Land Uses]). Based upon both CARB studies and the City-specific analysis, no substantial evidence exist that significant adverse health effects would occur along roadway corridors with volumes of less than 100,000 average daily trips (ADT), absent an unusual percentage of heavy truck traffic. The presence of higher pollutant levels along roadway corridors does not establish a causal link to definitive health risks, and is not substantiated by CARB or the City study. EIR Mitigation Measure AQ-1 requires City pursuit of installation of walls and trees along U.S. Highway 101 to help reduce impacts along this corridor, but does not provide for further landscaping or setbacks where no significant impacts are identified, such as along City streets and arterials. Please also see response O9-2.

**Letter Attachment** *(The following responses to comments are regarding attachment comments on EIR Sections 10 (Heritage Resources) and 13 (Open Space and Visual Resources).)*

**O3-9:** Comments noted. See EIR text edits throughout Section 10 (Heritage Resources) with respect to various facts. Please note references to the Presidio added in EIR Sections 10.1.3 (Historical Setting/Historical Resources) and 10.2.2 (Applicable Plans and Policies/Landmark Historic Structures and District). Please note that the EIR project description and analysis is based on the January 2009 *Plan Santa Barbara* General Plan Update draft titled “Policy Preferences Report.” Since that time, the Draft GPU has continued to undergo refinements, including changes in format moving the historical resources policies into a separate element and policy number changes.

**O3-10:** With respect to the comment regarding DEIR Section 10.4 (Impact Her-1-Archaeological Resources), asserting potential impacts to recent (unnamed) projects not prevented by existing policies: The EIR recognizes and assesses the potential for impacts to archaeological resources in the downtown historic core. The City’s existing *MEA Guidelines for Archaeological Resources and Historic Structures Sites* establishes assessment guidelines for determining impacts on archeological resources consistent with Federal and State and City environmental review and archaeological resource protection provisions. Potential impacts to archaeological resources associated with all recent individual projects have been appropriately assessed under existing City policies and procedures through the preparation of Archaeological Resources Reports approved by the Historic Landmarks Commission, mitigation measures, and monitoring as required in the reports.

**O3-11:** Comments noted. Regarding archaeological resources, as discussed in EIR Section 10.4 (Impact Her-1/Existing Policies), the City has extensive and complete existing policies, criteria, and procedures consistent with Federal and State regulatory provisions for the evaluation and protection of important archaeological resources. Regarding historic resources, please note that the City is in the process of looking into elevation of the Brinkerhoff district to a historic preservation district. Please also see additional language added to Mitigation Measure HER-1 and General Plan Historic Resources Element policy HR5 regarding historic structure buffers and historic districts.

**O3-12:** Comments noted. Please note that the potential impacts associated with El Pueblo Viejo are further addressed in EIR Section 10.6 (Comparative Impacts of Project Alternatives), while the cumulative impacts on heritage resources across the South Coast are addressed in Section 10.5 (Regional Cumulative Impacts to
# O3, Citizens Planning Association (Continued)

Heritage Resources). Also please note Mitigation Measure HER-1 (Protection of Historic Buildings, Structures, and Districts), which would add further historic resources protection policies and programs to the *Plan Santa Barbara* General Plan Update.

**O3-13:** The comment about the DEIR Section 10 page 10-23 Mitigation Measures discussion recommends that a mitigation measure include a proposal for a Historic Resources Element. This is not necessary because a separate Historic Resources Element is already part of the proposed project. The Element would retain existing City policies from the existing Conservation and Land Use Elements, and include recommended updated goals and policies for a new Historic Resources Element as included in the General Plan Update document. The full Historic Element would be comprehensively updated as a subsequent planning phase.

**O3-14:** Comments noted. Please see EIR text edits in Section 13.1 (Open Space and Visual Resources Setting).

**O3-15:** Comments noted. Please note, as identified in the EIR impact analysis, that the proposed Plan includes updated policies and programs to strengthen view protection. Please see EIR text edits removing Historic Landmarks Commission references in Impact VIS-3 existing policy discussions for areas where the Architectural Board of Review has jurisdiction.

**O3-16:** Regarding comments about DEIR Section 13 (Open Space and Visual Resources) pages 13-38 and 13-39, in recognition of the importance of El Presidio State Historic Park, new implementation actions requiring the establishment of a buffer around the El Presidio State Historic Park is recommended for inclusion in the General Plan Update. Please see additions to Land Use Element Policy LG14 and Historic Resources Element Policy HR5.
Good morning Barbara, John, and Bettie:

First of all, thanks Barbara for assembling the hard copies I picked up for CPA after I attended the March 18 Open House, and thanks John and Bettie for answering some of my questions at the Open House. I append below four sets of questions I am still seeking answers to, and I hope you can supply the answers without too much trouble.

You may want to cc your responses to the people cc’d on the present inquiry. They are some of the key CPA and Allied folks likely to be involved with commenting on the impressive documents you have worked so hard to produce over the last several years. We will also make sure that Connie Hannah gets a hard copy of your responses for use by the League of Women Voters.

Many thanks in advance,

Paul

Questions Revised after Open House of March 18, 2010

1. Are the figures of the Available Land Inventory Summary (Draft General Plan, Appendix F, p. 3 of 147) as clear and comprehensive as you meant them to be? In particular:
   a. Is the total figure of 9,099 “potential units” based on policies associated with the No Project, Plan SB, Lower Growth, or Additional Housing scenarios? Could/should the total build-out figure not be calculated for each scenario so that decision makers and the public has this information about long term implications readily available when comparing Plan Santa Barbara with its alternatives?
   b. Are city- and state-mandated density bonuses (e.g., current or possibly proposed higher percentages under the Inclusionary Housing Ordinance) included in the total of 9,099 “potential units”? If not, what would be a more realistic projection of our zoning capacity for “full build-out” through 2050 in view of the very different figures cited for the four scenarios with respect to the the required or assumed average densities per-acre: 18, 20, 25, 50 (see Table 5.1 under “Use of Variable Density Ordinance”)?
   c. What allowance, if any, was made for the setback from Freeway 101 on the basis of the originally proposed (500 feet) or now suggested (250 feet) requirement in calculating the number of potential units?

2. What percentage of the existing commercial development was projected to be retained (in addition to the residential development potential of each “opportunity site”) in assessing the cumulative job-generating impact of the old and the new commercial square footage?

3. Now that the term MODA has been abandoned, are there any changes in some details originally presented with reference to MODA? For example, are there any changes in the DEIR’s growth assumptions for impact analysis reflected in Table 5.1 which repeatedly contrasts residential densities “inside” and “outside MODA”?

4. Last but not least, could/should an additional table and a brief discussion provide a more even-handed comparison of Plan Santa Barbara’s environmental impacts with the corresponding impacts of the Lower Growth and Additional Housing alternatives by using the same non-residential growth assumptions and the same or similar transportation demand management policies for those three scenarios?
Response to Organization Letter # O4, Paul Hernadi for Citizens Planning Association (March 28, 2010)

O4-1 (Plan SB GPU and EIR): Thank you for your comments. The City looks forward to working with CPA and other community organizations during the final adoption of the Santa Barbara General Plan Update.

O4-2 (Plan SB GPU and EIR): Comments noted. The estimate of 8,600 additional units at full build-out represents the estimated realistic residential development capacity under the existing and proposed General Plan Land Use map for EIR impact analysis. The changes proposed for Plan Santa Barbara could shift the location of development within the City but are not intended to increase overall development potential. This long-range estimate is also applicable to all four alternatives in the EIR. The amount of growth projected to occur under each different alternative over the next 20 years is estimated based on differing policy approaches for type, location, and pacing of growth, while the 8,600 units represents estimated realistic long-term residential development capacity. Please also see responses A12-7 and A12-8.

This estimate incorporates assumed use of City or State bonus density provisions on some parcels, as well as reductions in build-out potential due to environmental constraints and policy restrictions. For example, restrictions for development on slopes, within oak woodlands, adjacent to creeks, or on sites with historic structures (e.g., within El Presidio State Historic Park) would reduce the theoretical development potential of remaining undeveloped areas and underdeveloped parcels. Setback requirements, landscape standards, irregular lots sizes, and protection of major trees could also reduce development potential. Further, as discussed in responses A12-7 and A12-8, changes to the Variable Density Ordinance could also restrict development of outlying parcels. In summary, for long-range planning purposes, the EIR considers that 8,600 new units represents a reasonable worst-case estimate for long-range residential development potential within the City.

Potential setbacks from US Highway 101 are anticipated to be phased out over the next decade, would not materially affect overall long-term buildout numbers, and are considered similarly to the environmental constraints discussion provided above. Estimated maximum potential build-out within the 250-foot Highway 101 setback area is 1,249 units on 340 parcels. The revised Draft Housing Element Suitable Sites Inventory identifies 7,426 units citywide as estimated development potential for this 7-year Element, based on land use designation refinements and subtraction of the units within the 250-foot highway setback. Please also see response A12-10.

O4-3 (Plan SB and EIR): Comments noted. Job generation estimates were based on net new commercial development overall, not on assumptions of individual site development potential.

O4-4 (Plan SB and EIR): Comment noted. The term Mobility Oriented Development Areas (MODA) has not been abandoned, but was altered only to focus on the principles rather than a specific boundary. Please see proposed Land Use policy LG4 (previously numbered LG9 during DEIR), which discusses location of growth close to transit corridors, encouraging a mix of land uses, and measures to enhance mobility options. No major change in EIR analysis is warranted as the assumptions regarding projected development locations still apply.

O4-5 (Plan SB and EIR): Comment noted. Please see response O3-2.
May 4, 2010

City of Santa Barbara Planning Commissioners
Honorable Members of the Santa Barbara City Council
P.O. Box 1990
Santa Barbara, California 93102-1990

Subject: Comments on the General Plan Update

Ladies and Gentlemen:

We are members of the Coalition for Community Wellness commend the City and all involved for the tremendous work accomplished in developing the draft to update the General Plan. We are very encouraged by the incorporation into this document of the relationship between city planning and improving the health and well being of residents.

The Coalition for Community Wellness represents all key health agencies in the Santa Barbara community. We list below the areas we especially support and advocate for in the document and include recommendations that we hope will help enhance the final product. Our comments are bolded for easy identification.

First, we fully endorse the Introduction to the General Plan document, page 20, identifying public health as a goal.

Introduction - Public Health

“A clear causal relationship has been established between the built environment and public health issues, especially in relation to epidemics such as obesity, respiratory disease and diabetes. Health professionals maintain that where we locate our housing, how we get from Point A to Point B, and what kind of access is available to open space and healthy food are key determinants of such epidemics. Planning decisions need to acknowledge the link between the physical environment and public health, and include consideration of public health and particularly active living in preparing plans and project review.”
We recommend framing the implications in the positive and adding specific methods to improve public health and minimize illness and injury. A suggested rewrite would be as follows:

Potential implications of designing the built environment with regard to public health issues include:

- A **decrease** in the number of residents with obesity, respiratory disease, and diabetes
- **Greater** opportunities to live a safe and healthy lifestyle
- An **increased** level of productivity and quality of life
- A **stabilization or reduction** in the cost of healthcare

These positive impacts can be realized by:

- Creating neighborhoods that are safe for walking and biking by people of all ages
- Creating neighborhoods that promote physical activity
- Ensuring convenient access to affordable and healthy food
- Reducing air pollution
- Providing a wide variety of housing options for people of all income levels to help address the need of the local healthcare workforce

*Second, we list below the points we found most important in the body of the draft with comments as appropriate to the section.*

**Land Use Policies**

Goal for Public Health: Improve public health through community design and location of resources, by promoting physical activity, access to affordable healthy foods and improved air quality.

LG 3.1, the Adaptive Management Program: Please add health indicators in the measurable indicators where possible.

LG 4.4 is a goal directly related to serving health needs. "Link mixed-use development with main transit lines; promote active living by encouraging compact, vibrant, walkable places; encourage the use of the bike; reduce the need for parking."

Other specific points in this section that we endorse are LG 4.5, LG 7, LG 10.2, LG 12 and LG 17.1.

We ask that language be added to provide incentives to markets that carry fresh produce and healthy foods in LG 4.8 (Corner Stores) and in LG 17.1b. (Sustainable Neighborhood Plans).
Environmental Resources – Air Quality Policies

ER 9 is a health priority within the Air Quality policies. “expand infrastructure and establish incentives for use of lower emission vehicles and equipment (e.g. parking priority, electric vehicle plug-ins). Support the amendment of speed limit restrictions to permit the wider use of electric vehicles.” We also support ER 7 and ER 8.

Environmental Resources – Food and Agriculture Policies

This entire section, ER 19 thru 24 directly addresses providing access to high quality, fresh foods. We strongly support farmer’s markets, public and private gardens and health advocacy, as stated in ER 24.

Circulation – Pedestrian and Bicycle Infrastructure

C1.1 Pedestrian and Bicycle Infrastructure: “emphasize high quality public right-of-way infrastructure to include enhanced pedestrian and bicycle facilities.” We endorse improved pedestrian and bicycle infrastructure as vital to providing a healthier community.

We also make the following additional comments:

- Continue involving all segments of the community and the open process.
- Consider performing Health Impact Assessments as an integral part of Adaptive Management.
- Work regionally, especially with the County and neighboring counties on air quality issues.

Thank you once again for this ambitious document. We look forward to our ongoing collaboration with the City on behalf of the health care community of Santa Barbara.

Sincerely,

Dana Goba
On behalf of the members of the Coalition for Community Wellness
Response to Organization Letter # O5, Coalition for Community Wellness (May 4, 2010)

O5-1 (Plan SB GPU): Thank you for your comments. The City appreciates the Coalition’s concern for community health.

O5-2 (Plan SB GPU): Comments noted. Please see General Plan text revisions to Public Health in the Introduction Section.

O5-3 (Plan SB GPU): Comments noted. See text edits to the Public Health Goal. Policy LG12 (Healthy Urban Environment) indicates that the City will consider health in land use decisions. The City will add consideration of measurable health indicators (see text edits to LG3.1-Adaptive Management Program, previously numbered AM 1-4) where possible, however, the City cannot at this time commit to performing Health Impact Assessments as an integral part of our Adaptive Management Program. Due to budget considerations, City decision-makers will consider priorities, feasibility, and timing for such measures. Land Use Policies LG7.1 (Community Benefit Land Uses – Findings), LG12.2-Healthy Urban Environment – Guidelines (previously CH7), LG17.1b-Sustainable Neighborhood Plans (previously LG15), as well as Food and Agriculture Policies ER19-ER-24 (previously ER31-36) in the Environmental Resources Element all support and encourage community gardens, farmers markets, green roofs, green groceries, and regional agriculture. We appreciate suggestions as far as the type of incentives being suggested, because enforcing a use once established to carry fresh produce or healthy foods could be a challenge. The City looks forward to working with the public health community to develop appropriate incentives to encourage fresh food sales, as well as other health-related programs and projects within the scope of the City’s regulatory framework.
May 11, 2010

Subject: Comments on Draft Plan SB and Draft EIR

Honorable Members of the Santa Barbara Planning Commission:

On behalf of the Coalition for Sustainable Transportation (COAST), I would like to offer the following comments on the Draft Plan SB EIR. COAST promotes healthy and green ways of getting around, from biking and walking to taking the bus or the train.

The Plan Santa Barbara EIR identifies two “significant environmental impacts” of the policies proposed in the Plan. Both impacts result from a projected increase in Vehicle Miles Traveled (VMTs) between now and 2030. VMTs will be increasing even more under the “No Project” alternative; the “Lower Growth” alternative results in “somewhat less of an impact,” and the “Additional Housing” alternative in “significantly less” of an impact. Even eliminating growth altogether will not eliminate increases in traffic, as the trend of fewer people living here and more people commuting to work in the City continues. The impacts of increased VMTs are the following:

1. **Transportation:** Traffic congestion will increase. Plan SB will triple the number of intersections in the City functioning below LOS C.

2. **Climate Change:** Increased VMTs will aggravate climate change, violating State requirements to reduce Greenhouse gas emissions.

COAST strongly supports the strategies outlined in the Draft EIR that will mitigate both these key environmental impacts:

- **Travel Demand Management (TDM) strategies** that include parking pricing are the most effective way to combat traffic congestion and greenhouse gas emissions. The TDM strategies could be combined with any of the growth scenarios. We support all of the policies described in MM Trans-2 and in the Circulation Element, C1-10.
- **MODA principles:** Future development generates the least amount of increased traffic if located within the Downtown core and along major transit corridors north of Hwy. 101.
• **Additional Housing Alternative:** Allowing more people who work in Santa Barbara to live here, combined with effective TDM, is the most environmentally and socially responsible course of action. More than any of the other scenarios, it would approach our ideal of “living within our resources.”

We have these comments on the **Implementation Actions** proposed in the **Circulation Element of the Draft General Plan** and the policies proposed in **Section 16: Transportation** of the **Draft EIR**:

1. In C-1, Bicycle and Pedestrian Infrastructure, make implementing the Pedestrian Master Plan a priority, along with the Bicycle Master Plan.

2. The **expanded TDM program** described in C-6.2 is key to relieving congestion and improving air quality. These are low-cost, common sense measures that should be implemented as soon as possible.

3. C-7, **Increased Sustainability of Parking**, is equally important. It will provide more parking for shoppers and theatre patrons downtown, while encouraging downtown workers to carpool or shift to other modes. It will thus enhance the vitality of downtown and, as an added benefit, will provide a much needed revenue stream.

4. In the **Draft EIR**, these policies are described in the **Transportation Section**, and summarized in the table in 16.5 and again under **Impact Trans-2: Reductions in per capita vehicle commute trips**. They include parking management, improved transit, parking cash-out, mode shift programs, improved bicycle and pedestrian infrastructure, and more. All of these have our whole-hearted support.

Sincerely,

![Signature]

Eva Inbar, President
Response to Organization Letter # O6, Coalition for Sustainable Transportation (May 11, 2010)

**O6-1**: Thank you for your comments.

**O6-2**: Comments noted. The EIR analysis has clarified that potential future growth under the Plan Santa Barbara scenario could almost double “the number of intersections in the City functioning below LOS C prior to implementation of proposed mitigation measures.” Application of all available mitigation measures would substantially reduce this traffic effect, and would also improve compliance with State greenhouse gas reduction efforts.

**O6-3 (Plan SB GPU)**: Comments noted. City decision-makers will consider this input when reviewing proposed policies, required mitigation measures, and the trade-offs between various project alternatives.

**O6-4 (Plan SB GPU)**: Thank you for your comments. The City decision-makers will consider the priority for bike, Transportation Demand Management (TDM), transit, and pedestrian programs. Please consider the information in the Mitigation Monitoring and Reporting Program (Table 23.1) for the relative timing of various improvements.
April 26, 2010

TO: Santa Barbara Planning Commissioners

SUBJECT: Plan Santa Barbara Draft EIR, Housing & Land Use Elements

The Coastal Housing Coalition, representing thousands of local workers, has greatly appreciated the opportunity to be part of the discussion about the City's future through Plan Santa Barbara.

Framework, Goals & Draft EIR

Throughout the Plan Santa Barbara process, the Coalition has been supportive of the Plan's framework of sustainability and the recognition that "living within our resources" must include housing a greater percentage of our local workers rather than continuing to export our housing needs to neighboring jurisdictions.

We have been pleased to see throughout the process such a large number of participants, particularly younger residents, expressing strong support for making housing for all income levels a priority, a sentiment that was reinforced by the Plan Santa Barbara survey in 2008. The involvement of younger residents and workers in this process is particularly important as we think about the general plan update as a document for the future that will impact our City's residents for the next twenty years.

In general, the Coalition applauds the goals of Plan Santa Barbara, particularly those articulated in the draft housing element, including seeking to ensure a full range of housing opportunities for people of all income levels, encouraging smaller unit sizes and increased density downtown and in multi-family zones, and working toward a better jobs housing balance in the South Coast region.

We support the City's effort to make housing for our local workforce a top priority. The Draft Housing Element identifies targets for affordable and workforce housing as very low through middle income (160% of AMI) earners. We would note that a middle income family with a median income of $112,500 (based on HUD's 2010 AMI) can only afford a home in the range of $525,000; however, even in today's housing slump, a median priced home in the City of Santa Barbara at the end of 2009 cost $724,000. Therefore, we encourage the City to consider expanding the target range to families earning up to 200% of AMI.

Over the past twenty years — since our last General Plan Update — the number of workers commuting daily in and out of Santa Barbara has risen significantly due to increased housing costs. From the period spanning 1996-2008, the median home price rose from five times median household income to more than ten times median income (California Economic Forecast data). And commuters now make up fully one third of our local workforce, with over 30,000 people making daily trips to Ventura and North County. Our next general plan and housing element must reverse the failed policies of the past and focus on addressing our community's housing challenge and the resulting impacts on traffic, our environment and local economy.

To that end, the Coalition supports the Additional Housing Alternative studied in the EIR, which would allow for some more modest residential growth in order to house more local workers and their families and is, according to the EIR, the ONLY alternative to meet ALL of the Project's objectives.

Housing Element Implementation Actions

As we enter the "Decision Year" for Plan Santa Barbara and begin to get more specific, it is imperative that the policies and implementation actions be consistent with and serve to advance the goals of the plan.
To that end, there are a number of implementation actions that we wholeheartedly support, including thinking creatively about how to make the most efficient use of land - itself a limited resource - to reach our housing goals. Among the implementation strategies we support are building reuse (H10.3), housing at shopping centers (H10.4), exploring housing opportunities on surplus land and public facilities (H11.12-14), encouraging secondary dwelling units (H15), and changing parking requirements (H17.1). Additionally, we strongly support ensuring the availability of housing opportunities for seniors (H6), which would serve not just seniors, but likely free up larger single family homes for families with children still at home.

We also are encouraged by the proposed effort to work with employers to affect the jobs-housing balance. We strongly support the development of incentives for employers throughout the South Coast to provide employee housing on-site or close-by offsite, and establishing or expanding programs to encourage employers to provide other housing benefits or financial assistance programs, and look forward to being part of that conversation and implementation where appropriate (H22.7).

Land Use Densities

However, we believe there is a fatal flaw in the draft land use element in the recommended average residential density program (LG6) that would keep the City from meeting its affordable and workforce housing goals. The proposed densities are much lower than many exemplary existing multi-family properties in town, as well as significantly lower than the required densities presented by the City’s own Development Feasibility Study consultant who examined the densities required to make local projects economically feasible to build.

We understand and support the City’s intent to incentivize smaller units; however, it seems to us that the recommended average residential density program as current drafted will instead only serve to shrink the size of buildings and allow for fewer units, rather than provide an opportunity to create more units at smaller average square feet. This is not the most efficient use of limited resources. To reach the goal of housing more local workers and their families and ensure projects are economically viable, we need smaller unit sizes linked to increased densities in appropriate areas - including downtown near jobs and in other multi-family zones. As an alternative strategy to the ARD, we would encourage the City to develop a form-based code to determine the size of a building, perhaps in concert with minimum densities and/or incentives for smaller units. At any rate, we believe the proposed ARD program warrants further discussion and study as to how it would or would not advance the Plan’s goals and impact development feasibility before being adopted.

One additional note about densities. The draft housing element includes a provision (H11.2) - which we support - to grant increased density overlays up to 50% of base density for rental housing. We believe that this same opportunity should exist for those seeking to provide for-sale opportunities targeted for local workers and their families. Why would the standard be different if we truly are seeking to provide housing of both types?

Again, we are grateful for the opportunity to make comments and look forward to continuing to be part of this important community dialogue.

Sincerely,

[Signature]
Debbie Cox Bultan
Executive Director

cc: Mayor Schneider and Santa Barbara City Council Members
    John Ledbetter, Bettie Weiss
Response to Organization Letter # O7, Coastal Housing Coalition (April 26, 2010)

O7-1 (Plan SB GPU): Thank you for your comments. These concerns about provision of housing affordable to the City’s workforce and its relationship to long-distance commuting are reflected within Plan Santa Barbara's policy framework. The EIR alternatives provide a range of housing growth, densities, and policies for the decision-makers to select from.

O7-2 (Plan SB GPU): Comments noted. The Coalition’s support for various policies will be forwarded to the decision-makers.

O7-3 (Plan SB GPU): Comment noted. The polices of Plan Santa Barbara require the balancing of many competing factors, including provision of housing, protection of community character, availability of public services, etc. The City is exploring ways to provide sufficient density within these confines to permit creation of affordable housing, including with the development of form-based codes, unit size restrictions, etc. The Coalition’s concerns over this issue will be forwarded on to the decision-makers for consideration.
"Local governments are increasingly encouraging or even requiring LEED certification in new development, which is nice, but most continue to require generous minimum parking supply, which contradicts their goals..."

Parking Policy Reform More Important Than LEED Certification
<http://www.planetizen.com/node/43365>
Mar 15, 2010

Apologies to USGBC folks, but here's a provocative thought from Todd Litman -- that a LEED certified building might completely miss the mark if it has far more parking than it needs.

Let's not throw out LEED, of course, but let's recognize that it's not the be-all and end-all of sustainable design.

Author Todd Litman (Victoria Transport Policy Institute) is an outside-the-box transportation thinker. He's worth knowing and following.


------ End of Forwarded Message
Response to Organization Letter # O8, Community Environmental Council (March 30, 2010)

O8-1 (Plan SB GPU): Thank you for your comments, which will be forwarded for decision-maker consideration. The policies in the Plan Santa Barbara General Plan Update as well as the proposed EIR mitigation measures address both LEED efficiency standards and parking requirements.
Community Environmental Council

Santa Barbara Planning Commission
735 Anacapa Street, Santa Barbara, CA 93101

Dear Chairman Bartlett and Commissioners,

The Community Environmental Council is a local nonprofit organization with a 40 year history in Santa Barbara. Today our main focus is on energy and climate change. Our dependence on fossil fuels and the resulting greenhouse gas emissions are the most pressing issues facing our city, county, nation, and world.

We would like to thank you for the opportunity to comment on the Plan Santa Barbara document and the Draft Environmental Impact Report. In general, we support the General Plan process - we need to be forward thinking and plan not only for our future, but to ensure those to come have equal access to the quality of life we enjoy. We also need to assure that we are following the goals and tenets of state laws like AB 32 and SB 375 that focus on energy and climate change.

At this stage we are concerned with the process and find it difficult to make substantive comments on policy documents before the environmental document has been vetted, agreed upon and certified as accurate. We believe that science should inform policy and that we should have accurate information first in order to make the right decision.

Our primary concern is the finding that the Plan Santa Barbara Alternative is the "environmentally superior alternative" in this draft. We believe this is a seriously flawed conclusion based upon weak, subjective opinions. Our assessment - based on local, regional, and global impacts - is that the "Additional Housing Alternative" is clearly the environmentally preferable alternative. This is particularly true for the sections that cover air quality, biological resources, hydrology and water quality, open space, transportation, energy, global climate change, population and jobs-housing balance, and socioeconomic issues - that is nine out of fifteen criteria.

An alternative like the Additional Housing Alternative (including a robust TDM) will:

- Improve the jobs/housing imbalance
- Support alternative forms of transportation
- Create more efficient buildings by design
- Reduce air pollution, traffic congestion, and energy use
- Help the City meet its goals under AB 32 to reduce GHG emissions
- Meet all of the project objectives.

The City should move forward with an alternative that allows for and incentivizes the creation of affordable, workforce housing because increased local housing that helps people live close to where they work is the only way we are going to reduce the significant impacts of the way that we live now, and any future growth. A policy that supports these goals will allow the building of the...
appropriate building types, sizes, and densities within available resources and community character to fill this need. This solution is truly the best for everyone today and for those to come.

We have two remaining significant points of comment:

First, we oppose the 40 ft height requirements in the General Plan. We would like to remind the Commission that less than six months ago the Citizens of Santa Barbara voted down those very height restrictions and we strongly oppose placing further height restrictions on new construction. This recommendation should be stricken from the policy document.

Second, we are a bit confounded by the emphasis on community character in the EIR, as defined as the community's built environment. Currently, there are no adopted thresholds, standards, or guidelines to judge the assessments made in the draft. CEQA requires that the decision as to whether a project may have one or more significant effects shall be based on substantial evidence in the record. The "impact" findings in the draft EIR are made with declarative statements with no basis in the law or for that matter, is there any "substantial evidence" in the record to make such findings.

We are seriously worried about the implication this has for the integrity and legality of such use in the City's environmental review process. We are concerned that the draft EIR has attempted to stretch CEQA to "codify" the sentiments of some in the community. Such an abuse of the CEQA process has serious implications for future projects and EIRs. As defined, the State Street Mall, and associated parking garages would have had a significant unavoidable adverse environmental impact on existing community character. The opinion of some at the time was that Santa Barbara's character would be adversely changed forever. Looking back, we can see that those changes were beneficial and created our pedestrian friendly Downtown. A change in the built environment can be beneficial and this Plan should allow for progress, not leave us stuck in the past.

We believe that the City's development and design review process works to assure any development comports with the values and aesthetics of Santa Barbara. The City's numerous commissions, boards, and development standards, including adding new form based codes, effectively alleviate any serious concerns over changes in community character in future years. The proposed 'mitigation' is unnecessary and restrictive to Santa Barbara moving into the 21st Century.

In the coming month we will be submitting detailed comments on both the Plan and the DEIR. We look forward to working with staff, the Commission, and the public to draft a plan that will help us prepare for the coming years.

Sincerely,

Dave Davis
Executive Director

Megan Birney
Renewable Energy Specialist
Response to Organization Letter # O9, Community Environmental Council (April 28, 2010)

O9-1: Thank you for your comments. The City appreciates CEC’s involvement in climate change issues and the challenges that can arise when providing comments on evolving documents.

O9-2: Comments noted. Please refer to EIR Section 22.3 which discusses the Environmentally Superior Alternative. As noted in this section, the EIR identifies the Additional Housing Alternative as being environmentally superior for issues such as transportation, energy, air quality, climate change, and jobs housing. The EIR also notes that the Lower Growth Alternative is environmentally superior for issues such as public services, public utilities, biology, visual resources, heritage resources, hydrology and water quality, etc. and that the Additional Housing Alternative would better meet project objectives. The EIR does not identify Plan Santa Barbara as the Environmentally Superior Alternative.

O9-3 (Plan SB GPU): Comment noted. Your policy recommendations will be forwarded for decision-maker consideration. The EIR provides City decision-makers and the public with a range of alternatives to consider. In addition, the Planning Commission and City Council are considering a hybrid alternative which may blend desirable aspects of several of these alternatives.

O9-4 (Plan SB GPU): Comment noted. The Plan Santa Barbara General Plan Update does not propose imposition of a 40-foot height limit. The EIR Lower Growth Alternative considers this restriction in order to provide the public and decision-makers with information on the environmental effects of a range of options.

O9-5: Comment noted. The State CEQA Guidelines provide only very broad guidance in regard to determination of what constitutes a significant impact and leaves great latitude to lead agencies in identifying resources of local concern. For a number of CEQA issues such as visual resources, biological resources, and cultural resources, environmental review uses a qualitative approach to identifying impact significance, because there is no hard numerical threshold measure that works to incorporate the complex set of factors considered for all circumstances.

Communities considering urban redevelopment projects with substantial change in the built environment, especially those with historic downtowns, often consider community and/or historic character as a key issue of redevelopment projects. The City of Santa Barbara has long considered community character as part of the Visual Aesthetics portion of its Initial Study and CEQA documents for individual projects. The current EIR provides a similar approach but at a citywide programmatic scale.

Community character—that is the aggregate character of an urban area, its mix of historic and modern structures, varying architectural styles and sizes of structures, street trees, streetscape, open space, and view resources all combine to make up a community’s character. Such issues are limited not merely to alteration of a single feature such as a view corridor. Thus, significant alteration of a community’s skyline, demolition or serious alteration of historic or notable structures, removal of large numbers of street trees, or alteration of other character defining features are frequently used on CEQA documents as a basis for such impact analysis.

The EIR provides extensive documentation of the City’s existing character, defining-features and qualitatively assesses future growth under proposed policies for potential alterations to the existing built environment to determine potential impacts.

It should also be noted that CEQA requires assessment of potential substantial changes to the environment,
regardless if the overall change is adverse or beneficial. In this vein, the EIR discloses change that some residents may find adverse (e.g., additional new structures) while clearly stating that other residents may find the added urban amenities beneficial. This approach is entirely consistent with existing City practice, applicable CEQA statutes, industry standards, and the process in surrounding jurisdictions.

**O9-6:** Comment noted. The EIR discloses and discusses the roles of various City boards and commissions in the review process, as well as the proposed addition of new form-based codes and other programs. The EIR analysis, including recommended measures for additional policies provide information to assist City decision-makers in considering tradeoffs and balancing between retention of aspects of the City’s existing community character with provision of needed new urban development.
May 17, 2010
City Council and Planning Commission
Community Development Department
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Dear Council and Commissioners,

The Community Environmental Council is a local nonprofit organization with a 40 year history of creating positive environmental change in Santa Barbara. Today our main focus is on energy and climate change. Our dependence on fossil fuels and the resulting greenhouse gas emissions are some of the most pressing issues facing our city, county, nation, and world.

We would like to thank you for the opportunity to comment on the Plan Santa Barbara document and the Draft Environmental Impact Report. In general, we support the General Plan process – we need to be forward thinking and plan not only for our future, but to ensure those to come have equal access to the quality of life we enjoy. We also need to assure that we are following the goals and tenets of state laws like AB 32 and SB 375 that focus on energy and climate change.

Several weeks ago we submitted comments in support of the Additional Housing Alternative as the environmentally and socially preferable alternative, based on local, regional, and global impacts.

We have attached that letter for your review.

Our primary concern is the finding that the Plan Santa Barbara Alternative is the "environmentally superior alternative" in this draft. We believe this is a seriously flawed conclusion based upon weak, subjective opinions. Our assessment – based on local, regional, and global impacts – is that the "Additional Housing Alternative" is clearly the environmentally and socially preferable alternative. This is true for the sections that cover air quality, biological resources, hydrology and water quality, open space, transportation, energy, global climate change, population and jobs-housing balance, and socioeconomic issues.

In particular, the DEIR finds two Class 1 Significant Impacts, Trans-1 Increased Congestion (pg. 27), and Citywide Transportation GHG Emissions in 2030 and Effects on Climate Change (pg. 35). For both of these significant, unmitigatable impacts, the Additional Housing Alternative is superior to all other alternatives, including Plan Santa Barbara. In addition, we believe the climate change pollution analysis is flawed, and that the Additional Housing Alternative could meet AB 32 requirements to reduce greenhouse gas levels to 1990 levels, thus changing this impact from a Class 1 to a Class 2 impact (currently this alternative is modeled to bring total GHG levels to 1.5 percent above estimated 1990 levels).
This letter serves to point out key policies, impacts, and mitigations that are of specific interest to our organization.

**EIR Growth and Policy Assumptions**

Table 4.3: Additional Policy Assumptions Related to Growth and Sustainability (pg. 4-5)

CH10-Building Height Limits Downtown Near Residential Areas and Historic Structures sets a maximum of 40 feet on buildings in the El Pueblo Viejo District. We oppose this requirement. Reducing building heights will have adverse affects on vehicle miles traveled, air pollution, energy use, climate change, and open space. In addition, in November 2009, the Citizens of Santa Barbara voted down those very height restrictions and we strongly oppose placing further height restrictions on new construction. This recommendation should be stricken from the policy document and EIR.

**Air Quality**

6.4 Citywide Air Quality Impacts

The California Clean Air Act (pg. 6-14) requires that local jurisdictions substantially reduce the rate of increase in vehicle miles traveled (VMT) by employing Transportation Control Measures, so that VMT growth is held to the same growth rate as population. Plan Santa Barbara is projected to increase VMT by 1.62 percent annually (Table 6.6, pg 6-14), or around five times the annual population growth rate of 0.34 percent (Table 6.4, pg 6-13). While the DEIR doesn’t indicate the reductions in VMT from Additional Housing, it does state that this alternative will increase affordable housing, which could improve the jobs-housing imbalance and decrease emissions associated with long distance commuting. This alternative would also substantially expand Transportation Demand Management (TDM) programs so that overall “emissions are projected to be substantially reduced when compared to Plan Santa Barbara due to a greater decrease in overall VMT. NOx emissions could be less by 1,784 pounds per day (66.51%) and VOC emissions could be less by 1,096 pounds per day (56.9%).” (pg 6-26)

The Additional Housing alternative achieves the greatest air pollution reductions and is clearly the environmentally and socially preferable alternative. As the TDM measures provide much of air quality improvements, we request that any adopted plan includes robust TDM measures.

We support:

RM AQ-1 Reduce Sources of Air Pollutants, 1.a. Electric Vehicles and 1.b. Low-Emission Vehicles and Equipment. (pg. 6-29)

While we are pleased to see the inclusion of electric and low emission vehicles in the Plan, the discussion in 1.a. Electric Vehicles is very limited, and we request that the City take more proactive measures to support wide-scale adoption. Auto manufacturers have announced over a dozen electric and plug in hybrid vehicles to be launched by 2012. In addition to monitoring electric car development and installing public charging stations, the City should actively promote charging station upgrades for
local residents. Promotion could include information sheets that educate homeowners about the upgrade process, including a list of approved electricians. The City could also create a streamlined, over the counter permit process. In addition, codes should be updated so that new and retrofitted residences and multi-family units are pre-wired for electric vehicles. Pre-wiring can be done for a minimal cost during new construction but is a much more expensive retrofit for existing homes, and thus a significant barrier to electric vehicle adoption.

**Transportation**

*Trans-1 Increased Congestion (pg. 27)* is a Class 1 Significant Impact identified in the DEIR. While this impact remains significant for all alternatives, the Additional Housing Alternative mitigates the impacts to the greatest extent, when compared to the other alternatives. Under Plan Santa Barbara, the number of impacted intersections would more than double, from 13 to 28 intersections operating below the City’s adopted Threshold of Significance of Level of Service (LOS) C, with 10 of these intersections projected to experience moderate to severe congestion characterized by LOS D, E and F during peak AM or PM commute hours (Table 16.6; Figure 16.5, pg 16-39). Most of these failing intersections are along the freeway entry/exit points, and only two are feasibly mitigated through roadway improvements.

Thus Plan Santa Barbara falls short of its own policy objective to keep traffic congestion below the 2008 baseline study. The Additional Housing Alternative is environmentally preferable because the number of impacted intersections only increases from 13 impacted intersections to 18, rather than 28 in Plan Santa Barbara.

The DEIR indicates that up to 32,000 commuters enter the South Coast daily via automobile, along with 800 commuters using long distance buses (pg 16-3) creating congestion, air pollution, and unnecessary greenhouse gas emissions. Plan Santa Barbara does not do enough to address the existing causes such as the jobs housing imbalance, inexpensive, subsidized parking, and insufficient availability of alternative modes. More and more commuting is creating worsening congestion along with a huge misallocation of resources. A commuter from Santa Maria drives over 32,000 miles per year, burning 1600 gallons of gasoline, creating over 30,000 pounds of CO₂, along with spending 500 hours – almost 21 days – just to go to work. The Additional Housing alternative, with its emphasis on affordable-by-design workforce housing and aggressive TDM measures does a better job of addressing these impacts.

**Section 16.6, Comparative Impacts of Project Alternatives (pg 16-61)** clearly states that the Additional Housing Alternative is the environmentally preferable alternative for transportation. Specifically, the Additional Housing Alternative will produce around half the number of congested intersections as compared to the Plan Santa Barbara alternative. “The Santa Barbara Traffic Model analysis indicates that reductions in the amount of growth alone do not substantially mitigate traffic impacts…. The combination of vigorous TDM programs, decreased commercial development, and increased housing in the Additional Housing Alternative resulted in the lowest levels of forecasted congestion.” *(pg 16-61)*

The Additional Housing Alternative is environmentally preferable because it produces the least impactful type of new development (infill residential), and reduces impacts from existing trips due to robust TDM
programs. As Table 16.12 (pg 16-66) shows, Additional Housing would generate an increase of 1 percent of new trips, while Plan Santa Barbara would generate a 13 percent increase. Additionally, total new VMT would increase 11 percent under Additional Housing, which is much less than the 36 percent increase under Plan Santa Barbara. The DEIR states the Additional Housing Alternative would be “substantially less severe” and a “substantial improvement” (pg 16-66) compared to Plan Santa Barbara.

CEC strongly supports all the mitigation measures in MM TRANS-2 Reductions in Traffic Demand (pg. 16-70), and encourages their vigorous implementation in any scenario.

We suggest addition of the following:

- **2.c. Expand TDM Program – Carsharing (pg. 16-71)**, we encourage not only the creation of a carsharing program, but also policies to encourage developers to offer carsharing in new MODA developments as an option along with unbundled parking. By decreasing parking requirements and necessary parking space through carsharing, construction costs could decrease, making units more affordable.

- **2.g. Improve Transit Services (pg. 16-73)** we encourage a robust program to increase regional, long distance commuter buses. While these services have increased significantly in recent years, they still only carry 800 commuters daily compared to 32,000 entering the South Coast by car. Targeting these commuters gives the greatest return on investment to reduce congestion, energy use, and pollution.

**Energy**

CEQA places particular emphasis on “avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.” (pg. 17-9) Plan Santa Barbara, No Project Alternative, and Lower Growth Alternative continue the development patterns that support our current jobs housing imbalance and encourage sprawl, the impacts of which are felt in the City and far beyond the our borders. Our housing situation is unsustainable: 32,000 South Coast workers commute from residences in North County (15,000) and Ventura (17,000) every day. Only the Additional Housing Alternative plans for smaller, more affordable housing close to jobs. This housing is greatly needed to reduce the significant impacts caused by commuting. Each worker that can walk to work from an energy efficient, mixed use condo instead of driving 32,000 miles a year from their suburban house in Santa Maria represents a huge decrease in “inefficient, wasteful, and unnecessary consumption of energy.”

**RM Energy-2 Residential, Commercial and Industrial Energy Consumption (pg. 17-22)**

We strongly support all measures in this recommendation.

We suggest addition of the following under ‘Exterior Heat Gain Standards’:
- Incentives for Green Roofs. Provide expedited plan check and reduced permit fees for installation of green roofs in new residential and commercial development.

**Climate Change**

**Citywide Transportation GHG Emissions in 2030 and Effects on Climate Change** (pg. 35) is a Class 1 Significant Impact identified in the DEIR.

The DEIR provides an adequate discussion of the significant challenges Santa Barbara faces in the next decades in areas such as water supply, flooding, coastal erosion and sea level rise, wildfires, public health, energy demand, and economy, etc.

After discussing these concerning impacts, the analysis shows that Plan Santa Barbara is projected to increase GHG emissions over existing levels by 21.1 percent, or 274,026 metric tons of CO2 (pg 18-24). The No Project and Lower Growth alternatives project an increase of 23 percent and 15.5 percent, respectively, over existing levels. The Additional Housing alternative is the environmentally preferred alternative because it forecasts a 6.1 percent increase over existing levels, clearly representing a much smaller impact than the other Alternatives. In addition, due to large gains in solid waste recovery since 1990, the Additional Housing alternative is forecasted to be only 1.5 percent above estimated 1990 GHG emission levels (pg 18-34), thus almost meeting AB 32 requirements.

It is stated in the DEIR that these estimates are a likely worst case scenario, as changes in vehicle technology, electricity fuel mix, state requirements, and other factors may lower GHG emission levels greatly. We concur, as there are already laws in place that make the analysis as considered obsolete. For example, as shown on Table 18.4 (pg 18-32), transportation emissions are the vast majority of GHG emissions, around 75 percent in most scenarios. The analysis uses outdated data such as the CalTrans Motor Vehicle Staff Report that projects a 1.7 percent increase in vehicle fuel efficiency from 2008 to 2030, from 18.3 mpg to 18.5 mpg. This analysis ignores recent changes in state and federal law such as AB 1493, the Pavley Regulations, which will reduce GHGs from new vehicles by 30 percent by 2016, and the Low Carbon Fuel Standard, which calls for a reduction in carbon intensity of at least 10 percent in all California fuels by 2020.

As such, the analysis is seriously outdated and flawed, and it is very likely that the Additional Housing alternative will decrease GHG emissions more than the 1.5 percent needed. If the final EIR calculates GHG emissions using current data, it is our strong belief that the Additional Housing Alternative will reduce GHG emissions below 1990 levels, thus meeting AB 32 requirements and changing Significant Impact – Citywide Transportation GHG Emissions in 2030 and Effects on Climate Change to a Class 2 impact – Less than Significant with Mitigation. As the Plan Santa Barbara and other alternatives are projected to produce much higher GHG emissions, it is uncertain if they would meet AB 32 requirements, even if current data is used to calculate their GHG emissions.

We strongly support the following measures in these recommendations, and the associated policies that are necessary to carry them out.
We suggest addition of the following under RM Climate-1 Carbon Sequestration (pg. 18-37):

- Pursue carbon sequestration through the planting of green roofs, with a goal of green roof installation on 10 percent of new building units, either residential or non-residential, by 2030.

**Conclusion**

In summary, based on the aforementioned findings, the Additional Housing Alternative is clearly the environmentally and socially preferable alternative. It produces the smallest amount of additional traffic congestion and is thus the preferable alternative considering Class 1 Significant Impact - Trans-1 Increased Congestion. Additionally, if calculated using current data, the Additional Housing Alternative would likely reduce GHG emissions below 1990 levels, thus mitigating the second Class 1 Significant Impact - Citywide Transportation GHG Emissions in 2030 and Effects on Climate Change. Additionally, as the TDM measures provide much of the reductions in congestion, energy use, GHGs and other pollutants, we request that any adopted plan includes robust TDM measures.

We urge the Santa Barbara City Council and the Planning Commission to adopt the Additional Housing Alternative instead of Plan Santa Barbara, as well as include robust TDM measures in any adopted plan.

Sincerely,

Dave Davis
Executive Director
Response to Organization Letter # O10, Community Environmental Council (May 17, 2010)

O10-1: Thank you for your comments.

O10-2: Comment noted. However, the EIR does not identify Plan Santa Barbara as the Environmentally Superior Alternative. Please see response O9-2 and Section 22.3 of the EIR. In regard to climate change, while full and vigorous implementation of the Transportation Demand Management (TDM) and other programs of the Additional Housing Alternative may potentially reduce greenhouse gas (GHG) generation to at or below 1990 levels, the EIR employs a reasonable worst-case analysis as required by CEQA. Please also see response O10-9 below.

O10-3: Comment noted. The policy text in Table 4.3 has been updated to note that this policy could result in reductions in building heights next to historic structures and residential neighborhoods. The intent of this policy is to protect historic structures and residential neighborhoods through measures such as height restrictions; however, no specific height limitation is specified in the policy. The text in the EIR has been corrected.

O10-4: Comment noted. The comparative air quality impacts of the Additional Housing Alternative are described in Section 22.3. City decision-makers will consider the suggested inclusion of any robust TDM measures in the adopted plan.

O10-5: Comment noted. Please see revisions to recommended mitigation measures RM AQ-1.

O10-6: Comment noted. Section 22.3 identifies the Additional Housing Alternative as environmentally superior for Transportation-related impacts. Table 6-3 compares air pollutant and greenhouse gas (GHG) emissions for local tri-county average commuting distances versus long-distance commutes to Santa Barbara from Santa Maria, Lompoc, and Ventura.

O10-7: Comments noted. The Additional Housing Alternative is identified as environmentally superior for the issues of transportation, air quality, energy, climate change, and jobs/housing balance throughout the EIR.

Trip reduction benefits of car sharing programs can be anticipated, but could not be quantified at this time based on available studies. However, please see additional language added to MM TRANS-2 (Reductions in Traffic Demand) to encourage developers to offer car sharing in new core commercial mixed-use area developments together with unbundled parking.

Provision of the 5-minute peak hour headways suggested in the mitigation measures would constitute robust transit service. Funding sources to support implementation of this measure has not yet been identified.

O10-8: Comments noted. Section 17 (Energy) compares and contrasts the various environmental benefits, impacts, and tradeoffs of each project alternative in regard to energy usage.

Proposed policy ER1.3-Urban Heat Island (previously numbered ER4 during DEIR) includes a measure for providing incentives such as expedited processing for projects that incorporate green roofs. Please refer also to comment O10-9 below, and see revised language in recommended measure RM Energy-2 regarding green roofs.

O10-9: Comment noted. Projected greenhouse gas (GHG) emissions analyzed in the EIR are based on a reasonable worst-case approach as required by CEQA. While it is certainly possible that the adoption of the Additional Housing alternative could result in compliance with AB 32 and mitigation of the City’s GHG contribution to global climate change, this would require full implementation of all City programs and mitigation
measures that address this issue. Just as impacts occur incrementally over time, many of the TDM measures would be expected to be phased in over a 5- to 10-year or more horizon and would require further adjustments to be fully effective. AB 1463 and other State and federal actions would begin to influence the mixture of the vehicle fleet and the carbon content of fuel later in this decade; however, the majority or at least a substantial portion of the vehicle fleet in 2030 could continue to be older, less efficient cars. Given these circumstances, it appears reasonable to employ a conservative approach to this issue and describe the potential for meeting this goal, but continue to identify the impact of the Additional Housing Alternative as significant. However, please see the revised text in Section 18.4.2 (Evaluation of Future Citywide Greenhouse Gas Generation) which more fully describes these issues, including recent legislation and its potential effects on emissions.

In regard to green roofs, please see added text to RM Energy -2 (Residential, Commercial, and Industrial Energy Consumption). While green roofs would have limited benefits in terms of carbon sequestration due to relatively low biomass, shallow substrates, and the typical plants used (i.e., those using CAM photosynthesis), this measure has been added to the Energy section as green roofs may have the greatest benefit in reduction of energy usage, as well as possible water quality benefits. Some indirect benefits to GHG emissions could certainly arise due to reduced energy consumption.
ORGANIZATION LETTER # O11

LEAGUE OF WOMEN VOTERS®
OF SANTA BARBARA
328 East Carrillo Street, Suite A
Santa Barbara, California 93101

To: Mayor Helene Schneider and all Council Members
   All Planning Commissioners
   City of Santa Barbara

From: Santa Barbara League of Women Voters
Date: April 26, 2010

Subject: Needed Changes to Plan Santa Barbara

The Santa Barbara League of Women Voters believes that some changes need to be made in Plan Santa Barbara in order for the City to approve it. These are changes that we have asked for over the past five years, and are consistent with the League position that says that this City should live within its resources.

On April 22 Chris Thornberg and Brad Kemp of Beacon Economics told 600 business leaders that Santa Barbara County has been very insulated from the effects of the current recession. They said, “The chief reason for Santa Barbara County’s relative health is the slow-growth policies that restrained construction spending and job growth on the South Coast. If you put curbs on growth in a boom, you won’t fall as much when the bust arrives.” We support the policies of slow growth that have enabled us to be a successful and special city for a hundred years. We have many constraints, and we live within them.

In order to continue these policies, we recommend the following changes to the Plan:

* Choose the Low Growth Scenario for future development, continuing the City’s long existing policies. Non-residential development should be reduced to 1 million square feet as well.

* Remove all plans for the Mobility Oriented Development Areas (MODAs). Santa Barbara’s unique circumstances make that common solution unworkable here. Lower density mixed use development along transit corridors will accomplish the same goal. We do not need 60-80 new four story buildings downtown, which the EIR predicts could result.

* Continue to allow 20 units per acre. Additional units will only produce more market rate units, that in turn require more low paying service jobs and more commuting.

* The Traffic Demand Management ideas should be added to the Low Growth plan, and to Plan Santa Barbara. Such new ideas should be phased in, so that they can be removed if they fail.

* The League has always supported bus and train travel, but the City should not assume that people won’t drive, and you should continue to provide adequate parking for all needed uses.
Some have suggested that the entire Plan Santa Barbara be thrown out. The League observes that the No Project Alternative has been shown to be more damaging in the Environmental Impact Report (EIR), so we do not agree. A great deal of money, effort and good intention has gone into the Plan in the last five years. However, we do think some modifications are definitely necessary, and we will discuss some of them below.

DENSITY

The League opposes all of the High Growth scenarios, which are misnamed the Affordable Housing alternatives in the Plan. There is no evidence that these high growth plans will produce any serious amount of affordable housing. Since the market rate units must support the affordable units in private developments, the market rate units will be priced so high that they might never sell, if more than 15% affordable is required. Chapala One, which produced about 30% moderate priced units, forced the market rate luxury units so high that they never sold.

The San Francisco consultant and the EIR both acknowledge that the City might have to go to 60 units per acre to achieve any amount of affordability. That is three times our normal density, and would be extremely unpopular with the public. Only the Housing Authority has built acceptable projects of that density, and they have done it because they made no profit, and had huge subsidies available to them. You are asking private developers to do the same without similar sources of funding. League supports continuing the existing density ordinances.

MODA PLANS

Mobility Oriented Development Areas (MODA) sound good on paper, but we see too many unintended consequences resulting from them. Regular two and three story mixed use buildings can supply some affordability without damaging the character of various areas, or losing the charm of the city. We note that the waterfront has never been an area approved for housing projects by the California Coastal Commission or the public. If certain areas want more housing, they can request changes in their own districts.

CIRCULATION

The good ideas in the Plan for Traffic Demand Management should be applied carefully to any of the scenarios. We say “carefully” because they must be phased in and then evaluated. The League has always supported additional funding for buses and trains, but we think that adequate parking must still be provided until the resulting reduction in driving has been made.

Contact Person: Connie Hannah, 967-4720 Fax at 967-1931
Response to Organization Letter # O11, League of Women Voters (April 26, 2010)

O11-1 (Plan SB GPU): Thank you for your comments and policy recommendations, which will be forwarded to decision-makers for consideration. These issues pertain to the Plan Santa Barbara General Plan Update policies and not the adequacy of the EIR. These matters will be considered by the Planning Commission and City Council as part of the adoption process for the new General Plan.

Note that the transportation policies and the EIR analysis of land use and transportation policies do not assume that people won’t drive but recognize differing vehicle trip generation rates of different policies and different areas (i.e., areas with a mix of uses and close to goods and services and with infrastructure supporting alternative travel modes have lower average vehicle trip generation). The long-established City Circulation Element policies and proposed policy updates under Plan Santa Barbara promote measures to improve mobility under all modes of transportation because if non-vehicle modes are convenient, some people will likely choose to use alternate modes for some of their trips. This helps to limit vehicle congestion and also improves livability. As documented in the EIR transportation analysis, studies have confirmed that specified land use and road patterns and transportation demand management measures do in fact result in lower vehicle trip generation rates. Proposed parking measures are intended to improve management of parking resources and provide appropriate supply for customers, residents, and employees, which may also result in reduced traffic congestion.
Statement to the Santa Barbara Planning Commission on May 6, 2010

Subject: Completion of Plan Santa Barbara and the Program EIR

I'm Connie Hannah, speaking for the Santa Barbara League of Women Voters. The League agrees with the Commission that developing more affordable housing for working people is our number one priority. Our concern has been that the present General Plan will not do that, and it will allow us to continue to build expensive condos to support the few affordable ones. We do not see any clear regulations to change that in the Plan.

The League understands that the increased density in the downtown area is being driven at least in part by the Regional Housing Needs Assessment (RHNA) numbers you have unfortunately been given. However, it is important to remember that you may be given additional high numbers every few years, so that your 4,300 figure does not satisfy even the RHNA numbers over time. At some point the City will have to decide when enough is enough. Are we really going to change the nature of the South Coast and our City to satisfy some arbitrary state mandate?

We have had one hundred years of experience in preserving a landmark city. We have done it by being consistently conservative about development, and by protecting our historic background. Few cities have managed that. We are now being forced into a one size must fit everyone, and that size is what we see to the south of us. Many of us reject that huge development size, and want to protect the unique Santa Barbara lifestyle and ambiance.

Any pretense that big new development will be affordable is unprovable. New housing produced here has always been expensive, unless it was heavily subsidized. Because it is so expensive to build downtown, developers have already told you that the condos will need to be at least 1,500 square feet, like the Chapala street condos. Every time we allow more new expensive condos to be built, we increase the demand for more lower wage workers who will have to commute to work, and that defeats our mutual climate change goals.
Response to Organization Letter # O12, League of Women Voters (May 6, 2010)

O12-1 (Plan SB GPU): Thank you for your comments which will be forwarded to decision-makers. These comments pertain to the proposed Plan Santa Barbara General Plan Update policies and not the adequacy of the EIR. These matters will be considered by the Planning Commission and City Council as part of the adoption process for the new General Plan.
ORGANIZATION LETTER # O13

LEAGUE OF WOMEN VOTERS®
OF SANTA BARBARA
J28 East Carrillo Street, Suite A
Santa Barbara, California 93101

John Ledbetter, Principal Planner, and Dan Gira, Consultant
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102

Subject: League Comments on the EIR for Plan SB

Dear John, and Dan:

The Sustainable Communities Committee of the League has given particular attention to the Comparison of Key Regional and Local Issues which we received on May 6. At the Planning Commission hearing on that date, the Commissioners agreed that the City must concentrate on their local issues, because they cannot be certain of cooperation from other jurisdictions. We agree that must be the goal of a General Plan Update.

In running down the comparison of local issues, it is clear that the Lower Growth Scenario had the least impact in every case, including Energy Demand and Public Utilities, which includes landfill capacity. The League believes that this listing clearly shows that Lower Growth is the Environmentally Superior Alternative, and should be identified as such in the Environmental Impact Report. All of the categories in which Lower Growth has less impact are concrete and measurable. They include service demands for fewer firefighters, police officers, water supply, landfill capacity, electricity, natural gas and school capacity. Lower growth also had less impact on community character, visual resources and open space demand. The categories in which Additional Housing is ranked as having the least impact involves assumptions that may or may not work out as predicted. Therefore, we are asking for a change in the EIR.

REQUEST FOR CHANGE IN THE FINAL EIR:

Because the City must concentrate on its own capacities and needs, the League asks that the discussion of Alternatives now show Lower Growth to be the Environmentally Superior Alternative. This will affect every decision that the City makes for Plan Santa Barbara.
Population and Jobs/Housing Balance

This section is important for city planning. The balance or imbalance between what workers will be paid, and the cost of any housing created is critical. We would like to see them compared, because then we could see how affordable any new units will be. We need an estimate of what new housing might cost: both market rate and "affordable" units. And then, an illustration of how the expected incomes will relate to the affordable units.

On 19-30 the EIR notes that our desired combination of low density and small units might not be feasible downtown. It does not note that such a combination in the areas of less expensive land, like the R3 and R4 zones, could very well be financially feasible. Consideration of the cost of building units in the R3 and R4 zones should be added in this section of the EIR.

On Page 19-31 we note that both Lower Growth and Additional Housing create the same demand for new housing, 1,167 units. We do not understand how that can be, since the many more expensive units used to support the additional affordable will create more demand for service workers, and hence more demand for affordable. But if this figure is correct, we note that the population would grow by 10,464 people under Additional Housing, and Lower Growth requires 4,800 to produce the same demand for affordable housing! Since we are concerned about housing our work force; Additional Housing would certainly intensify rather than solve our problems.

Transportation

Circulation planning continues to be done in concert with increasing housing density within the central Downtown district, with the overall policy goals of reducing peak hour traffic and the attendant traffic congestion at key intersections on the corridors connecting State Street with Highway 101. This narrow focus on commuter traffic (15% of the volume of traffic on 101)
Page 3  League of Women Voters Comments on the Draft EIR

Transportation (Continued)

creates a kind of tunnel vision. On Page 16-32 it is mentioned that there is a lack of data on the correlation between car ownership and car travel. The new occupants of downtown units will probably own a car, and as pointed out on 16-53, “Goleta would be especially likely to receive increased car trips due to its relatively high concentration of “destination retail” stores that are not available in the city.” In terms of reducing area traffic, as well as the increase inside the city, the strategy of packing more car owners into Downtown seems of dubious benefit.

The Lower Growth Alternative

In section 13.6 on Page 34, the following quotation summarizes some of the League’s reasons for supporting this alternative: “Overall reductions in development under this alternative combined with lower building heights and decreased densities could result in less potential for impacts associated with loss of views Downtown, as well as changes in the character of El Pueblo Viejo, when compared to the multiple-story construction that could occur under Plan Santa Barbara policies.” Of course, those changes would be even more extreme under the Additional Housing Scenario, where 60-80 new multi-story, 60 foot high buildings could be built. Non-residential development should be limited to 1 million square feet in this Alternative.

Water Supply

The League does not believe that there are easy solutions to a growing need for water in an era when water is expected to be in short supply everywhere. The Draft EIR discusses supplemental sources of water that would be used during a drought situation. These include purchase and importation of water from other areas of the state, and restoration of the desalination plant. The EIR should clearly point out that either of these is a negative factor for the City’s sustainability goal, since they are both large consumers of energy.
The League wishes to thank the City for giving us copies of both the General Plan and the Draft EIR in the format we had requested. These are valuable documents and eight members have reviewed them. We have selected a few key comments to forward to you.

We think that the Draft EIR is well written and provides a great deal of information in a generally readable form. However, as you see on Page 1 of this letter, we disagree with the critical conclusion that it reaches, and we are asking you, in view of recent decisions of the Planning Commission, to change the "environmentally superior alternative" discussion to show that Lower Growth does have less impact in almost every important and measurable area. With the Plan's stated goal of "living within our resources," and that same requirement in the City Charter, it appears to us that the Final EIR should clearly identify the Lower Growth Alternative as the environmentally superior alternative.

Sustainable Communities Committee
Connie Hannah, Chairman
Response to Organization Letter # O13, League of Women Voters (May 18, 2010)

O13-1: Thank you for your comments.

O13-2: Comment noted. The EIR identifies the Lower Growth Alternative as having relatively low energy demand from the built environment (i.e., lowest demand for electricity and natural gas), and lower commercial growth than the Project could also reduce transportation effects somewhat. However, the Additional Housing Alternative would be expected to have the least overall increase in energy demand as the transportation sector is the largest single user of energy in the City. With more affordable housing, fewer employees commute, and vice versa. Please see response O1-2 regarding assumptions in the EIR.

O13-3: Comment noted. The impacts and environmentally superior aspects of the Lower Growth Alternative are discussed and analyzed in Section 22.3 of the EIR. As described in that section, there are many aspects to this Alternative that are environmentally superior. The Additional Housing Alternative is identified as environmentally superior for issues such as transportation, energy, air quality, global climate change, and jobs-housing balance. The policy set assumed to go with the Lower Growth Alternative did not assume expansion of transportation demand management (TDM) measures such as reduced parking requirements and parking pricing. However, with application of more extensive trip reduction measures from the Additional Housing Alternative, the Lower Growth Alternative could potentially be made environmentally superior for energy issues and some transportation issues, but likely not for meeting objectives to improve the jobs-housing balance or to provide more affordable housing.

O13-4: Comments noted. Section 19.0, Population and Jobs/Housing Balance provides an in-depth discussion of housing prices, anticipated job classes/wages of new employees, and housing affordability. While it is beyond the scope of this EIR to forecast future home values and construction costs, the EIR does identify the projected shortfall of affordable housing under each alternative.

The EIR discusses that housing development in the City’s R-3 and R-4 zones could contribute to affordable housing production (refer to Section 19.4 Implications of Population Growth and Jobs/Housing Balance).

In terms of future job growth under the Lower Growth and Additional Housing Alternatives, the EIR describes direct job growth from nonresidential expansion. Indirect employment growth from housing construction is discussed in Section 19.4.1 (Population and Jobs/Housing Balance; Citywide Job Growth and Housing Availability). Many such jobs would be expected to be filled by existing construction workers, households, or domestic staff. Increased demand for retail, service commercial, and institutional uses is accounted for in the job growth forecasts (please refer to Table 19-9). The EIR finds that the Additional Housing Alternative could substantially improve the City’s overall jobs/housing balance and result in the greatest potential to meet affordable housing demand associated with future employment growth in the City.

O13-5: Comment noted. The EIR focuses on peak hour traffic since that is generally the period which road and intersection congestion is the greatest. For most facilities during most periods, non-peak hour traffic is generally free flow. Please see also responses O1-2 and O3-6.

O13-6: Comment noted and will be forwarded to decision-makers. The growth alternative, density standards, and non-residential development amounts will ultimately be decided by the City Council.

O13-7: Comment noted and will be forwarded to decision-makers. The EIR does discuss fiscal and energy costs of supplemental water supplies. Please see EIR Sections 15.1.1 (Water Supply and Service; Water Supply Planning Issues) and 17.7.2 (Energy and Climate Change).
# O13, League of Women Voters (Continued)

O13-8: Thank you for your comments. Please refer to response O13-4 above and Section 22.3 of the EIR regarding identification of the Environmentally Superior Alternative.
From: Dennis Thompson [mailto:Dennis@thompsonnaylor.com]
Sent: Friday, May 14, 2010 1:17 PM
To: Ledbetter, John
Subject: Gen. Plan

We Mesa Architects have been so busy with our Spring Fest, we didn’t get into the Draft Plan or EIR as we should have. Is there an analysis of narrowing Cliff Dr. in the EIR, as I thought there was going to be? Are there any other critical parts for us to look at/comment on regarding the Mesa?

Dennis Thompson, AIA, LEED AP
Thompson Naylor Architects, Inc.
900 Philinda Ave., Santa Barbara, CA 93103
(805) 966-9807
www.thompsonnaylor.com
Response to Organization Letter # O14, Mesa Architects (May 14, 2010)

O14-1: Comment noted. Please see discussion of Cliff Drive in Section 16.4 (Transportation; Impact TRANS-2) of the EIR.
April 27, 2010

Chair Bruce Bartlett and members of the
City of Santa Barbara Planning Commission
630 Garden Street
Santa Barbara, CA 93101

RE: Comment on Plan Santa Barbara and DEIR

Dear Chair Bartlett and members of the Commission:

The Montecito Association is a homeowner's organization committed to leading the community in the preservation, protection, and enhancement of the semi-rural residential character of Montecito. As such, it is very interested in reviewing the City's draft General Plan, particularly as it relates to visions for the Coast Village Road area, including land use element policies and infrastructure improvements.

On May 4, our Land Use Committee will be discussing the March 2010 drafts of Plan Santa Barbara and its DEIR in more detail. We also hope to gain feedback from our members and residents of the Montecito community who live near Coast Village Road, as the policies for this area hold great interest for these and many other residents of Montecito.

We appreciate staffs' efforts in having the Montecito Planning Commission receive a briefing on the City's General Plan on April 28. This is a good first step as we begin the coordinated review protocol adopted recently by both agencies.

The Association looks forward to providing constructive and thoughtful comments by May 17 regarding both documents directly to the City of Santa Barbara. Please contact Victoria Greene in the Montecito Association office if you have any questions.

Sincerely,

Peter van Duinwyk, President

cc: 1st District Supervisor Salud Carbajal
Response to Organization Letter # O15, Montecito Association (April 27, 2010)

O15-1: Thank you for your comments. The City looks forward to working with the Montecito Association regarding planning and environmental issues in the community and the finalization of the City’s General Plan.
May 5, 2010

Chair Bruce Bartlett and members
City of Santa Barbara Planning Commission
630 Garden Street
Santa Barbara, CA 93101

RE: Plan Santa Barbara, Planning Commission Discussion of May 6, 2010

Dear Chair Bartlett and members of the Commission:

As we understand the City's process, your Commission will be providing further direction to staff about what specific policies and strategies should move forward as the project description for Plan Santa Barbara. Therefore, we believe these initial comments are important now, even though our Association is working on a more detailed review of the DEIR and Plan which will be submitted by May 17.

In order to protect the unique commercial character of Coast Village Road as well as ensuring development that is compatible with the adjacent residential community, coupled with the recognition of a number of unique environmental constraints, we believe a hybrid land use scenario is required that significantly reduces the intensity of development permitted along Coast Village Road.

The land use densities along Coast Village Road, as proposed in Plan Santa Barbara, may not significantly change from the current General Plan designations for Coast Village Road. However, based on the community outcry over the development at 1298 Coast Village Road, the Union 76 station, there is broad concern that the existing regulations of development under the City's current zoning and land use policies are too intensive to properly retain the street's character and to be compatible with adjacent residential uses within the Montecito Community Plan area of Santa Barbara County.

As redevelopment projects have begun to occur along Coast Village Road, it has become evident that there is a growing disparity between the semi-rural community character of the adjoining Montecito community and the increasingly urban intensification of Coast Village Road, as allowed under current City zoning.

In addition, to preserving the unique character of Coast Village Road and ensuring compatibility with adjacent uses, we are also concerned about a number of significant negative impacts associated with a future intensification of development as permitted under the Plan. To name just a few impacts with this level of intensification:

- Worsening traffic operations, including general congestion along Coast Village Road and projected failure of the intersections of Coast Village Road with both Olive Mill Road and Hot Springs Road intersections.
The current unmet parking demands associated with Coast Village Road businesses, much of it due to employee and event parking, will be exacerbated without a less intensive Plan alternative. Each year, this overflow of employee and business related parking onto multiple residential streets in Montecito worsens particularly along Hermosillo Road, Butterfly Lane, and Middle Road. Some of the City’s proposed parking management strategies may work for the City’s downtown, but would not work in this satellite commercial area. Pay parking will surely guarantee additional parking pressures on the adjacent (unrestricted) residential streets controlled by the County.

Coast Village Road is also unique in that it receives water from the Montecito Water District (MWD) rather than being serviced by City Water. MWD is facing shortages and has therefore been forced to recently enact significant rate increases, conservation measures, and a special Ordinance. District officials have said that they can only service “existing levels of development along Coast Village Road and will not be able to service any intensification of use” as is called for in both the current plan and Plan Santa Barbara. Furthermore, they have stated that a “will serve” letter would not be issued to the 76 station project if it were before them today. Simply stated, any intensification over what is on the ground now would lead to increased water demand which cannot be accommodated by MWD. This past year, MWD was forced to purchase additional water because of its inability to service existing customers from its groundwater and contracted allotments. Relying on emergency purchases in the marketplace are simply not sustainable sources upon which a plan should be based.

We respectfully request that you consider the unique setting and character of Coast Village Road as well as its significant environmental constraints and impacts in this process and develop a less intensive planning option for this commercial area.

Thank you for your consideration. Please contact Victoria Greene in the Montecito Association office if you have any questions.

Sincerely,

Peter van Duijwynk, President

cc: 1st District Supervisor Salud Carbajal
     Mr. Jon Ledbetter, Principal Planner
Response to Organization Letter # O16, Montecito Association (May 5, 2010)

O16-1 (Plan SB GPU): Thank you for your comments, which will be forwarded to decision-makers. The EIR recognizes the existing qualities of Coast Village Road and the surrounding community. The EIR analysis assumed that a small increment of development would occur under the proposed Plan over the next two decades. Currently proposed EIR measures such as RM-VIS-1 (Open Space Protection and Restoration) and proposed Policy LG13 (Community Character) and Implementing Actions 13.1 (Design Overlays) and 13.2 (Building Size, Bulk, and Scale, previously number CH9 during DEIR), and LG17 (Sustainable Neighborhood Planning, previously LG15) would help address such concerns. It is anticipated that decision-makers will consider a hybrid growth and policy scenario blending aspects of the various alternatives studied.

O16-2 (Plan SB GPU): Comments noted. Plan Santa Barbara and the associated EIR provide for a number of adjustments and refinements adding more design review tools to City policy to improve compatibility of new development with surrounding uses. Please also refer to response O16-1 above.

O16-3: Comment noted. In regard to traffic congestion along Coastal Village Road, the primary source of increased congestion is anticipated to be diversion of traffic from the mainline of US Highway 101 that would be ongoing prior to completion of the US Highway 101 HOV lane improvements. While some small amount of growth and development along Coast Village Road would contribute incrementally to increased traffic congestion, it is not anticipated to be a major contributor to such congestion.

The draft EIR incorrectly identified the Hot Springs/Coast Village Road intersection as operating at unacceptable LOS in both the AM and PM peak hours (e.g., LOS F in the PM peak.). Corrected calculations indicate that this intersection would operate at LOC C in both AM and PM peak hours in the year 2030. Text has been revised in Section 16, Transportation and throughout the EIR. The City has requested that Caltrans and SBCAG place a new roundabout at Olive Mill with the future freeway HOV lane project. This improvement has the potential to restore acceptable operating conditions at this intersection through the year 2030.

In general, the City considers the adequacy of parking to be a planning and not a CEQA issue. Typically, planning standards call for business parking to be adequate to meet ongoing demands and not those associated with occasional special events peak use. Designing parking lots to account for intermittent special events would be prohibitively expensive, consume valuable land, and lead to creation of extensive areas of underutilized pavement. The Coast Village Road corridor generally has adequate onsite business parking or that available on Coast Village Road, such as angled parking on the Village frontage road and on the commercially designated portions of side streets.

The City will continue to coordinate with the County on development-related issues along Coast Village Road regarding new construction, including building size, bulk, and scale, parking, lighting, landscaping etc., as specified in the Memorandum of Understanding agreed to this year (please see County letter A12 for description). The City is also committed to coordinating with the Montecito Association, Coast Village Business Association, other interested organizations, and concerned citizens to ensure that new development along Coast Village Road is respectful of the community’s character. Please see the proposed additional Plan policy language regarding coordination for this area.

O16-4: Comment noted. Please see added discussion of Montecito water issues in Section 15.0 (Utilities; Water Supply) of the EIR. Refer also to response A8-2.
May 17, 2010

Mr. Jon Ledbetter, Principal Planner
City of Santa Barbara Planning Division
630 Garden Street
Santa Barbara, CA 93101

RE: Plan Santa Barbara, DEIR

Dear Mr. Ledbetter,

The Montecito Association wishes to add these comments for your consideration in refining the Environmental Impact Report for the March 2010 Santa Barbara General Plan. Many of our comments focus on the DEIR, but we also have input about provisions of the General Plan update itself, and so have woven those into these comments as well.

The Association has worked informally with residents who live adjacent to Coast Village Road, members of the Coast Village Business Association, and interviewed staff of the Montecito Water District in its research and review of the DEIR. What we have heard from nearby Montecito residents and business interests along Coast Village Road is that they want to retain the "village like" ambiance provided by this vibrant part of our community.

Coast Village Road has a unique commercial character unlike any other portion of the City of Santa Barbara. This character is further defined by the surrounding unincorporated County parcels, developed in a semi-rural character consistent with the Montecito Community Plan. This character is guided by a 25-foot height limit for the surrounding residential uses. Therefore, future height standards for Coast Village Road should be compatible with this 25’ limit.

In addition to the community character of this street, there are important constraints affecting Coast Village Road that need to be clearly documented in the DEIR. These constraints lead the Association to recommend that a lower land use density and build-out scenario be considered in the EIR, and adopted as part of the General Plan.

1. Water Supply:

Coast Village Road properties have always been served by, and are a part of, the Montecito Water District (MWD). No infrastructure exists for water service from the City of Santa Barbara to this area. The MWD's water supply is dangerously close to existing demand given the limitations on State Water delivery and the District has had difficulty in obtaining additional supplies. As a result, Ordinance 89 was adopted in 2008 and limits water allocations to the level used on a parcel historically. In the absence of available water resources to serve new or expanded development on Coast Village Road, we believe that buildout of the area would result in a significant impact to water resources/public utilities. We ask that this issue be fully evaluated in the EIR.
2. **Traffic:**

a. The single Class I impact in the DEIR is increased congestion on City streets and intersections. Two intersections that would significantly worsen upon Plan Santa Barbara build out are the very cornerstones of Coast Village Road - at Hot Springs Road and Olive Mill Road. However, there is no data regarding the link volume on Coast Village Road itself, nor the operations of Coast Village Road and Butterfly Lane and Middle Road. This should be added to the analysis and document. Again, Coast Village Road has a unique ambiance and the recent saturation of this arterial with traffic diverting from the U.S. 101 construction project has significantly impacted residents, businesses and customers using Coast Village Road.

The DEIR, chapter 16, discusses the impacts to Coast Village Road intersections resulting from diversion of US 101 onto this parallel road. Therefore, Coast Village Road should be included in Table 16.7 as well.

Given the emphasis on alternative transportation methods, could the EIR also assess the success of the Coast Village Road bike lane transitions to the new roundabout at Hot Springs Road? Some residents have noted this road is too dangerous (and difficult) for bikers now.

b. Table ES 6 notes that the number of intersections that already operate below 0.77 v/c ratio, the City's "acceptable" service level, would increase from 13 to 21. However, Table 16.6 lists a total of 20 intersections that, with Plan Santa Barbara growth, would be impacted. This is the figure that should be summarized in Table ES 6, or added to it. It would be helpful to bullet point in this table the locations of the intersections and roadway segments that are anticipated to drop below the City's LOS standard (from 13 with this existing operation to 21 under Plan build out).

Please make sure to include the intersection of Olive Mill Road and Coast Village Road here, which would be partially mitigated with installation of a signal, per discussion on page 16-4.

c. Table 16.6 lists both Olive Mill Road/Coast Village Road and Hot Springs Road/Coast Village Road as degrading from LOS B and C respectively to LOS F and D/F (am/pm periods) respectively. Discussion on page 16-41 addresses mitigation for the Olive Mill Road/Coast Village Road intersection as being the installation of a traffic signal.

It is VERY important to recognize Montecito Community Plan, Policy Circ -M-3.4, which states:

"Traffic signals are not considered compatible with the semi-rural character of Montecito, and as a result, should only be considered when no other form of intersection improvement is feasible. Signalization is not appropriate under any circumstances at the intersection of two secondary or two unclassified roadways or at the intersection of a secondary and an unclassified roadway. Signals shall not be installed until community workshops have been held so that community concerns can be discussed and subsequently addressed to the maximum extent feasible."

This conflict could possibly be avoided using the roundabout solution for Coast Village Road/Olive Mill Road. However, that discussion on page 16-41 does not conclude if a roundabout would, or would not, improve LOS sufficiently but refers only to signalization for mitigation. Please expand that analysis, something that should be available if a Project Study Report is already done.
If there is no feasible mitigation for Coast Village Road/Hot Springs Road, and this is to remain a Class I impact, this should be stated more clearly in the discussion on page 16-45, and highlighted as well in Table ES 6.

d. Please revise Table 16.6 to include the resulting LOS at intersections that DO have mitigation measures available that would help reduce impacts?

e. Based on conversations with the Coast Village Business Association and residential neighbors, there is grave concern about the City's assumption that all MODA principles should apply to this island of a commercial district. Coast Village Road is unique and unlike the other retail/commercial districts of the City. It has limited parking for businesses, does not have a Parking Business Improvement District, does not have large quantities of on-site parking (like La Cumbre Plaza), and has very limited transit service, unlike Milpas Street and State Street.

f. Particular concern about overflow parking on adjacent residential roads has been expressed by the community. Such overflow occurs regularly and seems to be associated with businesses on Coast Village Road, or special events with limited parking management. This problem is exacerbated because the City does not have jurisdiction nor control over parking infractions in these residential neighborhoods. Therefore, many of the proposed policies contained in the draft Transportation Element are not applicable and raise concerns.

g. Given Coast Village Road's specific constraints and the desires of residents and businesses to maintain the road's "village" character, we recommend that this area be treated similar to the City's other unique and historical districts. This may require limited application of MODA principles. There are already unmitigable Class I impacts at the two Coast Village Road intersections if the City chooses to respect the Montecito Community Plan and does not rely on installation of a traffic signal at Coast Village Road/Olive Mill Road. Therefore, the exemption from the MODA principles such as robust transportation demand measures, lower parking requirements and pricing strategies for on-street parking, should not make the CEQA implications worse.

3. Visual Resources:

Please revise the description of Coast Village Road to more fully characterize the adjacent land uses, particularly the single-family residences that abut most of the northern border of the area (p. 13-14). Additionally, there are several important historical buildings along this street that warrant consideration of this area for a design overlay or similar type of district. The Coast Village Road Inn is more than 50 years old and provides an excellent example of roadside vernacular architecture, while the thatched roof Moody sisters cottage, just east of Hermosillo Road, is also historic, and should be tracked as resources in the EIR and General Plan.

p. 13-29 – We take issue with the conclusion that impacts to community character with build-out under the proposed plan would be less than significant. There has been considerable concern in the community regarding development at the scale currently permitted under the City’s existing General Plan and Municipal Code. Infill development at the scale currently allowed and perpetuated by the proposed plan would significantly harm the unique village character of the road by potentially building setback to setback at a height of 45 feet. This is not compatible with the majority of adjacent commercial development nor adjacent single-family residences. We believe that this impact is significant but subject to mitigation through requiring the implementation of measure RM VIS-2 in a timely manner, establishing floor to area ratios to
provide compatibility with the scale of development in the surrounding neighborhood and reducing the maximum permitted height of structures. Care should also be taken to ensure that the City’s General Plan policies and implementation measures would comply with directives from the State Coastal Act, including height limitations.

To reduce this significant impact, we believe it is essential to adopt design guidelines for Coast Village Road in a timely manner – before development pressures make the issue mute. If this cannot be done in a timely fashion, we request Plan Santa Barbara be revised to include clear design criteria that will ensure development is at a scale that is compatible with the surrounding area, including adjacent unincorporated areas.

Given the community issues, as well as the true environmental constraints of water and traffic cited above, the Association also recommends that Coast Village Road be designated in the General Plan as its own Design Overlay District, similar to past City consideration of other Landmark and Historic Districts (per MM HER-1.b). Such a treatment of Coast Village Road could achieve the lower land use densities desired by most citizens, be partially implemented through Coast Village Design Guidelines, and allow this micro-neighborhood to develop without the restraints of all MODA principles.

4. Other comments on DEIR:

Page 1: Refer immediately to Table ES 3, 4, and 5, as the summary of environmental impacts for the project.

Page 27: Mitigation 1.a - Why does this not list a mitigation measure of Coast Village Road/Hot Springs signal? This is unclear based on page 16-45 discussion if this would help, is needed, or is unmitigable.

Page 44: The Association supports the MM Noise-1, requiring periodic monitoring of freeway noise from US 101

Page 9-14: Due to the overlapping service area with Montecito Fire Protection District, please include that District's Wildland Fire Protection Plan as a related document.

Page 14-6: Because Coast Village Road is a satellite location to the City, it is important to note emergency response times to this area, given the lack of a City substation on Coast Village Road or nearby. This is important for major disaster planning such as an earthquake or fire.

5. Comments on the General Plan, March 2010 Draft:

The Association would like to take the opportunity to provide some comments on the March 2010 draft General Plan. We plan to track the plan through the public hearing process, but as the project description continues to evolve we offer these comments:

Land Use Element - An overall emphasis of the draft Plan is to maximize densities in the City's commercial areas - Coast Village Road included. For the reasons outlined above, we believe a less intensive commercial designation should be considered for Coast Village Road.

Land Use Element - Neighborhoods. The discussion of neighborhood planning efforts along Coast Village Road is good on page 87, noting work by the Coast Village Business Association toward completing draft Design Guidelines for this area.
Pg. 142 - The concept of the City's Adaptive Management Plan (AMP) is a good one, and the Association would like to participate as updates regarding Coast Village Road are brought forward from time to time through this check and balance tool.

Pg. 147 - Community Design Policy LG 13 and Implementation Action LG 13.1 - Thank you for listing Coast Village Road Guidelines here as a means for ensuring appropriate community character.

Pg. 148 - Implementation Measure LG 13.2.b.i - This appears to be a typo, and should read:

"...i) Maximums. Develop a set of maximum FARs that permit the largest structures in the core of the city (adjacent to transit and commercial services), and increasingly restrictive maximums moving outward from the core that are generally consistent with the land use designations. (A range of FARs depending on location using the "Parking Zone of Benefit" model.);

p. 148 - Implementation Measure LG 13.2.b.ii: Could this concept of 'buffers' for historical sites, thereby affecting adjacent development, also be explored for buffers to residentially designated neighboring properties? In the Coast Village Road area, where the commercial corridor is under separate governmental control from the adjoining residential neighborhoods, this concept of a buffer to transition more intense development into less intense, single family land uses, has merit.

p. 190 - We appreciate Aesthetics and Resources Policy and related implementation measures that call for protection of public views, vegetation and scenic views as it relates to new development.

p. 191 - Could ER 28.1, Lighting and Open Space, be amended to also include Coast Village Road? While this commercial corridor does not abut open space areas, the semi-rural character of the Montecito community, as codified in the County's Montecito Community Plan, would be an appropriate feature to protect.


We respectfully request that you consider the unique setting and character of Coast Village Road as well as its significant environmental constraints and impacts in this process and develop a less intensive planning option for this commercial area.

Thank you for your consideration of these comments.

Sincerely,

Peter van Duinwyk, President

cc: 1st District Supervisor Salud Carbajal
     Michael Phillips, Chair, Montecito Planning Commission
Response to Organization Letter # O17, Montecito Association (May 17, 2010)

O17-1: Thank you for your comments. The City recognizes the existing qualities of Coast Village Road and the surrounding community which are described in Section 13.1.3 of the draft EIR (Open Space and Visual Resources) and the draft General Plan Land Use Element Neighborhood Description. Proposed City policies such as Policy LG13 (Community Character) and Implementing Actions 13.1 (Design Overlays, including Coast Village Road) and 13.2 (Building Size, Bulk, and Scale) and EIR recommended mitigation measure RM-VIS-1 (Scenic Views) would directly address protection of the existing village qualities of Coast Village Road. The City looks forward to working with the Montecito Association, Coast Village Business Association, the County, and concerned community members to draft long-term guidelines that appropriately balance new development with protection of community character.

O17-2: Comment noted. Please see revised text in Section 15.1.1 (Public Utilities/Water Supply and Service) and Section 15.4, Impact PU-1 (Future Water Supply and Demand) which address Montecito related water issues. Also please refer to Comment A8-2.

O17-3: Comment noted. In EIR Section 16.5 (Regional Impacts to Transportation), please see the new Table 16.12 for intersection and roadway LOS in Montecito at build out of the Montecito Growth Management Ordinance. Section 16.5 provides a discussion of potential increases in congestion along Coast Village Road. When considering long-term implications of growth in traffic volumes along Coast Village Road, it is important to consider that while current operations are impacted due to construction on US Highway 101, completion of these improvements will greatly improve operations over the next 5 to 10 years. As discussed below, the EIR forecasts that gradual increases in traffic volumes and diversion from the main line would worsen operations on the Coast Village Road corridor toward the end of the 20-year planning horizon; however, this “reasonable worst-case” analysis does not account for completion of the proposed HOV lane improvements along US Highway 101 through Montecito, which have the potential to occur within this timeframe and could substantially improve the situation by reducing diversions.

In regard to local intersection operations along Coast Village Road, these intersections generally operate at free flow during non peak times. The stop sign-controlled intersection of Coast Village Road and Middle Roads experiences limited queuing along the main line during peak hours, but due to extremely low side street volumes, operates acceptably. Similarly, the uncontrolled intersection of Coast Village Road/Butterfly Lane operates at an acceptable level due to extremely low side street volumes and adequate gaps in traffic on Coast Village Road to permit side street turning access.

In regard to bicycle safety at the new roundabout, a National Transportation Research Board (NTRB) study recently produced a number of findings regarding pedestrian and bicyclist behavior at roundabouts. This research “did not find any substantial safety problems for non-motorists at roundabouts, as indicated by there being few reported crashes and a very small number of observed conflicts. In addition, no crashes and a very small number of conflicts were observed from video recordings of interactions between non-motorists and motorists” (NTRB, 2007). In addition, the City’s experience with the Milpas and Sycamore Canyon roundabouts indicate that once cyclists and motorists become accustomed to using roundabouts, perceived safety concerns diminish substantially.

O17-4: Comments noted. EIR Summary Table ES-3, which contains the impacts and mitigations you refer to, has been supplemented as requested with the identification of impacted intersections. However, EIR Transportation Section Table 16.6 lists 21 intersections as being impacted.
In regard to mitigation of impacts to the intersections of Olive Mill and Coast Village Road, the EIR recommends either signalization or installation of a roundabout. Further, the City has requested that Caltrans and SBCAG place a new roundabout at Olive Mill with the future freeway HOV lane project. This improvement has the potential to restore acceptable operating conditions at this intersection through the year 2030. Please refer to mitigation measure MM TRANS-1a in EIR Section 16.8. The EIR does analyze the effectiveness and feasibility of roundabout or signalization of intersections at a program level, as is appropriate for a General Plan. Further consideration by decision-makers of feasibility and priorities regarding intersection improvements will occur. Basic steps involved with implementation such as detailed project study reports would also be identified by decision makers.

The draft EIR incorrectly identified the Hot Springs/Coast Village Road intersection as operating at unacceptable LOS in both the AM and PM peak hours (e.g., LOS F in the PM peak). Revised calculations indicate that this intersection would now operate at LOC C in both AM and PM peak hours in the year 2030. Text has been revised in Section 16, Transportation and throughout the EIR. Further, please remember, as discussed under response O17-3 above, completion of the US Highway 101 High Occupancy Vehicle (HOV) lanes was not assumed in this conservative analysis, but could improve road and intersection operations along Coast Village Road, as diversion from the mainline would be substantially reduced or potentially eliminated.

Please see amendments to Table 16.6 in EIR Section 16.4 (City Transportation Impacts), which highlight in bold the intersections subject to mitigation through feasible physical improvements.

The originally proposed MODA boundaries did not include Coast Village Road. The revised draft General Plan Update no longer has mapped MODA boundaries and utilizes MODA principles. Implementing Actions LG4.2 (Focus Growth), LG4.3 (Mix of Land Uses) and LG4.4 (Mobility and Active Living) [all previously numbered as part of LG9 during DEIR period] call for focusing growth within ¼ mile of “frequent transit service”, in areas with a mix of uses, “particularly Downtown” and to link mixed-use developments with “main transit lines.”

Per January 2010 changes in the State CEQA Guidelines, parking is considered to be a planning and not a CEQA issue. Planning standards call for business parking to be adequate to meet ongoing demands and not those associated with occasional special events peak. Designing parking lots to account for intermittent special events would be prohibitively expensive, consume valuable land, may induce additional traffic, and lead to creation of extensive areas of underutilized pavement. The Coast Village Road corridor generally has adequate onsite business parking along with that available on Coast Village Road, such as angled parking on the Village frontage road and on the commercially designated portions of side streets.

The City will continue to coordinate with the County on development-related issues along Coast Village Road regarding new construction, including building size, bulk, and scale, parking, lighting, landscaping etc., as specified in the Memorandum of Understanding agreed to this year (please see County letter A12 for description). The City is also committed to coordinating with the Montecito Association, Coast Village Business Association, other interested organizations, and concerned citizens to ensure that new development along Coast Village Road is respectful of the community’s character. Please see the proposed additional Plan policy regarding coordination for this area.

O17-5: Comments noted. Please see added discussion of the Coast Village Road area in EIR Section 13.1.3 Urban Visual Character; Coast Village Road.
# O17, Montecito Association (Continued)

Please refer to proposed Policy LG13 (Community Character) and Implementing Action 13.1 which would require adoption of a design overlay along Coast Village Road. Please also refer to Implementing Action LG13-2 (previously numbered CH9, CH14) which addresses building size, bulk, and scale. The Mitigation Monitoring and Reporting Program and Adaptive Management Program will establish priorities and time frames for implementation, and monitoring of effectiveness. Inclusion of these proposed policies and programs as part of the General Plan Update project provide for reduction of potential environmental impacts to less than significant levels.

O17-6: Comments noted and policy recommendations will be forwarded for decision-maker consideration.

EIR Summary: References to the impacts summary tables have been added to a new Section on page 9: Listing of Impacts.

Mitigation Trans-1.a: This measure has been amended to read “Installation of Improvements at Intersections Currently Controlled by Stop Signs. In regard to a new signal at Hot Springs Road, installation of signal at a location with a roundabout is generally infeasible and counterproductive. Please note, the draft EIR incorrectly identified the Hot Springs/Coast Village Road intersection as operating at unacceptable LOS in both the AM and PM peak hours (e.g., LOS F in the PM peak.). Revised calculations indicate that this intersection would now operate at LOC C in both AM and PM peak hours in the year 2030. Text has been revised in Section 16, Transportation and throughout the EIR. The City has requested that Caltrans and SBCAG place a new roundabout at Olive Mill with the future freeway HOV lane project. This improvement has the potential to restore acceptable operating conditions at this intersection through the year 2030.

Mitigation Noise-1: Comment noted.

Fire Protection: Comment incorporated; please see revised text in EIR Hazards Section 9.2.1, Relevant Plans and Policies.

Emergency Response: Coast Village Road falls within acceptable responses times for City fire service. In addition, the City maintains a mutual aid agreement with the Montecito Fire Protection District which can provide service to this area from both Stations 1 and 2, and all fire and police protection service providers in the area also coordinate with respect to disaster planning and response.

O17-7 (Plan SB GPU): Comment noted and recommended land use policies will be forwarded for decision-maker consideration.

As GPU Implementation Action LG13.1 (Community Character/Design Overlays) for Coast Village Road is carried forward, the concept of buffers or setbacks from residentially designated neighborhood properties could certainly be a consideration. Action LG13.2b (FAR) has been refined to include particular attention to protection in areas adjacent to single-family zoned neighborhoods. The City will work with the County and Montecito Association, Coast Village Business Association, County, and concerned community members to draft appropriate standards for development on Coast Village Road with consideration for protection of the neighboring residential community, and in monitoring of implementation as part of the Adaptive Management Program

GPU Implementation Measure 13.2.b.i-Floor Area Ratios (previously numbered policy CH15): Please see text correction.
# O17, Montecito Association (Continued)

Buffers: Yes. GPU Land Use Policy LG 13 (Community Character) and its implementation measures are intended to provide additional guidelines and tools to ensure compatibility.

GPU Policy ER28.1 (Lighting and Open Space) pertains more to open space such as beaches, foothills, and Las Positas Valley. However, the existing City lighting ordinance will also continue to address light and glare issues in future development. The Coast Village Road Design Guidelines could also further address this issue.

FYI - Kellam will be commenting at PC hearing on DEIR for Pearl Chase Society.
Initial questions:
1. What is reference to "MEA" mean on p. 10-8 of DEIR?
2. If Lower Growth Alternative is chosen, does that mean the entire Draft GP is thrown out?
3. Historic Element not drafted, identified for future phase. How can Council adopt the GPU if parts are not done yet?
Response to Organization Letter # O18, Pearl Chase Society - Kellam Chase (April 22, 2010)

O18-1: Comments noted and forwarded to decision-makers.

The reference to the City’s Master Environmental Assessment (MEA) is to explain its use by the City in the review of proposed projects for potential impacts to Heritage Resources.

The City retains the option to select from among the various alternative growth scenarios and policy options, or a “hybrid” scenario blending elements of the alternatives. The final adopted General Plan Update document would reflect the policies selected. The EIR would remain valid if the Lower Growth Alternative was selected.

The City Council approved a process for a phased adoption of the updated General Plan components, consistent with past practice. Existing General Plan policies protective of heritage resources, such as in the existing Conservation Element, would remain. The General Plan Update policies proposed in this planning phase would also provide updated policy direction for Historic Resources protection, for immediate use upon adoption, and also to provide direction for the development of a comprehensive new Historic Resources Element in a subsequent planning phase.
From: on behalf of Community Development PC Secretary
Subject: FW: Draft EIR
Attachments: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR PLAN SANTA BARBARA.doc

-----Original Message-----
From: deforek@aol.com [mailto:deforek@aol.com]
Sent: Monday, May 17, 2010 4:01 PM
To: Ledbetter, John
Subject: Draft EIR

Dear Mr. Ledbetter;

Attached are comments from the Preservation Committee of the Pearl Chase Society.

Please forward them to the members of the Planning Commission for the June hearing.

Thank you,

Kellam de Forest
COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR PLAN SANTA BARBARA

A major flaw in the Draft EIR is that its preparers did not have a Historic and Cultural Element on which to comment. Section 10 is misleadingly titled “Heritage Resources”. What is the preparer’s definition of “heritage resources”? Please change the title of Section 10 to “Historic and Cultural Resources” for conformity to Section 22.22 of the Municipal Code.

Also, the preparers fail to realize that the ordinances enacted to preserve historic buildings, trees and sites, along with the establishment of a city Historic Landmarks Commission, were and are designed to recognize individual historic properties. El Pueblo Viejo district was established more to respect the Spanish Revival look of Santa Barbara championed by Miss Pearl Chase than to encourage historic preservation. Some buildings and sites within this district are officially designated as landmarks or structures of merit as are many that are outside the four designated district. I have not read the additional EIR volumes. Is the list of all the City Landmarks and Structures of Merit along with all 600 plus potential structures and sites. This list needs to be referenced in the Section 10 of EIR.

The EIR fails to acknowledge that the whole City of Santa Barbara is a historical resource. The introduction of three or more story structures, even if restricted to the so-called MODA, would, in the opinion of the Preservation Committee of the Pearl Chase Society, constitute a Class I unmitagable impact to the entire city. The fabric of many a historic city has been destroyed when the city has not been considered in its totality. The impact on page 10-19 to historical resources should be a Class 1 and wording should be changed from “districts” to the city”.

Kellam de Forest
2651 Todos Santos Lane
Santa Barbara CA 93105
682-4834
Response to Organization Letter # O19, Pearl Chase Society (April 22, 2010)

O19-1: Thank you for your comments. As per the City Council approved scope and phased process for the Plan Santa Barbara General Plan Update, the current planning phase includes incorporation of updated policy direction for historic resources protection, with the development of a comprehensive new Element based on that policy update as a subsequent planning phase. The EIR reviews the impacts of the project as proposed. The absence of a separate comprehensive new Historic Resources Element does not make the EIR inadequate. The EIR analyzes potential impacts of future growth on historic resources, based on the effectiveness of existing historic resources and the proposed updated policies and programs to address historic issues.

Archaeological, historic, and paleontological resources are identified in the EIR as “Heritage Resources”.

O19-2: The EIR Section 10.1 (Heritage Resources Setting) clearly describes the roles and direction of existing City ordinances including the El Pueblo Viejo Design District in protecting historic resources. The number of historic structures in the City is noted on Figure 10.1 and discussed in Section 10.2.

O19-3: Comment noted. The EIR does recognize the many historic resources throughout the City. However, technically speaking, the entire City as a whole does not qualify as a “historic resource” within the technical criteria for historic resources. Please refer to Section 10.2.1 of the EIR (Applicable Plans and Policies/Archaeological, Paleontological, and Historical Resources).

The EIR analysis finds that existing and proposed new General Plan policies together with identified mitigation measures would reduce potential impacts to historic resources to less than significant levels. Please refer to mitigation measure MM HER-1 (Protection of Historic Buildings, Structures, and Districts) and General Plan policies LG13 (Community Character), LG14 (Historic Structures, previously numbered as CH10 during DEIR period), and HR3 (Development Adjoining Designated Historic Structures, previously numbered CH4).
April 28, 2010

Chair Bruce Bartlett
Vice Chair John Jostes
Commissioner Charmaine Jacobs
Commissioner Mike Jordan
Commissioner Stella Larson
Commissioner Sheila Lodge
Commissioner Deborah L. Schwartz
Planning Division Office
630 Garden Street
Santa Barbara, CA 93101

Dear Commissioners,

Although the Santa Barbara Association of REALTORS® understands the thought process behind the General Plan policies, we do not believe that they are cohesive with the future of Santa Barbara. In fact, there is a tension between the General Plan's articulated goals of supporting affordable housing and sustainability, and the City's slow growth (some would say anti-growth) policies. We suggest that there is an inherent conflict between policies that severely curtail the supply of housing and jobs, and the General Plan's goal of fostering affordable housing. From an environmental standpoint, these growth policies also conflict with the City's sustainability claims because these kinds of growth restrictions tend to result in forcing housing construction outside the City limits, which leads to longer automobile commutes, higher carbon emissions, etc. In a similar vein, we find a conflict between the General Plan's policy goal of producing more housing suitable for families, and the Average Residential Density Policy, which would make it more difficult and expensive (based on small size) to construct family housing in the areas where new housing is envisioned under the General Plan.

Draft Land Use Element/Draft Housing Element
Given the economic growth of the region and desirability of the City as a place to live, it is probably no coincidence that there is a lack of affordable housing in the City. Also, some development that would have otherwise located in the City has most likely been directed to outlying areas, leading to more land consumption (a resource that cannot be replenished), longer commutes, and increased carbon dioxide emissions from automobiles.

The General Plan mentions at the outset the need to reexamine the City's Charter §1507, which established the policy of limiting growth in Santa Barbara, however, the General Plan proposes few policy changes that would result in a meaningful increase of housing in the City. In fact, the City states in the General Plan that it envisions an increase of only approximately 2,800 housing units over the next 30 years, which equates to less than a 5% increase in the total housing stock. It seems unlikely that this small increase in housing supply would do much to alter the status quo and what appears to be a systemic imbalance between supply and demand of housing in the City and the resultant affordability issues.
The constraints on new development are based on the premise that "the majority of the City is built-out." This "built-out" premise deserves closer scrutiny if the City is truly serious about addressing its affordable housing issues and promoting sustainability. The General Plan itself indicates that in existing neighborhoods, granny flats and other infill projects have had successes. These are examples of density increases in existing neighborhoods that belie the "built-out" premise of the General Plan.

A component of the City's "Vision for a Sustainable Santa Barbara" is "building as much housing as possible within resource limits to provide an array of lifestyle options for a demographically and economically diverse resident population." Consistent with this vision, Implementation Action H11.12 of the Draft Housing Element is directed at encouraging the construction of more market-rate housing units with more than three bedroom units through incentives, which would include increased density, reduced parking requirements, expedited review process, and fee waivers or deferrals. Likewise, Implementation Action 11.10 of the Draft Housing Element calls for the City to "encourage the construction of the three bedroom and larger rental units for low-, moderate-, and middle income families." The General Plan does not provide any specifics on how the City would encourage and accomplish these actions of fostering more 3+ bedroom units.

At the same time, however, the General Plan proposes the Average Residential Density Policy, which would impose density limitations that are tied to the average square footage of a unit. The "target unit size" under this policy is approximately 1,000 square feet, which is designed to be "sufficient to accommodate two bedrooms." While larger units would be permitted if counterbalanced by smaller units, the General Plan is clear in stating the intention that the larger units would be mostly market rate units, stating that "the purpose of an average residential density is to encourage smaller, more affordable units through established unit sizes while allowing flexibility for larger units, which help subsidize the cost of the smaller units." Thus, the Average Residential Density Policy is intended to promote mostly two-bedroom units and leverage a small number of larger units to subsidize one- and two-bedroom affordable units.

Although the Average Residential Density Policy would be replacing the existing Variable Density Ordinance (which regulates density on the basis of the number of bedrooms), this new policy arguably conflicts with the City's goal of fostering more 3+ bedroom units, since these units require more square footage and thus would be more difficult to build than smaller units under the Average Residential Density Policy.

Aside from shifting standards from the number of bedrooms to the square footage of units, an important change under the Average Residential Density policy would be the functional imposition of minimum, as well as maximum, density requirements.

The minimum density requirements under the Average Residential Density Policy are not absolute. But failing to meet the required density would have some undesirable economic consequences. It appears that all units in residential developments with less than the prescribed density (15-25 dwelling units per acre in the Medium-High Density Residential area or 27-34 dwelling units per acre in the High Density

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1 Draft Land Use Element Page 59
2 Draft General Plan Framework Page 24
3 Draft Land Use Element Page 66
4 Draft Land Use Element Page 66

SBAOR Draft General Plan Comments Page 2 of 6
Residential area) would be limited to no more than 1,300 square feet in the Medium-High Density Residential area and no more than 1,000 square feet in the High Density Residential area. While single-family units are exempted from the Average Residential Density Policy, it would seem to apply even to duplexes, such that certain forms of development (e.g., a medium density townhouse development with larger units in the higher density district) would be impossible to achieve under the Average Residential Density Policy.

The limitations at the lower end of the density scale distinguish the Average Residential Density Policy from the existing Variable Density Ordinance. While minimum density requirements have been gaining popularity in recent years, they are still much more the exception than the rule. It could also be argued that minimum density requirements represent a fundamental shift in the relationship between the landowner and the regulatory authority, where a landowner is being basically forced to build more than he or she wants.

Another parallel that has not been fully distinguished is the comparison of the Average Residential Density Policy and the Floor Area Ratios. Currently within the Neighborhood Preservation Ordinance, single family FAR's for a 6,000 sq. ft. lot is 0.45 (smaller lots have even higher FAR's). The current General Plan proposal for Medium-High Density zoned properties equates to the same 0.45 FAR as the single family zone, and the proposed High Density zoned properties equates to 0.62 FAR. Historically under the current standards, FAR's of 0.85 have been the norm for High Density zoned properties.

Our Association has some questions in regards to the City's implementation actions to "establish a program for use of vacant or under-utilized properties for temporary community gardens throughout the City". Would the establishment of this program be directed towards government owned lands, utility owned lands, or privately owned lands? If it is private property, how would this program be implemented? Would this be a "taking" of land that the City deemed vacant or under-utilized? We are concerned about property owners not being fully compensated or being possibly punished because they are not "using" their land according to what the City deems acceptable.

Property Transfer Tax

Although we understand that the City needs to find sources for funding affordable housing "increase[ing] property transfer tax to provide funding for price-restricted affordable and workforce housing, in order to broaden the funding base" is not the way. As is evident through the current economic situation, transfer taxes are an extremely volatile and unreliable source of revenue. The imposition of a transfer tax on homes adds one more cost to a growing list of expenses which must be considered in the purchase and/or sale of a home, including water and seismic retrofit, environmental upgrades, insurance, transaction costs, and property taxes. The cumulative effect of these expenses is to decrease the mobility of households because it becomes too expensive to move. This means fewer home transactions will occur, and the simulative effect of home buying activity on the overall economy will lessen as a result of a decline in new housing construction, real estate brokerage, escrow and title services, home inspections, warranty and insurance. Since the multiplier effect of new home sales approaches 3 (i.e. for every one dollar spent building the home, there is a three dollar impact on the economy), a transfer tax affects the economy far more profoundly than just a single added cost to a

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5 Draft Open Space, Parks, Recreation, and Trails Element Page 160  
6 Draft Housing Element Page 305

SBAOR Draft General Plan Comments Page 3 of 6
home sale. Transfer taxes decreases the affordability of housing. If the seller pays the tax, their equity will be reduced. Particularly, in a flat or declining market, this will hinder the ability of that homebuyer to purchase another home. If the seller passes the cost of the transfer tax on to the buyer in the form of higher sales price, some buyers will be forced out of the market, some will have to search for a less expensive home, and some will incur higher housing costs as a result of a larger mortgage loan and additional interest expenses. High housing costs make it increasingly difficult to attract skilled workers from other areas and to keep existing workers. Although the residential market accounts for the most transfers of real estate, typically 6 percent or less of a city’s total single-family housing stock is transferred in any one year. Clearly, the transfer tax places the burden of funding price-restricted affordable and workforce housing on a narrow segment of the population that sells or buys a home. The real estate transfer tax is clearly regressive. People spend a smaller share of their income on housing as their income increases. Many first-time homebuyers who have tremendous difficulty in saving for a down payment will be particularly hard hit. The transfer tax is levied whether or not the seller makes a gain on their home, unlike the capital gains tax. Further, transfer taxes are not deductible from state or federal income taxes.

Terminology Question
An issue that we would like the City to address is the terminology “walkable/within walking distance”. As REALTORS® we do not use this terminology because some find it offensive and it could be construed as discriminatory. Instead, we use the term pedestrian oriented.

Draft Environmental Resources Element
With regard to the Environmental Resources Element, the Santa Barbara Association of REALTORS® is on record as being in opposition to a Creek setback standard or any varied development requirement focused solely on creek properties.

It was determined and has continued to be argued that setback standards that are disproportionate with adjacent neighbors simply because one owns on a creek is considered a “taking”. Incentives, encouragement, education and cooperative partnering with creek owners will go much further than creating a mandate that nearly 1500 homeowners have already stated they oppose. Nearly 80% of city creeks are privately owned. Most of those owners are excellent stewards of the creek and its bank. The city on the other hand is the single largest owner of impervious surfaces. The city should focus on publicly owned lands, and, work toward eliminating their own hard surface materials in order to achieve cooperation by example rather than forced mandate. The forced mandate approach did not work when the Creek Development Standards were originally introduced.

Using a “creek setback standard greater than the existing Mission Creek ordinance” will inevitably risk degradation to the creeks from non-owner residents as well as tourists who are not made aware that these are private banks and private creeks. More importantly, if the owners are essentially stripped of their rights to use large swaths of their own property, they will not continue the very stewardship the city wants to inspire.

Establishing an environment where the city creates trails along the creeks presents an invitation to members of the community to assume walking the creeks is legal. This leads to degradation of the very

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7 Draft Environmental Resources Element Page 187
banks the city claims to be protecting and to unsuspecting community members, it encourages trespassing.

Creekside development guidelines are discriminatory to the owners along the creek whose adjacent neighbors are not subjected to such guidelines. It constitutes a severe down zoning. Developing a setback standard that envelops an owner’s entire home will cause existing development to become legal non-conforming. Smaller lots, or linear lots, become completely unable to be developed or re-built. While that may be the wish of some, it is most definitely a “taking” in the legal sense.

It is evident that the city needs to use private property as its own mechanism for storm water runoff. Between the poor sewer main system and the lack of any other storm water management capability, the city is putting all of the responsibility on 1500 property owners for cleaning storm water by running it over property for which they technically do not have an easement.

Draft Circulation Element
We have concerns with how transportation aspects of the General Plan may negatively impact homeowners in the downtown area. The following circulation policies have the potential to negatively impact homeowners in the downtown area.

C.1.4 Excess Motor Vehicle Capacity – This implementation action could result in the elimination of on-street parking and vehicle travel lanes deemed “excessive”, reducing the supply or parking and increasing congestion in the downtown area.

C.1.6 Car Free Zones – Some homeowners could lose convenient access between their homes and their vehicles as a result of this implementation action.

C.6.2 Expand TDM Program – This provision could appear to force all downtown residents to pay for transit passes, either directly or indirectly, regardless of whether they use transit or not.

C.7 Increased Sustainability of Parking – This provision could decrease the availability on on-site parking for existing development (redevelopment) and new development, which, in turn, would reduce the number of on street parking spaces available. The requirement to reduce impervious surface could require more structured parking, which is more expensive than surface parking.

C.7.4 Parking Maximums – This provision could decrease the availability of on-site parking for new development, which, in turn, would reduce the number of on street parking spaces readily available.

C.7.5 Residential Parking Program – This could eliminate the right of downtown residents to park their cars in commercial zones for extended periods of times, creating more competition for parking spaces in residential zones and off-street parking.

C.7.6 Residential Parking Requirements – Although we are not opposed to this provision, we do have an idea that parking spaces are sold separately from condominium units, some unit owners may forgo the cost of the parking spaces and opt to store their vehicles on existing streets,
creating problems for the existing downtown residents who do not have off-street parking and already rely upon the on-street spaces.

The overall objective of the policies above seems to be to make it less attractive and more burdensome to live downtown and own a car. While this might seem desirable for environmental reasons and potentially fair with respect to new residents who have a choice about where to live, the burden of these policies would fall most heavily on existing residents who lack off-street parking. Where alternative means of transportation (e.g. transit, bicycles, walking) are inadequate for their daily needs, these homeowners will be forced to (1) live with the frustration of competition, (2) purchase an off-street parking space to store their vehicle (if one can be found), or (3) move to another location where parking is more available and less expensive.

Incentives

In closing, although we find that this document has contradicting aspects to it, it also has some positive positions. We appreciate the fact that for some implementation actions you have decided to promote incentives instead of guidelines or regulations. “Providing incentives such as expedited permitting for building projects” is a great way to promote the type of building that the City is looking to achieve. We would like to see this idea more throughout the General Plan.

Thank you for taking the time in reading this letter in regards to the General Plan. If you have questions or need further information, please contact Krista Pleiser, Government Affairs Director for the Santa Barbara Association of REALTORS® at (805) 884-8609 or kpleiser@sbaor.com.

Sincerely,

Elaine Abercrombie
President

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*Draft Environmental Resources Element Page 182
Response to Organization Letter # O20, Santa Barbara Association of Realtors (April 28, 2010)

O20-1 (Plan SB GPU): Thank you for your comments. These comments address the general direction and content of the General Plan Update and do not pertain to the adequacy of EIR. These comments will be considered by City decision-makers during the General Plan adoption process.

O20-2 (Plan SB GPU): Comments regarding draft Land Use and Housing Elements are noted. With respect to the goal of fostering more 3 or more bedroom affordable units, additional proposed policies under consideration would provide for density bonus for rental projects, and densities of between 46-60 dwelling units per acre for significant Community Benefit projects such as apartments with 3+ bedrooms. For individual projects, the Planning Commission would need to make findings of sound community planning and substantial community benefit on a case by case basis. Although the specific details and findings for the new density program have not been developed, flexibility has always been envisioned for Community Benefit and affordable residential projects. As a point of clarification, the Average Residential Density Policy is not intended to apply to single family or two family zoned properties.

With regards to FARs, a higher FAR would result if the Council adopts the increases to the high density designation at densities of up to 45 dwelling unit per acre. In addition, because mixed use could still be proposed on some of the commercially zoned parcels, the parking and commercial components would need to be factored in and would increase the FAR.

Although the specific details for community gardens have not been developed nor any sites identified at this time, the City has no intention of “taking” private land for purposes of establishing community gardens. The City would look at primarily City owned land but would encourage private property owners to participate if acceptable to them. At the time that Sustainable Neighborhood Planning occurs (Land Use Element Policy LG 17) or when proposed Open Space and Parks Element Policy OP1.1 (Park and Open Space Standards and Planning) is implemented, individual neighborhoods could identify prime locations that would serve their neighborhoods. The property owners would be involved in any decision to use a person’s private property before it is developed as a community garden. A new Implementation Action (LG12.4) is under consideration directing that an audit of local government owned land be conducted to determine potential use for community gardens.

O20-3 (Plan SB GPU): Draft Environmental Resources Element comments regarding proposed creek setback standards are noted. The City has long-held existing policies and programs to provide for adequate flood control and protect creek water quality and habitat resources, consistent with federal and state regulatory requirements (see existing adopted General Plan Conservation Element, Storm Water Management Program, Floodplain Ordinance). Policies to apply adequate creek setbacks as development gradually occurs are ongoing, as are City programs to improve creeks along public property. Current City practice generally provides for creek setbacks of 25 feet or more per the Mission Creek standard.

Proposed policy updates would improve the clarity, effectiveness, and predictability of City creek protection policies, programs, and standards, which is necessary to maintain adequate flood control, water quality, and habitat resources, and avoid significant cumulative effects from incremental growth, consistent with federal and state regulations. Issues raised by the commenter about the difficulties in establishing and implementing appropriate standards are acknowledged. The proposed process for identifying more specific creek setback standards (per Policy ER 18.1 – Creek Setbacks) would be a public process with property owner involvement.
# O20, Santa Barbara Association of Realtors (Continued)

The proposed General Plan Update also includes a program (ER 16.3 – Master Drainage Plan) to better address drainage issues.

O20-4 (Plan SB GPU): Draft Circulation Element comments are noted. The goal of these policies is to improve the access of downtown residents to all modes of transportation, and not to disadvantage car ownership to those who chose to own automobiles. On-street parking would remain available throughout the existing residential neighborhoods and commercial districts, and residential parking would be protected under the City’s residential parking program. In regard to Policy C7.6-Residential Parking Requirements (previously C18), this policy has been reworded to allow reductions in parking requirements for certain types of units or developments (e.g., rental, affordable, etc.). This flexibility would permit but not require a reduction in parking maximums. Taken together, these changes would improve transportation choices available to downtown residents while still facilitating ownership and use of the automobile.
ORGANIZATION LETTER # O21

THE SANTA BARBARA CONSERVANCY
829 De la Vina Street, Suite 300
Santa Barbara, California 93101

May 17, 2010

John Ledbetter, Planner
Planning Division
City of Santa Barbara
P.O. Box 1990
Santa Barbara, California 93102

SUBJECT: Draft Environmental Impact Report
Plan Santa Barbara
Comments for the Planning Commission

Mr. Ledbetter,

The Santa Barbara Conservancy is an organization founded by the late architect John Pitman. The Conservancy strives to increase public awareness of and participation in local preservation issues. It provides information and education regarding preservation of sites, structures, and neighborhoods of the city and county of Santa Barbara.

The Conservancy recognizes the importance of historic preservation in our community. This importance far exceeds simple preservation for preservation's sake, but emphasizes the creation of a city that not only reflects its history in conservation of structures but also its historic atmosphere, ambiance, and architectural character. This to date has resulted in a Santa Barbara community that is unique and a major tourist attraction.

Support for preparation of a Historic Resources element for the General Plan has been voiced by the Conservancy and by many public officials. We need to recognize our historic areas especially in view of the various growth proposals in the current draft revision of General Plan elements and its DEIR. We at the Conservancy call on the City to set a firm time frame for the completion of such an element. Without a Historic Resources element the continuing effort to preserve and protect our heritage is in danger of being lost for future residents and visitors to our city.

The draft EIR has many errors and incomplete assessments, especially in the Heritage Resources section. The number of errors is so frequent that there needs to be outreach by the EIR writer to contact representatives of organizations who can assist with corrections. An environmental document that has so many errors colors all of the document's information as to its accuracy.
In any draft document discussing neighborhoods the historical significance of the neighborhoods should be stated. Any historic structures within the neighborhoods should be cited.

Because of the importance of the tourist industry to our economy and the image of Historic Santa Barbara, we request that the Historic Resources element be completed and all of its suggested implementations be incorporated into the Plan’s various proposals for growth in the city, including the Plan’s DEIR. This becomes especially crucial in the proposals calling for increased density in the downtown, other close-in neighborhoods, and outer State Street.

Sincerely,

Donald G. Sharpe
President
Santa Barbara Conservancy
Response to Organization Letter # O21, The Santa Barbara Conservancy (May 17, 2010)

O21-1 (Plan SB GPU): Thank you for your comments. The City appreciates the contribution that the Conservancy makes to our community.

The City too recognizes the importance of preparing a new Historic Resources Element and plans to move forward as expeditiously as possible with the project. However, the Conservancy should be aware that existing City policies protective of historic resources will remain in place, and the General Plan Update provides updated policy direction for further historic protection which would go into effect with the adoption of the Plan Santa Barbara General Plan Update, and would provide direction for the more comprehensive development of a separate new Element.

O21-2: Errors and omissions in the draft EIR (and draft General Plan Update document) have been corrected. Please see the revised text in the EIR Section 10 (Heritage Resources). Accuracy of factual information is important. However, because the errors were frequently related to facts about dates and occurrences that transpired over 100 years in the past, they did not materially affect the EIR’s analysis of potential future impacts to historic resources, which was based on impacts to existing designated and potential landmark structures, structures of merit, potential historic structures, and historic districts or areas of the City. Further, recognized historic districts or neighborhoods are disclosed in the EIR.

The City looks forward to working with the Conservancy on the future creation and adoption of a Historic Resources Element.
The Downtown Organization has reviewed the March 2010 Draft Plan Santa Barbara document and its Draft Environmental Impact Report (DEIR), and offers the following comments. We offer specific comments and language refinements in the attached matrix, and suggest some new implementation measures that will make the Plan more responsive to your primary business district.

Sustainability is the stated cornerstone of the Plan, and we agree with this concept. Santa Barbara's environment is key to our quality of life and existence as a community. Economic sustainability is equally vital to this community, as no part of this plan can be successfully executed or sustained without community financial health.

As one reads through this document, however, the economics of your downtown business core are lightly if at all touched upon, and implementation strategies for economic development are slim. Except for an arts master plan (which we support), the thorough analysis in the Housing Element of our jobs/housing imbalance, and a study of development impact fees, the draft Plan Santa Barbara does not highlight how important it is to take steps to re-energize and sustain a vibrant downtown. In fact, many of the planning implementations could further burden an already challenged downtown by squeezing out customer and employee parking while increasing residential housing.

The Downtown Organization therefore requests greater emphasis on public-private partnership discussions as the City moves toward completion of this General Plan.

1. Residential Intensification Downtown

As downtown business leaders and the City partner in its maintenance and beautification, the Downtown Organization finds a number of Plan provisions excellent tools to help retain the downtown business climate. However, these are outnumbered, it seems, by the mitigations seemingly required to offset the projected concentrations of residential housing in the downtown corridor. Such mitigations, incorporated as policies and implementation measures, clearly discourage vehicle ownership, usage, storage and therefore outsider visits to the downtown business district which is currently so critical to the City's finances. Many of these mandates would place the downtown business district
at an even greater disadvantage than is evident today, as bigger and better retail concentrations become more conveniently located and attract customers that used to find Santa Barbara's downtown accessible. Downtown businesses are increasingly feeling the competition from places like Camino Real and La Cumbre Plaza, regional shopping centers that both offer ample free parking, good security (no panhandlers), and clean and well-maintained common areas.

When we noted similar concerns in February 2009, in response to the Draft Policy Options Report, our members were already feeling the economic pain that has swept through the City and county. Many merchants would tell you that this has not improved significantly, and yet the Plan SB document barely recognizes the need for flexibility to address changing economic climates.

We understand the City's goal of achieving a jobs-housing balance, and this is what drives the primary goal of residential development in the downtown. The Downtown Organization also supports development of affordable housing in the central business district - hopefully that provides more customers for our merchants. Unfortunately, several implementation measures crafted to facilitate such development also carry with them a very real, pragmatic disincentive to people from outside the core district to come into the downtown for shopping, dining and cultural attractions. This contradicts everything achieved by the PBIA, which in 2008-09 contributed $880,000 toward subsidizing the 75 minute "free" parking period in downtown lots. This is in addition to the more than $400,000 that the Downtown Parking System contributes annually to public transit, which could also be adversely affected if visitors slow down, and employees are banished from downtown parking areas.

2. Housing Development - a Reality Check

The premise for assuming development of workforce housing downtown is also questionable. With the expiration of the Redevelopment Agency in 2015, the present near-term budgetary crisis in the City and surrounding communities, and the non-profit housing sector, it is hard to imagine that so much affordable housing will be built in the life of Plan SB. While Plan Santa Barbara offers good incentives for affordable projects, (Implementation Actions H 11.2, and 13.1, and Policy H 16, H 170), there does not seem to be equally attractive incentives for private sector development of downtown housing. Further, it would be helpful for the Housing Element to state its goal for creation of rental housing vs. ownership housing. While this split has been nearly 60/40 for the last 20 years, it seems that downtown units should have a heavier emphasis on the rental sector.

The City can also be a leader by reviewing existing city structures, vacant land, and parking facilities for additional commercial and residential uses.

3. Wait to Phase in Certain Transportation Measures

While we understand the importance of showing the opportunities for such residential build out, we also note that the Plan SB growth scenario still results in Class I transportation impacts. Part of these Class I impacts include the increase of impacted intersections from 13 to 21 under the Plan SB build out. Similar greenhouse gas impacts also remain as Class I.
Because the transportation impacts remain Class I, even after application of adjustments in the traffic model for all the increased TDM, parking limitations, assumptions for live-work trip reductions, there should be some flexibility to phase in some of the more draconian implementation measures (e.g. Implementation Actions C1.1, C1.6, C7.1), dependent on residential build out realized. The proposed AMP would be a perfect mechanism to use as the tool for deciding when to impose these most restrictive transportation measures.

4. Downtown Organization Help

As noted in our February 2009 comments, it appears that there has not been an accurate census of downtown employees taken for the General Plan Update or its EIR. The Downtown Organization would be happy to work with the City to gather current data about its downtown employees, similar to the TDM survey done some years ago. This updated information should assist the City in better evaluating how various traffic reduction measures would actually reduce trip making and parking demand downtown. Similarly, we would be happy to participate with the City in developing a downtown Parking Master Plan, exploration of converting the PBIA into an enterprise fund, working with the City to provide improved advance notification about downtown street closures and utility work, and facilitating development of a Cultural and Arts Master Plan, as specifically noted the attached matrix.

Respectfully Submitted,

Randy Rowse, Acting Chair
Government Relations Committee
Santa Barbara Downtown Organization

Cc: Jon Ledbetter, Principal Planner
<table>
<thead>
<tr>
<th>Santa Barbara General Plan Draft Policy</th>
<th>Downtown Organization Position &amp; Follow Up</th>
<th>New Implementation Strategy</th>
</tr>
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<tbody>
<tr>
<td>Mobility Oriented Development Area (MODA) Principles - Focus Growth, encourage mix of land uses and strengthen mobility options (p.59)</td>
<td>Supports concept of mixed use downtown, but must also recognize need for parking supply improvements - for customers &amp; residents &amp; employees, a steady customer base</td>
<td>Develop an appropriate downtown parking master plan with strategies that improve the economy of the CBD by including all parking data, policies, and implementation measures into a comprehensive document. (Also applies to C.7.1)</td>
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<tr>
<td>(See also Land Use Policies LG4.1 - LG 4.8 below):</td>
<td></td>
<td></td>
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<tr>
<td>Adaptive Management Plan (AMP)-Method to track success of Plan SB implementation measures (p. 76);</td>
<td>Supports Adaptive Management Plan approach: Through AMP, City could adjust parking policies, pricing strategies, depending on future supply and demand evidence. DO can work directly with Downtown Parking Committee to interpret data and adjust parking strategies so that business and residential interests can be balanced in a public forum.</td>
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<td>(See also Policy LG3.1 a-d, outlining AMP feedback cycle)</td>
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</table>

**LAND USE ELEMENT:**

**Implementation Measure:**

LG 4.2: Focus Growth. Encourage workforce and affordable housing within a quarter mile of frequent transit service and commercial services through: smaller units and increased density, transit resources; parking demand standards; targeted infrastructure improvements; and increased public areas and open space (p.143)

Supports density downtown and goal of having smaller units;

Need future parking requirements to be REALISTIC about residents' parking demand downtown. The Plan must recognize economic vitality and respect achievements of those who worked to develop customer parking and how that is still an element of ongoing business vitality.

DO can work in a cooperative manner to collect employee and transit habits via prior TDM methodology completed earlier.

Work with private sector to support focused growth by conducting a survey of employees in the CBD to determine demographic information pertinent to workforce and affordable housing, and transportation patterns of employees.

**Implementation Measure:**

LG 4.4: Mobility and Active Living. Link mixed use development with main transit lines; promote active living by encouraging compact, vibrant, walkable places; encourage the use of the bike; reduce the need for parking. (p. 143)

Amend last phrase to qualify it as "reduce the need for residential parking", since this is the primary growth sector envisioned downtown.
<table>
<thead>
<tr>
<th>Implementation Measure</th>
<th>Downtown Organization Position &amp; Follow Up</th>
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</tr>
</thead>
<tbody>
<tr>
<td>LG 4.5 Capital Improvement Program (CIP). Focus CIP expenditures on new mobility options (e.g. quality transit facilities, bicycle infrastructure and secure parking, enhanced pedestrian facilities and car and bike-share programs) that facilitate ease of movement from one form of travel to another (p. 143)</td>
<td>Can there be ANY hope of new parking downtown? Include this, even if qualitatively, in City's CIP programming, and perhaps tie it through AMP to occupancy rates at existing parking district lots or on street.</td>
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<tr>
<td>LG 4.6 Parking Demand. Amend zoning requirements to a parking demand standard, i.e. automobile parking provided to meet but not exceed demand (p. 143)</td>
<td>Reliance on only parking demand figures downtown is dangerous, due to the existing zone of benefit discounts, and general shortage of downtown parking spaces. The 1989 Rich Report estimate Downtown parking would have a shortfall of 3,000 parking spaces. Even after the Granada Garage was built, this means the downtown has a 1,000 space shortfall.</td>
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<tr>
<td>G 7. Findings [for Community Benefit Non-Residential Land Uses] &quot;Small and Local Business. A Small and/or local business in the community that is started, maintained, relocated, redeveloped or expanded...&quot; (p. 145)</td>
<td>DO greatly appreciates implementation measure of including this finding LG 7.1.d. listing Community Benefit Land Uses.</td>
<td></td>
</tr>
</tbody>
</table>

**ECONOMIC AND FISCAL HEALTH ELEMENT:**

**Economic and Fiscal Health Element Policies**

"EF-9. Infrastructure Improvements. Identify, evaluate and prioritize capital improvements that would assist in business retention or expansion, such as increased public transit, a rail/transit transfer center, city-wide wi-fi, sidewalk improvements, or consolidated customer parking facilities." (p. 174)  

DO strongly supports this policy, and acknowledgement that customer parking facilities have an important role in the future economic viability of the downtown.  

Work with business organizations such as Downtown Organization to develop specific strategies to incentivize business development and recruitment to the area. (Also applies to EF 20)
<table>
<thead>
<tr>
<th>Santa Barbara General Plan Draft Policy</th>
<th>Downtown Organization Position &amp; Follow Up</th>
<th>New Implementation Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;EF-12. Partnerships. Encourage public/private joint venture partnerships as an economic development tool.&quot; (p. 174)</td>
<td>DO also supports this policy, and provides this very model through its private contract for landscape maintenance in the downtown.</td>
<td>• Develop public/private partnerships for additional transit and employee-shuttle options.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Explore possibility of making downtown parking and operational revenues into a codified enterprise fund, as opposed to the implied enterprise fund, to ensure parking revenues are maximized for the ongoing viability of the parking system.</td>
</tr>
<tr>
<td>&quot;EF-17. Arts and Culture. Recognize the contribution to the City's economy played by the arts and cultural events and continue to support and promote these endeavors.&quot; (p. 174)</td>
<td>DO supports this policy and related Implementation Actions. The DO includes a Cultural Committee that would love to participate or facilitate this Arts Master Plan concept, thereby conserving City funds and providing another public/private partnership.</td>
<td>Work with private and non-profit sector to develop the Public and Cultural Arts Master Plan.</td>
</tr>
<tr>
<td><strong>Implementation Actions:</strong></td>
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<tr>
<td>EF17.1 Arts District. Continue to support venues, facilities, events, and public artwork within the cultural arts district informally recognized as the area bound by Carrillo, Micheltorena, Anacapa and Chapala streets as well as surrounding areas within the Downtown.&quot; (p. 175)</td>
<td></td>
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<tr>
<td>EF 17.2 Master Plan. Develop a Public Art Master Plan. (p. 175)</td>
<td>Suggests amending implementation action 17.2 to be &quot;...Public and Cultural Arts Master Plan.&quot;</td>
<td></td>
</tr>
</tbody>
</table>
### Santa Barbara General Plan Draft Policy

**EF 20. Small Businesses.** The City recognizes the economic importance of small business in the community and shall promote programs to encourage their continued economic vitality and flexibility in future expansion. (p. 175)

### Downtown Organization Position & Follow Up

**DO** strongly supports and appreciates this policy, but remains concerned that it is internally inconsistent with other measures that seek to restrict commercial development, provision of new parking, and plan price increases to existing customer parking.

**Work with business organizations such as Downtown Organization to develop specific strategies to incentivize business development and recruitment to the area.**

### ENVIRONMENTAL RESOURCES ELEMENT

**Implementation Action:**

ER 8.6 Solar Energy. Encourage or require the use of solar photovoltaic arrays on new construction, redevelopment, and significant remodel projects, as appropriate, taking into consideration building size, orientation, roof type and current energy use.

(Another then lists sliding scale of kw of solar photovoltaic panels for varying residential densities, and (d) lists for commercial and industrial projects, provide a "...minimum of 5 watts of photovoltaic panel systems for every new square foot of building net floor area; or a photovoltaic system sized to meet a minimum of 30% of the average projected energy demand for the structure, whichever is lower." (p. 184)

**Downtown Organization generally supports green building concepts. However, believes these mandates should be evaluated in the context of the size of development, and the financial burden it carries for the owner/tenant/applicant. For very small commercial projects, such a solar system may cause small projects to cost even more, and this may discourage business growth.

Consider amending Action as follows:

"Encourage or require use of solar photovoltaic arrays...as appropriate, taking into consideration project scale and budget, building size, orientation..."

### CIRCULATION ELEMENT

**Implementation Actions:**

C 1.1, bullet 2: "Give bike lanes designated in the Bicycle Master Plan a priority over curbside residential parking. Create more Downtown bike lane connections by regulating curbside parking during peak travel periods. Consider increased funding for bike lane maintenance to encourage their use and maximize safety."

**DO** remains concerned about erosion of available on-street parking, that may be exacerbated by this Action. Suggest striking sentence 2 in Action C 1.1, bullet 2.
<table>
<thead>
<tr>
<th>Santa Barbara General Plan Draft Policy</th>
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</tr>
</thead>
<tbody>
<tr>
<td>C1.1, bullet 6: &quot;Implement traffic calming measures as needed.&quot; (p. 319)</td>
<td>Traffic calming measures in commercial areas still controversial; suggest amending to read: &quot;Implement traffic calming measures as needed and supported by nearby residents and businesses by majority petition.&quot;</td>
<td>Develop a process for evaluating street closures for events and scheduled street maintenance that is jointly guided by the city, Downtown Organization, and other affected organizations. Such a process must provide advance notification to downtown businesses on a timely basis of planned street closures, utility work, or other activities that will affect downtown circulation and parking availability.</td>
</tr>
<tr>
<td>Implementation Action:</td>
<td></td>
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</tr>
<tr>
<td>C1.6 &quot;Car Free Zones. Look for areas within the Downtown that can be intermittently or permanently converted to car-free zones, such as for weekly farmers markets or other community events.&quot; (p. 320)</td>
<td>Implementation Action:</td>
<td></td>
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<tr>
<td>Implementation Action:</td>
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<tr>
<td>C2.2 Commuter Transit. Work with other local governments and MTD to address the transportation needs of commuters from Ventura and San Luis Obispo counties including multi-modal and rail-commuting systems. (p. 320)</td>
<td>DO supports this Action and suggests exploring competitive bidding process for shuttling employees into downtown. Private sector transport may augment transportation choices downtown for customers and employees alike.</td>
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<tr>
<td>Implementation Action:</td>
<td></td>
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<tr>
<td>C 6.2, Expand TDM Program (variety of measures) (p. 321)</td>
<td>TDM data is woefully out of date and was not updated in consultant’s work. Any expansion of TDM measures need new forensic data prior to implementation and not just reliance on the Nelson/Nygaard report.</td>
<td>Same as above for LG 4.2</td>
</tr>
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<td></td>
<td>DO suggests free employee transit passes to new development downtown (bullet 1) and employers</td>
<td></td>
</tr>
<tr>
<td>Santa Barbara General Plan Draft Policy</td>
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<tr>
<td><strong>Implementation Action:</strong></td>
<td>(bullets 2&amp;3) may be via MTD or any new provider that offers private or private/public partnership shuttle</td>
<td>Develop an appropriate downtown parking master plan with strategies that improve the economy of the CBD by including all parking data, policies, and implementation measures into a comprehensive document.</td>
</tr>
<tr>
<td>C7.1 Appropriate Parking. Establish requirements for on- and off-street parking in the Central Business District (CBD) appropriate to the parking users as follows:</td>
<td>The DO fully supports item (a), and understands need to limit employee parking to certain extent, knowing that downtown employees are sometimes our best customers. The DO could help with a campaign to educate employees about how and where to park, public transit opportunities and support employer policies that will not tolerate the &quot;75 minute shuffle.&quot;</td>
<td></td>
</tr>
<tr>
<td>a. Maximize availability of customer parking in the CBD;</td>
<td>The Downtown Organization is keenly aware of our need to make parking convenient, so supports item (c). This support includes strong protest to any concept of on-street public parking pricing, e.g. meters, to dissuade people from parking longer than 15-30 minutes. Such a measure would irreparably harm the competitiveness of downtown businesses.</td>
<td></td>
</tr>
<tr>
<td>b. Limit/discourage employee use of public parking the CBD, and maximize employee commuting options to the CBD.</td>
<td></td>
<td></td>
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<tr>
<td>c. Manage and price public parking the CBD so as not to put businesses in the CBD at a competitive disadvantage with other south coast shopping options; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Change residential parking requirements and permitting programs in the CBD to maintain and/or increase the availability of on and off-street parking. (p.322)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Implementation Action:</strong></td>
<td>This is in conflict with Implementation Measure LG 4.6, which would require parking calculations based on parking demand. Would this Action C 7.4 cause the true assessment of parking demand to be ignored?</td>
<td></td>
</tr>
<tr>
<td>C7.4 Parking Maximums. Create motor vehicle parking requirement maximum for new development within the high-density mixed-use commercial areas. (p.322)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Response to Organization Letter # O22, Downtown Organization (April 23, 2010)

O22-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with the Downtown Organization (DO) to sustain an economically vibrant downtown, and to foster and expand the public-private partnership between the City, DO, and local businesses. To address concerns raised by the DO that the draft General Plan Update does not adequately recognize the importance of Downtown, please see the revised text added to the Economics and Fiscal Health Element which describes Downtown’s key role in the economic health of the City; the revised text also incorporates a number of policy addition/modification concepts suggested by the DO.

O22-2 (Plan SB GPU): Comments noted. The traffic analysis in the DEIR determined that Downtown residential development generally does not make congestion worse and can have the effect of creating less new future peak hour trips if the residents of such housing units are members of the workforce. Rather, it is the non-residential or commercial land uses that were found to increase congestion over time. The traffic mitigation measures in the DEIR are specifically designed to address congestion created by incremental commercial growth. Commercial growth is commonly viewed as a necessary ingredient to maintaining and stimulating economic growth and vitality. Decision-makers, as well as Downtown stakeholders, will need to balance desires for maintaining traffic congestion levels with the amount of new commercial growth, and the need to implement Traffic Demand Management strategies that accomplish this goal.

O22-3 (Plan SB GPU): Comments noted. The draft General Plan and EIR both recognize the challenges facing the City with regards to provision of affordable housing. The draft General Plan provides multiple incentives for construction of affordable and rental housing, including a policy to create a new rental housing overlay, and increased entity provisions for rental housing. The City also recognizes the importance of providing rental housing downtown.

O22-4 (Plan SB GPU): Comments noted. Please see response to comment O22-2. The phased approach for TDM would be outlined in the Adaptive Management Program.

O22-5 (Plan SB GPU): Comment noted. The information and conclusions of the transportation section of the DEIR are based on technical information and analysis but do not rely on a detailed census of the Downtown workforce. Nor is a census needed to reach better or more accurate conclusions. However, at the direction of City Council, staff would be pleased to partner with the Downtown Organization on the items mentioned.

O22-6 (Plan SB GPU): Comment noted.

O22-7 (Plan SB GPU): The existing Circulation Element directs the development of a Parking Master Plan. This is not proposed to be changed.

O22-8 (Plan SB GPU): Please see response to comment O22-5. The need and use of information should be established and strategized before embarking on expensive data gathering exercises. A Downtown employee census might be used for benchmarking for the Adaptive Management Program. Historically, congestion levels have been used to determine the success of the City’s transportation improvement efforts, included demand management. Decision-makers could supplement or replace this information with employee census information.
# O22, Downtown Organization (Continued)

**O22-9 (Plan SB GPU):** The amendment has been added to the proposed policy as suggested. This was the original intent. Thank you for the clarification. Please see text edit to Policy LG4.4 (Mobility and Active Living).

**O22-10 (Plan SB GPU):** Because the current and proposed updated policy for Downtown is to provide for adequate customer parking, the tool to add more customer parking supply remains a valid, although expensive, strategy.

**O22-11 (Plan SB GPU):** LG 4.6 (Mobility Oriented Development Area/Parking Demand) is not intended to reduce parking supply, but rather to meet the parking demand of land uses without providing more parking than necessary.

**O22-12 (Plan SB GPU):** Comment noted.

**O22-13 (Plan SB GPU):** Comment noted. Please see revised text in the Economic and Fiscal Health Element reflecting the suggested language for consideration by decision-makers.

**O22-14 (Plan SB GPU):** Comment noted. Please see revised text in the Economic and Fiscal Health Element reflecting the suggested language for consideration by decision-makers.

**O22-15 (Plan SB GPU):** Please see text edit to Policy EF17.2 (Arts and Culture/Master Plan).

**O22-16 (Plan SB GPU):** Please see text edit to Policy ER6.6 (Solar Energy).

**O22-17 (Plan SB GPU):** Comment noted.

**O22-18 (Plan SB GPU):** References to “traffic calming” will be eliminated from the proposed circulation section of the General Plan.

**O22-19 (Plan SB GPU):** This policy is not intended to be a program, rather a direction to look for opportunities that will stimulate economic and pedestrian activity within the Downtown. The policy was developed because of comments from community members requesting more experiences where the pedestrian space includes the street. The suggested substitute language serves the same purpose.

**O22-20 (Plan SB GPU):** Comment noted.

**O22-21 (Plan SB GPU):** Comment noted. The existing Circulation Element directs the creation of a Parking Master Plan. This existing policy is not proposed to change. The current parking requirement for Downtown residential development is 1 space per unit. The parking maximum policy would limit developers to providing only the required amount of parking.
April 27, 2010

Honorable Planning Commission
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93101

SUBJECT: Comments on the General Plan Update & Draft Environmental Impact Report

Dear Honorable Commissioners:

SB4ALL is especially pleased to see many of the ideas we both presented and heard at the Community Workshops reflected in PlanSB and the EIR. In particular, we welcome the concept on page 26 of the Draft GP, that distinguishes between “Sustainability” and “Resource Capacity”, noting that “Resources capacities can be increased or decreased depending on lifestyle preferences, conservation strategies, technological advances, availability of alternative resources or substitutes, and changes in relative resource costs. Santa Barbara can grow and evolve and also retain a high quality of life…” while maintaining a commitment to Sustainability principles of social equity, environmental preservation and protection, and a healthy economy. It is this balance that we in SB4All are committed to.

SB4ALL supports the Additional Housing scenario, which targets very modest additional residential growth aimed at providing local housing for Santa Barbara workers and their families. We support the intent of that alternative as articulated in the EIR: “policies evaluated under this alternative would direct additional residential in-fill development and densities in the downtown and along commercial corridors, to provide more affordable housing that supports the local economy and diverse population; improve the jobs/housing balance, and reduce long-distance commuting and its associated air pollution, energy use, and regional traffic; and to provide stronger traffic management and vehicle trip reductions strategies, such as greater support of local and regional rail and bus transit, vehicle sharing, telecommuting, and parking management”. According the EIR analysis, the Additional Housing Alternative is the ONLY scenario that allows for ALL of the projects’ objectives to be met.

Housing Element and Land Use Element

SB4ALL supports prioritizing housing for our local workforce, defined as low and very low income, up through middle income, and encourages you to expand that target through upper-middle income (200% of AMI). We believe that only by housing more local workers closer to jobs in and around the downtown area will we be able to address our growing traffic, energy and affordability challenges – all of which increased during the period of the last housing element –
and create a sustainable future for Santa Barbara. Since the Housing Element (HE) is key to future development, we will focus on it – AND how some policies of the Land Use Element must be seen as integral to it. The Draft GPU recommends density/acre changes based on an average 800 square foot unit; in our estimation, both the proposed densities and unit size are unacceptable as they are inadequate to meet the goals laid out in Plan Santa Barbara.

In order to guide the location of future housing development, the valuable policies – and especially the implementation actions – of the Land Use Element (LUE) must be considered as part of the HE. Policy LG4 outlines areas where growth should be focused. The MODA principles focus residential growth in the downtown or other areas well served by transit, and should guide development in the HE. Policy LG5 details the prioritization of affordable housing in our community’s planning decisions, and Policy LG6 states that we will “Encourage new residential units be located in High Density residential land use designations.” A HE that does not make reference to or include these policies and implementation actions will not result in the desired jobs/housing imbalance reduction or in the production of housing that is needed in our community.

We advocate that the Downtown commercially-zoned areas be looked at as a prime resource for residential development. About the only absolutely immovable resource constraint is land: nobody is making more of it. We should increase the density of our urban core – land that has historically been used for development (and housing) – to protect the largely undeveloped lands to our north and south, as well as the larger parcels of open space within the city. In addition, the residents of this city recently firmly rejected a 45-ft. height limit for downtown, but PlanSB continues to make oblique references to the need for new height limits. We continue to state that lowered height limits would encourage sprawling development – or development of housing that is insufficient or inappropriate for our real housing needs. Our GPU should include policies (and densities and FARs) that allow (and incentivize) housing for downtown workers (as advocated in LUE). Our present course, as embodied in our existing policies (and the No Project or Low Growth Alternatives) is a failed strategy for achieving a better quality of life for all who live and/or work in Santa Barbara; new rules are needed.

**Land Use Designations - Average Residential Density**

The current Draft Land Use Element includes a policy and an Implementation item that directs staff to study and update the city’s Variable Density Program (Policy LG6 and LG6.1). This Implementation Item has been added since the last public review of the Plan Santa Barbara Policy Preferences and has not had much public review or discourse. In the end of 2009, staff did hold a few public workshops with the Planning Commission to present the proposed revision of the variable density ordinance – Average Residential Density (ARD). However, there was no agreement on this approach at the Commission Workshops but the concept has moved forward and is now contained in the General Plan update.
Overall, we support: 1) Changes to the variable density program to focus on unit sizes rather than bedroom count; 2) Incentives for creation of smaller units; and 3) Increased residential densities in the multi-family and commercial zone districts. However, the ARD and new residential densities have flaws and are not ripe for adoption. SB4ALL does not support the adoption of the ARD at this time for three key reasons.

- During the General Plan Update process staff contracted with Strategic Economics to prepare a Development Feasibility Study which analyzed whether existing zoning created a disincentive to redevelopment in the downtown areas. The Study found that the current densities created disincentives to the construction of housing in the downtown areas. In fact, the study demonstrated that densities in the range of 42-60 units per acre were needed to create sufficient incentives to build new housing. The ARD and new land use designations set maximum densities at 25-34 units per acre. There has been no economic analysis of this program and therefore very little is known about its ability to stimulate and incentivize residential development in the commercial areas near transit and services.

In addition, there are dozens of existing buildings built in the 1920-30s throughout Santa Barbara that have densities above the specified maximum densities in the ARD. These projects are some of the most beloved and quintessential Santa Barbara buildings that have helped define the character of this community and they would no longer be permitted under the proposed ARD. (See Appendix A).

- The ARD creates defacto FARs that are far lower than those studied in the Development Feasibility Study. For example, the floor area ratios (FARs) analyzed in the Study range between 0.7 -1.5. The defacto FARs created by the ARD range from 0.45-0.62. These FARs are similar to those permitted in single family residential areas like the Mesa and were shown to be economically infeasible in the downtown.

- The creation of a .62 FAR will only drive up the cost of the units in the downtown areas because there will be less units in less volume. In other words, there will be fewer units to spread the cost across. For example, in the downtown a project with an FAR of .62 (assuming podium parking) the average unit price would be $1.3 million if there is one level of living. Where there are two levels of living with an FAR of 0.62 the average unit price would be $800,000. However, when the FARs allow for three levels of housing (FAR 1.86) the average unit price decreases to $633,333. The ARD actually results in higher unit costs rather than lower unit costs which is a key objective of the City. (See Appendix B)

We strongly recommend that the update to the Variable Density Program (the ARD) – and the changes in allowable residential densities be delayed and studied at the time a Form Based Code is developed – an action item in General Plan Policy LG13. This will allow for a thorough
analysis of its consequences and to determine if it creates the incentives for the type of housing needed in the community.

**Draft Environmental Impact Report**

**Air Quality**

The Policy Preferences Report that was reviewed by the public and decision makers included **Policy ER12** which addressed the potential air quality impacts to sensitive receptors. The policy called for the following:

- **Highway 101 Set-Back.** Evaluate the potential health benefits of avoiding locating additional residential and other sensitive land uses (schools, day care centers, playgrounds, and medical facilities) within 500 feet of Highway 101 and the potential for mitigating health hazards. Establish:
  - A 500 foot setback as an interim screening guidelines for up to 5 years while tracking the State phased regulatory program to reduce struck and diesel particulate emissions;
  - Funding and a program to monitor emission levels and identify a more refined setback line; and
  - Project review criteria.

SB4ALL is supportive of addressing this issue and believes that the State should be working to address emission levels by reducing trips on Highway 101 and reducing the level of emissions from vehicles. In addition, we support the creation of standards for closed circulation systems that mitigate the impact of emissions for residential and other sensitive receptors within 500 feet of the freeway. SB4ALL does not support the most current policy ER7 and Air Quality mitigation measure AQ-1 which call for a moratorium of residential development within 500 feet (250 Feet in DEIR) of Highway 101 until it can be shown that the State Program has reduced emissions. The moratorium would significantly impact this community’s ability to provide much needed housing. We believe that the goals of more downtown housing for presently commuting workers seems better able to improve air quality for all, including those living closer to the highway.

**Transportation**

The Draft EIR demonstrates that the Additional Housing Alternative actually minimizes impacts to intersections within the City because it focuses housing adjacent to employment centers and services. The creation of additional housing also has the potential to reduce existing and future commuting which takes pressure of the most impacted intersections in the City – the intersections with Highway 101. For example the EIR’s Mitigation Measures required to offset the Class I traffic impacts of any of the Alternatives include the following:
Planning Commission
April 27, 2010
Page 5 of 6

- “Increase percentage of Downtown housing occupied by downtown workers:
- "Concentrate new housing development within and adjacent to the Downtown core and implement ordinance and policy changes that expedite and facilitate (emph. added) housing construction in and around downtown." (page 32 of the EIR Summary)

SB4ALL also supports the innovative Travel Demand Management Strategies including but not limited to; parking pricing and management, improving transit services, and provision of neighborhood store requirements. In fact, the DEIR analysis indicates that the “most effective measure to combat traffic congestion is to aggressively support Travel Demand Management (TDM) strategies that include parking pricing…” It should also be noted that “PlanSB – although better than No Project- will triple the number of significantly impacted intersections in the City”.

Open Space and Visual Resources

The Draft EIR includes an assumption that over the next 20 years there could be between 60-80 multi story buildings constructed in the MODA and El Pueblo Viejo areas. SB4ALL believe that this assumption is totally unrealistic based on the growth patterns over the past 100 years and the present economic uncertainty. As shown in Appendix C, there have been 34 buildings that are 45 feet or greater constructed in EPV in the last 120 years. By using an over estimated growth assumption the potential impacts to Open Space and Visual Resources associated with the Additional Housing Alternative are overstated. The Final EIR should reflect a more realistic growth assumption.

In addition, there is no indication that the building of some high-density projects with multi stories has had or will have a negative impact on the “views or community character” of the City – although the EIR implies that such building would result in such impacts. This impact analysis is subjective.

Conclusion & Recommendations

In conclusion SB4ALL supports the general direction of the General Plan to focus housing in the downtown areas near jobs and services. We also strongly support the Additional Housing Alternative (4360 new housing units over the next 20 years – a growth rate well within our traditional maximum of less than 1% per year) which has been shown to be the only alternative to meet ALL of the project objectives. SB4All urges the following:

1. The Inclusion of policies LG 4; LG 5.1; LG 6; LG 9 from the Land Use Element into the Housing Element, as well as
   - Increasing the maximum densities in suitable sites in the downtown areas to 45-60 units/acre and defining minimum densities for the city

www.sb4all.org
• Providing flexibility in maximum size of higher density units (like 1000 sq. ft. for a 2-BR unit), to allow the housing of households with an average of 2.5 persons per household.
2. Adoption of the (revised) Housing Element.
3. Support the Additional Housing Alternative.
4. Postpone the adoption of the Alternative Residential Density Program until the City begins work on the Form Based Code. Any changes to the Variable Density program should be studied to determine potential economic consequences.
5. Adoption of the Transit Demand Management plans and policies, as linked in the DEIR to the Additional Housing Alternative.
6. Replace currently proposed Policy ER 7 – Air Quality with previously proposed ER 12 – Air Quality (as identified above).
7. Revise Draft EIR growth assumptions for the Additional Housing Alternative to be more realistic. The construction of 60-80 multi story buildings in the downtown in the next 20 years presumes 3-4 buildings per year and this has not occurred historically.
8. The City, in coordination with the community, should prepare a more precise evaluation and definition of “community character” and “historic resources” in order to plan for reasonable protection of them, in balance with the other needs of the community.

We greatly appreciate the opportunity to participate in the General Plan Update process. Please to not hesitate to contact us with any questions.

Sincerely,

Mickey Flacks
Co-Chair

Alex Pujo
Co-Chair

Appendices
A. Existing Buildings
B. FAR Chart - Increased Housing Prices
C. History of Construction – EPV

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APPENDIX A

Existing Buildings
111 Chapala St.
16 Units
18,750 SF

37 units/acre
2333 De La Vina St.
12 Units
13,445 SF

39 units/acre
2333 De La Vina St.
12 Units
13,445 SF

39 units/acre
316 W. Anapamu St.
10 Units
11,218 SF

39 units/acre
316 W. Anapamu St.
10 Units
11,218 SF

39 units/acre
42 units/acre

106 W. Mason St.

6 Units
6,250 SF
109 W. Mason St.
12 Units
11,710 SF

45 units/acre
109 W. Mason St.
12 Units
11,710 SF

45 units/acre
1015 Orilla Del Mar
19 Units
18,436 SF

45 units/acre
1015 Orilla Del Mar
19 Units
18,436 SF

45 units/acre
APPENDIX B

FAR Chart - Increased Housing Prices
### One Living Level (A)

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<tr>
<th>Far</th>
<th>Sales Price</th>
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<td>0.62</td>
<td>$1,300,000</td>
</tr>
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<th>Living</th>
<th>Walk</th>
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</thead>
<tbody>
<tr>
<td>BALC</td>
<td>Living</td>
<td>Walk</td>
</tr>
<tr>
<td>PARKING / DRIVE</td>
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</table>

### One Level Added

- (Walls and one floor added)

<table>
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<tr>
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<th>Sales Price</th>
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<tr>
<th>Roof</th>
<th>Living</th>
<th>Walk</th>
</tr>
</thead>
<tbody>
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<td>BALC</td>
<td>Living</td>
<td>Walk</td>
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<td>PARKING / DRIVE</td>
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### Two Living Levels

<table>
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<table>
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<th>Roof</th>
<th>Living</th>
<th>Walk</th>
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<tbody>
<tr>
<td>BALC</td>
<td>Living</td>
<td>Walk</td>
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<tr>
<td>PARKING / DRIVE</td>
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### One Level Added

- (Walls and one floor added)

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<tr>
<th>Far</th>
<th>Sales Price</th>
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<tr>
<td>0.62</td>
<td>$300,000</td>
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<tr>
<th>Roof</th>
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### Three Living Levels

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<th>Far</th>
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<td>PARKING / DRIVE</td>
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### Land

- Total: $1,300,000
- Average Per Unit: $300,000
- Percent: 100%

One Level Added - Cost is for incremental living space (walls and one floor), balcony and access.

Third Level Added - Allows for price differentiation due to views at top level.
APPENDIX C

History of Construction – EPV
BUILDINGS 45' OR GREATER IN EPV

YEAR OF CONSTRUCTION

1 Fithian Building 1896
2 Trinity Church 1912
3 Edgerly Building - 1913
4 Carrillo Hotel 1923
5 Faulding Hotel 1923
6 Masonic Temple 1924
7 Granada Building 1924
8 Balboa Building 1924
9 Hotel Neal 1925
10 Califo. Hotel 1925
11 Callahan/Bldg 527 State 1926
12 1036 State 1926
13 Court House 1927
14 Lobero 1927
15 Arlington Theatre 1930
16 Telephone Building 1935
17 Museum of Art 1941
18 Borders 1965
19 Suski Building 1965
20 County Admin 1966
21 200 E. Carrillo 1975
22 222 E. Carrillo 1984
23 101 W. Anapamu 1984
24 1111 Chapala 1990
25 Nordstrom 1990
26 Macy's 1990
27 Lot 2 1990
28 1532 State Street 1993
29 1014 Santa Barbara 1995
30 Chapala Lofts 2003
31 28 W. Anapamu 2003
32 1021 Anacapa - SBBT 2003
33 D.A. Building 2005
34 Paseo Chapala 2005
35 Abitts 2006
36 Chapala One 2007
37 523 Chapala 2007
38 1528 State Street Approved
39 1025 Anacapa - Haywards Proposed
40 834 Anacapa - Cravotta Proposed
41 Alhambra Building Proposed

200
Response to Organization Letter # O23, Santa Barbara For All (April 27, 2010)

O23-1 (Plan SB GPU): Thank you for your comments, which will be forwarded for decision-maker consideration.

O23-2 (Plan SB GPU): Comments noted. The Land Use and Housing Elements of the draft General Plan Update would work in concert to guide new housing development. These two elements are coequal elements of the new General Plan, therefore, there may not be the need to repeat or relocate Land Use Element policies to the Housing Element. Both the Land Use and Housing Elements will work in concert to focus new residential growth toward commercially zoned areas Downtown which are proposed for redesignation as a Commercial/High Density (27-34 du/acre) land use. The draft General Plan Update contains policies which balance protection of key City resources such as views and historic structures with provision of new housing. However, where more restrictive height limits are applied, they are proposed to be targeted to protect key resources and not applied universally. Exceptions for taller structures may also be provided, where appropriate, for projects which provide community benefits such as affordable housing. Please see proposed additional Land Use Element Implementation Action LG13.4 (Fourth-Story Allowance in Commercial Zones).

O23-3 (Plan SB GPU): Comments noted. The primary recommended housing policy emphasis is to encourage workforce housing in smaller buildings through the adoption of the Average Unit Size Ordinance, a rental/employer housing overlay, and reduced residential parking requirements. These densities are reflected in the General Plan land use designations section of the General Plan Update and in the Housing Element.

The density program to address rental and employer housing at the higher densities and FARs will be developed and implemented soon after the Council adopts the Plan. Staff agrees that the for sale residential development standards need further work in order to ensure that plan objectives are being met. We agree that Policy LG 13 will take more time to thoroughly study and implement.

An alternative policy is also under consideration for a new base density for the high density areas in a range of 27 to 45 dwelling units per acre, in conjunction with the restriction of unit sizes. In addition, a policy is under consideration for a higher density range (46-60 dwelling units per acre with a supermajority vote and community benefit findings) for projects that demonstrate significant Community Benefit, such as the adaptive reuse of an historic structure, rental apartments with 3 or more bedrooms, or projects with a substantial percentage of affordable units. In addition, a 50% increase for rental and employer housing projects is being considered within designated target areas of the Downtown, Haley/Cota Street corridors, and the Milpas Street corridor.

The initial General Plan Update policies would go into effect upon adoption; however, there will be substantial additional work in subsequent implementation phases such as the amended Variable Density Ordinance.

O23-4: Comment noted. Air Quality Mitigation Measure MM AQ-1 requires the City to track State progress on reducing diesel emissions. In addition, please see the amendments to MM-AQ-1 addressing closed air circulation systems for all new residential development within 250 feet of US Highway 101. However, absent State progress on reducing diesel emissions, closed circulation systems alone would not be expected to fully mitigate temporary air quality impacts due to open windows. Given the presence of the Union Pacific Railroad tracks, Mission Creek, freeway landscaping, on- and off-ramps, and other freeway corridor uses, the temporary 250-foot buffer would not remove substantial amounts of residential development potential from the City's land inventory.
# O23, Santa Barbara For All (Continued)

**O23-5:** Comments noted. Please note that the EIR analysis has clarified that potential future growth under the Plan Santa Barbara scenario could almost double the number of intersections in the City functioning below LOS C prior to implementation of proposed mitigation measures.

**O23-6:** Comments noted. Please be aware that the estimated range of 60-80 new taller buildings applies to the 2,878 units forecast to be constructed within the core commercial mixed-use development areas under the Additional Housing Alternative, not the Plan Santa Barbara project scenario. As discussed in Section 10.6.3 (Additional Housing Alternative) of the EIR, this projection assumes that 20-40 units could be accommodated in each new building. Based on recent taller development projects, the number of new units in each new three- to four-story building has ranged from roughly 15 to 30 units. If 80 new buildings each accommodate an average of 20 units, then 1,600 of the potential new 2,878 units in the core commercial mixed-use development areas under the Additional Housing Alternative would be located in larger structures, and over 1,200 units could have to be accommodated in smaller projects (e.g., duplexes, second units, smaller two-story structures, etc); the areas most subject to proposed policies are unlikely to be able to support this type of development. In addition, while the overall level of 2,878 units of residential growth may not come to pass, the EIR is required to provide a reasonable worst case analysis of impacts based on this set of policies and assumptions. Finally, the EIR identifies the potential for impacts associated with a change in community character, and concludes that the impact would be less than significant.

**O23-7:** Comments noted. Please see responses O23-1 through -6 above. The City looks forward to working with Santa Barbara For All through adoption and implementation of the General Plan Update.
May 5, 2010

Honorable Planning Commission
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93101

SUBJECT: Further Comments on the General Plan Update & Draft EIR

Honorable Commissioners:

Please allow us this opportunity to comment further on the GPU and DEIR after observing the comments of the staff, public, and Commissioners. We want to briefly reiterate our most significant recommendations for further action by the Commission.

In general, we stress our agreement that policies, mitigation implementations and alternatives operate together but that the “graphic equalizer” analogy (put forth by Commissioner Jostes at the last hearing) isn’t exactly accurate, because many of the “dials and levers” are linked, one to another. Most importantly, the TDM element will only really work when it is linked to the Additional Housing scenario. As we quoted in our previous statement:

“... this alternative would direct additional residential in-fill development and densities in the downtown and along commercial corridors, to provide more affordable housing that supports the local economy and diverse population; improve the jobs/housing balance, and reduce long-distance commuting and its associated air pollution, energy use, and regional traffic; and to provide stronger traffic management and vehicle trip reductions strategies, such as greater support of local and regional rail and bus transit, vehicle sharing, telecommuting, and parking management”.

According the EIR analysis, the Additional Housing Alternative is the ONLY scenario that allows for ALL of the projects’ objectives to be met, and is the one we strongly recommend. It should also be noted that the 4300 residential units associated with this Alternative represents less than a 1% growth rate, which has been Santa Barbara’s historical growth rate. This is a housing production, NOT a high growth alternative.

Specifically we urge you to:

- Include policies LG 4; LG 5.1; LG 6; and LG 9 from the Land Use Element into the Housing Element
- Recommend adoption of the (revised) Housing Element

www.sb4all.org
Honorable Planning Commission  
May 5, 2010

- Delete the Residential Average Density Program from the General Plan and EIR and include them as an implementation item along with the development of a Form Based Code. Further analysis of the unit sizes, FARs and residential densities is needed.
- Increase the "bonus density" for rentals to 100% of base, and legalize "legal non-conforming" rental property to allow refurbishing.
- Adoption of the Transit Demand Management plans and policies, as linked in the DEIR to the Additional Housing Alternative.
- Do not enact a moratorium for residential development within 500 feet of the freeway. Look to other ways to mitigate Air Quality impacts such as reduced traffic and closed air circulation systems in units. Replace currently proposed Policy ER 7 - Air Quality with previously proposed ER 12 - Air Quality.

There are many issues that require further community discussion and analysis in order to arrive at a true consensus. We recommend that the other elements be subject to a further ongoing process - not as extensive (or costly) as the previous Plan SB process, but one which allows staff and public development and evaluation of steps like:

- Form-based coding
- FAR and density standards for different areas of the City
- Redrawing of "Downtown Business District" lines, to include the Milpas corridor, etc.
- Clearer definitions of "community character", views, and compatibility with historic resources
- Economic effects of implemented policies

Although Plan SB has been many years in the making, we believe that it needs further work to accurately reflect majority public opinion and to effectively plan for the next 20 years.

Thank you for this further opportunity to comment.

Sincerely,

Mickey Flacks
Co-Chair

Paxton Pujo
Co-Chair

www.ab4all.org
Response to Organization Letter # O24, Santa Barbara For All (May 5, 2010)

O24-1: Thank you for your comments, which will be forwarded to decision-makers. In regards to the effectiveness of Transportation Demand Management, while it is true that the higher densities and increased provision of housing in the Additional Housing Alternative would most effectively match new growth with TDM, it is important to remember that the vast majority of the congestion reduction benefits identified in the EIR for TDM are derived from reductions in existing traffic volume and that new growth adds a relatively minor amount of trips to the roadway network when compared to existing traffic volumes. Therefore, the TDM program is relatively transferable between alternatives and would only lose a degree of effectiveness when applied to other alternatives. Further, while new housing, particularly in the Downtown, would almost certainly help reduce long distance commuting and associated congestion, the Transportation Model was unable to fully isolate this variable so these anticipated benefits could not be quantified.

O24-2 (Plan SB GPU): Comments noted. Please see responses O23-1 through O23-6.

O24-3 (Plan SB GPU): Comments noted. Major implementation measures such as adoption of form-based codes will entail an open public process with substantial opportunities for input.
May 14, 2010

Mr. John Ledbetter, Planner
City of Santa Barbara
P.O. Box 1990
Santa Barbara CA 93102

Dear Mr. Ledbetter:

Thank you for the opportunity to contribute comments on the Draft EIR for the Plan Santa Barbara program.

We have several comments pertaining to Chapter 10.0: Heritage Resources, which are outlined below.

Page 10-1: Photo caption: The Presidio was founded, not constructed in 1782. The caption should be revised to reflect this.

Page 10-5: First Paragraph:
- Mission Santa Barbara was founded in 1786 and, although Junipero Serra was present at the founding of the Santa Barbara presidio in 1782, he was not present at the founding of the mission.
- Casa de la Guerra was constructed between 1818 and 1828 (this should be corrected in later references as well)
- There was no Chumash village established at the site of the presidio.

Page 10-13: last paragraph: This and all subsequent references to policies and programs in Plan Santa Barbara designed to protect historic resources (10.53, 10.8) need to contain reference to the decision to create a separate Historic Resources Element, a decision which post-dates this DEIR document.

Page 10-16/17: We believe that the potential for adverse effects to archaeological resources in the downtown historic core near El Presidio de Santa Barbara SHIP do exist under current policies, and this belief has been borne out by recent development projects in the area. We believe that more stringent policies are required regarding “in-fill” projects in this area in order to substantiate the assertion that impacts will be “less than significant.”
In addition:

**Chapter 13: Open Space and Visual Resources**

**Page 13-2:** Table 13.1: We request the El Presidio de Santa Barbara State Historic Park be listed as a major park within the City.

**Page 13-3:** The boundaries of El Presidio de Santa Barbara State Historic Park are not correctly identified on this map. The park boundaries are much larger. See joint letter from California State Parks and SBTHP dated 5/4/2010 for more information.

**Page 13-8:** Second paragraph: El Pueblo Viejo is not centered on State Street. It is more accurate to say that EPV is centered on El Presidio de Santa Barbara State Historic Park. It is from this eighteenth-century Spanish site that the pueblo of Santa Barbara radiated out and grew into the area known even in the nineteenth century as El Pueblo Viejo.

**Page 13-25 – 13-31:** We believe that the assertion in this section that potential adverse impacts can be rendered “less than significant” through existing and proposed policies requires more explanation.

**Page 13-38, “Mitigation Measures” and Page 13-39, “Scenic Views and “Community Character”:** We request that El Presidio de Santa Barbara State Historic Park be included in these sections due to its nature as a special type of active open space in the downtown area deserving of protection. In addition, the location of El Presidio de Santa Barbara SHP also helps protect scenic views of and from the downtown and adds significantly to community character.

If you have any questions regarding our comments, please do not hesitate to contact us. We appreciate the opportunity to continue to participate in the planning process.

Sincerely,

Jarrell C. Jackman
Executive Director
Response to Organization Letter # O25, Santa Barbara Trust for Historic Preservation (May 14, 2010)

O25-1: Thank you for your comments.

O25-2: Comments noted. Please see revised text in EIR Section 10 (Heritage Resources).

O25-3: Comment noted. As set forth in the EIR, the City’s extensive archaeological resource protection policies and programs as referenced in EIR Section 10.2 (Applicable Plans & Policies) ensure that subsurface archaeological remains will be identified and characterized, protected where appropriate and feasible, and salvaged where avoidance is not possible. The City’s programs, policies, and approach are consistent with the requirements of CEQA Section 15064.5, and the City MEA Guidelines for the Assessment of Archaeological Resources and Historic Sites and Structures were developed with extensive input from the local community and experts. The City is unaware of any recent development projects near El Presidio that have resulted in significant impacts to archaeological resources. Please also refer to EIR response to comment O3-10.

O25-4: Comment noted. Please see responses A2-2, A2-4, and A2-7.

O25-5: Comment noted. Please see revised text. While the El Pueblo Viejo (EPV) Design District is clearly centered around State Street, the heart of the City’s historic resources are concentrated around El Presidio.

O25-6: Comment noted. The EIR provides substantial analysis and discussion of the effectiveness of the City’s existing policy framework and design review and environmental review processes to address visual and aesthetic impacts, as well as the role of proposed Plan Santa Barbara policies in further reducing such potential impacts through improved design review, measures limiting building size, bulk, and scale, and identification/preservation of key views. In addition, the EIR provides recommended mitigation measures which could further reduce such impacts.

O25-7: Comment noted. With application of existing policies and proposed Plan Santa Barbara policies, no significant impact has been identified with regard to open space within the Downtown core. Please see the revised text of MM VIS-1 (Open Space Protection and Restoration), which now includes El Presidio as an additional example of an important public open space and viewing location which should be protected Downtown.
The intent of this position paper is to identify the land use planning issues that the Upper East Association (UEA) believes will have the most direct effect on the future of our neighborhood. In concert with our mission statement of preserving our neighborhood character, we have identified six issues that we believe the current general plan update must address.

I. Neighborhood Preservation

Any proposed change to the general plan update must address the preservation of the historic character of the Upper East neighborhood, including:

- preservation of the current density capacity of the neighborhood;
- continued improvement of pedestrian and vehicle circulation through neighborhood streets;
- preservation of both public and other community use open spaces;
- the continued quest for a sustainable neighborhood; and,
- preservation of the historic qualities of the homes, religious institutions, education facilities (both public and private) and business areas that are part of the Upper East neighborhood.

II. Preservation of the State Street Residential Corridor

The preservation of the residential corridor now established on State Street between Mission Street and Constance Avenue is of great importance in retaining the historic character of the Upper East. The historic pattern of growth of our city is exemplified by this distinctive corridor of residential homes and the landscaped median that runs through the center of this portion of State Street. The very presence of this element documents Santa Barbara’s historic city boundary. Homeowners within this section value their properties and wish to retain the corridor’s residential character. Retaining this landscaped median with adjoining residential estates contributes to Santa Barbara’s beloved small town character.

III. State and Mission Street Intersection Specific Plan Approvals

Preserving the section of our neighborhood that runs along State Street between Mission and Constance also means providing a vibrant set of neighborhood
commercial businesses accessible to residents and compatible with adjacent multifamily and hotel uses at the intersection of Mission and State Streets. As a result of the proposed adoption of density changes along State Street at Mission, we propose that the City put in place a process whereby the zoning ordinance will require that a Specific Plan be submitted, with planning criteria and other required items, that will ensure that the Upper East neighborhood has sufficient tools available to evaluate and review future projects. This request specifically relates to the high and medium commercial densities shown on the City Draft General Plan Use Map (February 2010).

IV. City’s Core Density Increases Will Affect Our Neighborhood

We are concerned about the effect of proposed increased land use densities at or near the southerly edge of the Upper East neighborhood, (those areas to the southeast of Sola Street). Increasing the number of units allowed in R3 under a revised Variable Density calculation may have negative impacts upon this already densely populated area where on-street parking is already in short supply. Traffic circulation is constrained by narrow streets and hilly topography. Increasing the allowable number of units, even smaller, affordable ones, could impose additional vehicle circulation, on-street parking, noise, and other negative impacts to the current neighborhood character. Regardless of other efforts to reduce the use of the automobile, we believe that continued pressure for parking and traffic will have an effect on our neighborhood. This will be [exacerbated?] by reducing specific parking requirements for those areas of the city that are being designated for increased densities under the MODA.

V. “Institutional” Zoning Requirements

The presence of the many private institutional facilities - religious, schools, and other types of facilities (such as the Fielding Institute) - has a deep and historic influence on the Upper East neighborhood. The current proposed Draft General Plan Update Map simply labels these existing uses as “Institutional”. As the City continues to change and evolve, such facilities will also change and evolve. Currently the City's zoning ordinance has no specific language or set of tools available to either protect the neighborhood or allow City authorities to oversee the specific potential future development of such lands. The Upper East Association requests that specific language be included within the General Plan Update that outlines future actions required to establish a specific section of the zoning ordinance that will define, among other things, the following for such parcels identified as “Institutional”.

1. Require discretionary approval for all potential new land uses, including any change to educational programs, developed within a site that could have a potential negative impact on traffic, parking, noise, and aesthetics.
2. Set specific policy for structural setbacks, maximum heights, and other issues, which affect the size, bulk and scale of such structures, or uses which have the
potential to impact adjacent properties and/or the general character of the neighborhood.

3. Add specific requirements for appropriate on-site parking, pedestrian circulation (such as crosswalks), and other similar attributes that may be proposed.

4. Add specific requirements for defining public and private open space, and connectivity through dedicated trails that allow public access to other neighborhood open spaces or shared resource areas.

VI. No Change to Secondary Unit/Granny Unit Requirements

We continue to support the current ordinance requirements for second dwelling units within the current single-family designations; E1 and E3 zoned areas. The current requirements support the availability of such units, but provide sufficient controls and reviews for the construction of such units within our neighborhood.

Finally, the UEA requests that as the General Plan update process moves forward, particular attention be paid to the impact of potential shared resources within neighborhoods. Shared use of parking assets, circulation elements, and use of existing facilities will be important to assure that our community’s existing assets are used to sustain the neighborhood’s quality and character.
Response to Organization Letter # O26, Upper East Association (April 18, 2010)

O26-1: Comments noted. These comments generally apply to the contents of the General Plan and not the adequacy of the EIR. These comments will be considered by City decision makers during the adoption process.

O26-2 (Plan SB GPU): Comment noted. Proposed policies LG13.2b (Community Character/FAR, previously numbered CH15) and LG14 (Historic Structures, previously numbered CH10) both speak to developing standards with protection of historic resources or single family areas. Please see edits to LG13.2b and c. (Floor Area Ratios and Form-Based Codes) to add areas that are adjacent to single family zoned areas.

O26-3 (Plan SB GPU): Thank you for your comment. Comment noted.

O26-4 (Plan SB GPU): Comment noted. General Plan Land Use Policy LG17, Sustainable Neighborhood Planning (previously numbered LG15), encourages neighborhoods to preserve and enhance the sense of place, provide opportunities for healthy living, and accessibility, while reducing the community’s “carbon footprint”. The shape and focus of future Sustainable Neighborhood Plans will vary as they are developed for each unique area of the City, and for the Upper east and State Street, additional zoning tools may be considered at that time if appropriate (please see Policy LG 17 – Sustainable Neighborhood Planning).

O26-5: Comments noted. Please note that the Santa Barbara Transportation Model does not project significant increases in surface street traffic volumes for the area southeast of Sola Street. For example, traffic volumes on Laguna Street are projected to grow by less than 9% over this 20-year period (please refer to EIR Figures 16.2 and 16.5). Note: Volumes are projected to grow from 17,320 to more than 23,000 on the two-lane segment of State Street.

O26-6 (Plan SB GPU): Comment noted. The City currently does have regulatory tools for institutional uses in residential zones in The Zoning Ordinance. Most of the Upper East neighborhood has a single family zone designation. The uses permitted in single family zones are identified in the Santa Barbara Municipal Code (SBMC) Section 28.15.030. Institutional uses are allowed with a Conditional Use Permit (CUP) or a Performance Standard Permit. New institutional uses proposed in a single family zone require a CUP that is a discretionary action. CUPs define the permitted use and site improvements and have specific findings (SBMC28.94.020) required by the Planning Commission. In addition, SBMC 28.15.085 spells out the regulations for non-residential buildings, structures and uses (e.g. double setbacks, lot coverage limitations, design review approval). When the approved program of a CUP is changed, either a finding of substantial conformance, an amended CUP, or new CUP would be required. A new land use policy has been added as LG12 to address Institutional uses and to strengthen the CUP standards and findings in the zoning ordinance for stronger consideration when permitting institutional uses in residential zones.

However, as noted by the comment, there are many long established institutional uses that are non-conforming and that do not have a CUP. This is a challenge for the City in regulating established non-conforming uses or permitting changes of use or intensity for the same or another institutional use when the conditions of the CUP were never defined. This needs to be considered when reviewing the CUP section of the zoning ordinance. The four items identified in the comment would be considerations when reviewing institutional uses and implementing the new Institutional CUP policy.

O26-7 (Plan SB GPU): Comment noted and will be forwarded to decision-makers. It is noted that the relaxation of second unit standards and specific locations where any reduced limitations would be carried out, are
# O26, Upper East Association (Continued)

factors that still need to be worked out at a future phase of implementation. This implementation action would be carried out through a public process, and we look forward to working with the Upper East neighborhood on your specific concerns.

With respect to shared use of resources and facilities within neighborhoods, please see additional text as part of proposed Policy Implementation Measure LG17 (Sustainable Neighborhood Plans).
May 14, 2010

Letter to City of Santa Barbara Planning Commission

Subject: Upper East Association
General Plan Update Position Paper
Addendum #1

Dear Commissioners,

On April 28, 2010 we presented our position paper to the Planning Commission that addressed several elements of the current general plan update process that affect our neighborhood. Since that time we have learned of additional recommendations that are being proposed which we believe need comment.

As such we would like to address the issue of the proposal to introduce a more “robust Transportation Demand Management Plan” which may consist of several strategies. We would like to go on record that we are opposed to any initiation of a “punitive” parking penalty that is an attempt to alter residences behaviors with regards to on street parking.

As outlined under our April 18, 2010 UEA Position paper item IV. City’s Core Density Increases Will Affect Our Neighborhood. We believe that the implementation of such punitive parking measures in the downtown core will only alter people’s use of on street parking by increasing the demand for parking on streets above Sola Street. Currently, one can observe on a weekly basis, the increase in demand of on street parking by employees working downtown. This will only increase if such punitive measures are implemented forcing the current employee workforce to jockey for parking positions in competition with residents of proposed increased densities in the downtown core.

We would request that the implications of such punitive parking measures be accounted for in the environmental impact of our neighborhood. We believe that staff’s implication of such “experimental” notions have not been proven as a viable behavior modification measure to separate people from their cars.

Respectfully Submitted

Fred L. Sweeney
Vice President UEA
Response to Organization Letter # O27, Fred Sweeny, Upper East Association (May 14, 2010)

O27-I: Thank you for your comments. Improved Transportation Demand Management (TDM) and changes in City parking operations are proposed as the only cost-effective way to address existing and anticipated future congestion at City intersections. Although the City does not anticipate that most Downtown employees would walk more than ¼ mile outside of the Downtown core to park on Upper Eastside streets, residential parking permit programs are available as needed to address this issue. Improved TDM and parking management programs are not intended to be punitive, but will be utilized to broaden transportation choices available to commuters, avoid costly and environmentally damaging intersection widening projects, and conserve scarce City funds.
Rodriguez, Julie

From: Beth Perry [bepesb@yahoo.com]
Sent: Monday, May 17, 2010 2:58 PM
To: Community Development PC Secretary
Cc: Schneider, Helene; House, Grant; Hotchkiss, Frank; Self, Michael; White, Harwood "Bendy" A.; Williams, Das; Francisco, Dale

Subject: Upper East Assoc General Plan Update Position Paper Addendum #1

Attachments: Plan SB Addendum - parking.doc

On April 28, 2010 we presented our position paper to the Planning Commission. The document addressed several elements of the current general plan update process that affect our neighborhood. Since that time we have learned of additional proposed recommendations that we believe need comment.

Please see the attached document that addresses those issues.

Respectfully submitted,

Fred L. Sweeney, Committee Chair, Government Relations
Response to Organization Letter # O28, Fred Sweeny, Upper East Association (May 17, 2010)

O28-1: Thank you for your comments. Please see response O27-1.
Dear Dana,

The Coalition for Community Wellness has been in the forefront utilizing workshops to promote public input toward the development of the next 20-year Plan Santa Barbara. SWAG offers an educated guess that the Coalition was active in facilitating Public Health as a policy issue in Plan Santa Barbara. If that is correct, CONGRATULATIONS to the Coalition. In addition, thank you for the reassurance that the Coalition for Community Wellness believes that safe water is an important issue.

The dictionary definition of coalition is: "a temporary alliance for joint action". Speaking as a physician, Public Health infers a broader comprehensive coalition to help prevent citizens from being in harm's way. The many months of intermittent workshops appeared to be designed to promote and shepherd the broader community approach. With this in mind, SWAG suggests that our information be distributed by the Coalition for Community Wellness as a courtesy to other groups in Santa Barbara that you are aware of who are interested in water quality improvement. This will ensure that such groups know now that the Coalition for Community Wellness will not be working on the issue of safe water. Such information will facilitate the other groups working together and with Municipality and County decision makers to find practical solutions to potentially dangerous situations before it is too late.

It was suggested at the January 28, 2010 Project Clean Water Stakeholders' meeting that SWAG be formed as a "working group" because SWAG presented what the stakeholders considered as new information: evidence that EPA, since the early 80's, has been repressing information documented by their own scientist, Meckes. He documented that wastewater treatment plants breed multi-antibiotic resistant organisms most of which are not touched by the Regulations governing these facilities. The byproducts of wastewater treatment plants (effluent, reclaimed water and biosolids, classes A and B) are vehicles that can carry the potentially dangerous resistant organisms into our environment. These byproducts are potentially "hazardous substances" that cannot always be documented with single indicator testing but can be documented if laboratories test for antibiotic resistance. EPA has been a major promoter of using biosolids on agricultural and pasture lands. EPA's repressing of information (not on EPA or CDC websites) is quite analogous to what is described by the attached May 13, 2010 front page article of the New York Times. EPA, secretly, did not require environmental permits for oil drilling in the Gulf of Mexico.
In addition, more recent research has documented that typical chlorine levels utilized by the industry for both potable and waste water create only a temporary “shocking” (Viable But Not Culturable phenomenon=VBNC) that ultimately results in greater resistance and increased virulence of the same resistant organisms not eliminated by wastewater treatment plants. Therefore, the still contaminated byproducts of wastewater treatment plants (effluent, reclaimed water and biosolids) can a.) be washed by rain into State water, reservoirs, wells and ground water and b.) contaminate food crops, pasture lands, school playing fields, golf courses, public parks and Municipal greenscape.

As of a year ago, the repressed Meckes information was not known by people working at Santa Barbara County Public Health. This information was also probably not available to the Coalition for Community Wellness, other groups in Santa Barbara working on clean water issues and therefore, certainly not available to the Municipality decision makers who continue to do their best to keep our citizens and tourists out of harm’s way.

If it makes sense to you that the Coalition for Community Wellness has, in reality, been shepherding larger community participation in the development of Plan Santa Barbara, it would, thus, make sense for your Coalition to follow through and distribute this new, extremely important information. If yes, please tell me where your office is at Cottage so that I can hand carry the packet to you. Also, please tell me to whom you distribute as well as their contact information and contact persons.

All the best,
John

CC: City of Santa Barbara Planning Commission

Attachment to letter is provided at the end of this document
Response to Individual Letter # I1, John Ackerman (May 16, 2010)

I1-1: Thank you for your comments.

I1-2: Comments noted. EIR Section 11.1.6 (Hydrology and Water Quality/Existing Setting/Coastal and Marine Water Quality) and Impact HYDRO-3 (Coastal and Marine Water Quality) and Section 15.1.2 (Public Utilities/Existing Setting/Wastewater Treatment) and Impact PU-2 (Wastewater Collection and Treatment) discuss nearshore marine water quality, including the effectiveness of current treatment processes in relation to disease-resistant organisms and the discharge of treated effluent into nearshore waters. The consultant team producing this analysis includes a water quality specialist and toxicologist with substantial experience in effluent disposal and related water quality issues. Revised text describing production and disposal of biosolids has been added to Section 15.1.2 (Public Utilities/Wastewater Treatment).
When I sent my e-mail below I had read the EIR but I had not yet read the general plan. So my comment was based on what I thought was true when I wrote it. Today I read the general plan and in the Housing element it states how the 9099 units was determined. Therefore Bette was right when she said the 9099 number of units reflected the "proposed project" in Plan Santa Barbara and I was wrong when i said I thought it reflected what could be built under to no project existing zoning density. The Housing element explains in detail how the increase in density was taken into account and how only the parcels deemed suitable for development or redevelopment were included in this number.

However, in my opinion the number used to determine whether or not a parcel was suitable for development used a very low dollar amount. It is possible and even likely as the price at which a new unit goes up over the next 20 years and the value of a deteriorating existing building depreciates that that a property owner with a existing building worth more than the staff’s arbitrary number could decide that it was financially feasible for him to demolish it and build new small 1200 sq., ft high end luxury residential units and sell them for $1000 per sq. ft (the price they were selling for at the peak of the market and which will likely be reached again in maybe 5 short years of recovery) for a selling price of $1,200,000 each. (small units can and will be luxury units) It does not appear to me as if the city staff did a economic study to determine the "tipping point" at which a new project becomes feasible. The Housing element stated that the price staff used was the average value of the building of the recent projects. But these projects were built on sites which were 'low hanging fruit' and some were selected and started before the peak in the market. Just because this was the average of the "low hanging fruit" and obvious feasible projects does not mean that a parcel with a more valuable building would not be financially feasible to demolish when the market goes back up, which it surely will.

the financial feasibility study done by the consultant showed that a project could be feasible at a land cost of $107 per sq., ft which is the average price of land in the city (see page 286 of general plan) is a far cry higher than the low $27 per sq., ft number the city staff used. (see page 294 of the general plan). In fact one can no longer even purchase any R-3 or C-2 parcel in
town for $27 per sq., ft. The very cheapest parcel currently on the market anywhere in town is about $75 per sq., ft.

That being said I realize the calculation done by staff of the number of units does fulfill the purpose of proving to the State in our housing element that we have more than an adequate zoning capacity number of units in excess of the RHNA number. And I fully appreciate that a lower number might discourage the State and the SBCAG from dumping a even bigger RHNA number on us in the future.

But my main concern for the long term (after 2030) is just how many units could possibly ever be built in Santa Barbara under the proposed increase in density and my own rough calculations indicate that that number is close to 20,000 units if one takes all parcels and not just parcels staff deems "underutilized" or suitable for redevelopment, and over 10,000 units under our existing density. As I said future changes in the economics could in the long term (50 years) cause more than 10,000 units to be built here under a full build-out scenario.

Yes this is a very complicated and specialized subject (and I know that staff is well intentioned and doing their best) and one that may require the city to hire an economic consultant specialized in housing development to do further economic feasibility analysis in order to determine an accurate number of units that the proposed increase in density could allow at full build-out over the next 50 years. Not for the Housing element but for the land use element and sections on growth control and density and recourse (water) capacity.

Gil

On Apr 1, 2010, at 4:41 PM, Gil Barry wrote:

In my opinion, the 9,099 units can be built under the "No Project existing density. This is because the existing R-3 density allows 40,005 units less the existing 37,400. but the 40,005 units did not include any units in the commercial zone and Bette informed the PC at a Jan 2008 meeting, at which I was in attendance, that staff had discovered that staff had made a mistake years ago when it calculated the 40,005 number of units and it didn't include any units in the commercial zone and that staff had done a calculation only of what staff deemed underdeveloped lots (defined as having a market value under $185 per sq, ft) and had determined that the commercial zone under our existing density could accommodate another 6000 to 7000 units.

so if one adds 7000 units in the R-3 zone to the 2600 in the R-3 zone one gets 9600 units that
can be built under the no project existing density.

Therefore, with all due respect, in my personal opinion Bettie is wrong in her reply, because the "project' includes increasing density and increasing density would of course allow even more units. We must demand that the city staff and consultant do that calculation of the effect of increasing density will have on the number of units that could possibly be built in the future and provide it in the final EIR.
Response to Individual Letter # I2, Gil Barry (April 2, 2010)

I2-1 (Plan SB GPU): Thank you for your comments.

I2-2 Comment noted.

I2-3 (Plan SB GPU): Comment noted. Please see EIR Sections 4.3 (Future Growth Assumptions) and 4.4 (Extended Range or Full Build-Out Under Plan Santa Barbara) for discussion of build-out assumptions used to consider impacts of longer-range growth in 2050 and beyond and full build-out under the Land Use Element Map and zoning. This provides a reasonable worst-case analysis of impacts as required by the California Environmental Quality Act (CEQA). Also please see Responses O4-2, A12-7, and A12-8.

I2-4 (Plan SB GPU): Comment noted.
INDIVIDUAL LETTER # 13

Ledbetter, John

From: Gil Barry [gilbarry1@cox.net]
Sent: Monday, May 03, 2010 12:33 PM
To: Paul Hernadi
Cc: Weiss, Bettie; Shelton, Barbara; Ledbetter, John; Dayton, Rob; Naomi Kovacs; Mary Louise Louise Days; Michael Gray; Elly Langer; Cathie McCammon; jeanholmes Holmes; DeVore (John and Anna) (John and Anna) Family; Joe Rutjion; Judy Orias

Subject: Re: Follow-up questions re Plan Santa Barbara

Paul, Bettie, John, Barbara, et al

We also need a clear understanding of the residential build out for the no project alternative (existing policies and allowed density) and explanation why the number of units goes up so very slightly when the allowed density is proposed to be increased by 50% for much of the MODA where most of the new units are proposed to be located.

Also, for each of the 4 alternatives it would be very helpful (even necessary), for each total to be broken down into units in the single family residential zone, the r-2 zone, in the R-3 residential zone, and the commercial zone in the MODA downtown, in the MODA other than downtown, and the commercial zone outside the MODA.

This is the only way the public can comprehend the differences in the 4 scenarios.

It would be ideal if all this was presented in one chart. It should already have been done that way in the EIR.

With all due respect, he way it is done now is absolutely impossible for anyone to figure out exactly what is going on in each of the 4 scenarios or to be able to properly compare them and after all the allowed density (which DIRECTLY affects the population at long term build-out—which in turn affects our living within our resources at long term build-out) is the number one unresolved issue in the community.

Gil

On May 3, 2010, at 8:36 AM, Paul Hernadi wrote:

Good morning, Bettie:

Thanks again for providing a first round of response to my questions dated March 28 and for saying that a second round will probably follow. The staff report for April 28, as well as John’s, Rob’s, and Barbara’s comments on April 29, actually supplied some additional clarifications, but the following questions are among those that remain:

1. What would be the residential build-out figure relating to the assumptions of the Additional Housing scenario? The very helpful Exhibit B of the staff report for April 28 only lists the figures for Plan Santa Barbara (9,099) and what is essentially the Lower Growth Alternative (7,455), i.e., “replacing the High Density 30 units per acre average with the
Medium High 20 units per acre average."

2. What would be the effect of a 500- or 250-foot Freeway Buffer on the calculations of full build-out (9,099 under the "Project")?

3. What would be the effect of the partially or fully retained commercial component in new mixed-use projects on various figures utilized in the Travel Demand Model?

Once again, I request that your response to me be cc’d to the community activists cc’d on this e-mail. Several of them told me that they were glad to receive your prompt response to my previous inquiry.

May I also request that a copy of any additional information requested by and presumably forthcoming for the Planning Commissioners before their May 6 meeting be also provided for the public, perhaps on the YouPlanSB website? Please let us know how to be sure to receive this information.

Gratefully,

Paul

Paul Hernadi
hernadip@english.ucsb.edu

5/3/2010
Response to Individual Letter # I3, Gil Barry and Paul Hernadi (May 3, 2010)

I3-1: Thank you for your comments. Differences in projected build-out between the proposed project and No Project alternatives are largely a result of proposed changes to the City’s variable density ordinance. These changes would facilitate increased density in the Downtown and within the proposed commercial/high density zones under the proposed project. Please also see response A12-8.

In regard to the differences in assumptions by zones between alternatives, please refer to EIR Sections 4.3.3 and 4.3.4 (Residential Development Assumptions), Tables 4.7 (Existing City Land Uses and Relationship to the MODA) and 4.8 (Assumptions for Distribution of Potential Future Growth by Land Use) as well as Section 5, Description of Alternatives (including Table 5.1- EIR Alternatives: Summary of Policy and Growth Assumptions for EIR Analysis), and Table 22.1 (Summary of Growth and Policy Assumptions). Appendix D, Representative Distribution Assumptions for Future Growth provides additional details on this matter.

I3-2: Thank you for your comments. Please see response to comment O4-2.

I3-3: The freeway buffer of 250 feet is anticipated to have minimal effects on long-term build-out due to the presence of landscaping, the railroad, and roads within these setbacks, the relatively limited amount of residential lands affected, and the expected interim nature of these setbacks. Please see also response A9-2.

I3-4: With respect to retained commercial component in mixed-use development, the existing commercial component is part of the baseline conditions. Build-out assumptions project net increases and do not figure in existing retained uses.
INDIVIDUAL LETTER # I4

From: J'Amy Brown [mailto:j.amy.brown@att.net]
Sent: Tuesday, April 27, 2010 5:31 PM
To: Shelton, Barbara
Cc: Martha Siegel
Subject: Plan SB -- Coast Village Road Area

Ms. Shelton. I would appreciate you forwarding my comments to the Planning Commission and Council for their meetings this week. I represent the 200 homes in the unincorporated Montecito residential neighborhood that abuts Coast Village Road in the City of Santa Barbara. Thank you. J'Amy Brown

Dear City Decision Maker;

I would like to comment on “Plan Santa Barbara,” the two-year study on the City of Santa Barbara’s general plan update.

As it pertains to Montecito, I believe this plan update could have a major affect and/or impact on Montecito, but I will address how it might impact my community, the 200 residential parcels, located in the unincorporated part of the county, which abut Coast Village Road.

As we have see by 101 and Coast Village Road, what impacts our neighbors in the City of Santa Barbara, impacts us, especially on common boundaries. (Fire safety, roads, circulation, parking, water use, lighting, signage, density, building heights, FARs, affordable housing (Westmont) and especially 101 design and improvements.)

In particular I want to make note of the density proposed for Coast Village Road (medium high commercial density.) I think you can look at the current traffic snarl and parking situation created by CVR use and be able to see that a high density on this multi-use corridor is unacceptable. Already the commercial parking is filtering into and encroaching upon Montecito’s nearby residential streets. Your protection is requested.

Visit my neighborhood (Butterfly / Middle Road) any weekday to see CVR employee and customer parking encroaching higher and higher into our neighborhood. Higher density will only add to that burden, further reducing the semi-rural character of our neighborhood and infringing on our own guest-parking needs—and threatening our property values. If anything the density of this corridor should be lowered.

While Middle Road is currently posted No Parking from Coast Village Road to High Road, it is almost never enforced by the city or the Highway Patrol (no staff, they tell me,) so signage and enforcement seem to not be a good controlling option. Lower commercial dentistry, along with adequate parking planning for this business zone, is a better controlling mechanism.
On Friday's, when the farmers market is in session, an event initiated and encouraged, I believe, by the Coast Village Road Business Association, the parking in our neighborhood becomes frightful. While I enjoy the farmer's market, I think it demonstrates how a commercial-zone-marketing activity, with the intention of drawing people to the street, can impact the residential quality of Montecito. Parking created by such marketing activities (i.e. farmers market, car shows, Halloween and Holiday business open-houses) need to be contained on Coast Village Road or in city itself and not infringe and impact nearby county homeowners, who receive little or no economic benefits.

Fire and safety adequacy (response times), road circulation (Vons trucks), lighting (i.e. the way over-lit roundabout), signage and design aesthetics -- all potentially covered in the updated plan--could impact our neighborhood and our community. I believe the Montecito Planning Commission and the Montecito Association will address these items at a later date.

My job is to ask you to give critical thought as to how this plan-update affects the residential quality and character of the Montecito neighborhoods that adjoin the city--especially the neighborhoods of Hermosillo, Middle Road and Butterfly Lane--and be certain we are no further encumbered than we are today -- whether that means status quo or even down-zoning! Current parking needs must be addressed, including contemplating the idea of a city parking structure.

Thank you for your time hard work used in the protection of our community.

Sincerely,

J'Amy Brown
Captain
High Road Neighborhood Watch

J'Amy Brown
j.amy.brown@att.net
(805) 969-5515
Response to Individual Letter # I4, J. Brown (April 27, 2010)

I4-1 (Plan SB GPU): Thank you for your comments. Please see EIR discussions of fire issues (EIR Sections 9 and 14), traffic and circulation (EIR Section 16), water use (EIR Section 15), lighting (EIR Section 13), and affordable housing (Section 19). The draft General Plan Update also proposes policy updates that address each of these issues, as well as parking, density, building scale and height, and Floor Area Ratios. For sign issues within City jurisdiction, please refer to the City Sign Ordinance and Design Review Guidelines on the City web site (www.SantaBarbaraCA.gov). For U.S. Highway 101 design issues, please see existing City Highway 101 Santa Barbara Coastal Parking Design Guidelines, and for Highway 101 improvements, access the SBCAG web site (www.SBCAG.org). The City looks forward to working with the County, interested organizations, and individuals to ensure that new development along Coast Village Road is of high-quality design that appropriately minimizes impacts.

I4-2 (Plan SB GPU): Comments noted. Please see response O17-4. Parking overspill appears largely confined to unusual peak events and new development must comply with City parking standards. With respect to enforcement, City parking officers are responsible for enforcing City ordinances within City boundaries. The County is responsible for enforcement of County ordinances within unincorporated areas.

I4-3 (Plan SB GPU): Comment noted. Please see response O17-4. As noted in this response, it is generally neither feasible nor desirable to design parking based on peak events, as this leads to excessive underutilized parking areas with associated secondary environmental consequences, such as from excessive paving. The goal of the City parking standards is to accommodate average peak commercial parking demand, and not that associated with a weekly farmers market or low-frequency events such as car shows which are of benefit to the entire community. Permits for such events are generally structured to manage parking to minimize overspill issues through provision of signs and/or monitors to direct parking to established streets and lots to the extent feasible.

I4-4 (Plan SB GPU): Comments noted. The EIR provides a general, citywide evaluation of issues such as fire and safety response (EIR Section 14), circulation (EIR Section 16), and design aesthetics (EIR Section 13). The General Plan Update also identifies a program to address more specific Montecito area issues. Please see GPU Land Use Element, Policy LG13-Community Character, and Implementation Action 13.1.2-Design Overlays/Coast Village Road. Under this program, the City would coordinate closely with the County, Montecito Association, Coast Village Road Business Association, and interested neighbors on future development of specific guidelines to address development along Coast Village Road. The City looks forward to working with the community on this and other development related issues.
INDIVIDUAL LETTER # I5

May 13, 2010

Planning Commission
City of Santa Barbara
P.O. Box 1900
Santa Barbara, CA 93101

Subject: Plan Santa Barbara Process

In viewing the Planning Commission meetings of last week I was pleased with the following discussions:

1) Confirmation that the Planning Commission embraces the Sustainability Principles upon which Plan Santa Barbara will be based, including housing for all income levels.
2) Comparison of Key Regional and Local Issues that highlight that the Additional Housing alternative is the most sustainable having the least impacts on transportation, energy demand, and climate change, while greatly improving the jobs/housing balance.
3) Seeing what a significant benefit, a robust TDM program can be by reducing potential cumulative downtown traffic.
4) Policy consideration of lowering downtown unit parking requirements and unbundling for efficiency. This would allow more units to build on the same parcel, thereby reducing costs.
5) Proposing to change the existing density determination by number of bedrooms. This has had the unintended consequences of fewer, more expensive residences than downtown sites should be producing, especially for middle income workers.

A recent study for the Santa Barbara Workforce Investment Board tallied public responses from the public including 140 county employers. Of the survey respondents, 39% indicated that at least a 25% of their business was focused on clean or green products or services. The study found that the most significant workforce opportunities in the green economy was green building, utilities expansion of renewable energy portfolio, technology firms developing market based solutions for environmental challenges and agricultural bio-based materials.

The industry profile for the future shows green economy jobs growing as a percent of total jobs. However, 50% of the employers surveyed throughout the County indicated at least some difficulty with recruiting employees as well as retaining valuable employees who want to purchase or find adequate housing within a reasonable distance from work. This would be even more significant on the south coast and the City.

As a participant in the corporate partners program for the Bren school, I am seeing the talented students whom will have a big impact in expanding green technology and starting new companies. This is a resource that we need to stay in our community, and not move because of a lack of attainable housing.
New residential construction is very energy and water efficient and this keeps improving. Because of this new construction will improve resource utilization for the entire City, rather than negatively impact it.

Based on the principles in Plan Santa Barbara we are laying the ground work for new industry and the housing to support it.

However, I need to address my concerns after the meeting last Thursday. The concept of a decision matrix selection process prior to the EIR being finalized, may lead to unintended consequences.

1) The matrix selections are not being evaluated in light of each other and the cumulative impacts are not calculated.

2) Unit sizes are decreased and parking requirements are reduced, which should result in more attainable priced units. However height restrictions, density restrictions and increased affordable requirements are also being proposed that could more than offset these benefits. This could result in only two to three story buildings allowed downtown where the jobs are and the density is needed. One of these levels would have to be for parking, so the cost per unit is very high since the total costs from ground up are shared by fewer units on only 1 to 2 floors of living areas.

3) The fourth story that currently would be allowed downtown, may only be considered for “community benefit” projects. Producing smaller units for workforce near jobs, building green residences, reducing environmental impacts, all in compliance with sustainable principles, would in fact be a “community benefit”.

4) There are no financial analyses of the impacts of any of the proposals, or any combination thereof. For example recommending that inclusionary requirements be at 25% could increase the cost of each unrestricted unit by approximately $150,000. This would price the units out of the range for middle income workforce.

My concern is that at the next Planning Commission meeting, negotiations will take place to come up with a consensus on individual items, without evaluating the financial consequences of each or in total. This would then be presented to the City Council and may become embedded in the decision-making process for the final Plan Santa Barbara.

To be effectively implemented, sustainability principles need to consider environmental, social and economic issues.

I would respectfully recommend the following for your consideration:

1) Delay making decisions on implantation tools until the EIR is completed, so everyone understands the objectives to be met.
2) When the EIR objectives are known, convene the parties that can implement them in work sessions to see how best this can be accomplished. This would include members of the Planning Commission, ABR, HLC, architects, for-sale and rental builders, and lenders. The group can look at approved sites and see how these could have been improved for affordability. Vacant sites can also be reviewed and to see how to build more attainable units and still be design sensitive.

3) Inventory historical sites as soon as possible. This is causing decision makers to hold back on policy recommendations until areas of conflict can be determined and standards established. The CBD and historical overlap, as does the redevelopment area, so we need to see what sites should be the focus for density.

4) Not preclude the C-2 areas between State and Milpas from taking higher density. These are less expensive due to underutilization, Measure E limits, and do not present conflicts with historical and existing residential neighborhoods. We should look at the number of middle income jobs in this corridor and the ability for workers to walk to work. This could become a prime opportunity for reasonably priced housing and rents as well as being sustainable through adapted re-use.

The goal then would be to move forward with all the knowledge at hand to produce the best attainable and well-designed residential projects.

There are currently 1,500,000 square feet still available under Measure E; a good portion of which could be used for the new green economy. Assuming 250 square feet per worker, as many as 6,000 jobs can be created during the commercial build out (or 4,000 jobs if a proposed 1,000,000 is enacted).

Assuming 1.25 jobs creates a new household, 3,000 to 4,000 residences would be need for these new workers. If the City were not to proceed with the Additional Housing alternative, I don’t feel the City be able to match the new demand for worker housing much less the jobs / housing imbalance we now have. I look forward to the EIR conclusions on this.

Thank you for delaying implementation of policy suggestions on residential developments, until the EIR is completed and all interested parties can formulate how to best achieve the needed workforce housing.

Sincerely yours,

John P. Campanella
Response to Individual Letter # I5, J. Campanella (May 13, 2010)

I5-1 (Plan SB GPU): Comments noted. Thank you for your input and participation in the process. Your comments will be forwarded for decision-maker consideration.

I5-2 (Plan SB GPU): Comments noted.

I5-3 (Plan SB GPU): Comments noted. Concerns about the financial feasibility of providing the workforce units will be forwarded to the City Council. The direction with respect to densities, units sizes, and height limitations (4th stories) will be decided on as part of the adoption process for the General Plan Update.

I5-4: Comments noted. Regarding EIR and overall objectives, these were defined by the City Council at the outset of the Plan Santa Barbara process and may be found in Section 3.2 of the EIR. Final decisions on implementation tools will be made by City Council following Final EIR certification as part of the Plan approval process. New policy direction for protection of historic resources has been incorporated into the Land Use and Housing Elements. See refinements to LG 14.5 and HR5 to further address buffering of historic resources, and establishment of historic districts. The target areas for higher density will be decided by the City Council.

I5-5 (Plan SB GPU): Comments noted. Please see Section 19 (Population and Jobs/Housing Balance) of the EIR which provides an analysis of the project jobs/housing balance for Plan Santa Barbara as well as for each alternative studied. It should be noted that the EIR finds that development under Plan Santa Barbara would result in a rough parity between new jobs and new housing over the next 20 years. However, the EIR does not identify an improvement in the jobs/housing balance under the proposed project and projects a substantial shortfall in affordable housing production required to meet increased demand generated by new job growth.
Dear City of Santa Barbara,

Upon reviewing the general plan updates and EIR on my spare time I felt it compelling to write to the city about some of the main concerns/suggestions that have been bothering me.

The first of which is the city's poor definition of the word sustainable. As an environmental studies major @ UCSB, soon to be graduate, I have been fortunate enough to learn that sustainability is composed of three elements: 1. the environment; 2. the economy and 3. Social Equity. However, these three pillars of sustainability are addressed only a few times within the general plan. Instead the plan elects to define sustainability as "living within the city's resources." This definition does not adequately address the city's responsibility to provide and protect the three pillars of sustainability. Many people will surely interpret this definition as solely environmental and therefore feel that other needs are being neglected.

The next of my observations is the city's lack of concern with newly passed legislation SB 375. The updated general is focused around land use and using this land use to become sustainable. Why is there a lack regional emphasis? Many, if not most, of the sustainability goals and policies should address some sort of regional effort and or plan. I believe the only regional address is with in the first sentence of the updated Economy and Fiscal health element. This is just another example of how the update is saying it wants a sustainable city with out acting on it.

The last of my observations is a more personal matter and it involves the TOD plans addressed for infill developments with in the city. While I think TOD is a great and effective idea I feel the general plan does not plan enough for the increase need of public transportation and those people who ride the bus and bike to their destination. More buses will be needed if more people are to live and work within the city. I believe High Occupancy Vehicle lanes may be one solution or possibly designated lanes for the buses may be needed in order to adapt to the increased need of buses and to keep them running in a timely manner. Again by planning for infill and Transit Oriented Development the city needs to address the three elements of sustainability and take a regional approach to determine and understand the outcomes and effects such a development will have.

Although I have addressed three complaints here there are many other suggestions that need to be made for the city. I believe the general plan does a nice job describing and breaking down the history of the city, the general plan elements as well as marketing public hearings to the public. However, there is still some work needed to be done in order properly address and prepare the city of Santa Barbara for a sustainable future.

Thank you for your time.

Christopher J. Cintas
Response to Individual Letter #I6, C. Cintas (May 17, 2010)

I6-1 (Plan SB GPU): Thank you for your comments. Please see the General Plan Update, Chapter 2, Sustainability Framework, which provides sustainability definition and principles for equity, environment, and economy that underlie the entire General Plan Update.

Regarding the local City versus regional perspective, the current process and focus is to update the General Plan for the City, which is the area for which City government has responsibility and authority. However, the proposed Plan recognizes the importance of the regional context, and includes many references to regional coordination for effective implementation of policy objectives, and consistent with recent State legislative mandates. A few of these measures include a Goal (Regional Approach), Introduction to the Elements Section that includes a section on Regionalism; Policy LG9 (Regional Planning) and Implementation Action LG 9.1 (Regional Land Use/Transportation Plan); OP2.3 (Regional Open Space); EF 21 (Regional Economic Strategy); EF23 (ER6 (Local and Regional Renewable Energy Resources); ER24 (Regional Agriculture); H22 (Work to Solve Regional Jobs/Housing Imbalance); C2 (Regional Transportation and Commuter Transit); PS6 (Regional Cooperation on Water Conservation); PS7 (Solid Waste Management Programs); PS12 (Emergency Workforce).

I6-2 (Plan SB GPU): Comments noted. Please see responses C1-2 regarding transit improvements. Please be aware that the City is currently considering the potential for dedicated transit lanes along Upper State Street and that new High Occupancy Vehicle Lane improvements proposed for U.S. Highway 101 from the City south to Ventura would also serve transit.
INDIVIDUAL LETTER # I7

From: Paul Cook [pcook@lpcook.com]
Sent: Thursday, March 18, 2010 11:25 AM
To: info@youplansb.org; Ledbetter, John
Subject: Public comment re the General Plan changes

Attachments: 230 234 Figueroa info.pdf
Thank you for having that open house today at the downtown library. I looked at the map and took a CD of the proposed changes and talked to several staff members after watching the intro. video. All very interesting.

My wife and I own two parcels in the downtown area, 230 and 234 E. Figueroa St. APN 029-212-032 & 033. We are surrounded by commercial uses and mixed use building and support the proposed designation and zone change to the Office High Density C2 (27-34 Du/Ac) This density already exist on our two lot as we have 5 legal units now and that works out to the same range as not proposed. We like the option of mixed use as well. If not in the downtown core, where should the density go? The proposal as not shown, is good planning in our opinion.

I am attaching a copy of the tax assessor's map with our parcels highlighted in yellow and an aerial photo of our neighborhood which has a orange stick pen icon in our home at 230 E. Figueroa.

Please advise me as to your progress and any changes that may happen along the way that might change that designation to something other that what is now proposed.

Again, we support the proposed changes to the zone and land use designation as presented today at the downtown library.

Thank you.

L. Paul Cook and Claudia E. Cook
property owners
Response to Individual Letter # I7, Paul and Claudia Cook (March 18, 2010)

I7-1: Thank you for your comments. The current General Plan Land Use Map designation for the parcels is Offices with an R-3, Multiple-Family Residence Zone classification. The proposed General Plan Land Use Map amendment for these parcels is to designate them as Office High Density. If Council adopts this land use designation for these parcels, a future implementation action would be to rezone the parcels from R-3, to R-O, Restricted Office Zone that would allow a mix of offices and residential development consistent with existing land use patterns.
April 27, 2010

Mr. Bruce Bartlett, Chair
and Members
Planning Commission
City of Santa Barbara
630 Garden Street
Santa Barbara, California 93101

SUBJECT: COMMENTS ON THE CITY’S DRAFT GENERAL PLAN UPDATE/EIR

Dear Chair Bartlett and Members of the Planning Commission:

This firm, together with Cotton, Shires & Associates and Souter Land Use Consulting, represents Mr. Thomas Felkay, the owner of two legally separate shoreline parcels, with established street access, at 1921 and 1925 El Camino de la Luz ("ECDLL"), Santa Barbara (the “City”). On behalf of our client, we respectfully submit the following preliminary comments on the recently revised draft General Plan Update (dGPU), draft Environmental Impact Report (dEIR), and associated documents.¹

In summary, our client commends Community Development Director Casey, his staff, and consultants for much of the work they have performed to update several General Plan elements and variously amend others. Our client especially supports fair, fact-based, and legally consistent application of economic-environmental sustainability principles to the conservation, use, and reuse of urban private property, public infrastructure, and public access to and along the shoreline. Practical implementation of renewable energy, water conservation and beneficial reuse, alternative transportation, coastal and other natural resource protection measures, and sensitive design, construction, monitoring, and adaptive management constitute vital components necessary to realistically maximize the sustainability of residential housing in the City.

Unfortunately, close reading of the draft GPU (March 18, 2010), dEIR (March 18, 2010), and associated documents has identified an array of errors and omissions that, when applied to our client’s residential parcels (and other similarly situated parcels) in the context of the City’s existing Zoning Code and certified Local Coastal Program, would unfairly and unjustly render them undevelopable, deny their substantial investment-

¹ Due to substantial City delays in producing requested critical documents relating directly to the content of the dGPU and dEIR, our client respectfully reserves his right to supplement these comments at such time as when the City fulfills its requirements pertaining to them, pursuant to the California Public Records Act (Gov’t Code sec. 6250 et seq.) and consistent with the dGPU’s own proposed planning transparency to afford the public, including property owners, “access to the necessary information” to effectively participate in the City’s planning-regulatory processes. (PP 1, PP2, dGPU at 51.)
backed economic reuse, and erect scaffolding for their unconstitutional takings by the City for public open space.

The following comments illustrate and summarize significant fundamental problems of the dGPU and dEIR. Section I, immediately below, states our client’s request for Planning Commission direction for urgently required steps to bring these two documents into compliance with the facts and applicable laws. Section II contains the comments regarding the dGPU and dEIR that form the bases of our client’s requests. Section III addresses the proposed “coastal bluffs and shoreline - ‘area of visual sensitivity’” land use designation land use designation. Section IV address the dGPU’s and dEIR’s constructs for coastal bluff erosion during a time of projected climate change. Section V reviews the “suitable (residential) sites summary.” And, in conclusion, Section VI summarizes these preliminary comments.

I. Request for Planning Commission Direction

1. Correct the factual errors and omissions in the dGPU and dEIR to render them accurate, internally consistent, and complete, and to afford our client and other similarly situated owners a reasonable opportunity for the substantial investment-backed sustainable reuse of their property.

2. Recirculate the revised dGPU and dEIR for public review, consistent with applicable laws and the dGPU’s own policies, prior to final hearing and action/s to allow for full public review of new and/or revised provisions that have only come forward within the past two weeks or that will be made in response to comments on the dGPU and dEIR.

3. Include our client’s parcels and other similarly affected parcels in dGPU Appendix F, Available Land Inventory Table. In the alternative, our client requests the Planning Commission to state in the General Plan Update the specific, documented reasons why the subject parcels, and other similarly affected parcels, should be excluded from Appendix F, and thereon designate, and fund, these parcels for immediate public acquisition, at full fair market value, for public open space.

4. Provide direction to Community Development Department staff to produce in full (e.g., to the General Plan Update web site) all technical documents and analyses upon which preparation of the dGPU and dEIR relied, including all of the documents for which we requested production in our Public Records Act requests ("PRAR’s").

II. Late Changes Require Recirculation

A new “Changes to Policy Preferences Report,” appended to the Planning Commission staff report, April 15, 2010, identifies at least six sets of material changes to the dGPU’s January, 2009 Policies Preference Report, and specified policies, implementing actions, and other measures, since simultaneous publication of the dEIR on March 18, 2010, which analyzed only the 2009 version/s. The April 15, 2010 Staff Report specifically
DALL & ASSOCIATES

acknowledges the lack of a finite project for dEIR analysis, at page 5: “Since that time
[March 18], the process has continued to evolve with a number of more detailed
refinements to the basic Project Description, which are enumerated in Exhibit A,
Changes to the Policy Preference Report.” As a result, recirculation of finite iterations of
both the dGPU and dEIR on it is required to adequately inform the interested publics
and decision-makers prior to City action on them.

III. “Area of Visual Sensitivity: coastal bluffs and shoreline.”

1. The “coastal bluffs and shoreline - ‘area of visual sensitivity’” land use designation is
simply unnecessary. The dGPU Land Use Element, page 62, already contains a
“Shoreline” land use designation that (a) “includes the beach, harbor, bluffs, and
adjacent park areas”, and (b) is specifically mapped as a subcategory of “open
space” on the City of Santa Barbara Draft General Plan Land Use Map at dGPU pages
Pursuant to the adopted City Open Space element, Zoning Code, and certified Local
Coastal Program, no development (other than habitat protective measures or public
access facilities) is permitted on bona-fide coastal bluffs.

2. The mapped depiction of the “coastal bluffs” designation, on dEIR Figure 13.1, in the
area of our client’s subject parcels on the Mesa, reaches landward to beyond the
easterly projection of unnamed Edgewater Way. However, the topography of the wave-
cut escarpment (California regulatory definition of “coastal bluff”), relative to the beach
seaward of the subject parcels, precludes public views from the beach of any area
above elevation c. 55 feet.

3. In addition, dGPU Sustainability-Aesthetics and Visual Resources policy ER 25 and
implementation actions ER 25.1, 25.2, and 25.4 are incomplete, internally inconsistent,
and in parts so ambiguous as to constitute invalid planning provisions. First, ER 25
leaves the core term of art, “important public views and viewpoints,” undefined and
hence its application subjective and potentially arbitrary. Second, the future
documentation, listing, and photo recordation of important public, including “other highly-
valued” views proposed in ER 25.1 underscore that the City has no evidence
whatsoever on the basis of which it can now factually burden the subject parcels above
elevation c. 55, with the proposed open space designation. Third, ER 25.2 makes clear
that the notoriously subjective public scenic view and development criteria it sets forth
are prospective only, and are not identified as having been utilized in crafting the open
space designation on the subject parcels. Fourth, similar to ER 25.2, the scenic view
protection guidelines proposed in ER 25.4 are also prospective only, and are not
identified as having been utilized in crafting the open space designation on the subject
parcels. There is no evidence to support either the subject designation or the proposed
prospective criteria for future designation.
IV. Climate Change and Coastal Bluff Position

The City proposes, in response to quasi-paradigmatic global climate change projections, to require new private development, substantial redevelopment or reuse projects, and in some instances, minor additions, to "estimate the useful life of proposed structures, and, in conjunction with available information about potential hazards attributable to climate change, to (1) incorporate responsive adaption measures in the design, siting, and location of the structures (ER 4), and (2) consider "the potential effects of climate change on bluff retreat for the life of the project (PS 9). To those purposes, the dGPU proposes (3) updating of the Seismic Safety element bluff retreat formula to reflect updated information for the 75-year bluff setback line (dGPU Implementation Action PS 9.1), and (4) in dEIR Figure 18.1, adding three reduced and therefore not-to-scale Coastal Bluff Erosion Hazard Zone vertical aerial maps (dEIR, p. 18-8).

To the extent ascertainable, the City bases its proposed policies, actions, and hazard zoning by dEIR on the Pacific Institute's 2009 sea level rise report, the California Natural Resource Agency's California Climate Adaptation Strategy, the California Climate Change Center's 2009 draft Impacts of Sea Level Rise on the California Coast report, the City's dGPU consultant's quantitative shoreline retreat assessment, and perhaps other studies referenced in dEIR section 25.13. However, among myriad significant deficiencies too numerous to list here, (1) none of these documents to which the dGPU and dEIR cite specifically addresses the El Camino de la Luz subarea within which our client's property is located, (2) none of the studies (including their technical reports) in any manner whatsoever contains professional shoreline, bluff, coastal bluff, or cliff retreat hazards analyses, (3) the 2009 Pacific Institute report itself facially states that its findings and graphics are generalized, not intended for planning-regulatory proceedings, and thereon disclaims any liability for such inappropriate use, and (4) the City's own consultant acknowledges that "State estimates for coastal erosion are not accurate enough to be used for planning purposes and those projected to the years 2050 and 2100 are beyond the planning horizon of Plan Santa Barbara." Notably, the dGPU and dEIR omit even mention, much less analysis, of the City's own recently adopted EIR regarding proposed single family residential development within the area where our client's parcels are located, which identified an average annualized bluff erosion rate of four (4) inches.

The changes proposed in the current documents that could render our client's and similarly situated parcels as undevelopable are premised on conjecture unsupported by facts, historical evidence, or quantitative professional technical analysis, in contravention of findings previously adopted by the City, and should therefore be abandoned.

V. Suitable Single Family Residential Sites Inventory

The dGPU "suitable (residential) sites summary" (Appendix F) is notable for a priori and
almost uniquely applying the City's erroneous, unsupported, and invalid scheme to identify geographically wildly expansive "coastal bluffs" to our client's parcels, by specifically omitting them from that matrix of anticipated new, or reuse, single family housing. Although the City contends that the two subject parcels were omitted because of the pendency of an application to redevelop 1921 ECDLL, that application has been halted since March 2008, and whether or not justification for omitting 1921, would not apply to the second parcel at 1925, or other similarly situated parcels, in any event.

VI. Conclusion

Our client therefore respectfully petitions the Planning Commission to factually correct and complete the dGPU and dEIR, afford our client reasonable use of his parcels, include them in the dGPU available land inventory table Appendix F, give direction that requested documents utilized in the preparation of the dGPU and dEIR be made available to requestors and be posted to City's web site, and recirculate the finite dGPU and dEIR to afford the public, including property owners, a reasonable opportunity to review and comment on these documents.

Thank you for this opportunity to comment on the above-referenced documents and provisions therein. We respectfully request a reasonable amount of time to address the Planning Commission at its scheduled hearing on the dGPU and dEIR on April 28, 2010.

Sincerely yours,

Norbert H. Dall
Consultants to Mr. Thomas Felkay

Stephanie D. Dall

223:2808.270410.1
c: Mr. Thomas Felkay
       Secretary of the Planning Commission
       Mr. Paul Casey
       Mr. John Ledbetter
       Ms. Syndi Souter, Souter Land Use Consulting
       Mr. John Wallace, Cotton, Shires & Associates

Enclosures:
TOPOGRAPHIC SECTIONS A-A', B-B'

Surveyed Coastal Bluff Location, 1925 and 1921 El Camino de La Luz
Santa Barbara, California

COTTON, SHIRES & ASSOCIATES, APRIL, 2010
(3 pages)

1. Location map (aerial)
2. Section A-A’, 1925 El Camino de la Luz
3. Section B-B’, 1921 El Camino de la Luz

Comment Letter to Planning Commission
In re the Draft General Plan Update and draft EIR
By: Dall & Associates, Coastal Consultant to
Mr. Thomas Felkay
April 27, 2010
Response to Individual Letter # I8, Norbert Dall, Dall and Associates (April 27, 2010)

I8-1: Comments noted. The General Plan update is a broad policy document and 20-year long-term plan for development citywide. The focus of this update is to develop a Sustainability Framework for the General Plan and all recommended elements along with a new Land Use Element, Land Use Map, and Housing Element. Updated policies are to be incorporated with other elements that currently exist and other elements will be further updated in the future. Until those elements are developed, the existing elements would be operational along with new policies recommended to be incorporated to those respective elements.

The focus of this update is not to do a qualitative and technical analysis of individual single-family zoned and low-density residential general plan designated parcels such as your client’s. Nor have any single-family zoned parcels been identified for the City to “take” for use as public open space.

Policies and implementation actions in general are measures the City could take to achieve long-term goals, such as preservation and dedications of public open space. Furthermore, the current Open Space Element, adopted in 1973 provides for the protection of “significant open and natural landforms through and around the community.”

The Shoreline is identified in the existing Conservation Element as one of the important areas of open space and visual features. The existing Open Space Element describes the shoreline, harbor, and waterfront areas as key aesthetic assets which provide diverse recreational opportunities and passive enjoyment of the sea, sand, and scenic views. The importance of this resource is reflected by the existing identification of “unique visual sensitivity” on the Scenic Resources Map.

Please refer to the responses of your more than 150 comments you submitted regarding use of your client’s parcel. The General Plan Land Use designation that would apply to El Camino de La Luz is Sub-Urban, Low Density Residential, Maximum 3 dwelling units per acre, consistent with the land use designation that applies to the parcel today.

I8-2: Comment noted.

I8-3: Comment noted. A proposed final Environmental Impact Report and General Plan document will be available for public review prior to certification of the EIR by the Planning Commission and adoption of the General Plan by City Council. Staff has reviewed the proposed changes to the project and the environmental review. Staff has concluded that none of the changes to the project or the environmental review constitute significant new information as that term is defined in CEQA Guideline 15088.5 that would require recirculation of the draft EIR. The proposed revisions to the project description do not result in new significant environmental impacts. Further, these changes would not require the addition of substantially different mitigation measures than were previously identified in the draft EIR. The changes merely clarify or amplify the discussion and analysis contained in the draft EIR. Therefore, recirculation of the revised draft EIR is not required under CEQA.

I8-4: The purpose of the Suitable Sites Inventory is to analyze whether the City’s proposed General Plan residential development potential is adequate to meet the housing needs identified in the 2008 Regional Housing Needs Plan prepared by SBCAG. It is intended to assess whether the City can accommodate the Regional Housing Needs Allocation (RHNA). The Suitable Sites Inventory does not include all developable parcels nor does it need to. The Inventory of itself does not in any way render a parcel unbuildable or eliminate development potential by the fact that it is not on the list.
A number of single-family parcels with slopes in excess of 30% or greater and/or with geologic, biological or other constraints were removed from the database. This is explained beginning on page 289 of the Draft Housing Element.

I8-5: Comment noted.

I8-6: The General Plan Update is a process, with refinements made at each stage, and it is also an iterative process between the Draft General Plan and EIR, as discussed in the State General Plan Guidelines. Numerous opportunities for public comment are afforded throughout the process. Until decision-makers have completed their review and provided input on recommended policies and measures in draft documents, and until the document is adopted by City Council, it may continue to be refined. See response I8-3.

I8-7 (Plan SB GPU): Comment noted. See response I8-1.

I8-8: Comment noted. Figure 13.1 is a 1-inch to 3,000-foot scale, 11 x 17 map intended for citywide display purposes. The map is intended as a general guide to sensitive resources. Its application to individual parcels would be considered on a site-specific basis based on more detailed review of specific site characteristics. However, it is inaccurate to characterize elevations above 55 feet as being precluded from public view. The shoreline is not a static feature and views available from the beach along this section of the City’s coast vary substantially depending upon the viewing location, tides, etc. For example, beach goers can view far more extensive areas of the bluffs and bluff top features such as trees and structures from points along this section of coastline. Views of the bluff face and bluff top features are also generally far more prevalent during the dozens of minus tides which greatly affect the width of the beach available for public use and the angle of public views of the bluff face and bluff top features. Views of the bluff face also consider offshore users, including several popular surf breaks along the Mesa bluffs, as well as offshore boaters and kayakers, etc.

I8-9 (Plan SB GPU): Comment noted. See response I8-1.

I8-10: Comment noted. The EIR primarily addresses sea cliff retreat issues in Section 8, Geologic Hazards and provides a more general long-term disclosure of bluff retreat issues as they relate to global climate change in Section 18.

Section 8.1.5 (pages 8-10 to 8-11) provides relatively detailed discussion of General Plan-level issues along the City’s roughly four miles of coastal bluffs, including a discussion of applicable City Local Coastal Program and State Coastal Act guidance. This includes a brief discussion of the findings of a recent City-prepared study in support of an update to the City Master Environmental Assessment (MEA) which indicates that overall guidelines for annual generalized bluff retreat rates should be increased to 12 inches per year from the current annual average mandated by policy of 8 inches per year.

The methodology outlined by Johnsson (2002) was generally utilized for the generation of a proposed sea cliff retreat line (SCRL) within a revised draft MEA, including steps to identify the top bluff edge; identify the general global stability conditions; and identify long-term erosion rates over a period of at least 50 years, evaluate short-term or episodic erosion rates; and apply a safety factor for setbacks if necessary. The global slope stability of sea cliffs along the Santa Barbara coastline was qualitatively evaluated at select locations along the project area coastline. The evaluation also was based on professional and research experience and a review of literature of mapped landslides along the Santa Barbara coastline. Detailed quantitative global slope stability evaluation was beyond the scope of this study to identify a regional SCRL. Site-specific quantitative evaluations may find that global slope stability may be less than or greater than the assumed global bluff instability.
# I8, Norbert Dall, Dall and Associates (Continued)

zone identified in this study. The highest erosion or retreat rate documented by Norris (1986, personal communication 2006) for sea cliffs within the City boundaries was approximately 12 inches per year. However, long-term erosion rates are on average 8 inches per year.

Additional sea cliff setback due to the effect of erosion on the sea cliff was calculated by multiplying the design life (75 years) by the identified documented highest episodic erosion rate (12 inches per year). Because rates of sea cliff erosion may translate along the coast (rate of erosion moves from littoral cell to another), the highest (most conservative) documented rate of sea cliff erosion (12 inches per year) has been utilized for generating the sea cliff retreat line.

This study was prepared by licensed geologist and was also peer reviewed by additional licensed geologists. Therefore, its utilization as a basis for CEQA analysis and for programmatic level mitigation measures within an EIR is both supported by sufficient evidence and consistent with CEQA mandates to employ a reasonable worst-case analysis and identify mitigation measures required to reduce any impacts identified.

Further, as explicitly stated in adopted City policy and in mitigation measure MM GEO-1, the use of a revised figure of 12 inches per year to determine the overall 75 year retreat line is to be used to screen individual projects to determine which are required to prepare project specific analysis. Further, this proposed amendment to the 75-year retreat line does not directly account for the newest, albeit preliminary information on the potential effects of sea level rise on bluff retreat as discussed below.

I8-11: Comment noted. As discussed above, Section 8 of the EIR addresses sea cliff retreat and designs proposed mitigation measures based on a recently prepared City-specific qualitative study of overall bluff retreat, not that of individual parcels or even particular streets. However, as required by recent amendments to CEQA, the EIR also discloses the potential longer-term implications of accelerated coastal bluff retreat. These studies, as endorsed by the State of California, constitute the most current available information on the possible implications of accelerated bluff retreat upon coastal properties in the City of Santa Barbara. However, the EIR is careful to characterize this data as general in nature and as such, it is provided in the interest of full disclosure and to meet State requirements that such potential climate change hazards be disclosed. The impact analysis in Section 8 along with the currently required mitigation is based on a technical analysis of historic bluff retreat and applies a conservation recommendation for setbacks (based on 12 inches per year).

As such, it would be inappropriate for the City to alter or abandon the EIR analysis as suggested.

I8-12 (Plan SB GPU): Comment noted. See response I8-1.

I8-13: Comment noted. See response I8-4.

I8-14: Comment noted.
Dear John,

Attached below please find our technical comments, in pdf and on behalf of our client Thomas Felkay, regarding:

1. City's draft General Plan Update (March 18, 2010), and
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<td>1</td>
<td>51</td>
<td>Information Access</td>
<td>PP1: The public shall have access to the necessary information and procedural understanding to participate in decisions that affect it. The bulk, organization, omissions, and lack of a search engine for electronic access to the CD iteration makes the unitary dGPU distinctly user unfriendly. City's decision processes are sometimes opaque (e.g., use of the consent calendar when there is public objection) and detrimental to public participation and/or informed decision-making.</td>
<td>1.1. Provide the dGPU on CD, and on the City's web site, w/ a Mac- (as well as PC-) compatible key word search engine. 1.2. The dGPU should be written in plain American English, be available in Spanish and other languages spoken in the City and its sphere of influence, and should avoid ambiguities and planning jargon (or clearly define its meaning). 1.3. Embed links in the dGPU on CD and on the City's web site to all referenced complete documents. (The same procedure should apply to all documents referenced in the companion dEIR on the dGPU.) 1.4. Promptly post all written comments, when received, and any written City responses to them, on City's web site. 1.5. Provide for public hearing and public decision-maker consideration of all comments received on the dGPU and on all implementing actions, including, but not limited to, when a matter is on the consent calendar. 1.6. City staff should promptly, upon receipt, transmit copies (in paper or electronic format) of all comments received on a planning or regulatory document to City decision-makers.</td>
<td>1.1. Provide the dGPU on CD, and on the City's web site, w/ a Mac- (as well as PC-) compatible key word search engine. 1.2. The dGPU should be written in plain American English, be available in Spanish and other languages spoken in the City and its sphere of influence, and should avoid ambiguities and planning jargon (or clearly define its meaning). 1.3. Embed links in the dGPU on CD and on the City's web site to all referenced complete documents. (The same procedure should apply to all documents referenced in the companion dEIR on the dGPU.) 1.4. Promptly post all written comments, when received, and any written City responses to them, on City's web site. 1.5. Provide for public hearing and public decision-maker consideration of all comments received on the dGPU and on all implementing actions, including, but not limited to, when a matter is on the consent calendar. 1.6. City staff should promptly, upon receipt, transmit copies (in paper or electronic format) of all comments received on a planning or regulatory document to City decision-makers.</td>
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### TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 16, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA

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<td>2</td>
<td>51</td>
<td>Public Participation</td>
<td>PP2: Encourage widest possible citizen participation in local decision-making by (a) enabling participation in planning by minorities and others unfamiliar with City procedures, and (b) maximizing participation opportunities through evening meetings.</td>
<td>• Broad and effective public participation in City's planning and related regulatory processes is not only limited for minorities. City's decision-making procedures are not posted in a readily identifiable, accessible, or understandable manner. &lt;br&gt; • Distribution/notice availability of documents and public participation modes may be as important as daytime of meetings to maximize participation.</td>
<td>2.1. The dGPU should contain a fully articulated methodology for its preparation, to maximize public understanding and effective participation in land use decision-making, while concurrently protecting stakeholders' due process. &lt;br&gt; 2.2. The dGPU should provide for interactive public participation in Council, board, and commission meetings by teleconferencing. &lt;br&gt; 2.3. The dGPU should update Council Resolution 08-045 to explicitly provide for consideration of, and responses to, written comments from the public by decision-makers and staff, as applicable.</td>
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<td>3</td>
<td>53</td>
<td>Geographic Jurisdiction</td>
<td>R1: expand City's sphere to include the eastern Goleta Valley  &lt;br&gt; R2: identifies resource capacity, fiscal, and land use planning/consistency thresholds for annexations  &lt;br&gt; R3: identifies priority annexation areas</td>
<td>• The City apparently does not know the location of its seaward corporate boundary.  &lt;br&gt; • The dGPU proceeds from the existing organizational public governance structure as a given, without considering potentially environmentally preferred (lower impact) and also fiscally beneficial regional alternatives.</td>
<td>3.1. The dGPU should accurately describe, and henceon map, the location of City’s seaward corporate boundary on all maps that include City’s aquatic (ocean) jurisdiction. &lt;br&gt; 3.2. The dGPU should address basic structural alternatives, including but not limited to city-county or functional services consolidation, utilization of adopted/approved/fully transparent NGO’s to perform services, creation and maintenance of a broadly inclusive civic culture, and consistency transparent governance, to enhance functional/ systemic environmental and community economic-fiscal sustainability.</td>
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<td>4</td>
<td>58</td>
<td>Sustainable development</td>
<td>- Various ways to characterize the dGPU  &lt;br&gt; - Defined, after Brundtland/World Commission on Environment and Economy, “Our Common Future” (1987)</td>
<td>• The generalized definition in the dGPU and the illustrative characterizations of sustainability lack specific consistency, clear terms (e.g., “small town character,” “community character,” “localized planning,” “perpetuity”).</td>
<td>4.1. Prepare a unified, clear, consistent definition of the concept of “sustainability” for use in the dGPU.  &lt;br&gt; 4.2. Identify quantified indicators in the dGPU for sustainability performance, measurement, and accountability.</td>
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<td>5</td>
<td>62</td>
<td>Open Space</td>
<td>This designation consists of 1800 acres of natural open space, parkland, and other recreational facilities in the Shoreline, Parks, Creeks, and Goleta Slough Natural Reserve categories. &quot;Other open space areas include recreational facilities, hillsides, as well as private open spaces provided as part of the development of private land uses. The Open Space Element [OSE] and Environmental Resources Element [ERE] help protect the character of Santa Barbara through conserving significant open space and natural landforms.&quot;</td>
<td>No definition of key terms: &quot;natural open space,&quot; &quot;natural landforms,&quot; &quot;hillsides,&quot; &quot;private open space provided as part of the development of private land uses,&quot; or &quot;significant open space.&quot;</td>
<td>5.1. What are the bases/criteria for key terms, boundaries?  5.2. Define the key terms in this provision.  5.3. Specify and link relevant OSE policies.  5.4. Specify and link relevant ERE policies.  5.5. Locate draft GP map to the start of the Land Use Designations section of the dGPU (e.g., at or about page 82). In immediate proximity to the definition of the designations, for clarity, usability.  5.6. In the electronic version of the dGPU, provide a link to a full size (zoomable, high resolution, parcel-specific) draft GP map iteration where reference to first occurs in this section (page 82).  5.7. Depict Assessor's parcel map lines on each dGPU map to clarify land use designation, policy, and applicability at the core land use spatial level.</td>
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<td>6</td>
<td>62</td>
<td>Land use designation: Shoreline</td>
<td>This area [of the City’s most significant and defining public open spaces] includes the beach, harbor, bluffs, and adjacent park areas. The City’s Local Coastal Plan and Harbor Master Plan dictate key land use policies for this area.&quot;</td>
<td>The shoreline designation applies to public open space, but on its face not to bluffs in private open space. The seaward and landward edges of the Shoreline designation are undefined, hence ambiguous and unsuitable as a land use designation.</td>
<td>6.1. Reconcile this land use designation, particularly the &quot;bluffs&quot; subdesignation, with other related dGPU nomenclature (coastal bluff, sea cliff).  6.2. Define the seaward and landward extent (boundaries), respectively, of the Shoreline land use designation.</td>
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<td>7</td>
<td>63</td>
<td>Hillside protection, open space conservation, development on steep slopes</td>
<td>&quot;ERE policies specifically address hillside protection, conservation of open space, discourage development in high fire areas, and limit development on steep slopes.&quot;</td>
<td>The dGPU does not identify, or reference, these specific policies.</td>
<td>7.1. Specifically identify, or link in the electronic dGPU iteration, the ERE policies referenced here.</td>
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<td>8</td>
<td>78</td>
<td>Residential Buildout: Suitable Sites Inventory</td>
<td>The Suitable Sites Inventory (dGPU Appendix F) is the basis for the draft 2010 Housing Element’s estimate (2007-2014) of a 9,099 du build-out/4,803 new residential units capacity.</td>
<td>dGPU Appendix F (Available Land Inventory Table &amp; Sites Map, 8p 6105 ft.) specifically omits APN’s 045-100-023 (1921 ECDLL) and 45-100-024 (1925 ECDLL), because of pending development applications (J. Ledbetter, em pers. com.). As of the date of dGPU publication (18 Mar 2010), there was no active application for any entitlement involving 1921 ECDLL before the City. As of the date of dGPU publication (18 Mar 2010), there was no application for any entitlement involving 1925 ECDLL before the City.</td>
<td>Update dGPU Appendix F to specifically include and address APN’s 045-100-023 (1921 ECDLL) and 45-100-024 (1925 ECDLL).</td>
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<td>9</td>
<td>76</td>
<td>Adaptive Management Program</td>
<td>“Objectives that are measurable restatements of the General Plan goals have been prepared for the AMP.”</td>
<td>The dGPU contains no identifiable list of quantifiable standards for the AMP.</td>
<td>Present the quantifiable AMP standards in the dGPU.</td>
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</table>
### Technical Analysis, Effects of Draft GPU (March 18, 2010) on Sustainable Environmental-Economic Reuse of the Legally Separate Parcels at 1921 and 1925 El Camino de la Luz, Santa Barbara, California.

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<td>10</td>
<td>78</td>
<td>Zoning Ordinance: District boundaries</td>
<td>Amendments to the existing zoning ordinance will be necessary to make it consistent with the land use designations and policies adopted as part of the Plan Santa Barbara process.*</td>
<td>The Zoning Ordinance map (ZC page 581.17) that includes APN's 045-100-023 (1921 ECDLL) and 45-100-024 (1925 ECDLL) maps them within the E-3/SD9 district, and further depicts an unidentified zoning district seaward of the southerly property lines of these two parcels. The draft GP land use map, at p. 153-154, maps an area, different from that on ZC page 516.17, as Open Space: Shoreline, while (1) the Draft EIR on the dGPU, at Fig. 3.2, presents a &quot;Draft Plan Santa Barbara General Plan Map&quot;, at pp. 3-9/3-10, locates an &quot;Open Space: Shoreline*&quot; designation in yet a specifically different area, and (2) Draft EIR on the dGPU, at Fig. 13.1, &quot;Visual Resources,&quot; maps an open space &quot;Area of Visual Sensitivity: coastal bluffs and shoreline&quot; that is again different from all of the above mapped designations/zoning map district. The dGPU land use map has reportedly been prepared on a base map that contains parcel lines (B. Weiss, testimony before HLC, April 13, 2010), but the dGPU land use map presented in the dGPU omits such directly relevant data.</td>
<td>10.1. The dGPU reference to Plan Santa Barbara (rather than dGPU) land use designations and policies impermissibly imports criteria and mapped representations, without prior identification and analysis of substantial evidence of potential significant effects from zoning ordinance/district consistent reuse of 1921/1925 ECDLL, and this reference should therefore be deleted from the updated GP. 10.2. The dGPU land use map should clearly identify all land use designations, and their boundaries. 10.3. The dGPU land use map should reflect parcel lines.</td>
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### Technical Analysis, Effects of Draft GPU (March 18, 2010) on Sustainable Environmental-Economic Reuse of Parcels at 1921 and 1925 El Camino de la Luz, Santa Barbara

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<tr>
<td>11</td>
<td>78</td>
<td>Project Compatibility Ordinance (PCO)</td>
<td>In unspecified certain neighborhood areas of the City, it requires analysis of possible size, bulk, scale and height issues with any proposed development and to help preserve the area’s historic character.</td>
<td>The scope of the referenced ordinance, which is not posted to City’s website or readily identifiable in the MC or ZC, is unclear; does the PCO apply to residential uses, in the E-3 district?</td>
<td>11.1. Clarify the applicability and geographic scope of the PCO.</td>
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<td>The concept “possible size, etc. issues” is ambiguous.</td>
<td>11.2. Clearly define its key operative terms.</td>
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<td>The concept “area’s historic character” - is a new geographic area specification or time (since European settlement?) - is ambiguous.</td>
<td>11.3. Is the definition of “development” that contained in PRC sec 50118, or some other meaning?</td>
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<td>12</td>
<td>79</td>
<td>Neighborhood Preservation Ordinance (NPOA)</td>
<td>The City Council on May 4, 2010 adopted amendments to the NPOA (NPOA) that, among other things, require (a) a 3-star sustainability rating from the NGO’s local contractor’s association “Built Green” program (or other program), and (b) establish entitlements expiration dates for SFR’s in the coastal zone without tolling of time for Coastal Commission regulatory delays.</td>
<td>Council’s NPOA adoption action occurred without requisite prior CEQA compliance.</td>
<td>12.1. The specific flexibility in application of standards provisions in the NPOA disqualifies it from being exempted pursuant to CEQA guidelines.</td>
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<td>The SBCC sustainability rating program lacks critical transparency to protect environmental resources, requires membership in a private organization (or payment of an enlarged fee) and thus is discriminatory against non-members, and operates on the basis of unpublished and unadopted (by Council) criteria.</td>
<td>12.2. The GPU should provide for full transparency of all public agency functions that the City elects to delegate to NGO’s.</td>
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<td>The NPOA contains no specific identification of other sustainability rating programs that meet City’s standards (which are also not specified)</td>
<td>12.3. The GPU should contain the full array of alternative sustainability reviews that acceptable to the City.</td>
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<td>The regulatory expirations established by the NPOA are incompatible with Coastal Commission practices and therefore discriminate against permittees in the coastal zone/coastal permit appeal zone.</td>
<td>12.4. The GPU should harmonize all applicable CEQA, PSA, and Coastal Act appeal schedules to increase regulatory efficiency and avoid bureaucratic delays in processing discretionary development permit applications, condition compliance, and ministerial permit issuance.</td>
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<td>Some NPOA substantive standards are inconsistent with GPU policies, to the detriment of the physical environment and its sustainability. (See our comment letter to Council of May 4, 2010 thereon.)</td>
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### TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF THE LEGALLY SEPARATE PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA, CALIFORNIA.

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| 13   | 79   | Pedestrian paths | City's Pedestrian Master Plan |  - Does an adopted Ped. Master Plan exist, beyond the Circulation Element (CE) Ch 5 provisions?  
    - What specific provisions for walkability to/from ECDLL relative to public, commercial, recreational and other facilities does the Ped. Master Plan contain to (a) identify current impediments, (b) systematically address them, and (c) capitalize their improvement and maintenance? | 13.1. Provide a link to the Ped. Master Plan (if it has been adopted) where it is referenced in the GPU.  
13.2. Give priority to enlarging City sidewalks to a minimum 6 feet width, removing obstructions, and regular maintenance. |
| 14   | 79   | Design guidelines | (a) Guidelines as Regulatory tools  
(b) Architectural Board of Review Guidelines  
(c) Outdoor Lighting Design Guidelines  
(d) Pedestrian Master Plan  
(e) Single Family Residence Design Guidelines  
(f) Urban Design Guidelines  
(g) Future design guidelines to “more effectively control” structure size |  - Are these guidelines directory or mandatory?  
- Citation(s) to ZC?  
- No citation to location in MC for (b), (d), (e), (f)  
- Was PDM adopted by Council in 2007?  
- Findings?  
- What “future” structural size guidelines? | 14.1. Clarify the regulatory status of guidelines in the GPU, including their specific implementation flexibility (feasibility, etc.).  
14.2. Provide a link in the GPU to all referenced guidelines.  
14.3. Post all guidelines referenced in the GPU on-line.  
14.4. Identify (post, link) all of City’s presently contemplated, in preparation, etc. prospective structure size control guidelines. |
| 15   | 80   | Hillside design district | Spatial boundaries of district on Mesa |  - Delineation basis? (In Council adoption findings?) | 15.1. Reference or restate delineation bases (criteria) for Hillside design district boundaries along ECDLL, if in Council findings to adopt district boundaries, ordinance. |
| 16   | 82   | Santa Barbara Airport | Airport Specific Plan (1998) identifies appropriate land uses and locations within 228.2 acre Airport property.  
- The PI Sea Level Rise inundation map for the Goleta quadrangle projects substantial inundation of this regionally significant infrastructure, which is not addressed as to probability of occurrence or potential feasible mitigation in the GPU. | 15.1. Reference or restate delineation bases (criteria) for Hillside design district boundaries along ECDLL, if in Council findings to adopt district boundaries, ordinance.  
16.1. Address the sustainability of Santa Barbara Airport through the GPU planning horizon (2030), and mid- and long-term planning horizons (2050, 2100). |
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<td>17</td>
<td>83</td>
<td>Desired neighborhood qualities</td>
<td>Include, inter alia, &quot;pedestrian friendly and safe environment&quot; and &quot;enjoyment of City’s natural features, scenic beauties, and views&quot; including beaches, ocean, mountains, creeks, etc.</td>
<td>• Hillside and coastal bluff/sea cliff landform stability and MTLS infrastructure stability are notably omitted from ECDLL area quality desiderata listed here in the dGPU, notwithstanding the relevant experiences in the area.</td>
<td>17.1. The &quot;community input&quot; for preparation of the dGPU should not be limited to the point in time in 2007 referenced in the dGPU, but inclusively reflect, and address, the body of information and objectives received by the City since preparation of the last comprehensive GP, in 1994.</td>
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| 18   | 84   | Neighborhood qualities        | "The Land Use Element goals, policies, and implementation actions closely reflect these desired neighborhood qualities and strive to further enhance existing neighborhoods in a sustainable manner." | • The dGPU notably omits factual description or quantitative analysis of ECDLL area hillside and coastal bluff/sea cliff landform stability and MTLS infrastructure stability.  
• The dGPU projects, and thereon would legislate, a massive loss of the ECDLL area neighborhood seaward of ECDLL, or alternatively leaves it inexplicably and inappropriately unaddressed. | 18.1. The dGPU should contain, or reference and be linked to, a fact-based description and quantified analysis of the ECDLL area neighborhood, among others, as the basis for dGPU goals, policies, and implementing actions.  
18.2. The dGPU should specifically not abandon private property and public infrastructure seaward of, or including, ECDLL to abandonment and loss under the guise of managed retreat, but rather provide for a Coastal Act- and other statutes-consistent suite of adaptive enhancement, restoration, and management actions to provide for the maximally feasible sustainability of these neighborhood and community assets. |
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<td>19</td>
<td>84</td>
<td>Neighborhood issues</td>
<td>a. &quot;City policies discourage hillside grading on steep slopes given geologic constraints underlying hillside development such as erosion, landslides, and drainage.&quot; b. &quot;Other hillside development issues include building size, bulk, and scale compatibility, as well as the loss of private views of the hillsides or ocean.&quot; c. City has adopted &quot;special Hillside Design Guidelines&quot;.</td>
<td>• Does this provision apply to regrading of slopes and the extent, without subdrains, manufactured by the City in 1978 at 1921-1925 ECDLL? • Where the City has approved one or more SFR's that are relatively larger than other, older, SFR's on similarly sized parcels along a block, how does the City propose to assure equal treatment in the context of the identified hillside development issues? • Does the City propose to legislate any private view protection standards through the dGPU? • What are the City's &quot;special Hillside Design Guidelines&quot;?</td>
<td>19.1. The dGPU should identify manufactured slopes that have been previously graded, including those graded by the City (or its agents) at 1921 and 1927 ECDLL in 1978. 19.2. The dGPU should identify (list) manufactured slopes that were created without either both geotechnical reports (soil reports, geologic reports) and/or requisite entitlements (coastal permit, grading permit, building permit). 19.3. dGPU policies should differentiate between proposed new grading to address previous grading without geotechnical, soil, or geologic reports, or without requisite entitlements and new grading for other purposes. 19.4. The dGPU should further differentiate between grading, including grading volumes, for deep foundations pursuant to modern geotechnical reports, and cutting/living for shallow foundations. 19.5. The dGPU should contain a link (electronic version) or a citation (paper version) to the referenced &quot;special Hillside Design Guidelines&quot;.</td>
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<td>20</td>
<td>84</td>
<td>Single family neighborhoods</td>
<td>&quot;Single family neighborhoods are expected to change very little over the next 20 years&quot;.</td>
<td>• The dGPU finding is factually inconsistent with the mapped coastal bluff retreat projections and inundation maps contained in the dEIR. • Given pent-up demand for interior and exterior living space in relation to household income, and for optimized views from SFR's of the ocean and other scenic areas, on what basis does this finding rest?</td>
<td>20.1. The dGPU should be revised to be fact-based, or in the alternative to indicate confidence levels in projections (ranges) of shoreline/coastal bluff retreat, effects on infrastructure, and inundation, to serve as a basis for any finding/s regarding SFR neighborhood sustainability.</td>
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**TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA**

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<td>21</td>
<td>86</td>
<td>Mesa concept plan</td>
<td>(T)o strengthen the Mesa as a ‘village’ through greater self-sufficiency and sustainability.</td>
<td>• The dGPU at p. 89 contains a one-page summary of a &quot;Mesa Village&quot;* Vision for a sustainable neighborhood,&quot; but no details (goals, provisions, base or map.</td>
<td>21.1. The dGPU should contain a link (electronic versions) or reference (paper version) to the referenced 2007 Mesa concept plan. 21.2. The dGPU should specifically analyze the referenced 2007 concept plan and identify components that are included in the dGPU, subject to further study, and other components that may have been omitted but should now be addressed to enhance the sustainability of the area.</td>
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| 22   | 86   | Sustainable neighborhoods | a. Reference to the “sustainable neighborhood planning policy” that addresses preservation, sense of place, healthy living, accessibility, carbon footprint reduction.  
b. SNP’s should be developed to best suit each neighborhood or district. | • The dGPU omits a specific citation or link to this policy, LG 17, dGPU p. 150, which encourages preparation of Sustainable Neighborhood Plans (SNP’s).  
• The list of enumerated SNP subjects/ 
objectives is both incomplete (omits ) and inconsistent with other provisions of the dGPU (projected loss of area, shoreline retreat, loss of key infrastructure [e.g., MLT/S]).  
• The term “district” is undefined in the dGPU.  
• In addition to neighborhood desiderata, each neighborhood plan necessarily, especially but not limited to the coastal zone, must also address aspects/issues of greater-than-subareal significance and be consistent with the certified LCP. | 22.1. Policy LG 17 is addressed below. 22.2. The dGPU should (a) specifically identify the referenced policy/implementation action, and (b) contain a link (electronic versions) or reference (paper version) to it, as finalized. 22.3. The dGPU should identify a methodology for preparation of the Mesa SNP. 22.4. The dGPU should identify a specific funding source for preparation of the Mesa SNP. 22.5. The dGPU (or revised and recirculated dEIR) should contain a detailed and comprehensive goals, policies, and implementing actions matrix to identify specific consistencies and inconsistencies, both internally and with applicable supra-area standards (e.g., cert. LCP). 22.6. The prospect of future SNP's should not serve to delay or impede the reuse of existing parcels designated and zoned for SFR's. |
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| 23   | 89   | Mesa Village | "From good to great." | **Analysis:**
- The summarized objective to make the Mesa a great subarea of the City is laudable, but
  awkward in all manners of interconnected urban life (e.g., arts and leisure,
  transportation, communications, public governance, etc.) is both extremely difficult
  and may be counterproductive from a land use perspective.

| 24   | 118  | Sub-Urban Low and Medium Density Neighborhood-West Mesa | a. southern boundary: Pacific Ocean
b. western boundary: Arroyo Beach park
c. percentiles
d. neighborhood map | **Analysis:**
- Does the dGPU hereby signify that the beach along the toe of coastal bluff is not a part of the West Mesa neighborhood?
- Is the reference to Arroyo Burro Beach park?
- On what basis (bases) were the percentiles in column 3 calculated?
- The West Mesa neighborhood map is omitted.

**Recommendation/s**
- 23.1. Coordinated public and private stakeholder enhancement of Cliff Drive as an attractively landscaped multi-modal boulevard, rather than a slow express way, would substantially contribute to the Mesa's sustainability.
- 24.1. The dGPU should be both consistent with the southerly corporate boundary along the West Mesa, and be internally consistent as to its location
- 24.2. The beach along the toe of the West Mesa see cliff coastal bluff should be included in the West Mesa neighborhood
- 24.3. The acreage/size portion bases for the percentiles in Column 3 should be shown.
- 24.4. The West Mesa neighborhood map should be a linked zoomable map, with accurate parcel lines and the location of major in-ground and surface infrastructure shown.
- 24.5. The West Mesa neighborhood map should also either (a) contain the location both of the delineated State of California coastal zone boundary [PRC sec. 30103] and the post-LOP certification permit appeal boundary, or (b) a link to these maps in the electronic versions.
- 24.6. The last paragraph of text in column 2 requires noun-verb agreement (i.e., La Mesa Park and Douglas Family Preserve are located...).
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<td>25</td>
<td>141</td>
<td>Resource allocation</td>
<td>&quot;Achieve a balance in the amount, location, and type of growth within the</td>
<td>* Does this goal apply to the residential reuse of previously developed parcels, as at 1921 and 1925 ECDLL?</td>
<td>25.1. Clarify the applicability of this goal, and its individual component parts,</td>
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<td>context of available resources including water, energy, food,</td>
<td>* How does the City propose to balance &quot;available food&quot; with housing?</td>
<td>including specifically whether the City, in implementing the GP as it may be</td>
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<td>housing, and transportation.&quot;</td>
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<td>updated for the 2010-2030 planning period, will acquire private parcels that</td>
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<td>it deems not to be (re) developable pursuant to this goal.</td>
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<td>28</td>
<td>141</td>
<td>Small town character</td>
<td>Maintain it as a unique and desirable place to live, work, and visit.</td>
<td>* The terms &quot;Small town character,&quot; &quot;unique,&quot; and &quot;desirable&quot; are specifically or even fully conceptually undefined in the dGPU and thus, facially, not a goal capable of implementation through dGPU policies or implementing actions.</td>
<td>28.1. The dGPU should with specificity, consistency, and clarity define and use</td>
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<td>all of its key terms, including &quot;Small town character,&quot; &quot;unique,&quot; and &quot;desirable,&quot; etc.</td>
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<td>27</td>
<td>141</td>
<td>Design</td>
<td>&quot;Protect and enhance the community's character with appropriately sized</td>
<td>* The terms &quot;community's character,&quot; &quot;appropriately sized and scaled buildings,&quot; &quot;usable and well-located open space,&quot; and &quot;abundant, sustainable landscaping.&quot; are undefined in the dGPU, and have plural and in parts inconsistent meanings.</td>
<td>27.1. Define &quot;community character&quot;.</td>
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<td>and scaled buildings; a walkable town; usable and well-located open space;</td>
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<td>27.2. Define the threshold term &quot;appropriate&quot;</td>
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<td>and abundant, sustainable landscaping.&quot;</td>
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<td>27.3. Determine whether the term &quot;usable and well-located open space&quot; apply to</td>
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<td>private open space, e.g., in the coastal zone seaward of the first continuous</td>
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<td>public road where the Coastal Act’s public access and recreation policies provide an additional standard of review to that of the cert. LCP and updated GP.</td>
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<td>27.4. Determine the relationship, in the City’s substantially horticulturally</td>
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<td>landscaped areas, of the goal of “abundant” landscaping with its sustainability.</td>
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<td>Restoration plantings, generally, with locally-regionally native vegetation</td>
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<td>should be required, with a long-term removal strategy for especially highly</td>
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<td>flammable non-native and invasive exotic species.</td>
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| 28   | 141  | Neighborhoods | Maintain and enhance neighborhoods with improved connectivity to daily necessities, including limited commercial activity, transit, and open spaces. | - What does "improved connectivity" in the context of "necessity" mean?  
  - What is "limited commercial activity," in the context of 2010 commerce, e.g., on the Mesa?  
  - What does "improved connectivity to open spaces" mean, e.g., on the Mesa? | 28.1. The dGPU should clearly define, and consistently use, its operational terms, including where they inform dGPU goals. |
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<td>29</td>
<td>141</td>
<td>Public health</td>
<td>&quot;Improve public health through community design and location of resources.&quot;</td>
<td>The list of primary factors directly related to public health here is too limited, and in parts internally inconsistent, given the City's present and recent performance, to protect the physical environment from potentially significant direct, indirect, and cumulative adverse effects, including, but not limited to: antiquated, falling, or otherwise insufficient public infrastructure, including wastewater and directed and controlled stormwater runoff to the slopes of coastal bluffs; discharge of incompletely treated sewage to the nearshore marine and beach environment and biota that utilize it; alterations of and management limitations to groundwater flow; substantial precension of economic reuse of sloping parcels previously graded by the City; insufficient funding to maintain public infrastructure, failure of which contributes to sandform destabilization; degraded ambient air quality, including from nearshore and OCS sources.</td>
<td>29.1. The dGPU should identify, and address, the materials the City buried and graded at 1921 and 1925 ECDLL during 1974, including specifically any materials that may have contained toxins, given the dGPU’s projections of shoreline retreat during the 20-year planning period and to year 2100. 29.2. The dGPU should identify, and address, the reasonably potential effects on public health from the projected Mesa coastal bluff failures during the planning period and through year 2100, specifically on beach recreational safety, nearshore water quality, and prospective failure of the MLTS. 29.3. The dGPU should identify, and address, the distribution of toxins associated with raw and treated wastewater discharges, to the terrestrial, creeks, and aquatic environments, from the MLTS and the El Estero WWTP. 29.4. The dGPU should identify, and address, the direct and cumulative effects of concentrated and directed stormwater discharge pipes and related facilities on the Mesa sea cliffs/coastal bluffs, beach sands, and nearshore water quality and biota. 29.5. The dGPU should specify goals to address, through regional and supra-regional programs, the achievement and maintenance of all ambient air quality standards, including but not limited to State ldeals and OCS sources.</td>
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## TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF THE LEGALLY SEPARATE PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA, CALIFORNIA.

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| 30   | 141  | Mobility| "Apply land use planning tools and strategies that support the City’s mobility."
<p>|      |      |         |             |          | 30.1. The dGPU should temporally, spatially, and systematically specify goals for mobility, and relate them directly to the principal factors that control mobility during the planning period. |
| 31   | 141-142 | Foundational dGPU | The organization of the draft GPU Land Use Element Growth Management and Resource Allocation policies moves the recognized important affordable housing priority policy LG1, and non-residential growth limitation policy LG2, ahead of the curiously abrogated foundational sustainability policy LG3. | 30.2. The dGPU should identify specific mobility goals, in the context of a substantive regulatory reward and penalties system, to guide and achieve the dGPU's laudable zero emissions objective. |
|      |      | sustainability policy | A fact-based sustainability policy constitutes the necessary foundation for the dGPU; without it, the dGPU components lack internal consistency, transparency, and the platform for objective implementation. Policies LG1, LG2, and LG3 are addressed below. | 30.3. The dGPU should specifically address the sustainability, in light of its projections, of critical mobility infrastructure that serves the City (and region), including but not limited to optic cable routes, US 101, the erstwhile Southern Pacific (now Union Pacific) railroad facilities, the Harbor, and Santa Barbara Airport. |
|      |      |         |             | 31.1. An inclusive foundational sustainability policy that applies to all actions controlled by, or pursuant to, the dGPU, should succeed all other Land Use Element policies. |
|      |      |         |             | 31.2. Consideration should be given to augmenting, clarifying, and relocating Policy LG3, Living within Resources, to serve as that foundational dGPU policy that informs both content and implementation of all other subsequent dGPU provisions. |</p>
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<td>32</td>
<td>141</td>
<td>Affordably housing resource priority allocation</td>
<td>&quot;This area [of the City's most significant and defining public open spaces] includes the beach, harbor, bluffs, and adjacent park areas... The City's Local Coastal Plan and Harbor Master Plan dictate key land use policies for this area.&quot;</td>
<td>- The resource allocation priority is laudable; however, the qualification (&quot;available&quot;) is undefined and hence problematic as an objectively implementable dGPU goal. The title of Policy LG1, &quot;Resource Allocation Priority,&quot; is overly broad, given the subject matter.</td>
<td>32.1. Provide for internal dGPU consistency in providing for affordable housing, including (in the face of the demise of the Redevelopment Agency) especially through incentives for private production of affordable housing, including through comprehensively encouraging rather than discouraging below market-rate secondary units. 32.2. Define the term &quot;availability&quot; as used in LG1 in categorical or conceptual terms, with clarifications/specifications in the implementing actions here and in the HE. 32.3. Clarify the LG1 title to apply to affordable housing, e.g.: &quot;Affordable Housing Priority Resource Allocation.&quot;</td>
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<td>33</td>
<td>142</td>
<td>Living within Resources</td>
<td>Monitor new development, through a comprehensive Adaptive Management Program, to ensure that we are living within our resources.&quot; (LG3)</td>
<td>The key terms &quot;resources,&quot; &quot;living within our resources,&quot; and &quot;new development&quot; are undefined, which renders implementation of this policy problematic. The dGPU does not contain a comprehensive AMP. Given the relatively small additional amounts of development projected by the dGPU during the 20-year planning horizon, most resource-impacting activities in the City will elude the AMP, thus rendering it incomplete and partial rather than comprehensive.</td>
<td>33.1. The key terms in LG3 should be clearly defined to address and achieve maximally feasible sustainability during the 20-year planning horizon of the dGPU. 33.2. The AMP should establish factual baseline conditions for a complete set of identified resources by which sustainability will be measured and required, and further include public, private and non-profit development within the scope of the term. 33.3. Complete the comprehensive AMP as a vital component of the dGPU, with reasonable opportunities for public and decision-maker review and comment, and related CEQA analysis, prior to adoption. 33.4. The AMP should also establish clear criteria for determining the parameters of the &quot;living within resources&quot; construct, and provide for methodologies for adaptive management-implementation. 33.5. Augmented, clarified, complete, and transparent policy LG3, including with relevant parts from the core sustainability goals in the Environmental Resources Element, should become new LG3 to provide overall direction and guidance for the dGPU.</td>
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**TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA**

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| 34   | 144  | Residential Growth Location | Encourage new residential units to be located in High Density residential land use designations. (LG6) | - The policy lacks definition of its core functional terms ("encourage, "new residential units"), which renders it not analyzable.  
- The policy also lacks compatibility with other applicable laws, e.g., PRC sec. 30007.5 and 30250 for the coastal zone, which support, e.g., urban infill residential development in areas that can accommodate it, or in other areas with adequate infrastructure and where the development will not significantly adversely affect coastal resources. | 34.1. At the place where this policy occurs in the dGPU, or by reference (paper copy) or link (electronic copy), the dGPU should define these key terms.  
34.2. The proposed policy should be made consistent, in the coastal zone, with the Coastal Act or the certified LCP by, among other things, giving priority for development or redevelopment (reuse) of presently vacant parcels (lots) in the residential land use districts, consistent with other applicable GP/LCP land use plan and zoning standards. |
| 35   | 144  | Two-tier average density | Amend the ZO to include a "two-tiered Average Density program based on unit size and higher densities adjacent to transit and commercial uses." (LG6.1) | - This dGPU residential growth location IA lacks sufficient specificity, regarding the contemplated two tiers, applicable/allowed dwelling unit size maxima, and the concept of "adjacency" to allow analysis | 35.1. Specify the operational terms of this proposed IA.  
35.2. The dGPU should clarify the criteria and provisions of the contemplated two-tier program, and whether it is proposed to apply to all residential districts, rather than higher density districts. |
| 36   | 144  | TDR program | Develop a regional transfer of development rights program from, e.g., donor important open spaces to receiver higher density, urban infill sites. (LG6.3.a. and c.) | - The IA lacks definition of core functional terms such as "severe site constraints" or "important open spaces," which renders it not analyzable.  
- The IA is unclear as to whether it is mandatory or constitutes voluntary guidance, and the basis therefor. | 36.1. Specify the operational terms of this proposed IA.  
36.2. Define the parameters of the proposed TDR program.  
36.3. Clearly state the basis for TDR program applicability on a case by case basis.  
36.4. Map the TDR donor and receiver sites.  
36.5. Provide a methodology for donor/receiver site value equalization. |
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| 37   | 140  | Regional Planning | Work cooperatively with the County and other local entities through the SB 375 process for land use coordination, affordable housing, and transportation planning. (LG9) | • Cooperation and coordination, however laudable in concept, are essentially meaningless concepts without a specific identified regional land use, housing, or transportation program and the means to fund its implementation.  
• References to state legislation, without citation to its chapter/section/year, are meaningless.  
• The DGPU notably omits any goals, objectives, policies or IAs for an alternative, more stakeholder participatory, efficient, effective, or transparent, structure of governance to provide the identified GP controls and services. | 37.1. The DGPU should, at a minimum, identify specific areas of proposed intergovernmental cooperation and coordination, and a funding strategy for them.  
37.2. The DGPU should further describe, analyze, and recommend a concerted strategy for public participatory, lower cost, enhanced service, and increased openness for providing sustainability, land use, housing, infrastructure, and other General Plan services, including, but not limited to, multi-agency consolidation, participatory and expeditious decision-making, and civic culture enhancements.  
37.3. Whenever the DGPU refers to state statutes, it should consistently reference their relevant code section(s) or chapter and year of enactment (paper copy) and contain a link to an electronic copy of them. |
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<td>38</td>
<td>147</td>
<td>Healthy urban environment</td>
<td>Consider health in land use decisions (LG12), including through soliciting information (LG12.1).</td>
<td>The dGPU omits identification, analysis, or IA remediation, as necessary to protect public health, pursuant to, or consistent with, LG12 and LG12.1, regarding the debris buried by the City at 1921 and 1925 El Camino de la Luz as part of City's post-1978 slope failure/a and debris flows grading. The dGPU omits identification, analysis, or IA remediation, as necessary, of the earthen buttress constructed by the City in 1978 adjacent to and below the antiquated MTLS at 1921 and 1925 El Camino de la Luz. The dGPU also omits identification, analysis, or IA remediation, as necessary to protect public health, pursuant to, or consistent with, LG12 and LG12.1, regarding raw wastewater discharges from the MTLS, including but not limited to the area of the 1978 &quot;El Camino de la Luz landslide.</td>
<td>88.1. The dGPU should summarize City's 1978 onsite debris disposal at 1921-1925 El Camino de la Luz, identify potential health effects from it, and provide for a funded remediation program. 88.2. The dGPU should describe City's MTLS buttress, constructed in 1978 at 1921-1925 El Camino de la Luz, analyze its static and pseudo-static sustainability (factor of safety), and provide for its remediation or replacement (e.g., with piers to competent material). 88.3. The dGPU should summarize all previous and potential future MTLS wastewater discharges during the dGPU 20-year planning horizon, including but not limited to the area of the 1978 &quot;El Camino de la Luz landslide, identify potential health effects from such discharges, remediate them, and provide for a sustainable MTLS during the dGPU planning horizon.</td>
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| 39   | 147  | Community character | Strengthen and enhance design and development review standards and process to enhance community character, promote affordable housing, and further community sustainability principles.” (LG13) | From IA’s LG13.1-13.3, it is unclear whether the dGPU also proposes to apply LG13 to single family residential districts, e.g., on the Mesa.  
- The dGPU omits a concise and clear definition of the core term "community character," which renders it objectively unimplementable.  
- The dGPU also omits definitions of, or threshold criteria for, such other key operative terms in this policy as "strengthen," "enhance," "promote," and "further."  
- The dGPU’s omission of a productive secondary unit policy in single family residential districts substantially undermines, and thus is inconsistent with, the policy provision to promote affordable housing. | 39.1. The dGPU should specify the scope of applicability of LG13.  
39.2. The dGPU should consistently provide clear definitions of all operative terms, and of criteria.  
39.3. The dGPU should provide clear policies, feasible criteria, and expedited regulatory review to permit secondary residential units on residentially designated and zoned parcels (lots). (This policy desiderata is further addressed in comments on the Housing Element, below.)  
39.4. Where the dGPU cross-references other policies, goals, or objectives (e.g., “further community sustainability principles”), the dGPU should specifically identify (paper copy) and link (electronic copy) them. |
| 40   | 149  | Historic structures | Protect historic structures through building height limits and other development standards in Downtown. (LG14) | The dGPU does not define the term "historic structures".  
- The reference to "other standards" is ambiguous.  
- On what basis is the applicability of this policy limited to "Downtown" (defined at dGPU unmarked page DS) | 40.1. Provide clear definitions of all operative terms, and of criteria.  
40.2. The policy should identify, by name, title, or electronic link all proposed development standards that apply.  
40.3. The scope of the applicability of this policy should conform with other laws that apply, or a basis for non-applicability should be stated. |
### TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA

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<td>Low density residential areas</td>
<td>Maintain and protect the character and quality of life of single family zoned neighborhoods as a low density residential community. (LG19) In the steeper single family hillside areas classified as Major Hillside on the Open Space Element, study establishing densities as low as one dwelling unit for every ten or more acres due to such constraints as steep hillside, need for excessive grading, fire, emergency access and evacuation, degradation of viewshed, ground water recharge, and increased stormwater runoff. (LG16.1.)</td>
<td>- The title and text are ambiguous as to whether this policy applies only to existing designated low density residential areas, or whether neighborhoods zoned for residential use are proposed to all become low-density districts. - The dGPU omits a definition of the core terms “character and quality of life of single family zoned neighborhoods,” and thereby renders them ambiguous and objectively unimplementable. - The reference to “Major Hillside In the Open Space Element” in IA LG16.1 is ambiguous, in the absence of a specific reference to text or a map. - The discussion of Major hillsides at Land Use Element pp. 102-103 is generalized and lacks the requisite specificity that would be provided by a referenced map. - Core operative terms in IA LG16.1 (steep hillside, excessive grading, degradation) are undefined, hence ambiguous and objectively unimplementable.</td>
<td>41.1. Clarify the precise scope of applicability of LG16. 41.2. Consistently provide clear definitions of all operative terms, and of criteria. 41.3. Specify the term “Major hillside” by reference to adopted text (criteria, etc.) and specific maps, and provide a link to them in the electronic version of the dGPU. 41.4. Refer in the dGPU to other planning documents by their full title (name), and a page number. Link these other planning documents/pages/maps in the electronic version of the dGPU. 41.5. Provide clear definitions of all operative terms, and of criteria.</td>
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<td>42</td>
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<td>Sustainable neighborhood plans</td>
<td>Develop sustainable SNP’s throughout the City (where desired by residents) to address specified 13 goals, objectives, policies and IA’s. (LG17)</td>
<td>- The concept of comprehensive SNP’s conflicts with the stated limits of their components, which exclude, e.g., shoreline access, landform stability, groundwater management, removal/avoidance of non-native invasive species, and stormwater drainage. - The capacity, condition, and limits (needs) of existing public service infrastructure is proposed to be addressed in presently uncertain future SNP’s.</td>
<td>42.1. Provide for internal dGPU consistency. 42.2. Avoid limiting the scope of SNP’s 42.3. Specifically provide for SNP’s to address neighborhood/subarea issues (shoreline access, etc.) 42.4. Address infrastructure “needs” in the dGPU, rather than deferring them to uncertain future SNP’s 42.5. Explicate “resident desire” as the threshold criterion for SNP preparation.</td>
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### TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF THE LEGALLY SEPARATE PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA, CALIFORNIA.

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| 43   | 153-154 | Draft General Plan land use map | a. 1:38,000 map scale  
   b. Street grid  
   c. Lacks parcel lines  
   d. Shoreline land use designation  
   e. Residential land use designation, ECDLL area  
   f. Land use designation numbers  
   g. Lighthouse Creek is shown to extend to the seaward boundary of the Shoreline land use designation  
   h. City corporate boundaries | - The map scale, as produced in paper copy in the dGPU, is too large to be functional for accurate/ascertainable land use designation representation.  
   - The map street grid is incomplete and outdated (e.g., for Edgewater Way and El Camino de la Luz), hence ambiguous and misleading.  
   - The omission of parcel lines renders the land use designations imprecise, and hence objectively unimplementable.  
   - The stippling for the Shoreline designation is faint, not sized to be indicative on small subareas of the map (e.g., along the Mesa shoreline west of the debouchment of Lighthouse Creek) and extends seaward and landward to undefined boundaries.  
   - The color overlay for the ECDLL residential area on the GP LUM does not appear to match the land use designation legend on the map.  
   - The numbers (1, 2, 3) on the GP LUM lack explication.  
   - What basis, if any (e.g., documented bed and bank, stream channel, etc.), is there for the GP LUM depiction of Lighthouse Creek, as a "creek", between the top of coastal bluff and the seaward boundary of the Shoreline land use designation on the GP LUM?  
   - The GP LUM omits the City's corporate boundaries to seaward of the Shoreline land use designation. | 43.1. Provide a link in the dGPU to a scalable (zoom function) high resolution GP land use map (LUM).  
43.2. Show the current (2010) street grid on the GP LUM.  
43.3. Show current (2010) parcel lines on the GP LUM.  
43.4. Identify the seaward/landward boundaries of the Shoreline designation on the GP LUM.  
43.5. Represent the Shoreline designation on the GP LUM with a distinct and legible marking. Note: the dEIR, pp. 5-6, contains a 'Draft Plan Santa Barbara General Plan Map, also at 1:38,000 scale, the depicts the Shoreline land use designation in a color overlay.  
43.6 Clearly (distinctly) match the GP LUM legend and land use designation, e.g., for the ECDLL area on the Mesa.  
43.7. Define/describe the meaning of the numbers 1, 2, 3 on the GP LUM.  
43.8. Accurately map Lighthouse Creek, including where it has no bed and bank (e.g., is contained in a drain pipe or flows without a discernible channel).  
43.9. Accurately map (illustrate) the City's seaward corporate boundary. |
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<td>44</td>
<td>155-166</td>
<td>Open Space, Parks, Recreation and Trails Element</td>
<td><strong>Introduction:</strong> (a) &quot;Because the city is essentially built out, it is more essential than ever to preserve remaining open space, parks and recreational opportunities and create new public open spaces and recreational opportunities.&quot; (b) &quot;The sustainability goals, policies and implementation actions presented here for open space, parks, recreation and trails provide interim guidance for resource conservation, use and development. [They] Include policies that have been drafted and revised over the course of the Plan Santa Barbara process, existing policies transferred from either the existing Land Use or Housing elements, and policies required or recommended as mitigation measures in the Draft EIR.&quot; (c) This element also includes the existing text for both the Open Space and Parks and Recreation elements, including any existing goals and policies.&quot;</td>
<td>• This Element is, as it recognizes on p. 157, paragraph 2, substantially incomplete, and thereby renders the dGPU unsettled, ambiguous, incomplete, internally inconsistent (or lacking in demonstrated consistency) and in relevant parts unimplementable. • The dGPU omits a definition of &quot;remaining open space,&quot; specifically whether it includes residually vacant parcels such as at 1921 and 1925 ECDLL. • By omitting to include, analyze, or plan for the area of the City to seaward of the Shoreline designation, Sterns Wharf, and the Harbor, the dGPU inexplicably and erroneously omits most of the City's waterfront within its municipal boundaries, which has substantial open space, recreational, and marine trails capacity. • The dGPU has a planning horizon of 20 years, but leaves undefined the meaning of &quot;interim guidance.&quot; • What is the legal authority for &quot;recommended - in contrast to required - mitigation measures&quot;? • Given that the dEIR was released on the same day as the dGPU, what prior - nonpublic - dGPU did the dEIR analyze such that some of the dEIR's mitigation measures could be incorporated in the dGPU? • dGPU pages 161 and 163 inconsistently state that, respectively, the Existing Open Space Element and the Existing Parks and Recreation Element are &quot;not part of this General Plan Update.&quot;</td>
<td>44.1. Fundamentally, the disjunctive and piecemeal Open Space, Parks, Recreation and Trails Element should either be completed or be deleted from the dGPU. In either case, the revised dGPU should be recirculated for public review. 44.2. Define the term &quot;remaining open space&quot;. 44.3. Identify those presently residually vacant privately owned parcels that the dGPU recommends for public acquisition. 44.4. To be complete, the dGPU should address the entirety of the City's corporate jurisdiction, especially its open space and recreationally significant marine environment. 44.5. Specifically reconcile the dGPU's 20-year planning horizon with the interim guidance proposed by this element, as it is presented. 44.6. Here, or in the introduction to the dGPU, specifically state City's legal and analytical bases for incorporating &quot;recommended&quot; mitigations (rather than ones required to reduce factually identified potentially significant effects of the dGPU on the physical environment to below levels of significance) in the dGPU. 44.7. Similarly, describe which (what version(s) of the dGPU the dEIR analyzed to allow the dGPU released to the public to address dEIR required (or recommended) mitigations, and provide an exact copy of that (or those) dGPU(s). 44.8. Identify the revised Plan Santa Barbara and existing Land Use or Housing Element policies that are incorporated in the Open Space, Parks, Recreation and Trails Element. 44.9. Reconcile the omitted existing Open Space and Parks and Recreation Elements from the Open Space, Parks, Recreation and Trails Element.</td>
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| 45   | 159  | Open Space Opportunities | Goal: "Protect and enhance the city's livability and character, and the community's health, through the generous provision of a variety of public open space opportunities." | • The dGPU does not define key operational terms in this goal (community health, generous provision, variety of opportunities for public open space), which renders them ambiguous and incapable of objective implementation.  
• Does the term "opportunities" specifically include presently privately owned parcels (lots) that the City proposes to acquire for public open space? | 45.1. Define the key operational terms of this goal.  
45.2. Specify which present private parcels (lots) the City proposes to or may potentially ("proposes") acquire, or protect for future acquisition, the relevant action timelines, and the funding sources therefore.  
45.3. If the City proposes to acquire less than fee title interest in any parcel (lot), specify that level of interest.  
45.4. If the City has any current or lapsed first rights of refusal to acquire any parcel (lot), list them in the dGPU.  
45.5. If the City proposes to rely on any regulatory excision to acquire any parcel (lot), indicate the case-law consistent methodology for doing so in the dGPU. |
| 46   | 159  | Open Space variety and abundance | "Provide ample open space through a variety of types, including [...] parks, beaches, [...] trails, urban walkways, [...] pocket parks, play areas, gardens, and view points, consistent with standards established for this city." (OP1) | • The dGPU does not define key operational terms in this policy (provide, ample open space, variety, including, gardens, view points, established city standards), which renders them ambiguous and incapable of objective implementation.  
• The dGPU contains no map or list of public and private parcels (lots) that would, if acquired, improved, and opened for public use, meet (satisfy) OP1.  
• The dGPU does not map, analyze, and address the potential effects during the next 20, 50 or 100 years of projected or other climate change on City's existing inventory of open spaces.  
• The dGPU does not state, reference, or provide a link to City's established open space standards. | 46.1. Define the key operational terms of this policy.  
46.2. Provide a map and list of the parcels (lots) that would meet policy OP1 during the 20-year planning horizon.  
46.3. Map, analyze, and address the potential 20, 50, 100 year effects of climate change on open space within the City corporate boundaries.  
46.4. State, reference, or provide a link to City's established open space standards.  
46.5. Clarify whether the dGPU proposes OP1 to apply to parcels (lots) presently in public ownership, those in private ownership, or both. |
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<td>159</td>
<td>Park-Open Space Standards</td>
<td>Establish or update incremental (per capita) acreage standards for each type of open space appropriate for Santa Barbara. (IA OP1.1)</td>
<td>- Does the City have any data or analysis that existing open space types (including the marine environment within City's boundaries) are insufficient to satisfy any adopted per capita standard? - The dGPU omits to define &quot;appropriate for Santa Barbara,&quot; which renders the term ambiguous and incapable of objective implementation.</td>
<td>47.1. Reference (paper copy) or provide a link to electronic copy any open space demand or utilization study that addresses the adequacy (sufficiency) of the City's established open space standards (OP1). 47.2. Define the key operational terms of this policy. 47.3. To the extent (notwithstanding OP1) that the City has not adopted a per capita open space standard, they should be set forth in the dGPU.</td>
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<td>48</td>
<td>159</td>
<td>Key remaining open space areas</td>
<td>On the basis of the MEA Visual Resources maps and data in the EIR, identify key areas that merit long-term protection and take appropriate actions to preserve such areas as passive open space. (IA OP1.2)</td>
<td>- The dGPU incongruously references plural maps, without specific identification, and data in the (draft) EIR, rather than containing and analyzing them for implementation in the dGPU. - The dGPU omits any criteria for establishing &quot;merit&quot; as the basis for identification of key visual areas for long term protection. - The dGPU omits definition of key operational terms in this policy (appropriate actions, preserve, passive open space), which renders the term ambiguous and incapable of objective implementation. - dEIR Fig. 13-1, Visual Resources, maps essentially all (driveways excepted) of the parcels at 1921 and 1925 ECDLL as areas of visual sensitivity, coastal bluffs, or shoreline, and present, link, or specifically reference, any site-specific data that validly maps the &quot;shoreline&quot; or &quot;coastal bluffs&quot; on these parcels to near elevation 130 feet above sea level. - Identify the acquisition methodology, timeline, and funding for City's preserving the mapped visual resource area on the parcels at 1921 and 1925 ECDLL. - For lack of any site-specific potentially significant (unmitigable) impacts on public visual quality from sustainable residential reuse of the parcels at 1921 and 1925 ECDLL, the dGPU must delete any open space designation on them that is based on visual sensitivity, coastal bluff (above elevation 55 feet), or shoreline designation.</td>
<td>48.1. The Open Space, etc. Element should contain any visual resources map that the dGPU proposes to implement. 48.2. Define the key operational terms of this policy, including any objectively verifiable criteria for designating the parcels at 1921 and 1925 ECDLL as areas of visual sensitivity, coastal bluffs, or shoreline, and present, link, or specifically reference, any site-specific data that validly maps the &quot;shoreline&quot; or &quot;coastal bluffs&quot; on these parcels to near elevation 130 feet above sea level. 48.3. Identify the acquisition methodology, timeline, and funding for City's preserving the mapped visual resource area on the parcels at 1921 and 1925 ECDLL. 48.4. For lack of any site-specific potentially significant (unmitigable) impacts to public visual quality from sustainable residential reuse of the parcels at 1921 and 1925 ECDLL, the dGPU must delete any open space designation on them that is based on visual sensitivity, coastal bluff (above elevation 55 feet), or shoreline designation.</td>
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<td>Protection of contiguous open space areas</td>
<td>&quot;All new development within identified key open space areas shall be sited and designed to preserve contiguous tracts of open space and connectivity with open space on adjacent parcels.&quot; (IA OP1.3)</td>
<td>briefly posted map that purported to depict a major public view origination point on ECDLL at the head of the driveways to these parcels, and the sole related analysis in the dEIR, at 13-21 (&quot;potential development of some new single family homes and associated grading and vegetation clearing for fire protection or site improvements on steep slopes could cause visual scarring of these hillsides...&quot;&quot;) is speculative and would in any event occur on these two parcels in areas previously graded by the City.</td>
<td>49.1. Revision of the dGPU to implement recommendation 49.4, above, would remove this City framework to unconstitutionally take 1921 and 1925 ECDLL for public use. 49.2. Define the key operational terms of this policy.</td>
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<td>50</td>
<td>160</td>
<td>Community gardens on vacant land</td>
<td>&quot;Establish a program to use vacant or underutilized properties for temporary community gardens throughout the City, to enable residents to grow food or other crops.&quot; (IA OP1.5)</td>
<td>Persistent horticultural irrigation, e.g., for growing food or other crops, on the hillsides at 1921 and 1925, graded by the City without installation of subdrains, is imprudent given the history and geomorphology of the area.</td>
<td>50.1. Revise IA OP1.5 to specifically exclude areas of previous slope failure or where the City has performed remedial grading without installing subdrains to dewater a hillside parcel.</td>
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<td>51</td>
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<td>Open space and recreational facility funding</td>
<td>&quot;The City shall develop a variety of ways and options to support acquisition and maintenance of public open space, and new development and redevelopment shall contribute commensurate with the incremental need generated.&quot; (OP2)</td>
<td>• The operative term &quot;need&quot; is undefined; thus, proposed policy OP2 does not state a clear impact threshold for City's financially ambiguous open space and recreational facility tax (or fee).</td>
<td>51.1. Parcels should be exempted from City's open space and recreational facility tax (or fee) where residential reuse provides for a minimum 50% open space on the parcel.</td>
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<td>52</td>
<td>181</td>
<td>Existing Open Space Element</td>
<td>Omitted from the GPU.</td>
<td>• By not integrating the existing adopted Open Space Element (in the Land Use Element) into the dGPU, the City creates programmatic inconsistencies between the two documents that render implementation problematic with regard to 1921 and 1925 ECDLL.</td>
<td>52.1. Reconcile the existing adopted Open Space Element with the draft GPU to optimize cooperative private property owner conservation of open space in conjunction with investment backed sustainable economic reuse of the parcels, e.g., at 1921 and 1925 ECDLL.</td>
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<td>53</td>
<td>163</td>
<td>Existing Parks and Recreation Element (PRE)</td>
<td>Omitted from the GPU.</td>
<td>• By not integrating the existing adopted PRE into the dGPU, the City creates programmatic inconsistencies between the two documents that render implementation problematic with regard to 1921 and 1925 ECDLL, e.g., by placing the public beach along the top of the sea cliff/coastal bluff at risk of inundation from potential projected changes in sea level, escarpment failure/s. • The dGPU, unlike City's 2009 view points map, does not address location of a vista point at the driveways to 1921-1925 ECDLL, or, alternatively, along the top of the sea cliff/coastal bluff.</td>
<td>53.1. Integrate, update, and coordinate the adopted PRE with the dGPU and certified LCP. 53.2. Specifically address, and mitigate, the potential effects from projected shoreline/coastal bluff retreat scenarios on parks and recreation in the City. 53.3. Augment the PRE to address marine and marine-related recreation throughout the City's jurisdiction. 53.4. Address the location of a view point at the driveways to 1921-1925 ECDLL in the dGPU.</td>
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<td>54</td>
<td>167-168</td>
<td>Open Space, Parks, Recreation and Trails Map</td>
<td>This unnumbered map contains no park, recreational facility, or open space classification for the ECDLL shoreline, sea cliff/coastal bluff, or bluff top area between, e.g., Lighthouse Creek and Oliver Road.</td>
<td>• The map omits designation of the dGPU land use map designated Shoreline (beach, sea cliff/coastal bluff) as open space or beach park. • The map does not identify the locations of vertical or lateral accessways to the Shoreline (as defined in the dGPU), vista points generally, and a vista point at 1921-1925 ECDLL specifically.</td>
<td>54.1. Assign and show a sequential Figure number for all maps in the dGPU. 54.2. Classify the dGPU-designated &quot;Shoreline&quot; land use, west of Lighthouse Creek, on this map. 54.3. Identify the location of all existing and City-proposed vista points as important public recreational facilities. 54.4. Accurately depict the location and extent of Lighthouse Creek.</td>
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| 55   | 171  | New goals and policies for all aspects of a more sustainable community | In development of Santa Barbara’s General Plan, new goals and policies were identified for all aspects of a more sustainable community. | The reference to the “General Plan” is ambiguous, given that the City’s GP was developed through (a) its delayed initial adoption in 1964, and (b) subsequent piecemeal (Element-level) revisions and augmentations.  
   - The provision does not specify, and the current dGPU factually does not contain, any “identification” of the generally described new goals and policies for all aspects of a more sustainable community.  
   - The provision does not define key operative terms (“all aspects”, “more sustainable community”). | 55.1. Clarify the reference to the GP, or dGPU, if the latter is the intended subject. 
55.2. Append, or link, the referenced identification of new goals and policies. 
55.3. Define the key operational terms of this provision. |
| 56   | 171  | As-is dGPU (in)completeness | This is not to say that the initial set of goals and policies is complete, only that the new goals and policies were the result of holistic planning with the understanding that the General Plan is a living, evolving document. | The absence of a complete, consistent, and coherent fact-based as-is-GP suite of goals, policies, and IA’s at the points of public review, environmental review, adoption, and/or implementation (when taken together with its many ambiguities, omissions, and factually unsupported projections) renders the dGPU document insufficient for analysis, decision-maker action, or implementation. (Our comments on the companion DEIR address additional substantive and procedural problems in this context.)  
   - If the preparers of the dGPU contemplated or possessed augmentations, other revisions (incl. alternatives), evidence, or analysis relative to the dGPU on or before March 18, 2010, these processes and documents should be fully disclosed and all be part of, or referenced/linked in, the dGPU.  
   - The provision does not define key operative terms (“holistic planning,” GP as a “living, evolving document.”) | 56.1. Prepare a complete, consistent, fact-based, and transparent GP update that addresses the entirety of City’s corporate jurisdiction for the proposed 20-year planning horizon, and recalculate it for public review prior to any adoption actions. 
56.2. Produce (as paper attachments and in linked electronic form) a complete record of any and all augmentations, other revisions, alternative formulations, factual evidence, minutes of meetings, or analysis(es) related to dGPU preparation. 
56.3. Define the key operational terms of this provision. |
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| 57   | 171  | Separate dGP elements (GPE), content evolution | "As the City focuses its planning resources on the various separate elements of the General Plan, all of the goals, policies and implementation actions will also evolve." | • Which "separate GP elements"?  
• What "focus of planning resources"?  
• What, if any, proposed or adopted/funded work program does the City have for performing this work?  
• On what basis does the City know, in March 2010, that "all" of the GP components will "evolve" as it addresses these unspecified separate GPE’s?  
• This provision further underscores that the March 2010 iteration of the dGPU constitutes an unsettled, internally inconsistent, and in parts speculative or incomplete document that is not ready for adoption or implementation. (Our comments on the companion dEIR further address this basic dGPU inadequacy.) | 57.1. Define the key operational terms of this provision.  
57.2. Produce (as paper attachments and in linked electronic form) any and all City proposed or adopted/funded work programs, including issue identification, goals/objectives, tasks, and schedules) for performing the referenced content evolution of the separate GPE’s.  
57.3. Produce (as paper attachments and in linked electronic form) any and all analyses, minutes of meetings, or other documents (i.e., informal or formal issue checklists) that form the basis for City’s present knowledge that the entirety of the GPE goals, policies and implementation actions will evolve.  
57.4. At a minimum, complete the GPE’s and maps as preliminary contained in the dGPU, analyze the environmental effects of this finite project, and circulate both finite dGPU and companion dEIR documents for public review, prior to City adoption of them. |
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| 58   | 171  | Economy and Fiscal Health Element | dGPU sustainability goals, policies and implementation actions for economy and fiscal resources provide interim guidance for resource conservation, use and development. | • What is "interim guidance"? Specifically what are its proposed duration, feasibility, direct, indirect, and cumulative effects? (Our comments on the companion dEIR further address this basic issue.)
• The dGPU generalizes the provenance of some of the sustainability policies (SP’s), but does not specifically identify it for each SP.
• The dGPU’s statement that it contains "policies required or recommended as mitigation measures in the Draft EIR" is (1) temporally impossible, given that both documents were published on the same date (March 18, 2010), and (2) unclear/unsupported in its reference to "recommended" mitigation. | 58.1. For clarity, sequentially number each goal.
58.2. As part of its recommended (requested) completion, the dGPU should clearly and specifically describe (including by reference or link to electronic documents) the key methodological assumptions and operational components of this provision.
58.3. Identify the source of each SP.
58.4. Clearly differentiate CEQA mitigation requirements with recommended additional/ separate revisions to the dGPU, as advanced in the dEIR, and provide a coherent, factual basis for each. (Our comments on the companion dEIR further address this basic issue.) |
| 59   | 173  | “Green” businesses | Sustainability Goal (SG); Encourage more “green” businesses. | • The goal, while laudable, lacks definition of its key terms (green business, encouragement), consideration of relevant current status and trends (including fact-based status verification or why the goal should be limited to private sector businesses), and analysis of the direct, indirect and cumulative effects of its implementation on the Intra-City, regional, and supra-regional economies, including especially working persons, and on dGPU land use allocations during the 20-year planning period. | 59.1. Define the key operational terms of this goal.
59.2. Provide an analysis of the requirements and effects of currently adopted City requirements that implement this goal (e.g., “build green” ratings, land use allocations, development standards) to document the local and supra-local efficacies of, and costs from, this goal.
59.3. Provide that “green businesses” participate in labor agreements and/or a living wage program.
59.4. Identify/specify incentives to achieve zero GHG emissions from “green businesses” in the City during the dGPU 20-year planning horizon. |
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| 60   | 173  | Project internalization of environmental costs | "Internalize impacts to the environment of new development and redevelopment, and avoid costs to the community." | • Has City's (and its consultants') preparation of the dGPU (and dEIR) been carbon neutral?  
• Carbon neutrality should be the environmental (political, economic, etc.) predicate for dGPU implementation.  
• No definition of "new development," "environmental impact internalization," or "community"  
• The "community" cost avoidance provision is ambiguous, including but not limited to the fact that the City requires major infrastructure improvements/replacements during the 20-year planning horizon based on dGPU/dEIR projections, which constitute legitimate public service costs rather than private sector project costs.  
• The City, through public infrastructure construction and O&M, site grading, and/or regulatory compliance/avoidance has created episodic or continuing impacts to the physical environment, which are City's rather than new development proponents' responsibility to remediate. | 80.1. The City should implement a carbon offsets program for dGPU/dEIR preparation, review, and adoption, e.g., through monitored carbon sequestration (tree planting or other) on City-owned and suitable lands, or reductions (low or zero-emissions vehicle fleet, on-site production of renewable energy, etc.).  
80.2. Make demonstrated and verifiable carbon neutrality the first requirement for any and all public, private, and non-profit development applications in the City.  
80.3. Provide for mandatory participation in NGO, public, or private carbon sequestration mitigation banks where on-site capacity is insufficient or infeasible.  
80.4. Clarify, augment, and make sustainable the City's Capital Improvement Program and Maintenance/Operations (O&M) budgetary process, including a reliable revenue base and expenditure transparency.  
80.5. Identify all of City's infrastructure, grading, and regulatory performance impacts on the environment in the dGPU, and provide a site-specific program, with public funding, to remediate them. |
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| 61   | 173  | Economic development requirements | "Promote energy efficiency, innovation, public health, and arts and culture as integral parts of economic development." (EF1) | | 61.1. Define the key operational terms of this policy.  
61.2. Require energy efficiency (carbon neutrality) be a mandatory performance standard for all public, private, and NGO development, including renewal of all CUP's.  
61.3. City should collaboratively convene, including through public outreach and education, regular periodic (monthly, quarterly) conservation and development innovation workshops.  
61.4. The dGPU should clarify whether, and how, the promotion (however defined, see above) of arts and culture extends to the private and NGO sectors, i.e., should the City levy an arts-and-culture tax on all economic activity, in addition to other local taxes?  
61.5. City should consider allocating a substantial portion of the TOT to environmental programs, and applying/collaborating with TOT projects from local enterprises. |
| 62   | 173  | Desired economic growth areas | "Prepare and implement an economic development plan to focus economic development activities in desired areas to further implement economic policies." (EF 3) | | 62.1. Define the key operational terms of this policy.  
62.2. Clarify how the City proposes to identify and prioritize (schedule) "desired areas" for economic planning and activity, and specifically whether they include parcels previously impacted by anthropogenic landform destruction and City grading (e.g., those at 1921-1925 ECDLL). |
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<td>Buy local program</td>
<td>&quot;Encourage government, business and residents to patronize local businesses and contractors, [] with the City setting the example.&quot; (EF4)</td>
<td>• The stream of commerce in the 21st Century is at once global, regional, and local, which renders governmental limitations, however, inefficient. The purchase of goods and services from within the United States is objectionable under the Commerce Clause and in practice, where special expertise or products are not locally available may be needed, counterproductive to sustainability.</td>
<td>63.1. As a subdivision of the State of California, and ultimately the United States, the City should avoid even giving the appearance of violating our basic laws.</td>
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<td>64</td>
<td>174</td>
<td>Infrastructure improvements</td>
<td>Identify, evaluate and prioritize capital improvements (limited to benefiting businesses). (EF9)</td>
<td>• Given the advanced age, antiquated components, performance history, and broadly deferred maintenance or replacement of the City’s existing wastewater system (e.g., the Mesa Trunk Line Sewer, MTLS), or the projected inundation of the Santa Barbara Airport from dGPU/CEIR-identified rise in sea level, EF9 notably omits its infrastructure capital improvement program both the subareal MTLS and the regional passenger and freight airfield. • The dGPU also omits regular formulation, funding, and implementing of quinquennial or decadal Capital Outlay Programs for the MTLS, Airport, and El Estero WWTP facilities.</td>
<td>64.1. City’s 5- (or 10)-year CIP should be activated, funded, and implemented to benefit residential, business, and natural resource/protected area districts of the City (e.g., the beaches are also critical public infrastructure). 64.2. City’s CIP should specifically address, in a prioritized manner, the MTLS, Airport, and El Estero WWTP facilities, including to provide for and implement maximally feasible sustainable water reuse, rather than disposal of wastewater or stormwater to the ocean or to unsuitable landforms. 64.3. The City should monetize all wastewater and stormwater discharges to public infrastructure or adjacent privately owned parcels, to induce, as applicable, conservation, on-site storage and beneficial reuse, and systemic full cost recovery.</td>
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<td>65</td>
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<td>Regional jobs-housing balance</td>
<td>The City shall pursue an economic development strategy that sets a regional jobs/housing balance as a goal, and recognizes the need for affordable housing to support a diverse and healthy local economy.&quot; (EF21)</td>
<td>• The dGPU’s multi-agency strategy to address spatial imbalances in South Central Coast jobs and housing is laudable, but should not be used by the City to preclude sustainable reuse of existing residentially vacant or underutilized parcels (lots) including through development with below-market rate secondary units for seniors, family, in-home caregivers, or students.</td>
<td>65.1. As further discussed in comments on the dGPU HE, in addition to participating proactively in local and regional affordable housing programs, the City should provide for aesthetically attractive, energy efficient (zero emissions), and sustainable reuse of existing residentially vacant or underutilized parcels (lots), including through ancillary development with below-market rate secondary units for seniors, family, in-home caregivers, or students.</td>
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| 66   | 176  | Development Impact Fees (DIF's) | "To the extent applicable, [] new commercial and market-rate residential development and redevelopment shall either avoid impacts on community services and facilities, or contribute financially to the City or other community organizations to mitigate such impacts and costs of providing increased services and facilities." (EF25) | • It is unclear from this policy whether, e.g., a new market single family residence would be charged the proposed DIF in addition to the various connection and service fees that now apply to it.  
• The terms "to the extent applicable", "community services and facilities", "other community organizations" and "costs of providing increased services and facilities" are undefined, hence ambiguous and incapable of objective implementation.  
• Does the City have either a methodology for quantifying, or data regarding, the "impacts of new market-rate residential development on community services and facilities"?  
• EF25 on its face appears to propose that DIF's fund City's capital outlay budget and possibly (due to ambiguous phrasing) also that of unspecified other "community" facilities and services, although new development constitutes apparently <6% of the projected new facility/service demand during the 20-year dGPU planning horizon. | 66.1. The recirculated dGPU should clarify and specify the scope of this policy.  
66.2. Define the key operational terms of this policy.  
66.3. Reference (paper copy) or link (electronic copy) City’s methodology or data for market-rate residential development impacts, including specifically their quantities, temporal and spatial distribution, and what counts as acceptable avoidance.  
66.4. The dGPU should include a quantified summary of all of City’s presently known or projected O&M costs, inclusive of deferred O&M costs, service enhancements, or scope of service expansions (e.g., treating the beaches as public infrastructure) by sewer area, street, or other established or augmented Public Works Department sectors.  
66.5. To maintain requisite DIF nexus and proportionality, the dGPU should equitably relate the allocation of all O&M (including O&M) costs or budgets to respective demand by new development to the subject public facilities and services.  
66.6. To the extent that EF25 proposes DIF funding of NGO or other non-City facilities or services, the dGPU should clearly identify legal authorities for such an exemption. |

<p>| 67   | 176  | School Impact Fees (SIF’s) | &quot;Consider increasing development impact fees for [] market-rate residential development to expand Downtown area educational facilities.&quot; (IA EF25.1) | • The dGPU omits the requisite foundational information for even recommending consideration of an additional SIF (for however laudable a Downtown educational facility), above the SIF’s that are presently payable. | • Absent a clear indication of how new market rate residential development would impact existing Downtown educational facilities, or contribute to a need for new ones, EF25.1 lacks nexus and proportionality, and thus is a proposal for consideration of an invalid exemption. |</p>
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| 68   | 179  | Environmental Resources Element (ERE): Introduction | (a) The ERE addresses most of the City's natural resources: air quality, biology, surface and groundwater resources, and visual resources. The ERE also includes the following new policy areas: Climate Change, Energy Resources, and Food and Agriculture, which are part of the new sustainable (i.e., sustainability) focus of the GP. (Note: This introduction paragraph 2 and 3 reiterates previous introductory text and is not further addressed here.) (b) The ERE also includes the existing text for the Conservation Element, including any existing goals and policies. | • The ERE omits addressing coastal resources, or providing a reference to, or analysis of, how the dGPU provisions comply with either the certified LCP or the Coastal Act (Div. 20, PRC) with regard to provisions that affect the delineated terrestrial and aquatic coastal zone during the dGPU’s 20-year planning horizon.  
• The dGPU-inconsistently states that the “Existing Conservation Element” is “Not Part of the General Plan Update.” | 88.1. The dGPU, or alternately the dEIR, should contain an inclusive dGPU-LCP/Coastal Act consistency analysis.  
88.2. The dGPU, having presented a new ERE that references and purports to include the CE’s goals, policies and other components, should now do so in a manner that renders the integrated dGPU chapter clear, fact-based, internally consistent, and capable of implementation within the dGPU 20-year planning horizon. |
| 69   | 181  | Sustainable resources | ERE Goal (G)1: Protect and use natural resources wisely to sustain their quantity and quality, minimize hazards to people and property, and meet present and future service, health and environmental needs. | • The Goals are unnumbered, hence not readily identifiable.  
• The terms “natural resources,” “wisely,” “sustain their quantity and quality,” and “future service, health and environmental needs” are undefined, hence ambiguous and incapable of objective implementation. | 89.1. The dGPU should number goals in successive order.  
89.2. Define the key operational terms of this goal. |
| 70   | 181  | Reduce GHG emissions | ERE G2: Reduce greenhouse gas emissions contributions to climate change, and to air pollution and related health risks. | • The dGPU omits a finite definition of GHG’s, thus renders this goal ambiguous and unimplementable.  
• The dGPU omits to characterize (describe, quantify, analyze) either exactly what contributions the undefined GHG emissions make to any spatial or temporal climate change, or to air pollution or related health risks, within the City of Santa Barbara. | 70.1. Define (specify) each GHG covered by the dGPU.  
70.2. Include a finite list of GHG’s in the dGPU, and reference or link the adopted regulatory standards, or professional analyses and literature, that bridges the analytic gap, locally, regionally, or globally (as it may affect Santa Barbara) between the standards, GHG occurrence, and climate change. |
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<td>71</td>
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<td>Reduce fossil fuel use ERE G3: &quot;Reduce dependence on energy from fossil fuels through increased efficiency and conservation, and be developing renewable energy sources.&quot;</td>
<td>As presented in the March, 2010 dGPU, G3 is unnecessarily modest, given currently available systems, therefore incapable of achieving a zero GHG emissions standard within the City by the end of the dGPU planning horizon in 2030, and thus not the environmentally preferred (least environmentally adverse) alternative.</td>
<td>71.1. Revise G3 to (1) eliminate fossil fuels and nuclear power as an energy source for illuminating, heating, cooling, or pumping in new development, except in cases of emergency, (2) require installation of maximum feasible renewable energy production and conservation of energy and water in all new development and in all renewal of CUP’s, or participation in City’s (recommended) renewable energy/carbon sequestration bank, and (3) require retrofitting of all existing structures within the City to achieve carbon neutrality, or financial participation in City’s energy bank, according to a phased schedule that achieves City’s zero emission’s policy by the year 2020. 71.2. Augment the dGPU to provide substantive regulatory and utility tax incentives for compliance with G3, as revised, prior to year 2015. 71.3. Allocate a share of the income from sale of energy/carbon credits from City’s bank to subsidizing low income persons/households, or owners of buildings in which they reside, or installation and use of energy efficient/zero emissions energy systems. 71.4. Require all City vehicles to be zero emissions or low emissions vehicles by the year 2015, subject to time-limited exemptions for good cause for emergency response vehicles. 71.5. On and after January 1, 2013, require City purchase of verified carbon credits, from its own bank or elsewhere, for any vehicle in City’s use, other than specified emergency response vehicles, that is a not low/zero emissions vehicle. (Other related recommendations are provided with regard to specific policies, below.)</td>
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<td>Climate change adaptation</td>
<td>ERE G4: <strong>Incorporate adaptation to climate change in proposals for new development, redevelopment and public infrastructure.</strong></td>
<td>• Human adaptation to climate, sea level, and geomorphological/ tectonic changes along the westory Southern California Bight has been vital since initial colonization began during the late Pleistocene (~130,000 YBP), but current (2010) systemic and subregional knowledge regarding conditions and trends is incomplete, and subject to substantial variations in relevant data, independent variables, and associated uncertainty of confidence in projections over the next 20, or 50-100 years. The IPCC’s most recent global SLR projections do not indicate a high likelihood of major new episodic or chronic inundation at Santa Barbara, but omit consideration of effects from current/potential ice cap melting rates. • The orientation of its shoreline, together with Santa Cruz and the other offshore islands, suggests relatively low decadal rates of sea cliff/bluff retreat during the 20, 50, or 100 year future, absent major local seismic events, in conjunction with (1) anthropogenic or natural ground saturation in formations characterized by shallow bentonite layers and seaward dipping shale bedding planes, (2) inadequately manufactured, or drained, slopes and buttresses, or (3) erosional toe of sea cliff/bluff discharge of concentrated and directed stormwater, or catastrophic sea level rise due to substantial ice cap melting.</td>
<td>72.1. Before adopting or relying on any specific climate change-effect scenarios and derived adaptation strategies in the dGPU, conduct a transparent public and peer review of both their methodologies, data, confidence levels/predictive capacities as they apply to the subarea that includes the City’s jurisdiction during the 20-year dGPU planning horizon, to 2050, and to 2100. 72.2. Quantify the correlation between alternative climate change/SLR scenarios in the tectonic/geomorphological/atmospheric/oceanic region that includes Santa Barbara and resultant potential projected shoreline (sea cliff/bluff face) retreat during the 20, 50, or 100 year future, as a necessary methodological-factual basis for any spatial or temporal adaptation requirements. 72.3. Given the appropriate centrality of physical sustainability to the City’s dGPU, move the ‘climate change’ goals and policies/to’s, when completed, to the beginning of the dGPU as a threshold sustainability component. 72.4. Conceptualize and quantify the effects of alternative climate change scenarios and adaptation strategies on the City’s and Interrelated region’s physical terrestrial and aquatic environments (systems, processes), infrastructure, and economic profile and performance. 72.5. Prior to adoption of the dGPU, complete the analysis and depiction of climate change effects scenario(s) on all parts of the City’s jurisdiction.</td>
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| 72   | 181  | Climate change adaptation, continued |  | - Adopted required best coastal management, preconstruction, and landscaping practices indicate the importance of conservation to maximize the sustainability of existing and new development near the shoreline, including atop previously altered marine wave-cut coastal bluffs as along ECDLL. Such practices necessarily must take into account reasonably potential ranges of local effects from climate change scenarios. | 73.1. Provide for universal ER1 applicability, or explain why any class of development should be exempted from it.  
73.2. Define the key operational terms of this policy.  
73.3. Make a comprehensive zero emissions provision for new development the center of ER.  
73.4. Calibrate the dGPU adaptation strategy(ies) to methodologically rigorous, fact-based (quantitative) status and trends scenarios through 2030, 2050, and 2100, and clearly apply them to all of the City’s corporate jurisdiction.  
73.5. Define the effective economic (service) life (range) of each development, to preclude temporal piecemeal to avoid this standard. |
| 73   | 181  | Climate change | Private development and public facilities and services shall [1] incorporate measures to minimize contributions to climate change and [2] to adapt to climate changes anticipated to occur within the life of each project.” (ER1) |  |  |
| 74   | 181  | Climate change action plan | Prepare a comprehensive climate action plan (CAP), toward compliance with AB 20, to address climate change concerns including reduction in greenhouse gas emissions, greenhouse gas absorption, and adaptation to climate change including energy used by buildings and infrastructure, waste and recycling, water and wastewater transportation, design, and monitoring objectives and indicators (AMP).”(IA ER.1.1) | - The dGPU omits, and defers to an unspecified subsequent time, a comprehensive CAP. | 74.1. Prepare, distribute for public review/hearing, and adopt the CAP as a necessary part of the dGPU.  
74.2. Rather than limiting ER1 and CAP applicability to “buildings,” include all development and structures, including (but not limited to) CUP’s.  
74.3. Similarly, apply ER1.1 to all construction and reconstruction, rather than merely “design.”  
74.4. Prepare, make available for public review/ hearing, and adopt the AMP as a necessary part of the dGPU.  
74.5. Citations to statutes should be to their chapter and year of enactment. |
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<td>GHG definition</td>
<td>&quot;Greenhouse gases include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons and perfluorocarbons, among many others.&quot; (IA ER1.1, referencing ER3)</td>
<td>The dGPU definition of GHG's is facially incomplete, hence ambiguous and incapable of objective implementation.</td>
<td>75.1. Provide a complete definition (list) of GHG's that the dGPU proposes to regulate.</td>
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<td>GHG emission reduction</td>
<td>&quot;Require new development, redevelopment and substantial remodels to demonstrate associated vehicular GHG emissions reductions to 1990 levels by 2030.&quot; (IA ER1.2)</td>
<td>The dGPU does not define key terms (new development, substantial remodels, associated vehicular GHG emissions, 1990 levels) in the laudable ER1.2, which, however, is a policy rather than an IA. The scope of applicability of ER1.2 omits CUP's or changes in the density or intensity of use, or of water or wastewater.</td>
<td>76.1. Make ER1.2, given its programmatic significance, a dGPU policy. 76.2. Define the key operational terms of this policy. 76.3. Include all applicable 1990 GHG levels by reference and electronic link.</td>
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<td>Urban heat island effect</td>
<td>&quot;Reduce the urban heat island effect by: a. Amending the ZO to establish standards that decrease impermeable surfaces and building areas relative to lot size; b. Increase trees and other vegetation on private and public parcels, including through planting of 1000 new trees to sequester carbon; c. Incentivize green roof projects in the regulatory process; d. Explore reductions in impermeable surfacing standards required by other City entities. (ER1.3.)</td>
<td>ER1.3 takes an unnecessarily one-dimensional approach to achieving a laudable objective, by omitting functional equivalent or preferred alternatives (e.g., heat absorbent surfaces, beneficial PV exteriors). Non-native trees planted on slopes can have significant destabilizing effects. The City’s carbon sequestration objective is too modest by an order of magnitude. The dGPU does not define the term “green roof”. Multiple long driveways to serve contiguous parcels constitute a ready reduction opportunity.</td>
<td>77.1. Recognize and qualify heat absorbent-transfer surfaces and beneficial PV exteriors as practical and environmentally preferred alternatives to building size reduction. 77.2. Provide for a comprehensive City forestation program, utilizing City-owned parcels, to maximize carbon sequestration. 77.3. Define “green roofs” to specifically include renewable energy components, in addition to sod or other similar vegetation roofs. 77.4. Provide for the maximum feasible consolidation of multiple driveways, with beneficial heat transfer design capacity, to serve contiguous parcels, while maintaining minimum Fire Department access standards.</td>
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<td>Decrease city's global footprint.</td>
<td>In addition to promoting reduced unit size, building footprints and GHG emissions, and energy conservation, promote the use of more sustainable building and landscaping materials and methods. (ER 3.)</td>
<td>• The term “city’s global footprint” is undefined, hence ambiguous and incapable of objective implementation. • The dGPU contains no data or analyses that indicate a necessary relationship between, respectively, reduced dwelling unit size, building envelope, GHG emissions, and energy conservation and the City’s carbon budget. • ER3 neither contain, nor references, any criteria or standards for determining relative “more” building or landscaping materials, or methods, sustainability. • The dGPU neither contains, or references, existing adopted California or federal energy efficiency or California building standards, nor analyzes the extent to which City standards vary, or are exceeded, from specifically exceeding or otherwise varying from them. • The City recently adopted mandatory privatized sustainability (“built green”) standards for specified single family residences as part of Neighborhood Preservation Ordinance amendments (NPOA), without complying with CEQA or the governmental transparency provisions of this dGPU.</td>
<td>78.1. Define the key operational terms (“promoting”, “city’s global footprint”, “more sustainable”) of this policy. 78.2. Absent specific Santa Barbara data and/or analysis (that in relevant parts controls for independent variables such as energy inefficiency or other unsustainable practices), the preamble to ER3 should be deleted for being speculative and redundant. 78.3. To the maximum extent permitted by State and federal adopted standards, the dGPU should limit carbon neutrality, based on utilization of only renewable energy sources, as the City’s basic energy policy for all public, private, and non-profit development and uses. 78.4. The dGPU should provide specific energy budget parameters and performance criteria, with monitoring and reporting, for all new development, redevelopment, CUP’s, and existing structures, with applicable implementation schedules, provisions for adaptive management, and subsidies for disadvantaged households. 78.5. The City should revoke its recent action to adopt the NPOA, conduct a timely and transparent environmental review of it consistent with CEQA, and take action on it only following public hearing. 78.6. All City regulatory program components, including their criteria, decision-making procedures, and record keeping, should be fully transparent, not require payment of a fee for the public just to be able to access them, and require strict compliance, including when delegated to any third party for implementation, with the Political Reform Act, Public Records Act, Open Meeting Law, and other applicable statutes.</td>
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## TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA

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<td>Decrease city's global footprint (cont)</td>
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| 79   | 182  | Local building or manufacturing materials; incentives | "Establish additional green building incentives for the use of locally harvested, renewable building or manufacturing materials," (IA ER3.1) | • This IA lacks requisite clarity and specificity to allow analysis.  
• Is the City informed of a publicly unknown local or regional sustainable surplus of silica, metals, hydrocarbons, hemp, or other fibers (wood, kapok, etc.) that this IA addresses? | 79.1. To be determined on requested dGPU recirculation. |
| 80   | 182  | Development adaptation requirement | "New public and private development or substantial redevelopment or reuse projects shall estimate the useful life of proposed structures and, in conjunction with available information about potential hazards attributable to climate change, incorporate adaptation measures in the design, siting, and location of the structures." (ER4) | • Key terms in ER4 (new public and private development, substantial redevelopment or reuse projects, estimate, useful life of proposed structures, available information, potential hazards, attributable to climate change, adaptation) are undefined, hence ambiguous and incapable of objective implementation.  
• ER4 omits development or redevelopment by non-profit organizations, or reissuance of CUP's, from its scope. | 80.1. Define the key operational terms in this policy.  
80.2. Revise the scope of ER4 to include non-profit organization development and redevelopment, and all reissuance of CUP's.  
80.3. Provide a finite list of criteria to direct preparation of the guidelines proposed in ER4.1, including for (1) quantified threshold indicators of climate change, or climate change-associated events, that will trigger the adaptation requirement/requirements, and (2) all development adaptation measures that the City deems to be required or acceptable to satisfy this policy. |
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<td>Adaptation guidelines</td>
<td>&quot;City shall prepare adaptation guidelines for development projects, and to the extent of information available to the City, provide information about potential climate change hazards to developers.&quot; (IA ER4.1)</td>
<td>- ER4.1 makes no provision for City adoption of climate change adaptation guidelines (CCAG).&lt;br&gt;- The scope of ER4.1 omits all redevelopment (as defined) and reuse development projects.&lt;br&gt;- The dGPU omits current, or provision for periodically updated, quantified threshold dates, with confidence ranges and probability estimates, of any hazards that may be related to climate change during the dGPU 20-year planning horizon or the following 30 or 50 years.&lt;br&gt;- ER4.1 limits the City's pro-active distribution of information about potential climate change hazards to developers.</td>
<td>81.1. Provide for City adoption, following public notice to all affected property owners and other stakeholders and hearing, of any and all CCAG's.&lt;br&gt;81.2. Revise the scope of ER 4.1 to include all redevelopment and reuse projects.&lt;br&gt;81.3. The dGPU should (1) provide (or reference, link) all currently available quantified data, with disclosures of confidence levels of occurrence probabilities, for any hazards related to climate change that the City requires to be addressed pursuant to this IA, and (2) provide for its regular update.&lt;br&gt;81.4. City distribution of any information collected for, or pursuant to, the dGPU should be made to all known stakeholders.</td>
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<td>Energy efficiency, conservation</td>
<td>&quot;Dependence on energy from fossil fuels shall be reduced through increased efficiency, conservation and conversion to renewable energy resources.&quot; (ERS)</td>
<td>- ERS is too modest, given current environmental degradation associated with the exploration for and production, transportation, and use of fossil fuels.&lt;br&gt;- ERS contains no threshold or performance criteria for its key operative terms (increased efficiency, conservation, and conversion to renewable energy).</td>
<td>82.1. The dGPU should provide a zero carbon emissions policy as the basis for City sustainability.&lt;br&gt;82.2. The dGPU should provide (or reference or link) threshold or performance criteria for its key operative terms.</td>
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<td>Energy efficient buildings</td>
<td>&quot;Require new construction to be designed and built consistent with City green programs, policies and goals of achieving carbon neutrality by 2030 in all buildings.&quot; (IA ERS.1)</td>
<td>- ERS.1 omits identification of its key terms (City green programs, policies and goals).&lt;br&gt;- ERS.1 is limited to requiring &quot;green program&quot; conformance to new building construction, and thus omits from its scope all other structures, demolitions, and grading or dredging/filling.</td>
<td>83.1. ERS.1 should reference, or link, any and all City green programs, policies and goals that identify as applicable standards for all new building construction.&lt;br&gt;83.2. The scope of ERS.1 should apply to all development, as recommended to be defined above, within City's corporate jurisdiction, starting with the effective date of the GPU.</td>
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<td>Energy efficient infrastructure</td>
<td>City should continue to implement programs for municipal systems retrofits such as energy efficient motors, pumps and other equipment. (ERS.2, ref. RM Climate 3)</td>
<td>• ERS.2 is too modest in its scope, given direct, indirect and cumulative effects on the environment from infrastructure that is antiquated or has deferred maintenance or upgrades.</td>
<td>84.1. The City should coordinate its traffic control signals, and provide on-demand signalization, to maximally avoid stopped traffic flow on City streets that wastes fuel, decreases economic efficiencies, and contributes to ambient air quality deterioration.</td>
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<td>Renewable local and regional energy production</td>
<td>Provide within the City and cooperatively with others within the region “opportunities to preserve, promote and participate in development of local renewable energy resources such as solar, wind, geothermal, wave, hydro, methane and waste conversion. (ERS)</td>
<td>• ERS lacks policy and program specificity to successfully address currently identified unsustainable energy issues during the dGPU’s 20-year planning horizon. • Micro-scale production of renewable energy (e.g., at the individual house or building scale) is inconsistent with, or impeded by, other dGPU policies and ZC standards.</td>
<td>85.1. The dGPU should require, and incentivize, implementation of additional conservation measures that reduce energy demand and an implementation strategy, with schedules and identified funding, for specific renewable energy programs. 85.2. The dGPU should address, and reconcile, all planning-zoning provisions that impair maximized sustainable renewable energy production on public, private, and non-profit parcels, development (as defined), and</td>
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<td>Community choice aggregation (CAG)</td>
<td>Determine the feasibility of, and promote, bulk production or purchase of energy from alternative resources. (IA ERS.1)</td>
<td>• CAG feasibility analysis is properly conducted in the background studies for the dGPU, especially as here, where the dGPU identifies the fossil fuel based energy economy as a significant direct and cumulative effect on the physical environment.</td>
<td>86.1. Perform a CAG feasibility analysis for, and provide for its implementation in, the (requested) recirculated dGPU.</td>
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| 87   | 183  | Alternates/advanced fuels | Support and implement non-petroleum fuel use objectives of 20% by 2020 and 30% by 2030, as per AB 1007. (ER6.2) | • All references to State statutes should be by chapter and year of enactment, to avoid ambiguity. | 87.1. Clarify the statutory reference.  
87.2. The dGPU should fully implement the CEQA requirement for feasible mitigation of the identified significant effects of the hydrocarbon energy economy on the environment, i.e., by adopting and implementing a carbon neutrality policy and, among its IA's, strict schedule/s for sustainable fuel use by City entities, non-profits that receive City funding support, and development (as defined). |
| 88   | 183  | Incentivize Alternative Fuel infrastructure | a. Prioritize expedited regulatory processing of alternative/advanced fuels infrastructure. (ER6.3)  
b. Require installation of most common electric car charging stations in all major non-residential development and remodels as appropriate, based on EV fleet growth and available technology. (MM AQ-1) | ER6.3, which is laudable, does not define the term “alternative/advanced fuels infrastructure.” | 88.1. Define this term to specifically include electric recharge systems in all development (as defined). |
<p>| 89   | 184  | Small wind generation impediments | Identify and study regulatory obstacles to installing small wind generators and prepare environmental and neighborhood siting standards. (ER6.4) | • Given the dGPU's identification of the hydrocarbon energy economy's significant effects on the environment, CEQA requires that the City now enact all feasible avoidance or ameliorative (mitigation) measures, which, depending on topographic-windshed conditions, includes electricity generation from small modern windmills. | 89.1. Perform a small wind generation siting analysis, with standards that specifically provide for utilization of this renewable resource on public, private, and non-profit organization parcels, for inclusion in the (requested) recirculated dGPU. |</p>
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<td>Facilitate renewable energy technologies</td>
<td>Provide for flexible review standards, streamlined regulatory actions, and other incentives to facilitate renewable energy technologies. (ER6.6)</td>
<td>• Facilitation of renewable energy technologies regulatory review is laudable given the numerous impediments to it in City’s MO and GP, but undefined “flexible standards” tend to result in regulatory dysfunction and unequal application of standards.</td>
<td>20.1. The dGPU should provide for clear objectives, goals, and IA’s that rely on routine transparent implementation, rather than ad hoc flexibility to achieve maximum feasible sustainability.</td>
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<td>Solar energy</td>
<td>“Encourage or require” PV systems on “new construction, redevelopment, and significant remodel projects, as appropriate, taking into consideration building size, orientation, roof type, and current energy use.” a. Implement City’s Solar Energy Systems Design guidelines requirements for 1 kw PV panels, if physically feasible, for multi residential projects of more than four units; b. a minimum of 2 kw system for multi residential projects of 3-4 units; c. 300 sf of rectangular roof area suitable for future PV installation in one or two unit residential projects; d. a minimum of 5 kw PV system for every new square foot of building net floor area, or a PV system that meets 30% of the structure’s projected average energy demand, whichever is lower, for commercial or industrial projects. (IA ER6.6)</td>
<td>• ER6.6 is both laudable and replete with systemic ambiguities (“encourage or require”), undefined terms (new construction, significant remodel projects, as appropriate, physically feasible, commercial or industrial projects). • No City document titled “Solar Energy Systems Design guidelines” appears to exist • The dGPU contains (or references) no analytical basis for differential solar energy standards in relation to numbers of dwelling units, net floor area, or roof area.</td>
<td>21.1. Define the key operational terms in this IA. 21.2. Expand the scope of this IA to all development, as defined. 21.3. Require all development, as defined, to optimize its solar energy generation potential. 21.4. Include solar hot water generation, in addition to PV systems in this IA. 21.5. Clarify the document in subpart (a) and provide a reference or link to it in the dGPU. 21.6. Adopt City’s solar energy standards as policy or a MO standard, rather than as a guideline with ad hoc implementation. 21.7. Relate minimum solar energy requirements to the energy budgets of respective development, as defined, to achieve and maintain carbon neutrality. 21.8. Provide proportional (1) regulatory processing incentives and (2) fee credits for development, as defined, that exceeds City’s adopted minimum solar energy standards.</td>
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### TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF THE LEGALLY SEPARATE PARCELS AT 1921 AND 1925 EL CAMINO DE LA LUZ, SANTA BARBARA, CALIFORNIA.

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| 92   | 184  | Interior air quality | *Establish additional green building incentives and requirements for construction with nontoxic materials.* (ER8) | • Generally laudable, ER8 omits identification or referenced analysis of the non-toxic construction materials that would be considered to meet unspecified additional green building incentives or requirements, is therefore ambiguous and incapable of objective implementation.  
• The dGPU does not define the term "construction". | 92.1. The dGPU should provide for City adoption, following notice, opportunity for public review, and hearing, of all "green building" standards that it deems applicable, as incentives or requirements, with its corporate jurisdiction.  
92.2. Define "construction". |
| 93   | 185  | Low emission vehicles, equipment | a. Expand infrastructure and establish incentives for use of LEV's and equipment.  
b. Support reduced speed limits to permit wider EV use. (ER 9) | • Generally laudable, ER9 lacks the clarity and specificity necessary to make it implementable.  
• The dGPU contains (or references) no analysis on the basis of which to limit this policy to LEV's or to further limit vehicular speeds within the City to accommodate EVs. | 93.1. The dGPU should provide for a M-C requirement that EV plug ins be installed and provided in all development, as defined.  
93.2. The City should offer regulatory incentives and application fee/utility tax reductions for development, as defined, that meets recommendation 93.1 on or before January 1, 2015.  
93.3. Policy ER9 should preferentially address zero, rather than merely low, emission vehicles and equipment.  
93.4. Given posted speed limits within the City, subpart b is unnecessary and should be deleted.  
93.5. The dGPU should fully implement City's Bicycle Master Plan, through Inclusion in and funding via the CIP, by 2030. |
<p>| 94   | 185  | Marine shipping emissions | Support regional and State efforts to reduce marine shipping emissions. (ER10) | • The dGPU identifies offshore emissions as the primary source of air quality pollution in the City, which makes ER10 insufficient as a response pursuant to CEQA. | 94.1. The dGPU should, through the federal Coastal Zone Management Act (as amended) consistency doctrine, utilize the City's certified LCP, as a federally approved part of the California Coastal Management Program, to avoid or ameliorate, to the maximum extent practicable, operational and other offshore emissions that degrade City air quality. |</p>
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<td>TECHNICAL ANALYSIS, EFFECTS OF DRAFT GPU (MARCH 18, 2010) ON SUSTAINABLE ENVIRONMENTAL-ECONOMIC REUSE OF PARCELS AT 1921 AND 1923 EL CAMINO DE LA LUZ, SANTA BARBARA</td>
<td>95</td>
<td>Development Mitigation</td>
<td>Enforce on-site stormwater management to apply the latest best management practices (BMPs) to new development projects.</td>
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<td>Development Mitigation</td>
<td>Liquidate the City's development and construction projects, which are likely to be expensive and difficult to implement due to the current economic climate.</td>
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<td>96</td>
<td>Native and Other Tissue Landscaping</td>
<td>Protect and maintain native and other native-like plantings by using native plant species in landscaping to save energy and reduce water supply.</td>
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<td>96</td>
<td>Native and Other Tissue Landscaping</td>
<td>Incorporate habitat areas and provide shade.</td>
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*ER 11. While available, LWA is not possible in the City of Santa Barbara. The public is not informed of the availability of this project. *
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<td>97</td>
<td>186</td>
<td>Wildlife and Native Plant Habitat Protection and Enhancement</td>
<td>Protect, maintain, and to the extent reasonably possible, expand the City’s remaining diverse native plant and wildlife habitats - including ocean, wetland, coastal, creek, foothill, and urban-adapted habitats. <em>(ER13)</em></td>
<td>This laudable policy omits definition of key terms <em>(extent reasonably possible,</em> <strong>including,</strong> the listed habitat categories, and <em>urban-adapted habitats)</em>. The dGPU does not indicate the City’s seaward jurisdictional boundaries that encompass its ocean (inter tidal, shallow subtidal, and deepwater habitats), is thus ambiguous and incapable of objective implementation. ER13 does not elucidate the extent to which the concept of reasonably possible expansion of City’s native habitats applies to parcels in private and non-profit, in addition to public, ownership or control.</td>
<td>97.1. Define the key operational terms in this policy. 97.2. Reconcile the habitat categories listed in ER13 with the current standard professional habitat categories. 97.3. Depict the seaward extent of City’s corporate jurisdiction, and provide a reconnaissance level characterization of its habitat types in the dGPU (or by referenced or linked documents). 97.4. Clarify the native habitat expansion (restoration, enhancement) provision of ER13, specifically the extent to which the dGPU renders it applicable to private or non-profit parcels. 97.5. To the extent the City deems the native habitat expansion (restoration, enhancement) provision of ER13 to be applicable to private parcels, the dGPU should provide a safe harbor to avoid ex post facto classification of such affected areas as environmentally sensitive, critical, or essential habitat.</td>
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<td>98</td>
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<td>Designate habitats</td>
<td>Map and designate important City upland habitats and wildlife corridors that merit long term protection, enhancement, and preservation for habitat and wildlife values. <em>(IA ER13.1, ref. MM BIO-1a)</em></td>
<td>Although the City’s jurisdiction extends seaward to include “ocean” habitats, IA ER13.1 limits habitat designation to uplands. dER Fig. 7.1 referenced in this IA is inconsistent with the CE (which the dGPU itself inconsistently includes <em>(dGPU at 179)</em> and omits <em>(dGPU at 193)</em>) in that “coastal bluff” is a broad generic characterization that does not reflect a recognized native, rare, sensitive, or particularly valuable biotic community.</td>
<td>88.1. City’s habitat designations should apply to the entirety of its corporate jurisdiction. 88.2. Before adopting a settled updated GP, the City should decide whether to include the CE or any policies or IA’s that relate to it, as in and in furtherance of ER13. 88.3. The dGPU should map, describe, or include <em>(reference, link)</em> only recognized native biotic communities deemed by the US Fish and Wildlife Service or the California Department of Fish and Game to be of local, regional, or statewide importance.</td>
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<td>99</td>
<td>186</td>
<td>Coastal multi-use plans</td>
<td>Develop updated multi-use plans and monitoring guidelines for beaches and other coastal areas to provide for both recreational use and protection of coastal habitats and wildlife/native plant species. (IA ER13.2)</td>
<td>• This IA omits definition of its central term “other coastal areas,” which renders it ambiguous and hence objectively unimplementable. • Given that the certified LCP land use plan addresses the management of coastal habitat and recreational resources, this IA properly is a policy that, if the City wishes to revise it, should be contained in the LCP and reflected in the dGPU. • The shoreline along ECDLL, between Oliver Road and Lighthouse Creek, is presently unserved by an improved vertical accessway to the beach, or an improved public vista point.</td>
<td>99.1. Define this key operational term in this IA. 99.2. Revise the dGPU, in harmonization with the LCP, to contain any changes to the settled habitat-recreational management of beaches and whatever constitute “other coastal areas” within City’s jurisdiction. 99.3. The dGPU should address provision of a sustainable vertical access way from ECDLL (or Oliver Road or Lighthouse Creek) to the beach, and for an improved public vista point.</td>
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<td>187</td>
<td>Coastal multi-use plans: beach and bluff restoration</td>
<td>a. Establish objectives and monitor beach and bluff restoration such as restoring 5 acres of coastal bluff habitat over the dGPU planning horizon. b. Work to increase coastal bluff scrub acreage through restoration projects on publicly owned lands [] and through providing education and assistance to private landowners to encourage such habitat restoration. (IA ER13.2, subpart 5, RM BIO-3.b)</td>
<td>• This IA ambiguously establishes beach and bluff restoration policy. • Does this IA include the City’s grading, in 1978, of the coastal bluff top at 1921-1925 ECDLL, including through burial of anthropogenic slope failure debris, construction of an earthen buttress for the MTLs, and installation of stormwater drain lines? If not, why not?</td>
<td>100.1. Revise the dGPU, in harmonization with the LCP, to contain any changes to beach/bluff restoration, or monitoring/reporting, policies or programs. 100.2. Specify priority beach and coastal bluff restoration areas. 100.3. The dGPU should provide and identify funding for, as a priority coastal bluff top restoration project, the restoration of the bluff top area graded by the City in 1978 at 1921-1925 ECDLL.</td>
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<td>101</td>
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<td>Native species habitat planting</td>
<td>Protect and restore habitat areas for native flora and fauna, and wildlife corridors within the City, including for chaparral, oak woodland, and riparian areas. (IA ER13.3.)</td>
<td>• The habitat areas/corridors listed in ER13.3 comprise a partial list. • The IA omits any criteria for feasibility of habitat area restoration, e.g., presence of suitable soil horizons for native flora replanting or propagation from seeds.</td>
<td>101.1. The dGPU should provide a full list of habitat areas to be protected and restored pursuant to this IA (or policy). 101.2. The dGPU should provide criteria for determining the botanical feasibility of habitat area restoration, if and where required pursuant to City’s regulatory program.</td>
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| 102  | 187  | Bluff vegetation protection   | Site and design new development, and major remodels/additions (including access, drainage, and landscape improvements) to existing developments, along the City coastal bluffs to (1) minimize coastal bluff scrub habitat impacts, (2) provide for coastal bluff scrub habitat restoration where development creates direct or indirect impacts to the affected habitat, (3) provide compatible landscaping, consisting of appropriate native coastal bluff scrub species, to within 10 feet of the edge of the bluff or bluff face. (IA ER13.4, ref. RM BIO-3.6) | - The dGPU omits definition of key terms in ER13.4 (new development, major remodels/additions, improvements, along City coastal bluffs, minimize, impacts from development on affected habitats, appropriate species, edge of the bluff, bluff face), which renders it ambiguous and hence objectively unimplementable.  
- The dGPU does not identify a basis for classifying "coastal bluff scrub habitat" as a sensitive botanical community that requires conservation under any applicable statute or regulation.  
- On the quantified basis of what professional oceanographic, wave runup, or coastal processes study (IES) does dGPU/EIR Fig. 14.1 depict a bluff, or coastal bluff, to extend upslope (to near elevation 128 feet above sea level) above the marine wave cut coastal bluff toe at 1921-1925 ECDLL?  
- On what professional delineation does referenced dEIR Fig. 7.1 maps "coastal bluff scrub habitat" in the area of 1921-1925 ECDLL? | 102.1. Define the key operational term in this IA.  
102.2. Identify (reference, link) the protected status of "coastal bluff scrub habitat" on the basis of which this IA requires its conservation.  
102.3. Identify (reference, link) any quantified professional basis for the depiction of the area of 1921-1925 ECDLL to near elevation 128-130 feet above sea level as a bluff or coastal bluff.  
102.4. Identify (reference, link) any professional delineation does referenced dEIR Fig. 7.1 maps "coastal bluff scrub habitat" in the area of 1921-1925 ECDLL? |
| 103  | 187  | Creek resources, water quality | Encourage development and infrastructure that is consistent with City policies and programs for comprehensive watershed planning, creek restoration, water quality protection, open space enhancement, storm water management, and public creek and water awareness programs. (ER 16) | - ER16 references numerous unspecified policies and programs as the opportunistic regulatory basis for development and infrastructure, with renders them ambiguous and hence objectively unimplementable. | 103.1. The dGPU should specifically identify each referenced policy and program.  
103.2. The dGPU storm water management program should specifically address how the City will discontinue, avoid, and remediate coastal bluff and hillside destabilization and erosion during the dGPU planning horizon, including specifically in the area of 192-1925 ECDLL. |
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<td>Drainage Master Plan (DMP)</td>
<td>Develop a comprehensive drainage master plan that identifies the existing system, policies and development standards to better address drainage and water quality issues, areas appropriate for drainage retention/detention, future capital improvements, and project funding. (IA ER16.3)</td>
<td>• Given the erosional and cumulative environmental effects of anthropogenically concentrated and directed water discharges within the area of 1921 and 1925 ECDLL, and elsewhere in the City, the omission of a comprehensive and sustainable DMP from the dGPU as it pertains (at a minimum) to this area constitutes a continuation of those conditions until such a DMP is adopted and implemented.</td>
<td>104.1. The dGPU should be augmented to incorporate a sustainable DMP that specifically avoids and fully mitigates the erosional and cumulative environmental effects of anthropogenically concentrated and directed water discharges within the area of 1921 and 1925 ECDLL, and elsewhere in the City.</td>
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<td>Storm Water Management Policies</td>
<td>The dGPU incorporates the City's Storm Water Management Program’s policies, for low impact development to reduce storm water runoff and water pollution, into the GP ERE. (ER 17)</td>
<td>• ER17, which is conceptually laudable, lacks requisite specificity, regarding which policies are incorporated into a non-existent finite ERE, and thus is ambiguous and objectively unimplementable.</td>
<td>105.1. The dGPU, with the specified policies (augmented as necessary in light of current information as presented herein) included, should be recirculated as a finite document for public review and comment, prior to action by the City on it.</td>
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<td>Visual resource protection</td>
<td>New development or redevelopment shall preserve or enhance important public views and viewpoints for public enjoyment, where such protection would not preclude reasonable development of a property.” (ER 25)</td>
<td>• ER 25, which is conceptually laudable, omits definition of key operative terms (new development, enhance, important public views, viewpoints, public enjoyment, reasonably development, property), thus is ambiguous and therefore objectively unimplementable.</td>
<td>106.1. Define the key operational terms in this policy. 106.2. The dGPU should clarify whether the City deems a public view origination point to be located at or near the the driveways of 1921 and 1925 ECDLL. 106.3. The policy should reflect that the relevant standard for constitutionally protected (substantial investment backed) economic development use is the legally separate parcel, rather than the undefined term “property.” 106.4. If the City proposes by the dGPU to merge, or establish a framework for merger of, any legally separate parcels, it should so specify.</td>
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<td>Document public views</td>
<td>Conduct a study to identify and document important public views of the ocean, mountains, or other highly valued views, to list important public view points, provide a photo record, and prepare related development standards to protect the views seen from public view points. (IA ER25.1)</td>
<td>• This IA omits definition of key operational terms (important public views, other highly valued views, views seen from public view points), thus is ambiguous and incapable of objective implementation. • This IA defers to a future study the identification and documentation of public views of significant environmental areas, whereas such determination is basic to a complete and internally harmonized dGPU. • Does the visual resources map proposed at dEFF Fig. 14.1 constitute the recommended future study in response to this IA?</td>
<td>106.1. Define the key operational terms in this policy. 106.2. The dGPU should be revised to contain a finite policy that identifies (defines, describes, maps, documents) public views of significant environmental areas and provides conservation and development standards to regulate implementing actions, and be recalculated for public review and comment prior to City action to adopt the dGPU.</td>
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<td>Public scenic view and development impacts evaluation criteria</td>
<td>In evaluating public scenic views and development impacts at a particular location, the City shall consider the importance of the existing view, as defined; the individual or cumulative significance of a proposed change in the existing view, as defined; whether changes in the proposed action could be avoided or adequately reduced through project design changes, as defined. (IA ER25.2)</td>
<td>• The protected visual quality points of reference in this IA are specifically inconsistent with the IA addressed at item 105, above. • The operational term “consider” and “adequately reduced” are undefined, hence ambiguous and incapable of objective implementation.</td>
<td>107.1. All internal inconsistencies in policies, points of reference, and operative terms within the dGPU should be reconciled, and thereby avoided, prior to City action on the dGPU. 107.2. Define the key operational terms in this IA.</td>
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<td>Vegetation protection</td>
<td>Prepare guidelines and standards for removal of significant trees and for planting replacement or additional trees, and protect significant natural vegetated areas from inappropriate development.* (IA ER25.3)</td>
<td>• The functional objective of protecting natural biotic communities within the City is laudable. However, the proposed regulatory construct (guidelines and standards) in this IA is unclear and potentially internally inconsistent (mandatory standards, directory guidelines?). • Key terms (significant trees, replacement or additional planting, natural vegetated areas, inappropriate development) are undefined, hence ambiguous and incapable of objective implementation.</td>
<td>108.1. Define the key operational terms in this IA. 108.2. The dGPU should be revised to contain a clear and internally consistent set of standards (whether mandatory or directory) for conservation, or statutory-consistent mitigation, of defined protection status trees and for conservation of naturally occurring biotic communities. 108.3. In the coastal zone, dGPU standards relating to special status vegetation communities must be consistent with the Calif. Coastal Act (Div. 20, Pub. Res. Code) and the cert. LCP that locally implements it to avoid creating countervailing LCP and GP/ZC regulatory frameworks that preclude or substantially increase costs of compliance.</td>
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| 109  | 190  | Additional scenic view protection | Further protect public scenic views of the coast, hillsides, open spaces, creeks, and historic resources as a part of Form Based Codes (FBC's), project design guidelines, and environmental review guidelines. (IA ER25.4) | - Key terms (public scenic views, from the coast/hillsides/open spaces, creeks/historic resources, project design guidelines, and environmental review guidelines) in this IA are undefined, hence ambiguous and incapable of objective implementation.  
- Specifically, does the term "open spaces" signify public as well as non-profit and private open space, whether or not subject to a recorded encumbrance? | 109.1. Define the key operational terms in this IA.  
109.2. Where the dGPU references other adopted City standards (e.g., FBC's or guidelines), the reference should be to the formal title of the adopted document and be linked to an electronic version of it.  
109.3. Where the dGPU references proposed new City standards, it should identify them, reference their formal title (where known), and provide a link to City's web site for these proposed documents.  
109.4. The City should adopt any and all mandatory standards, as this IA appears to be, only by ordinance. |
| 110  | 190  | Protection of Views from key locations | New development and redevelopment adjacent to all important public viewing locations shall respect the most significant mountain or hillside views available from such locations. (ER26, ref. MM VIS-2) | - Key terms (adjacent, important public viewing locations, respect, the most significant views, mountain or hillside views) in this policy are undefined, hence ambiguous and incapable of objective implementation.  
- Does this policy, application of which is exemplified only as to some particulars, apply to views from the ocean, within City's corporate jurisdiction, toward any or all Mesa hillsides? | 110.1. Define the key operational terms in this policy.  
110.2. Clarify the scope of applicability of this policy to any or all Mesa hillsides as may be seen from the ocean within City's corporate jurisdiction. |
| 111  | 190  | Enhance visual quality | Not only retain, but improve visual quality of the city wherever practicable. (ER27) | - Key terms (improve, visual quality, wherever practicable) in this policy are undefined, hence ambiguous and incapable of objective implementation.  
- Does this policy create a presumption that private views in the City will be protected pursuant to the dGPU? | 111.1. Define the key operational terms in this policy.  
111.2. Clarify (specify) whether this policy creates a rebuttable presumption for private view protection. |
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<td>Light and glare</td>
<td>Public open space and natural habitat areas shall be protected from light and glare. (ER 28, ref. MM VIS-4)</td>
<td>• Does this policy prohibit operation of the Santa Barbara navigational light?</td>
<td>112.1. ER 28 should be revised to provide for (1) a public safety exemption, and (2) a clarification that the protection standard is from “direct lighting,” unless the City’s night sky lighting is also intended to be controlled by this policy. 112.2. Define the key operational term “natural habitat area” in this policy.</td>
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<td>• The term “natural habitat areas” is undefined in the dGPU.</td>
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<td>Lighting and open space</td>
<td>New development and major remodels adjacent to public or private open space such as the beach, foothills, and Las Positas Valley shall be designed to minimize outdoor lighting; flood lighting of passive open space areas shall be discouraged. Lighted recreational courts, ball fields, pools or other play areas shall be designed to minimize overspill of lighting []. (IA ER28.1, ref. RM VIS-1)</td>
<td>• Key terms in this IA (private open space, minimize) are undefined, hence ambiguous and incapable of objective implementation.</td>
<td>113.1. Define the key operational terms in this IA.</td>
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| 114  | 208  | Suitable sites inventory (SSI) | Identifies and evaluates the amount of vacant and underutilized land suitable for residential development. | • Anthropogenically concentrated and directed waters, discharged from higher elevations (rather than marine wave undercutting of the sea cliff/coastal bluff) in 1978 activated slope failures at 1921 and 1928 ECDLL, which the City previously annexed, subdivided, and developed with the MTL8, shallow foundation single family residences and appurtenances, including drainage. The slope failures destroyed the SFR at 1921 ECDLL and parts of the SFR at 1926 ECDLL; the City demolished the remainder and substantially graded the parcels, including to bury anthropogenic slope failure debris and to build an earthen buttress, without subdrains, to support the MTL8.  
• The SSI altogether omits the two vacant residentially designated and zoned sea cliff/coastal bluff top parcels at 1921 and 1925 ECDLL (APN’s 045-100-023 and -024).  
• The representation by the dGPU staff manager that these two parcels were omitted from the SSI because of pending development permit applications is not corroborable, given that no application is pending for 1925 ECDLL and the 2007 application for SFR reuse of 1921 ECDLL was deferred, in full consultation with City staff, in 2008. | 114.1. If the City, or its consultant, in preparation of the draft dGPU and HE have determined that these two separate legal parcels are unsuitable for residential development, the dGPU and HE should indicate the factual and analytical basis therefor.  
114.2. If the City, or its consultant, in preparation of the draft dGPU and HE have determined that these two separate legal parcels are unsuitable for residential development, the dGPU and HE should incorporate them in the SSI, related housing opportunity descriptions, and environmental analysis. |
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<td>Development review process</td>
<td>&quot;The most important actions the City can take to increase residential development] is to maintain its commitment to housing and a balanced and efficient development review process.&quot; (HE Governmental Constraints finding.)</td>
<td>• Specific omission of the two APN's addressed in Item 115 from the dGPU SSI, and from analysis in the companion dEIR, indicates City’s adverse prejudgment (including through specific, albeit factually erroneous and unsupported, dGPU/DEIR provisions addressed herein) of the economic investment-backed residential reuse of these parcels.</td>
<td>115.1. The dGPU/HE should include 1921 and 1925 ECDLL as part of City’s programmatic commitment to housing through balanced and fact-based, as well as efficient, development and environmental review.</td>
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<td>Land availability</td>
<td>&quot;The City encourages infill [ ] to provide housing within the City [ ].&quot; (HE Constraints finding.)</td>
<td>• The dGPU’s devised prejudgment specifically against residential reuse of 1921 and 1925 ECDLL is inconsistent with this central HE finding of concentrating residential housing through infill development.</td>
<td>116.1. The dGPU/HE should include 1921 and 1925 ECDLL as part of City’s programmatic commitment to housing through infill development.</td>
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<td>Suitable Sites</td>
<td>The City’s share of the regional housing need will be met through a variety of ways, including building permits issued, approved units, and pending units since the beginning of the Regional Housing Needs Plan. In addition, available vacant and underutilized land in residential [ ] zoned land will be included. The evaluation of suitable development sites includes a listing of individual parcels [ ], size of parcel, zone classification, and general plan designation. Existing use, allowable residential density, and the realistic unit capacity are include to demonstrate realistic development potential for each parcel. Existing constraints including environmental issue(s) and the availability and planned public service capacity are also provided in the analysis. The inventory identifies opportunity sites and estimates the potential development capacity. Both residentially and non-residentially zoned parcels which are vacant and underutilized, and could be developed with residential uses were identified. (HE Suitable Sites finding.)</td>
<td>• The dGPU/HE are incomplete and fundamentally flawed for their collective failure to analyze, disclose information known to the City, and falsely ascribe a regulatory marine wave-cut coastal bluff on purported visual grounds to 1921 and 1925 ECDLL, to preclude (substantial investment backed) economic expectation to sustainably re-develop these residentially vacant parcels with SFR’s.</td>
<td>117.1. The HE should include 1921 and 1925 ECDLL in the required fact-based analysis of vacant sites, for their suitability for renewed (sustainable) residential development and use, including as it may collaboratively benefit subareal landform stability and the MLTS.</td>
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<td>HE Goals: New Housing</td>
<td>Encourage the production of new housing opportunities which are sustainable. (HE G2.)</td>
<td>• This goal is specifically inconsistent with the dGPU’s omission of sustainable (e.g., deep foundation housing) reuse of 1921 and 1925 ECDLL.</td>
<td>118.1. Reconcile HE G2 and the SSI as they pertain to these two residentially vacant parcels, to provide for their sustainable residential reuse.</td>
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<td>New housing</td>
<td>Given limited remaining land resources, the City shall encourage the development of housing on vacant infill sites. (H10)</td>
<td>• This policy is specifically inconsistent with the dGPU’s omission of sustainable (e.g., deep foundation) housing reuse of 1921 and 1925 ECDDL.</td>
<td>119.1. Reconcile H10 and the SSI as they pertain to these two residentially vacant parcels, to provide for their sustainable residential reuse.</td>
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<td>120</td>
<td>322</td>
<td>Increase sustainability of parking</td>
<td>“In new development and redevelopment, parking shall meet (sic) minimized to reduce contributions to the heat island effect, stormwater runoff and traffic generation with attendant emissions.” (C7)</td>
<td>• The unspecified scope of C7 - motor vehicle parking, in contrast to other transportation modes? - results in internal dGPU inconsistencies.</td>
<td>120.1. Revise C7 to provide, for maximized parking sustainability: “In development (as defined), vehicular parking shall be (1) improved and preferred to accommodate zero- and low-emissions vehicles, (2) provided with information about proximate public transportation opportunities, and (3) designed, constructed, and maintained to minimize its carbon footprint.”</td>
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<td>121</td>
<td>331</td>
<td>Public Services and Safety Element (PSSE)</td>
<td>“This element also includes the existing text for the Safety and Seismic Safety, and Noise elements, including any existing goals and policies.” (PSSE Introduction)</td>
<td>• The PSSE is internally inconsistent as to its contents.</td>
<td>121.1. Revise the PSSE to render it internally consistent.</td>
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<td>339</td>
<td></td>
<td>The “existing Safety and Seismic Safety Element is Not Part of this General Plan Update.”</td>
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<td>341</td>
<td></td>
<td>The “existing Noise Element is Not Part of this General Plan Update.”</td>
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<td>122</td>
<td>333</td>
<td>City Services and facilities</td>
<td>&quot;City services and facilities shall be built, maintained, and operated in a manner to provide adequate services to all residents and coexist compatibly with surrounding land uses.&quot; (PS1)</td>
<td>• PS1 omits to define the operative terms “compatible coexistence”, “surrounding land uses,” and “adequate services,” which renders them ambiguous and hence incapable of objective implementation.</td>
<td>122.1. Define the key operational terms in this policy.</td>
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<td>• The scope of PS1 is insufficient in that it omits addressing the relationship of public infrastructure/services with (1) visitor-serving and coastal dependent uses, (2) the seaward (ocean) area within City’s corporate jurisdiction, and (3) the sustainability of the physical environment.</td>
<td>122.2. Include the entire City corporate jurisdiction within the scope of PS1.</td>
</tr>
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<td>123</td>
<td>336</td>
<td>Bluff retreat</td>
<td>&quot;All development and redevelopment, renovations and additions on bluff-top parcels shall consider the potential effects of climate change on bluff retreat for the life of the project.&quot; (PS9)</td>
<td>• PS9, while generally laudable, omits to define the operative terms &quot;all development&quot;, &quot;renovations,&quot; &quot;additions,&quot; &quot;consider,&quot; &quot;potential effects,&quot; &quot;climate change,&quot; &quot;bluff,&quot; &quot;retreat,&quot; and &quot;life of project,&quot; which renders them ambiguous and hence incapable of objective implementation.</td>
<td>123.1. Define the key operational terms in this policy.</td>
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<td>• The dGPU/dEIR do not consistently map, or provide criteria for mapping/not mapping, any sea cliffs, bluffs, coastal bluffs or other marine wave-cut escarpments along the City’s entire shoreline.</td>
<td>123.2. Provide and apply, in descriptions or mapped representations, a consistent basis for identifying or delineating the location of any sea cliffs, bluffs, coastal bluffs or other marine wave-cut escarpments along the City’s entire shoreline.</td>
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DALL & ASSOCIATES 2010
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<td>124</td>
<td>336</td>
<td>Bluff retreat IA</td>
<td>&quot;Update the existing Seismic Safety Element bluff retreat formula to reflect updated information for the 75-year bluff setback line.&quot; (IA PS9.1., ref. MM GEO-1.a)</td>
<td>• The dGPU should reflect accurate information and analysis in establishing regulatory (mandatory or directory) development setback standards from identified hazards. However, the dGPU, companion dEIR, and their background studies omit any quantitative professional study of site-specific, local, or regional oceanographic, atmospheric, or geomorphological/tectonic conditions, or trends, that could serve as a basis for the update recommended by PS9.1.</td>
<td>124.1. The City should prepare a professional quantified sea cliff, bluff, coastal bluff status and trends study, and provide notice of, and opportunity for, public review and comment regarding it, prior to adopting any revisions, as part of a finite dGPU, to its currently adopted generalized existing formula pertaining thereto.</td>
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<td>1</td>
<td>Santa Barbara Aerial Photograph</td>
<td>Oblique color aerial photograph, looking North, of “City of Santa Barbara and Its Sphere of Influence” (The image is reproduced in dEIR Figure 2.2)</td>
<td>1.1. This photograph is a spatially incomplete, and thereon factually misleading and insufficiently informative depiction of the City's (1) full corporate jurisdiction, and (2) sphere of influence, in that it specifically omits the western City, its sphere of influence adjacent to it, the area of Santa Barbara Airport, and the easterly City.</td>
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| 2    | 2-3  | Plan Santa Barbara Project Description | A set of draft GP amendments to update goals, policies, and growth management tools to guide development in the City through 2030. | 2.1. The draft GPU (1) by its own terms is specifically (and thus substantively) incomplete, (2) postpones essential components for establishing a finite document to an unspecified future, (3) is internally inconsistent, (4) does not contain the seven clusters of provisions indicated in the table titled “Plan Santa Barbara Goals and Objectives Overview,” (5) does not contain the “New General Plan Elements” identified in the table titled “Policy drivers and New General Plan Elements,” and thereon constitutes an insufficient project (project description as summarized on pages 2-3 of the dEIR) to serve as the basis for informed, reasoned, and thorough environmental analysis, including, but limited to, fact based identification, avoidance, or amelioration, to below levels of significance, of effects on the environment from presently adopted GP or draft GPU or mandatory or directory provisions, City GP implementation praxis, and existing and proposed public, private and non-profit development and regulatory programs.  
2.2. The draft GPU relies on environmental change scenarios that are, variously, on their own terms inapplicable, generalized rather than specifically applicable to the City, unquantified, and speculative.  
2.3. The draft GPU project description, including as summarized in the dEIR, is substantively incomplete and legally inadequate in that City’s project proposes to take, through its specifically applicable planning and regulatory scheme, the legally separate residually designated and zoned parcels at 1921 and 1925 ECDLL for public use, without compensation. (conf'd next page) |
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<td>2</td>
<td>3.3 ff.</td>
<td>(The dGPU project description is repeated and augmented at pp. 3-3 ff.)</td>
<td>2.4. Contrary to the dEIR description of the dGPU land use map as utilizing Assessors' Parcel boundaries to increase accuracy of density limits by parcel, neither the dGPU nor dEIR land use map consists of an Assessor's Parcel base map.</td>
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<td>3</td>
<td>5-6</td>
<td>General Plan Map (GPM)</td>
<td>Depicts City's &quot;limits,&quot; sphere of influence, and 24 land and aquatic use designations.</td>
<td>3.1. The GPM in the dEIR omits the City's corporate boundaries on the seaward (ocean) side of an undefined boundary along the shoreline, and thus is facially incomplete and inadequate to designate, or designate accurately, the respective use districts within City's jurisdiction. 3.2. The Shoreline land use designation in the area south of El Camino de la Luz (ECDLL) on the dEIR GPM specifically differs, relative to the adjacent residential district, from that depicted in the dGPU at pp. 153-154, and thus creates substantive land use ambiguities with regard to both district boundaries.</td>
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<tr>
<td>3.9-3.10</td>
<td>(The GPM is reproduced at Fig. 3.2)</td>
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<td>4</td>
<td>7</td>
<td>Project alternatives</td>
<td>The dEIR evaluates a range of alternative policies and growth scenarios.</td>
<td>4.1. The dEIR specifically omits analysis of site conditions, including as a result of City grading, in the area of anthropogenic slope failures in 1978 along ECDLL, and residential infill reuse of the parcels at 1921 and 1925 ECDLL.</td>
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<td>5</td>
<td>8</td>
<td>Areas of known public controversy</td>
<td>The dEIR limits the range of known issues (public controversy) to EIR scoping and &quot;Initial hearings&quot; for preparing the draft GPU.</td>
<td>5.1. The dEIR omits addressing the issues raised in correspondence to the City, regarding the dEIR, dGPU, and conditions in the ECDLL area by the representative of the owner of the parcels at 1921 and 1925 ECDLL.</td>
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<td>6</td>
<td>15</td>
<td>Vertical aerial photo inset: caption</td>
<td>&quot;Sea cliff retreat is typically a slow, gradual process; however, major bluff failures occur periodically such as the 2008 bluff failure at Shoreline Park.&quot;</td>
<td>6.1. The dEIR (1) uses terms such as &quot;sea cliff&quot; and &quot;bluff&quot; interchangeably and without definition, and contains (or references) no quantified analysis to support its findings herein.</td>
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<td>7</td>
<td>35</td>
<td>Class I impacts</td>
<td>Citywide transportation GHG emissions in 2030 and effects on climate change.</td>
<td>7.1. The dEIR impermissibly neither contains nor analyzes (1) a finite list of GHG’s, (2) their quantified effects on and relationship to local-regional or global climate change, (3) actions to require and achieve mandatory mitigation measures (e.g., carbon neutrality, regional pollutant emission controls through rigorous federal coastal consistency review), and thereon proposes incomplete mitigations with resultant residual significant impacts on the environment.</td>
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| 8    | 36   | Class II impacts | Potential future development could displace or disturb important upland habitats and special status species. | 8.1. The dEIR analysis lacks requisite specific criteria to determine “important” terrestrial habitats, and omits aquatic habitat within City’s jurisdiction.  
8.2. Absent a current reconnaissance-level parcel-specific professional delineation of the identified “important habitats” within the City, the dEIR’s finding of “potential” displacement or disturbance lacks requisite site-specific (or subarea) threshold analysis and hence is speculative and thus impermissible.  
8.3. With regard to the coastal zone, the dEIR in this context omits analysis of balanced urban infill conservation and development pursuant to the statutory provisions therefore in Cal. Pub. Res. Code sec. 30007.5 and 30200. |
| 9    | 39   | Class II impacts | Potential for future development to displace or substantially disrupt important coastal habitats (creeks, estuaries, dunes, beaches, bluff scrub, and woodlands) and special status species. | 9.1. “Bluff scrub” per se is not a (2010) recognized sensitive biotic community; the dEIR errns methodologically by substituting labels for relevant species/habitat composition lists/descriptions.  
9.2. Absent a current reconnaissance-level parcel-specific professional delineation of the identified “important coastal habitats” within the City, the dEIR’s finding of “potential” displacement or substantial disruption lacks requisite site-specific (or subarea) threshold analysis and hence is speculative and thus impermissible. |
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| 10   | 39-41| Class II impacts | Potential for geologic and soil instability and hazards, including landslides, expansive soils, erosion, sea cliff retreat, and radon gas. | 10.1. The dEIR’s MM to increase the average annual bluff retreat rate, for SSE formula purposes, by 50% is specifically unsupported by any site- or subaerial evidence in the record, and relies on a dGPU/dEIR background paper that by its own terms is based on unquantified considerations.  
10.2. The unsupported 12-inch per average annualized retreat rate, “potentially accelerating to 1 to 3 feet per year if sea level rise progresses,” is also the speculative and hence impermissible basis, in relevant part, of a dEIR recommendation to amend the certified LCP.  
10.3. The dEIR/dGPU neither contain, nor reference, any quantified locally/subaerially applicable climate change or sea level rise data or model that is authorized for GPU or regulatory use. |
| 11   | 44-45| Class II impacts | Potential for future new development to lead to loss or fragmentation of important open space areas. | 11.1. The dEIR’s proposed mitigation, based on the MEA Visual Resources map, lacks requisite threshold criteria for what constitutes “important open space areas.”  
11.2. MM VIS-1, as it applies to 1921 and 1925 ECDLL, fails to identify a public view origination point that would encumber effectively all of these legally separate privately owned parcels with a “shoreline and coastal bluff” open space restriction.  
11.3. City’s adoption or other implementation of the dEIR consultant’s unfunded recommendation herein, as it applies to 1921 and 1925 ECDLL, would establish the scaffolding for and constitute an unconstitutional takings of private property for public use, including, but not limited to, attempted hiding of the nature and extent of City’s grading on these parcels in 1978. |
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<td>12</td>
<td>45-46</td>
<td>MM VIS-2</td>
<td>Add new dGPU Land Use and Growth Management Element, Parks, Recreation, Trails and Open Space Policies section as follows: Coordinate with [ ] private property owners to restore toothills and other lands degraded by past inappropriate grading [ ].</td>
<td>12.1. If the dEIR proposes to make this subpart of MM VIS-2 applicable to the parcels at 1921-1925 ECDLL that City graded in 1978, the dEIR (or dGPU) should so clearly state, describe (reference) City's grading actions and any entitlements therefor, and City's funded participation in site remediation.</td>
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<td>13</td>
<td>51-52</td>
<td>Impact BIO-3, coastal habitats and species</td>
<td>dEIR-recommended measure (RM) to consider modifying dGPU ER19 to protect coastal bluff scrub habitat and expand it to within 10 feet of the edge of the bluff or on the bluff face.</td>
<td>13.1. This RM lacks any requisite identification of any reasonably potentially significant impact on this biotic community from proposed or potential development, and thus is impermissible speculative mitigation. 13.2. The generalized dEIR discussion at pp. 7-27 and pp.7-37 ff. adds no specific information regarding potential significant impacts on coastal bluff scrub or coastal bluff habitat.</td>
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<td>14</td>
<td>57-58</td>
<td>RM VIS-1</td>
<td>dEIR-recommended RM to protect existing high quality views from public streets, sidewalks, or intersections where they are unique or unusual to a neighborhood or corridor. Where such protection would preclude reasonable development of a property, consider project design changes to include public viewing areas from upper story locations.</td>
<td>14.1. This RM lacks any requisite definition, or identification, of any reasonably potentially significant impact from proposed or potential development on &quot;high quality views (as defined)&quot;, and thus is impermissible speculative mitigation. 14.2. Locating a public view deck atop a single family residence constitutes an impermissible takings of private property for public use.</td>
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<td>15</td>
<td>59-60</td>
<td>RM VIS-2</td>
<td>dEIR-recommended RM to protect &quot;community character&quot; by requiring unspecified &quot;major new in-fill development or remodel&quot; to preserve &quot;key visual assets&quot; of the particular block or corridor.</td>
<td>15.1. At a 50- or 100-feet wide single family residential parcel, as at 1925 or 1921 ECDLL, respectively, implementation of this RM on a SFR reuse development would, absent permitted major regrading, constitute an unconstitutional takings of private property for primarily private neighborhood property owner benefit.</td>
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<td>16</td>
<td>65</td>
<td>PU-2.2</td>
<td>Wastewater system inflow, infiltration, spills: MTLS</td>
<td>16.1. The dEIR does not describe the existing condition of the antiquated MTLS either in the area along ECDLL of the 1978 slope failures or at 1921-1925 ECDLL in particular, or analyze the MTLS’ viability through the dGPU 20-year planning horizon in light of City’s construction of an upper buttress, without subdrains or requisite entitlement, in 1978 on 1921-1925 ECDLL.</td>
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<td>17</td>
<td>3.7-3.8</td>
<td>Fig. 3.1. Current (1975) GP land use map</td>
<td>The 1975 GP land use map depicts a -100-300 feet wide &quot;Beach&quot; land use designation along ECDLL, and an unspecified &quot;bluff&quot; line along the landward side of it.</td>
<td>17.1. The 1975 GP contains no evidence (e.g., from a contemporaneous surveys or vertical aerial imagery) to support the beach designation width or bluff line location.</td>
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<td>18</td>
<td>7.3-7.4</td>
<td>Fig. 7.1. Biological Resources</td>
<td>Fig. 7.1 maps &quot;Coastal Bluff&quot; or &quot;Coastal Sage Scrub&quot; biological resources to -300 feet landward of &quot;City limits&quot; along the shoreline in the area of 1921 and 1925 ECDLL.</td>
<td>18.1. The color overlay for the two categories is similar; hence the ambiguity. The insert long-distance photograph at dEIR p. 7-5, with the caption &quot;Coastal bluff habitat occurs on the steep cliffs on the coastline of the Mesa and Hope Ranch,&quot; and another at p. 7-25, of the escarpment immediately downcoast of the Arroyo Burro debouchment, further adds to the ambiguous designation.</td>
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<td>18.2. The dEIR characterizes coastal bluff scrub (p.7-2) and coastal bluff habitat (p.7-5), but does not (1) provide a list or distribution (density) of vegetative species that occur at present anywhere on either parcel, or (2) distinguish between planted and naturally occurring vegetation either on the coastal bluff face or the City-graded coastal bluff top on these parcels.</td>
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<td>19</td>
<td>8.5-8.6</td>
<td>Fig. 8-2. Key Geologic Hazards.</td>
<td>Fig. 8-2 maps (1) an &quot;estimated 75-year bluff retreat (existing bluff not depicted)&quot; line along ECDLL, some ~600 feet landward of the ~shoreline, and (2) a &quot;high landslide potential area&quot; that extends ~375 feet landward of the ~shoreline in the area of 1921 and 1925 ECDLL.</td>
<td>19.1. The dEIR, or the unquantified March, 2009 background study to which it cites, contains no professional analysis that supports either line or area as they apply to 1921 or 1925 ECDLL.</td>
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<td>20</td>
<td>8.11-8.12</td>
<td>Climate change</td>
<td>&quot;Climate change can affect geological conditions in the City [ ] primarily through increased high intensity rainfall events and rising sea levels. Climate change is thought to have caused a rise in sea level of over seven inches in California over the last 100 years and may also already be affecting local rainfall patterns. (Pacific Institute 2009). Continued or accelerated climate change is projected to exacerbate these trends, with the rate of sea cliff retreat expected to increase in the future. (Pacific Institute 2009).</td>
<td>20.1. Pacific Institute's 2009 report, to which the dEIR cites as its authority, specifically states that it consists of generalized information, based on selected assumptions about SLR (and in the absence of considering coincident localized tectonic uplift, as along the Transverse Ranges), for which its authors or enabling State agencies disclaim any responsibility if used used in local-regional planning-regulatory proceedings.</td>
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<td>Additional surface water infiltration into bedrock units prone to landslides could increase the risk of landslides or debris flows in shallow, saturated soils.</td>
<td>20.2. The dEIR's findings herein are simply unsupported by specific subareal (Santa Barbara) quantified data or analysis.</td>
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<td>20.3. The dEIR's observational finding regarding surface water infiltration omits the effects, both historic and potential, of City's infrastructure pipes and trenches also concentrating and discharging anthropogenic water to, e.g., adjoining bedding planes as well as the toe of coastal bluffs.</td>
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| 21   | 8-18 | CCRP oblique aerial photo caption | Approximately 75 existing homes in the City are located within the bluff retreat hazard zone, a number of which could be exposed to serious damage or destruction from sea cliff retreat over the next decade. Many Mesa area homes have limited setbacks from the bluff edge. Climate change-induced sea level rise is predicted to accelerate sea cliff retreat, which could expose more homes to damage by 2050, as well as portions of Shoreline Park and several public roads such as segments of Cliff Drive. | 21.1. The first phrase in this caption reflects a bluff retreat hazard zonation based on generalized, rather than site-specific, older and newly projected annual averaged retreat rates. The latter, by the terms of the report in which they occur, are based on qualitative rather than quantified analysis, and thus of no valid planning-regulatory import or value.  
21.2. If the preparers of the dEIR have any quantified subareal or site-specific shoreline, or toe or top of sea cliff or coastal bluff, retreat data to support the second phrase in sentence 1, it should be produced in or appended to a suitably revised dEIR that the public, as well as City decision-makers, may be informed by it, rather than the subject speculation.  
21.3. The dEIR does not define the term "bluff edge."  
21.4. If the preparers of the dEIR have any quantified subareal or site-specific shoreline, or toe or top of sea cliff or coastal bluff, retreat data to support any specific such location in 2050, it should be produced in or appended to a suitably revised dEIR that the public, as well as City decision-makers, may be informed by it, rather than the subject speculation. |
| 22   | 8.23-8.24 | MMN GEO-1 | a. "Bluff setbacks shall be adequate to address long-term erosion and slope stability issues."  
b. "Update the existing [ ] bluff retreat rate formula [ ] to reflect updated bluff retreat rate of 12 inches per year. [ ] Periodically update bluff retreat rate and 75-year retreat line to reflect new data of potentially accelerated bluff retreat rates." | 22.1. The dEIR and the dGPU, and their technical studies, contain no quantitative analysis to support a 12 inch sea cliff or coastal bluff retreat rate, or even a map that depicts the current (2010) location of the toe or top of coastal bluff from which such a rate could be measured.  
22.2. The second cited sentence displays the dEIR preparers' bias, which altogether omits the possibility of subareal or localized <12 inch/average year retreat rates, but rather can only envision accelerated retreat during the 21st Century. |
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<td>23</td>
<td>8-24</td>
<td>RM GEO-1</td>
<td>Modify the Local Coastal Plan “Sea Cliff Retreat #1” to establish a 12 inch, and up to 1-3 feet, annual averaged retreat rate during the dGPU planning horizon and the subsequent 21st century, respectively.</td>
<td>23.1. The dEIR’s RM is completely outside the dGPU project description, unless Council at some unknown point authorized such a change in the General Plan update to also subsume a LCP update within it.</td>
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<td>24</td>
<td>11.7-11.8</td>
<td>Fig. 11.3. Floodplains and Flood Hazards in Santa Barbara</td>
<td>a. Fig. 11.3 depicts a flood zone in the area of 1921-1925 ECDLL that extends c. 150 feet landward of the unspecified shoreline boundary. b. Fig. 11.3 depicts no tsunami runup area to landward of (elevationally above) the referenced flood zone.</td>
<td>24.1. The dEIR should identify the seaward boundary of the depicted flood zone in the area of 1921-1925 ECDLL, to avoid ambiguity, or error, as to the true mapped extent of the flood zone here. 24.2. If the dEIR has any evidence of a tsunami (or any other marine wave) having reached near elevations 128-130 feet above mean sea level in the area of 1921-1925 ECDLL, it should produce it and thereby inform the public and decision-makers with regard thereto.</td>
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<td>25</td>
<td>13.3-13.4</td>
<td>Fig. 13.1. Visual Resources</td>
<td>Fig. 13.1 depicts an “Area of Visual Sensitivity,” based on “coastal bluffs and shoreline,” that extends landward ~800 feet from the unspecified line that indicates its seaward edge (or approximately to elevation 130 feet above mean sea level) in the area of 1921-1925 ECDLL.</td>
<td>25.1. The dEIR should, with reference to the area of 1921 and 1925 ECDLL, identify (1) the seaward boundary of the depicted Area of Visual Sensitivity, (2) the criterion(-ia) and relevant facts on the ground that form the basis on which it depicts this landward boundary of the Area of Visual Sensitivity.</td>
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<td>26</td>
<td>13-21</td>
<td>VIS-1: Open Space: Mesa Hillsides</td>
<td>Potential development of some new SFR's and associated grading and vegetation clearing for fire protection or site improvements on steep slopes could cause visual scarring of these hillsides and disruption of the City's scenic backdrop.</td>
<td>26.1. Does this speculative analysis apply to the areas mapped in the dGPU as “Major Hillsides,” or also to the Mesa’s sloping flanks, above the marine-wave cut escarpment (coastal bluff)?</td>
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<td>27</td>
<td>13-29</td>
<td>RM VIS-1 Scenic views</td>
<td>Protect existing high quality views from public streets, sidewalks, or intersections when they are unique or unusual to a particular neighborhood or corridor.</td>
<td>27.1. See analysis for item, 14, above.</td>
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| 28   | 18-8 | Fig. 18.1. Coastal Bluff Erosion Hazard Zone | This reduced, and variously screened opaque, vertical aerial graphic depicts, at a very large scale, individual structures, driveways, streets, and shaded coastal bluff erosion hazard zone bands through 2025, 2050, and 2100. | 28.1. This dEIR graphic itself notes, in the text box in the upper left, that “State estimates for coastal erosion are not accurate enough to be used for planning purposes,” and thus presents a “Coastal Bluff Erosion Hazard Zone” based on false premises.  
28.2. The baseline top of coastal bluff in the area of 1921 and 1925 ECDLL, which functions as the starting line for the depicted landward erosional bands, is located by reference to the 2006 topographical survey of this area in city's files near topographical elevation 50 feet, rather than near elevation 126-130 feet, as dEIR Fig. 13.1 purports.  
28.3. The depicted coastal bluff erosion bands indicate an average annualized retreat rate of approximately 10 feet/year between 2010 and 2030, 1.5 feet/year between 2030 and 2050, and 5.5 feet/year between 2050 and 2100. If the dEIR preparers have any quantified data to support such extreme retreat rates, they should produce them in the recirculated dEIR on the finite dGPU. |
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| 29   | 18.9-18.10 | Fig. 18.2. Current and predicted Coastal Flooding due to Climate Change SLR | Fig. 18.2 depicts, based on Pacific Institute 2009 generalized mapping, (1) a (lighter blue) 200-feet landward coastal flood, under year 2000 baseline conditions, from an unspecified seaward boundary, and (2) a (darker blue) adjacent landward band, ~10 feet wide, to depict predicted inundation from a 100 year flood under the 1.4 m (55 inch) SLR scenario. | 29.1. Fig. 18.2 omits to define the seaward boundary (line of departure) for either projected coastal flood scenario, which renders the landward dimensions ambiguous and incapable of objective implementation.  
29.2. Fig. 18.2 omits PI’s caveat disclaimer regarding use of its report and mapping for planning-regulatory purposes.  
29.3. The dEIR omits any quantitative spatial or temporal analysis, based on subaerial or site-specific geologic data in the area of 1921-1925 ECDLL, to arrive at its landward inundation mapping, in any specific year during the dGPU planning horizon or subsequently. If the dEIR preparers have any quantified data to support such extreme retreat rates, they should produce them in the recirculated dEIR on the finite dGPU. |
Response to Individual Letter #19, Norbert Dall, Dall and Associates/Matrix (May 17, 2010)

Draft General Plan Update

I9-1 (Plan SB GPU): Comment noted. All documents have been made available to public and decision-makers. The Plan Santa Barbara website has been set up specifically to keep the public informed about the Plan Santa Barbara process.

I9-2 (Plan SB GPU): Comment noted. See response I9-1.

I9-3 (Plan SB GPU): The City’s boundaries, including the seaward boundary, are shown on the Official Public Street Map of the City of Santa Barbara and the Annexation Index Map of the City of Santa Barbara. The General Plan Map has been edited to reflect that City boundaries extend into the Santa Barbara channel.

Developing specific structural alternatives for City-County organizations are not in the scope of the General Plan framework further than developing policies that organizations work together on regional issues or issues/services that overlap.

I9-4 (Plan SB GPU): The Draft General Plan Sustainability Framework discussion describes the sustainability approach to the General Plan update. The entire Plan Santa Barbara process has involved defining with decision-makers and the community what sustainability is for the city of Santa Barbara. As part of the City’s future implementation program, it is expected that the Adaptive Management Plan will be further defined to specify which indicators should be evaluated for impacts on resource use as well as sustainability.

I9-5 (Plan SB GPU): Comment noted. The new General Plan Map land uses designations were developed on a parcel-based method and follow parcel lines.

I9-6 (Plan SB GPU): Comment noted. The Shoreline General Plan land use designation is not intended to include the privately owned bluff top residential properties.

I9-7 (Plan SB GPU): Comment noted.

I9-8 (Plan SB GPU): The purpose of the Suitable Sites Inventory is to analyze whether the proposed City General Plan residential development potential is adequate to meet the project housing needs identified in the 2008 Regional Housing Needs Plan prepared by SBCAG. It is intended to assess whether the City can accommodate the Regional Housing Needs Allocation (RHNA). The Suitable Sites Inventory does not in any way render a parcel unbuildable or eliminate development potential by the fact that it is not on the list.

A number of single-family parcels with slopes in excess of 30% or greater and/or with geologic, biological or other constraints were removed from the database. This is explained beginning on page 289 of the Draft Housing Element.

I9-9 (Plan SB GPU): As part of the City’s future implementation program, it is expected that the Adaptive Management Plan will be further refined to include quantifiable standards.

I9-10 (Plan SB GPU): Comment noted. See response I9-5.

I9-11 (Plan SB GPU): The Project Compatibility Analysis purpose, considerations, and procedures are codified in the city of Santa Barbara Municipal Code (SBMC) chapters of Historic Resources and Architectural Board of Review. These sections can be found in SBMC Section 22.22.145 and SBMC Section 22.68.045. The development projects subject to these sections are defined in the respective codes.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

**I9-12 (Plan SB GPU):** Comment noted. The environmental review and standards of the recently adopted Neighborhood Preservation Ordinance amendments is not within the scope of the General Plan update. The appeal process schedules for discretionary projects are not within the scope of the General Plan update.

**I9-13 (Plan SB GPU):** The Pedestrian Master Plan was adopted by the City Council by resolution 06-065 on July 18, 2006.

**I9-14 (Plan SB GPU):** The City has various guidelines that apply to the various discretionary review bodies or to a specific geographic location in the City. All guidelines are found on the city of Santa Barbara website.

**I9-15 (Plan SB GPU):** The Hillside Design District is delineated on the maps labeled “Hillside Design District” which are part of SBMC22.68.

**I9-16 (Plan SB GPU):** The Sustainability Framework approach to the General Plan update includes broad policies towards sustainability citywide, including the Airport. Addressing further specific sustainability of the Airport through 2030, 2050, or 2100 is not within the scope of this General Plan update.

**I9-17 (Plan SB GPU):** Comment noted. The bulleted list of general broad desired neighborhood qualities is representative of the current General Plan update process as well objectives of the 1964 General Plan. The Plan development has considered extensive public comment received throughout the Plan process.

**I9-18 (Plan SB GPU):** The draft General Plan update is a broad policy document. A quantitative analysis of specifically the El Camino de la Luz hillside and coastal bluff/sea cliff landform stability is not within the scope of the draft General Plan document. Please also see response I8-8, I8-10 and I8-11.

**I9-19 (Plan SB GPU):** Comment noted. Grading policies relative to slopes throughout the City are found in the existing Conservation and Seismic Safety-Safety Element. Identifying specific grading that has or has not occurred in specific geographic areas of the City is not within the scope of the current phase of the General Plan update. The current focus is on an updated Land Use and Housing Elements as well as new policies to be included in other elements of the General Plan to be updated at a later time. Until the other elements are updated, the existing elements are applicable. At a future date when the Seismic Safety and Safety Element is updated, geologic issues will be further addressed.

**I9-20 (Plan SB GPU):** See edits to General Plan document, Land Use Element, Neighborhood Issues.

**I9-21 (Plan SB GPU):** Comment noted. Components of the 2007 Mesa Concept Plan will be considered at the time that a Sustainable Neighborhood Plans is further defined for the Mesa (LG17.)

**I9-22 (Plan SB GPU):** See response I9-21. The lack of a Sustainable Neighborhood Plan would not in itself delay or impede the development of a single-family zoned parcel.

**I9-23 (Plan SB GPU):** Comment noted.

**I9-24 (Plan SB GPU):** Comment noted. The final document will include the citywide percentages of land area by land use designation category. The individual charts for the neighborhoods will be removed from the document.

**I9-25 (Plan SB GPU):** Living within our resources is a broad general goal in both the existing and proposed General Plan. General policies for City acquisition of private parcels would be for the purpose of providing affordable housing, community buildings, or for open space and parks. See General Plan Policies OP1.2,
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

OP2, OP1.4, OP1.5. A few examples of properties identified in the draft General Plan that could potentially be acquired someday in the future to serve a community purpose include the Clark Estate, the National Guard Armory, and the Army Reserve Building.

I9-26 (Plan SB GPU): Comment noted.

I9-27 (Plan SB GPU): Comment noted. The term “useable and well located open space” applies to both private and public open space.

I9-28 (Plan SB GPU): Comment noted.

I9-29 (Plan SB GPU): Comment noted.

I9-30 (Plan SB GPU): Comment noted.

I9-31 (Plan SB GPU): Comment noted.

I9-32 (Plan SB GPU): Many of the General Plan policies including those found in the Draft Housing Element call for incentives, including higher densities, for affordable housing projects. Policy H15 in the Housing Element specifically calls for encouraging secondary dwelling units in some appropriate single family neighborhood locations.


I9-34 (Plan SB GPU): The adoption of Policy LG6 which calls for encouraging new residential units in the recommended High Density residential land use designations would not preclude the development of new single-family units on single-family lots. Please note that Policy H10 calls for encouraging the development of housing on vacant in-fill sites in residential zones.

I9-35 (Plan SB GPU): Comment noted. See proposed density program including text changes in the Land Use Element and Housing Element policies of the General Plan update. The actual operational details of an average density program would be part of future implementation. The City’s zoning ordinance would include the details and zoning classifications where applicable.

I9-36 (Plan SB GPU): Comment noted. Development of a revised TDR program is not within the scope of this phase of the General Plan update. At the time that that Council initiates the development of a revised TDR program, the operational terms, parameters, and methodology details would be identified.

I9-37 (Plan SB GPU): Comment noted.

I9-38 (Plan SB GPU): The General Plan update is a broad policy document. Your specific concerns for 1921-1925 El Camino de la Luz are not within the scope of the draft General Plan document.

I9-39 (Plan SB GPU): Comment noted.

I9-40 (Plan SB GPU): Comment noted.

I9-41 (Plan SB GPU): Comment noted. Major hillsides are discussed in the text of the existing Open Space Element which is not being amended at this time (except for incorporation of General Plan update policies). Major hillsides are shown on the Draft General Plan Parks and Open Space Map. LG16 is a policy for single-family zoned properties. Note that Implementation Action 16.2 discusses slope density standards that are applicable also in the R-2, two family zone.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

I9-42 (Plan SB GPU): Comment noted.

I9-43 (Plan SB GPU): Comment noted. See edits to the General Plan Land Use Map.

I9-44 (Plan SB GPU): Comment noted. The current focus is on an updated General Plan Land Use Element and Map and Housing Element as well as new policies to be included in other Elements of the General Plan to be updated at a later time. Until the other elements are updated, the existing elements are applicable. The focus of Policy OP2 is for possible future acquisition of publicly owned or underdeveloped properties. At this time, no specific residential vacant privately owned parcels are recommended for public acquisition.

I9-45 (Plan SB GPU): Comment noted. See response to I9-25.

I9-46 (Plan SB GPU): Comment noted. The Park and Open Space Standards have not been developed as they are a recommended implementation action to be carried out in the future. This policy and corresponding implementation actions are relative to publicly owned open space, primarily City-owned or managed parks. See EIR Section 14.0 for more discussion on Parks and Recreation Services.


I9-48 (Plan SB GPU): Comment noted. The General Plan update is a broad policy document. The Open Space Shoreline land use designation applies to public open space, and not private property. Your specific concerns for 1921-1925 El Camino de la Luz are not within the scope of the draft General Plan document.

I9-49 (Plan SB GPU): Comment noted. The level of detail that would define what areas of contiguous tracts of open space or important public views has not been defined. The General Plan is a 20-year document and further details of future implementation actions under OP1 and ER25.1 have not been identified.

I9-50 (Plan SB GPU): The program details for specific community gardens have not been developed nor any sites identified at this time. At the time Sustainable Neighborhood Planning occurs or when OP1.1 is implemented, individual neighborhoods could identify prime locations. The property owners would be involved in any decision to use a person’s private property is developed as a community garden. It would be highly unlikely that a community garden would be established on any bluff top properties due to irrigation and erosion concerns.

I9-51 (Plan SB GPU): Comment noted. This suggestion is something that can be considered if and when an Open Space fee structure is set up for new development or redevelopment in the City.

I9-52 (Plan SB GPU): Comment noted. The existing Open Space Element is part of the recommended final General Plan update.

I9-53 (Plan SB GPU): Comment noted. The existing Parks and Recreation Element would remain part of the General Plan, with updated policies adopted as part of the Plan Santa Barbara GPU and incorporated as part of the Parks and Recreation Element. With the exception of recommended new policies, this element is not being updated in this phase of the plan but would be in the future. Section 18.0 of the EIR (Global Climate Change) and Section 8.0, Geologic Conditions discuss possible future erosion of the City’s coastline that includes public facilities and parks. The EIR includes mitigation measure MM GEO-1 that calls for the development of a Shoreline Management Plan to identify, manage and to the extent feasible mitigate or reduce climate change-induced sea level rise impacts upon public facilities and private property along the City shoreline.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

I9-54 (Plan SB GPU): Comment noted. See edits to map.

I9-55 (Plan SB GPU): Comment noted. By the time the draft General Plan is adopted by City Council, it will include the recommended goals for the Land Use and Housing Elements and an initial set of sustainability goals and updated policies for each of the other elements that are to be updated at a later time. These goals are a combination of existing General Plan goals, Council goals and community and decision-maker input as part of Plan Santa Barbara. As explained in the introduction to each of the elements, as “the City focuses its planning resources on the various separate elements of the General Plan, all of the goals, policies and implementation actions will also evolve.”

I9-56 (Plan SB GPU): Comment noted. A proposed final General Plan document will be available for public review prior to adoption by City Council.

I9-57 (Plan SB GPU): Comment noted. The scope of the current General Plan update is to develop a Sustainability Framework (also see response to I9-55) for the General Plan and all elements, and to update the Land Use and Housing Elements. The Council will review and approve an implementation program for adopted programs and schedule for future planning phases to update other elements of the General Plan.

I9-58 (Plan SB GPU): Comment noted.

I9-59 (Plan SB GPU): Comment noted.

I9-60 (Plan SB GPU): Comment noted. See Existing City Sustainable Santa Barbara program for City facilities and operations (www.SantaBarbaraCA.gov). See GPU Environmental Resources Climate Change Policies including ER1.1 Comprehensive Climate Action Plan (previously numbered ER3).

I9-61 (Plan SB GPU): Comment noted.

I9-62 (Plan SB GPU): Comment noted. The General Plan is a 20-year plan. Policy EF3 calls for the preparation of an economic development plan in the future. When this future plan is developed, it is highly likely that the desired areas for economic planning would focus on the commercial zones of the city.

I9-63 (Plan SB GPU): Comment noted.

I9-64 (Plan SB GPU): Comment noted. Decision-makers will consider these issues when approving the City’s Capital Improvement Plan.

I9-65 (Plan SB GPU): Comment noted.

I9-66 (Plan SB GPU): Comment noted. Development impact fees as referenced in EF25 have not been developed at this time. If and when these are developed, a nexus study relative to the capital improvement costs of public facilities and services based on demands of the development will be part of the process for establishing fees.

I9-67 (Plan SB GPU): Implementation Action ER25.1 will be removed as a recommended measure because school districts and local jurisdictions cannot amend school fees. Fees are set by the State.

I9-68 (Plan SB GPU): Comment noted. The consistency analysis is not required to be contained in the General Plan. A comprehensive update of the existing Conservation element is not part of the current GPU update. The focus of this General Plan update is the Land Use Element, Land Use Map, and Housing Element,
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

with limited policy updates included in other elements such as the Environmental Resources policies. The Conservation Element as well as other elements will be further updated in future phases of planning.

I9-69 (Plan SB GPU): Comment noted.

I9-70 (Plan SB GPU): Comment noted. A General Plan is not required to define terms in common usage such as “greenhouse gases” which are generally accepted to refer to carbon dioxide, methane and related substances. Please refer to Sections 6 (Air Quality) and 18 (Global Climate Change) of the EIR for a more complete discussion.

I9-71 (Plan SB GPU): Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City will consider these recommendations during the development of its Comprehensive Climate Change Action Plan (CCCAP).

I9-72 (Plan SB GPU): Comment noted. This broad General Plan goal is intended to provide general direction to the City to address and adapt to climate change with more detailed implementation to be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

I9-73 (Plan SB GPU): Comment noted. This General Plan-level policy is intended to provide direction to the City to implement broad climate change goals to be further refined as part of the CCCAP. Editorial comments are noted and will duly be considered by City decision-makers; please see also response I9-70 regarding terms in common usage. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

I9-74 (Plan SB GPU): Comment noted. The draft General Plan provides one of the more detailed policy frameworks and accompanying environmental analyses yet performed at the general plan level in the State of California. No state laws or legislation suggest that the General Plan must provide Climate Action Plan level of detail. Such plans are clearly an implementation item under State law and the City has committed to a reasonable schedule for its adoption. Please refer to Section 23, Mitigation Monitoring and Reporting Plan and Table 23.1 in the EIR.

I9-75 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition. If the City adopts specific standards regulating GHGs, terms will be defined as required by statute. More detailed implementation will also be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

I9-76 (Plan SB GPU): Comment noted. Details to be defined when a comprehensive Climate Change Action Plan is developed.

I9-77 (Plan SB GPU): Comment noted. See response to I9-73.

I9-78 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition. If the City adopts specific standards regulating GHGs, terms will be defined as required by statute. More detailed implementation will also be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

I9-79 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition. If the City adopts specific standards regulating building materials, terms will be defined as required by statute. More detailed implementation will also be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

I9-80 (Plan SB GPU): Comment noted. This policy is appropriately detailed for a General Plan and requires no further definition of terms. If the City adopts specific standards or implementing guidelines, terms will be defined as required by statute. More detailed implementation will also be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

I9-81 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition. If the City adopts specific adaptation guidelines, terms will be defined as required by statute. More detailed implementation will also be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

I9-82 (Plan SB GPU): Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City will consider these recommendations during the development of its CCCAP.

I9-83 (Plan SB GPU): Comment noted. This policy is appropriately detailed for a General Plan and requires no further definition of terms. Comments are noted and will duly be considered by City decision-makers.

I9-84 (Plan SB GPU): Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City will consider these recommendations during the development of its CCCAP.

I9-85 (Plan SB GPU): Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City does not concur that City policy discourages micro production of energy. The City will consider these recommendations and any measures needed to ease micro production of energy at home sites during the development of its CCCAP.

I9-86 (Plan SB GPU): Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City will consider these recommendations during the development of its CCCAP.

I9-87 (Plan SB GPU): Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City will consider these recommendations during the development of its CCCAP.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

**I9-88 (Plan SB GPU):** Comment noted. A General Plan is not required to define terms in common usage such as “alternative/advance fuels infrastructure” which is generally in common usage in the energy industry. Please refer to Section 17 of the EIR for a more complete discussion of such systems.

**I9-89 (Plan SB GPU):** Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City does not concur that CEQA requires such detailed analysis of mitigation implementation (i.e., “small wind turban siting analysis”) at the General Plan level. However, the City will consider these interesting recommendations and any measures needed to ease micro production during the development of its CCCAP.

**I9-90 (Plan SB GPU):** Comment noted. General Plan goals are often broad in nature and are not required (or encouraged) by State planning and Zoning law to be overly detailed. Thank you for your detailed suggestions regarding this matter. The City will consider these recommendations during the development of its CCCAP.

**I9-91 (Plan SB GPU):** Comment noted. A General Plan is not required to define terms in common usage such as “new construction or significant remodel projects.” If the City adopts specific guidelines, terms will be defined as required by statute. More detailed implementation will also be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

**I9-92 (Plan SB GPU):** Comment noted. General Plan is not required to define terms in common usage such as “non-toxic materials.” If and when the City adopts specific incentives and guidelines, terms will be defined as necessary.

**I9-93 (Plan SB GPU):** Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. More detailed implementation will also be set forth as part of the CCCAP identified in ER1.1. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of its CCCAP.

**I9-94 (Plan SB GPU):** Comment noted. This General Plan policy is appropriately detailed and requires no further elaboration to be consistent with CEQA. The regional air quality impacts of development under Plan Santa Barbara have been identified as insignificant and therefore recommended measures such as this policy require no further elaboration.

**I9-95 (Plan SB GPU):** Comment noted. Nothing in State law prohibits the City from establishing such ordinance standards. The City will consider these specific recommendations during the development of any new ordinance.

**I9-96 (Plan SB GPU):** Comment noted. The policy is not internally inconsistent. Existing and proposed City policy encourages use of drought tolerant vegetation with a mix of both native and non-native plants acceptable in urban areas; landscaping within or adjacent to native habitats or areas designated for restoration would be required to consist of native species. Irrigation and landform stability would also be addressed under mitigation measure MM GEO 1a (Shoreline Management Plan) and GP Policy ER1 (Climate Change) and ER4 (Incorporation of Adaptation in Development).
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

I9-97 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define terms in common usage such as “to the extent reasonably possible.” State law permits leaving flexibility for future decision-makers on such matters and allow consideration of the fact for future cases when applying this policy.

I9-98 (Plan SB GPU): Comment noted. This policy is intended to apply to uplands habitats. Coastal bluff scrub is a recognized Environmentally Sensitive Habitat under the City Local Coastal Plan.

I9-99 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define each and every term used in the document. Further details of implementation of the Action will be addressed during development of updated multi-use plans.

I9-100 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. The policy is citywide in nature and is not intended to address any one parcel or subarea.

I9-101 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all actions set forth within the policy, but to provide guidance for review of future actions allowing for reasonable discretion on the part of staff and decision-makers.

I9-102 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. The policy is citywide in nature and is not intended to address any one parcel or subarea. Coastal bluff scrub is a recognized Environmentally Sensitive Habitat under the City Local Coastal Plan. Please see also responses I8-8, I8-10 and I8-11.

I9-103 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all actions set forth within the policy, but to provide guidance for review of future actions allowing for reasonable discretion on the part of staff and decision-makers.

I9-104 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. The policy is citywide in nature and is not intended to address any one parcel or subarea.

I9-105 (Plan SB GPU): Comment noted. See responses I9-18 through I9-56.

I9-106 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all actions set forth within the policy, but to provide guidance for review of future actions allowing for reasonable discretion on the part of staff and decision-makers. The policy is citywide in nature and is not intended to address any one parcel or subarea.

I9-107 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define each and every term used in the document. Further details of implementation of the Action will be addressed during development of the future visual study. Thank you for your detailed suggestions regarding this matter. The City will consider these specific recommendations during the development of this future study.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

I9-108 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all actions and terms set forth within the policy, but to provide guidance for implementation of future actions allowing for reasonable discretion on the part of staff and decision-makers. The Action is not internally inconsistent, but is intentionally broad to permit the City to adopt a mix of standards and guidelines based on the outcome of future review, the sensitivity of resources affected, and public input received.

I9-109 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all actions and terms set forth within the policy, but to provide guidance for implementation of future actions allowing for reasonable discretion on the part of staff and decision-makers.

I9-110 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all terms set forth within the policy, but to provide guidance for future decisions while allowing for reasonable discretion on the part of staff and decision-makers. The policy is citywide in nature and is not intended to address any one subarea or hillside.

I9-111 (Plan SB GPU): Comment noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all terms set forth within the policy, but to provide guidance for future decisions while allowing for reasonable discretion on the part of staff and decision-makers. Private views would be subject to protection to the extent consistent with City ordinance and State law.

I9-112 (Plan SB GPU): Comment noted. The policy is citywide in nature and is not intended to address any one subarea or sea cliff. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all terms set forth within the policy, but to provide guidance for future decisions while allowing for reasonable discretion on the part of staff and decision-makers.

I9-113 (Plan SB GPU): This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all terms set forth within the policy, but to provide guidance for future decisions while allowing for reasonable discretion on the part of staff and decision-makers.

I9-114 (Plan SB GPU): Comment noted. See response I9-8.

I9-115 (Plan SB GPU): Comment noted. The policy is citywide in nature and is not intended to address any one parcel or subarea.

I9-116 (Plan SB GPU): Comment noted. The policy is citywide in nature and is not intended to address any one parcel or subarea.


I9-118 (Plan SB GPU): Comment noted. See response I9-8. This Housing Element goal is a broad goal to encourage housing for all economic levels. Again, the fact that these two parcels are not on the Suitable Sites Inventory would not in of itself preclude development of a single family residence that complies with all applicable codes and regulations.

I9-119 (Plan SB GPU): Comment noted. See response I9-8 and I9-118.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

I9-120 (Plan SB GPU): Comment noted.

I9-121 (Plan SB GPU): Comment noted. The Public Services and Safety Element includes the existing Seismic Safety and Safety Element and the existing Noise Element. With the exception of recommended new policies, this element is not being updated in this phase of the plan but would be in the future.

I9-122 (Plan SB GPU): Comment noted. General Plan policies apply to City public facilities and operations as well as private development. Please also see the existing Sustainable Santa Barbara plan (www.SantaBarbaraCA.gov).

I9-123 (Plan SB GPU): Comments noted. This General Plan policy is appropriately detailed and requires no further definition or explanation. A General Plan is not required to define all actions and terms set forth within the policy, but to provide guidance for implementation of future actions allowing for reasonable discretion on the part of staff and decision-makers. Please see also responses I8-8, I8-10 and I8-11.

I9-124 (Plan SB GPU): Comment noted. Please see responses I8-8, I8-10 and I8-11

Draft EIR

I9-1 (EIR): Comment noted. The photo is simply an oblique view of Santa Barbara.

I9-2 (EIR): Comments noted. The EIR assesses the impacts of the Plan Santa Barbara GPU as set forth by the City. The City Council retains broad discretion on how to define the scope of this General Plan update. The EIR Project Description simply summarizes the project. The EIR addresses citywide impacts and is not intended to address any one subarea or sea cliff. The proposed maps are parcel-based. Please refer to City online GIS maps and/or request a meeting with City staff to review such parcel-specific information.

I9-3 (EIR): Comment noted. The maps, at 1-inch to 3,000-foot scale, depict the approximate shoreline and are intended for general citywide display purposes. They are not intended to depict specific parcels when reproduced at this scale. Please refer to City online GIS maps and/or request a meeting with City staff to review such parcel-specific information.

I9-4 (EIR): Comment noted. The statement refers to overall City growth. General Plans are often broad in nature and are not required by State planning and Zoning law to address specific site or parcel conditions at a high level of detail.

I9-5 (EIR): Comment noted. The summary refers to issues of citywide concern and is not parcel-specific.

I9-6 (EIR): Comment noted. “Sea cliff” and “bluff” are interchangeable terms.

I9-7 (EIR): Comment noted. The EIR identifies generation of GHGs within the City, describes their incremental contribution to climate change, and proposes mitigation measures to approach or achieve carbon neutrality. The EIR’s analysis remains conservative as required by CEQA, acknowledging the challenges with achieving these goals, and providing a project alternative more capable of reducing or eliminating this impact.

I9-8 (EIR): Comment noted. The EIR’s analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. Impacts to upland habitat are both quantified and generally characterized at a citywide programmatic level. Parcel specific analysis is not required.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

**I9-9 (EIR):** Comment noted. The EIR's analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. Impacts to upland habitat are both quantified and generally characterized at a citywide programmatic level. The EIR assesses citywide impacts and is not intended to address any one parcel or subarea; parcel specific analysis is not required. Coastal bluff scrub is a recognized Environmentally Sensitive Habitat under the City Local Coastal Plan.

**I9-10 (EIR):** Comment noted. The EIR's analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. Impacts to geologic hazards are both quantified and generally characterized at a citywide programmatic level. The EIR assesses citywide impacts and is not intended to address any one parcel or subarea; parcel specific analysis is not required.

**I9-11 (EIR):** Comment noted. The EIR's analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. Impacts to open space are general; however, the City determines the requisite threshold criteria for “important open space areas” based on facts in the General Plan and other documents. The EIR assesses citywide impacts and is not intended to address any one parcel or subarea; parcel specific analysis is not required.

**I9-12 (EIR):** Comment noted. The EIR’s analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. This mitigation measure is area- and citywide and programmatic in nature and is not intended to address any one parcel or subarea.

**I9-13 (EIR):** Comment noted. The EIR’s analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. Impacts to upland habitat are both quantified and generally characterized at a citywide programmatic level. The EIR assesses citywide impacts and is not intended to address any one parcel or subarea; parcel specific analysis is not required. Coastal bluff scrub is a recognized Environmentally Sensitive Habitat under the City Local Coastal Plan.

**I9-14 (EIR):** Comment noted. The EIR’s analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. This mitigation measure is area- and citywide and programmatic in nature and is not intended to address any one parcel or subarea. Please refer to Section 13 for a detailed analysis of impacts to views.

**I9-15 (EIR):** Comment noted. The EIR’s analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. This mitigation measure is area- and citywide and programmatic in nature and is not intended to address any one parcel or subarea. Application to specific parcels would be considered on a case by case basis; however, no substantial evidence or credible analysis has been provided that this policy would somehow result in a “taking” of a particular site or parcel.

**I9-16 (EIR):** Comment noted. The EIR’s analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. This mitigation measure is area and citywide and programmatic in nature and is not intended to address any one parcel or subarea.

**I9-17 (EIR):** Comment noted. The maps are prepared at a 1-inch to 3,000-foot scale, depict the approximate shoreline, and are intended for general citywide display purposes. They are not intended to depict specific parcels when reproduced at this scale. Please refer to City online GIS maps and/or request a meeting with City staff to review such parcel or subarea specific information.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

**I9-18 (EIR):** Comment noted. The maps are designed as general document displays at a 1-inch to 3,000-foot scale, depict the approximate habitat areas, and are intended for general citywide display purposes. They are not intended to depict specific parcels when reproduced at this scale. Please refer to City online GIS maps and/or request a meeting with City staff to review such parcel or subarea specific information. Surveys of habitats on particular parcels are not required at a general plan programmatic analysis level.

**I9-19 (EIR):** Comment noted. The maps are intended for general area-wide display purposes are not intended to depict specific parcels when reproduced at this scale. Please refer to City online GIS maps and/or request a meeting with City staff to review such parcel or subarea specific information. Please also refer to responses I8-8, I8-10 and I8-11.

**I9-20 (EIR):** Comment noted. Please refer to responses I8-8, I8-10 and I8-11.

**I9-21 (EIR):** Comments noted. The analysis in the EIR is citywide in nature. This caption illustrates a general characterization that a number of residences could be subject to damage or destruction from sea cliff retreat. Please see amended EIR text regarding timing as part of Impact GEO-2.4. Please also refer to responses I8-8, I8-10 and I8-11. Please refer to City ordinances for a definition of “bluff edge” or top of bluff.

**I9-22 (EIR):** Comments noted. The analysis in the EIR is citywide in nature. Please also refer to responses I8-8, I8-10 and I8-11.

**I9-23 (EIR):** Comment noted. EIR mitigation measures are designed to mitigate project impacts; it is certainly within the authority of the City to modify or amend its plans, policies, ordinances, and programs to implement required or recommended mitigation measures.

**I9-24 (EIR):** Comment noted. The maps are prepared at a 1-inch to 3,000-foot scale, depict the approximate shoreline, and are intended for general citywide display purposes. They are not intended to depict specific parcels when reproduced at this scale. Please refer to City online GIS maps and/or request a meeting with City staff to review such parcel or subarea specific information.

**I9-25 (EIR):** Comment noted. The maps are intended for general area-wide display purposes are not intended to depict specific parcels when reproduced at this scale. Please refer to City online GIS maps and/or request a meeting with City staff to review such parcel or subarea specific information.

**I9-26 (EIR):** Comment noted. The EIR’s analysis of issues is programmatic in nature as is appropriate for a citywide Program EIR on a General Plan. This particular analysis is focused on steep Mesa hillsides overlooking the City; however, grading and clearing of substantial areas of coastal bluff vegetation visible from the beach or nearshore waters, while potentially not as likely due to more limited aerial extent, may contribute to this impact.

**I9-27 (EIR):** Comment noted. Please refer to response I9-14.

**I9-28 (EIR):** Comments noted. Please also refer to responses I8-8, I8-10 and I8-11.

**I9-29 (EIR):** Comment noted. The maps are intended for general area-wide display purposes are not intended to depict specific parcels when reproduced at this scale. As required by recent amendments to CEQA, the EIR also discloses the potential long-term implications of sea level rise and associated flooding. These maps are based on studies endorsed by the State of California, and constitute the most current available information on the possible implications of sea level rise upon coastal properties in the city of Santa Barbara.
# I9, Norbert Dall, Dall and Associates/Matrix (Continued)

The EIR is careful to characterize this data as general in nature and as such, it is provided in the interest of full disclosure and to meet State requirements that such potential climate change hazards be disclosed. The impact analysis in Section 11 (Hydrology) is based on current flood hydrographs. It would be inappropriate for the City to not include such available information in the EIR. Please also refer to responses I8-8, I8-10 and I8-11.
Rodriguez, Julie

From: Feliciano, Gabriela P. on behalf of YouPlanSB
Sent: Tuesday, May 11, 2010 4:23 PM
To: Community Development PC Secretary
Subject: FW: Plan Santa Barbara's Demise

From: blairedwards [mailto:blairedwards@mac.com]
Sent: Tuesday, May 11, 2010 4:04 PM
To: Info@YouPlanSB.org
Subject: Plan Santa Barbara's Demise

Dear Sirs;

The residents of Santa Barbara have been very poorly served by the City Staff. It has squandered millions of tax dollars while following the Pied Piper's tune of "Affordable Housing" and relentlessly cranking out the proposed City's General Plan Update.

As I shovel my way through the proposed plan, I read one concession after another to the loud rantings of "Santa Barbara for All". One might think that the City's main obligation is providing "affordable housing" (whatever THAT is). Every home in the city is already affordable (i.e., it was purchased by SOMEbody). About 14% of living units are already low-cost and/or subsidized. If someone can not afford to live in Santa Barbara, it should be his choice to live somewhere else. There is NO reason that local citizens should be forced to chip-in their own scarce dollars to help pay for someone else's shelter. A number of recent building projects have died or been gravely harmed by the requirement that "affordable housing" be included. Chapala One should remain forever deserted as the Poster Tomb reminder of the "Affordable Housing" era.

And with any kind of luck or fortitude, the City Council will vote DOWN the currently proposed Plan. Although the Staff frequently talks up how much public input is reflected within its MANY pages, very few citizens have had any meaningful "say", and most know NOTHING about it. It would be a shame to foist this special-interest, silly plan upon beautiful, tradition-rich Santa Barbara!

Blair S. Edwards
Response to Individual Letter # I10, Blair S. Edwards (May 11, 2010)

I10-1 (Plan SB GPU): Thank you for your comments, which will be forwarded to decision-makers.
Page 19 of the Summary of the March 2010 Plan Santa Barbara Draft Environmental Impact Report lists Plan Santa Barbara Policy ER37 as a policy which will reduce noise when it will do just the opposite: instead of making Santa Barbara quieter, it will make Santa Barbara noisier! Policy ER37 proposes raising the maximum outdoor noise level for residential land uses by 5 dBA from the current 60 dBA to 65 dBA. What a sound level meter ("decibel meter") measures is sound pressure, the strength of a sound. Because the decibel scale is logarithmic, an increase of 5 dBA more than triples sound pressure. To claim that a policy allowing three times the strength of an undesirable quantity will reduce the undesirability of its presence is like claiming that allowing three times the current maximum amount of lead in the City’s water will produce cleaner water. Because sound pressure is a physical property of sound, it will be more difficult to reduce the noise level indoors with the physical techniques recommended to keep the currently allowed indoor maximum below 45 dBA, especially in older residences and in the homes of those who may not be able to afford the retrofitting, for example, of new windows and insulation, etc. The Draft Environmental Impact Report (DEIR) itself does not analyze how many of the older residences will need retrofitting nor does it analyze the increased costs for both retrofitting and new building, let alone the costs for the other exterior structures it mentions like soundwalls, barriers, or low glass panels.

When sound pressure as measured by a sound level meter ("decibel meter") is increased by 5 dBA, it is heard as about a third louder. Policy ER37 will thus allow ambient noise in residential neighborhoods to be about a third louder than it is now. Some idea of how loud a 65 dBA sound is can be gained from the fact that the City passed an ordinance (still in effect) before the vote to ban gas-powered leafblowers to limit the maximum decibel level of leafblowers, a noisy piece of equipment, to 65dBA! The different kinds of noise that will effect the ambient noise level of residential neighborhoods are produced by traffic, trains, airplanes, garbage trucks, street sweepers, sirens, construction equipment like jack-hammers, cement mixers, pile drivers, air compressors, hand tools like hammers, power tools like saws, drills, lawn mowers, leaf blowers, weed whippers, amplified and unamplified live music, recorded music, sports events, parties and other gatherings, barking dogs and other animals, etc. According to the DEIR, the din from all of these sources—basically all the noise sources in Santa Barbara—which Policy ER37 will allow to be a third louder outdoors in residential neighborhoods, only constitutes a “nuisance” because it is claimed that such noise is not loud enough, or continuous enough, or such that exposure to it will be long enough to effect human health.

The Noise of Santa Barbara is termed a “nuisance” by the DEIR and this categorization is the basis on which the DEIR concludes that according to the California Environmental Quality Act (CEQA) Guidelines (§15065) the noise impacts of a much louder future Santa Barbara are less than significant. What §15065 of CEQA actually says, and which the DEIR quotes (with a spelling error) on p.12-10 is that a significant impact is one that can “cause substantial adverse effects on human beings, either directly or indirectly.” Nowhere does CEQA limit “adverse effects on human beings” to health effects as does the DEIR. Even a “nuisance” is an “adverse

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PARTY ON DATE:
effect on human beings” and a “nuisance” that will be a third more of a nuisance is a “substantial adverse effect.” A much better term instead of “nuisance” would be “disturbance” and it is well-known that disturbances have an adverse effect on all the activities of human beings.

However, the DEIR not only does not quantify how loud a noise, how continuous a noise, or how long exposure to a noise makes a noise more than a nuisance [for example, on p. 12-16, construction projects that are described as “affecting individual project areas for weeks or months” are considered “short-term” and “intermittent”), but the DEIR does not refer to research of any kind to substantiate their claim that the noise (again, all the kinds of noise in the City) that Policy ER37 will allow to increase by a third will not have an effect on human health. As a matter of fact, decades of research on the health effects of noise has shown that what the DEIR labels “nuisance noise” does indeed have a negative effect on human health.

There is no good reason why the exterior noise standard of the City of Santa Barbara should match the standards of other cities and counties in California unless the City wants to lower their standard to produce a City as loud as other cities in California. If Plan Santa Barbara wants to look to other cities, it should be as a guide to improving the quality of life here, not degrading it! Is it the vision, or should I say, audition for the Santa Barbara of the future to be an over-crowded—I mean, a high-density city with a “small town feel” and the noise of the big city? Plan Santa Barbara should raise noise standards by lowering maximum decibel levels and abandon Policy ER37 for a quieter future.

[On a technical note, it should be pointed out that on pages 12-11 and 12-20 of the DEIR it is erroneously stated that a 3 dBA increase (double the sound pressure) is required for the increase to be perceptible to the human ear. The human ear is a marvelously sensitive instrument and can easily discern increases of a fraction of a decibel.]

Tracy Fernandez
302 Palisades Dr
Santa Barbara CA 93109
Response to Individual Letter # I11, Tracy Fernandez (May 17, 2010)

I11-1: Thank you for your comments. The City understands and appreciates residents’ concerns regarding maintaining reasonably tranquil residential neighborhoods and protecting residents and other sensitive receptors from undue adverse noise levels. City policies and standard practice are to regulate development and permitted activities to protect single-family and other residential neighborhoods from unacceptable levels of noise. The City noise ordinance applies to special events, parties, etc. to limit undue intrusion on surrounding neighbors and will continue to do so after adoption of Plan Santa Barbara. Also, in order to further City policies for maintaining quiet, high quality neighborhoods, the EIR Recommended Measure RM NOISE-1 proposes addition of a policy to the General Plan to require more detailed noise assessments as part of project reviews for special, conditional, and institutional uses with activities or events that may affect residential neighborhoods.

Application of California Environmental Quality Act (CEQA) standards and determination of what constitutes a significant adverse environmental impact is a different issue. A significant impact involves potential health effects associated with long-term involuntary exposure to high noise levels. The EIR recognizes that the 65 decibel (dBA Ldn) standard for average exterior noise levels is used in the other surrounding jurisdictions and throughout the State. The EIR identifies the change in exterior noise standards under Policy ER37 as insignificant due to lack of significant adverse effects on human health. Under the exterior noise standard change, current construction techniques will allow interior noise reduction to the same standard requirements as before (45 DBA Ldn). As discussed in Section 12 of the EIR, it is now widely recognized that a standard of 60 dBA for exterior noise levels is unnecessary to prevent damage to health, sleep disturbance, and other issues recognized as significant noise impacts.

In urban and suburban areas, a certain amount of ambient background noise is part of the environmental setting. City policy strives to minimize adverse disturbance type of noise events; however, this does not necessarily mean that average noise levels in the 60-65 dBA range should be considered significant adverse impacts under CEQA. Section 15064 (b) of the State CEQA Guidelines clearly recognizes that the setting should be taken into account in determining impacts and that “For example, an activity which may not be significant in an urban area may be significant in a rural area.” In this case, the City proposes to employ exterior noise standards widely recognized as acceptable in suburban and urban areas. Please see added text on human health issues related to Noise in Section 12.

City policy continues to support protection of residential areas from unduly adverse noise levels and City staff responds to specific noise complaints. The City’s Noise Ordinance provides an adequate mechanism to address such concerns.
April 30, 2010

Mr. John Ledbetter
Principal Planner
Planning Division
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102-1990

RE: DRAFT GENERAL PLAN UPDATE

Dear Mr. Ledbetter:

Thank you for the opportunity to review the results of the hard work done by City staff and the consultants on the General Plan Update (GPU). Overall, I believe that this is a good effort that will provide Santa Barbara with appropriate guidance for the next 20 years. However, I also have some concerns about the proposed document.

In this letter, I will focus on some of my more significant concerns. I have also attached two documents; one that outlines substantive comments not covered in this letter, and a second that includes minor comments and typographical errors.

INTRODUCTION AND LAND USE ELEMENT

Sustainability – Overall, I agree with the emphasis on sustainability. The world needs to move beyond wasting its resources. The only way to continue to live on this planet is to protect and preserve our resources for the future. However, the primary focus of sustainability in the GPU is on protecting the resources to save humanity. There is little focus on sustainability as a way to save the earth’s flora and fauna. More emphasis should be added on sustainability as a means to all parts of the environment.

Historic Context – This section is full of significant inaccuracies that need to be corrected (see Attachment 1). The city has no better historic summary (other than Chumash history) than already exists in the current Land Use Element (pp. 5-9). The Master Environmental Assessment and the archaeological guidelines discuss Chumash history, which this section could summarize. The array of errors is so extensive that it has the potential to affect the credibility of the entire draft document.

Mobility-Oriented Development Area (MODA) – If the MODA is not going to be mapped, maybe the concept should be abandoned — or renamed. The MODA does not seem to allow enough flexibility to include areas that may not currently meet the principles outlined in the GPU, such as limited transit availability. One area that could qualify as a MODA would be the Mesa as envisioned by some of the Mesa Neighborhood residents. There are sufficient services on the Mesa to reduce the need to travel outside of the neighborhood to take care of most basic needs. With good shuttle-type transit on the Mesa and a good connection to Downtown and Upper State Street shopping and other services, the Mesa Village concept could succeed as a small MODA area.
General Plan Update Comments
April 30, 2010 Page 2 of 4

Average Residential Density Program – A couple of questions about this program:

1. What is the allowed density if a developer wants to provide larger units? What will prevent a developer from moving forward with lower density, larger units?
2. How does this apply if a developer is trying to provide units with larger numbers of bedrooms to meet Housing Element goals for larger/extended families?

Coast Village Road Neighborhood – This area is not semi-rural. This area is strongly commercial with a scattering of multiple-family units. The neighborhood does have a distinct identity as shown by the wide avenue with its landscaped median strip and angled parking. Many of the buildings on the south side of Coast Village Road appear to be one-story (except Montecito Inn) because the topography drops south of the street. However, many of the buildings are two stories and some are three stories. Similarly, there is a mix of one, two, and three story buildings on the north side. The architecture is more contemporary than it is in downtown or along Milpas Street, and certainly does not have a semi-rural character. It might be considered a suburban strip commercial area or an “edge village.”

The Mesa – The residents' ideas for promoting an urban village here are great! Even if not every idea is embraced, there are many great ideas included in the proposal. See comments on the MODA above.

Santa Barbara Municipal Airport – The Airport should be added as a neighborhood. It is no less a neighborhood than other commercial areas of the city that have been called out as neighborhoods.

Resource Allocation Policy LG1 – This policy, which grants affordable housing the highest priority over all other development is extremely helpful to affordable housing providers. This clearly ties the goals of the Land Use and Housing Elements together. However, be careful about changes that are proposed that could affect the ability of affordable housing developers to finance projects, such as policies that could require more on-site open space (Policy LG5).

Senior Services and Support – Other than housing, there is not as much emphasis on senior services as there should be. Like services for families to provide child care, there should be more emphasis on providing senior day care, as well as services that keep seniors in their homes.

Height Limits in El Pueblo Viejo – Implementation Action LG14.2 calls for lowering height limits adjacent to historic resources. You may wish to consider lowering the height limit for the core of El Pueblo Viejo (EPV). You could consider the original EPV boundary established in the 1970s as a starting point for discussion (before it was extended across State Street in the late 1970s or into the Waterfront in the early 1980s).

ECONOMIC AND FISCAL HEALTH ELEMENT

There is no “meat” to this element. There is no discussion of the regional and city economy, what makes it tick, issues, pluses and minuses, business and employment sectors, etc. The introduction does not clearly indicate whether there is more to come. I would also dispute the Element’s statement that there is no discussion of the economy in the current General Plan. There are economic principles and goals outlined in the current Land Use Element. On page 3 of the Land Use Element, there is a critical discussion of “Free Enterprise for the Common Good” from the 1964 General Plan that is as clear a statement on sustainability as can be found in any of today’s writings. It concludes: “...the city is an
organic unit. It is a complex structure of interrelated facilities and services, all interdependent, and all affected to some degree from the breakdown or malfunction of any part.”

Pages 10-15 of the current Land Use Element include an extensive discussion of the city and regional economies. Principles 2, 3, and 5 on page 26 of the current Land Use Element are economic principles that may still apply — and certainly indicate an early interest in sustainability. The Goals incorporated into the General Plan in 1974, based on the Citizens General Plan Goals Committee report, also include Economic Goals, including a focus on: Properties and Pensions; Visitors and Tourism; and Research and Administrative Centers.

The Economic Development Plan and Implementation Program (EDPIP) included updated goals for economic enhancement and could be included in this discussion. This discussion only needs to be updated to be current.

**HOUSING ELEMENT**

The Housing Element needs to include a section that discusses the importance of providing a diversity of housing in Santa Barbara and the South Coast. I think there was a very good explanation of the reasons in a much earlier Housing Element. Because Housing Element updates have tended to build on past elements, this discussion has come to be "incorporated by reference." It is very difficult to find and review old Housing Elements to read this discussion. A new generation of citizens needs to understand the basis for providing affordable and senior housing, as well as housing for special needs populations, including the homeless. The discussion should include the social, political, economic, safety, and legal reasons for requiring housing diversity.

**Highway 101 Setback** — This discussion should be in both the Environmental Resources (p. 187) and Housing Elements. Presently, it is only in the Environmental Resources Element. Yet, it has the potential to substantially reduce the development of multi-family housing in Santa Barbara, including most affordable housing. See more comments in Attachment 1.

**Condominium Conversions** — Action H13.2 requires all condominium conversions to be consistent with the allowed General Plan density. I’m sure the goal of this change is to protect rental housing, which is an important goal. However, this change could lead to unintended consequences — including the demolition of rental housing. At a minimum, this change should not apply to projects converted for the purpose of providing, very low, low, or moderate income ownership units. There are affordable housing providers in the community that would welcome the opportunity to convert existing rental units to affordable ownership units. Additionally, there should be an exception if the conversion will protect historic resources, such as bungalow courts.

**Secondary Dwelling Unit Ordinance** — I urge you to consider rewriting the ordinance to allow more flexibility than is proposed in the draft Housing Element. I would especially encourage allowing secondary dwelling units to be detached from the main house as long as the view from the street remains single-family in appearance. This could allow secondary dwelling units to be built above garages or at the rear of lots.
General Plan Update Comments  
April 30, 2010 Page 4 of 4

PUBLIC SERVICES AND SAFETY ELEMENT

This element should include public services, such as libraries and adequate police and fire services that are not included in other elements.

**Noise Policies** - The change from 60 dB (A) to 65 dB (A) for residential noise exposure should only apply to multiple-family and commercial zones. The lower number should still apply to single family zones, based on the city’s long-time policy of protecting the single-family neighborhoods.

**Emergency Preparedness Policies** - A policy should be included that requires a formal review process after disasters occur before deciding to demolish historic and architectural resources. Too often, after a major disaster, structures are torn down in the heat of the moment without really assuring that they cannot be preserved or restored.

Again, there is much to applaud in this update. This is the first time in more than 30 years that the General Plan has been considered in a comprehensive manner. While there is much to be done to complete the new elements and update other existing elements, this is a great first step.

If you have any questions, please feel free to call me.

Sincerely,

Janice M. Hubbell, AICP

Attachments:

1. General Plan Update – Substantive Comments
2. General Plan Update – Typo/Grammar Corrections

Cc: Planning Commission
Attachment 1 - General Plan Update – Substantive Comments

Introduction

Page 21, Energy & Climate Change, ¶ 2 – This paragraph indicates that single occupant transportation is the main determinant affecting fossil fuel use, air quality, and global climate change. Is it really? I agree that it is one significant contributor. However, I would argue that electricity and natural gas generation to power homes, factories, farms, and business is also a major determinant. This section is solely focused on transportation-related issues. It needs to also focus on reducing fossil fuel usage through reducing energy usage by conservation, including embodied energy, development of small local energy providers (i.e., wind and solar energy), encouraging energy-efficient and low-emission vehicles, and other means.

Sustainability Framework

Page 25, Environment, bullets 1 and 3 – We must also preserve and enhance our natural resources, such as the creeks that are entwined in the community, native and other major trees, endangered and sensitive species, and other resources.

Background and Setting

Page 33 et seq., Historic Context – This section is full of significant inaccuracies that need to be corrected. The city has no better historic summary (other than Chumash history) than already exists in the current Land Use Element (pp. 5-9). It only requires updating. The array of errors is so extensive that it has the potential to affect the credibility of the entire draft document.

Page 33, Chumash Periods, Spanish and Mexican Periods, ¶ 1 – While Syuxtun may have existed for 1000 years, there is clear evidence that the Chumash were present in the Santa Barbara area for as much as 9000 years before European contact. I would suggest reviewing the Guidelines for Archaeological Resources and Historic Sites and Structures and the original Master Environmental Assessment for more information.

Page 33, ¶2 – Padre Junipero Serra died in 1784. Since the Santa Barbara Mission was established in 1786, he could not have founded the mission. The Santa Barbara Mission founder was Padre Fermin Lasuen.

Page 35, ¶ 5 – Bernhard Hoffmann and Pearl Chase created the Plans and Planting Committee. Ms. Chase was also instrumental in the preservation of the waterfront (see ¶ 1).

¶1 -5 – There is no discussion here about oil development as an important part of the City's history, both as a positive economic force on the Mesa and as a destructive force leading to a stronger position on the importance of the environment as a result of the major oil spill in 1969.

Page 36, After the War – should be called “During and After the War” since it includes the war years. It should also mention the development of Santa Barbara's municipal airport into a Marine Air Base during WW2 and subsequent reuse as a public airport.
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Page 37, History of City Planning, ¶ 2 – The first Zoning Ordinance was adopted in the 1920s (the GPU even includes the year in the earlier discussion), with the first comprehensive ordinance adopted in the 1930s. The only significant rewrite occurred in 1957. The Architectural Board of Review also was first established in the 1920s, but was set aside and not reestablished until 1947 – and this date should be double-checked. A new ordinance that significantly expanded ABR’s jurisdiction was adopted in 1974.

Page 46, Existing Land Uses – How do land use percentages compare to other similarly-sized cities that serve as regional centers? Is Santa Barbara atypical or normal in the percentage of land used for residential purposes? Intuitively, cities like Santa Barbara that are not compactly developed (i.e., mostly one and two story) would likely have similar land use percentages. More compactly developed cities would likely have lower percentages of land devoted to residential use.

Introduction to the Elements

Page 51, Policy PP2, bullet 2 – While I applaud the goal and policies that encourage public participation, I have concerns about moving Council, Board and Commission meetings to the evening. There will be budget implications related to staff overtime to attend these meetings. It may be more difficult to recruit membership on the appointed boards and commissions since many of the meetings could go quite late.

Page 53, Policy RR1, bullet 1 – Should the western Sphere of Influence line for Santa Barbara meet the eastern Sphere of Influence boundary for the City of Goleta rather than the city limit line? Or are they the same? If they are the same, it should be so noted.

Land Use Element

Page 57, Introduction, ¶ 1 – A lot more happened to the General Plan in the 1970s than the addition of the Open Space and Scenic Highway Elements. This is when the Impacts of Growth report was written and the principles from that report were incorporated into the Land Use Element. Additionally, the Noise, Conservation and Seismic Safety/Safety Elements were adopted. I know you are trying to summarize what happened; however, you may be going too far.

Page 57, Land Use History, ¶ 3 – The focus on Spanish Colonial architecture and open space preservation began before the 1925 earthquake. The earthquake gave Santa Barbara the opportunity to carry out mass changes, due to the damage that occurred to so many Victorian Era buildings.

MODA

Pages 66-68, Average Residential Density Program – I have a couple of questions about the proposed program:

1. What is the allowed density if a developer wants to provide larger units? What will prevent a developer from moving forward with lower density, larger units?

2. What if a developer is trying to provide units with larger numbers of bedrooms to meet Housing Element goals for larger/extended families?
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Page 80, EPV, ¶ 3 – The Architectural Board of Review does not have jurisdiction over Part II of El Pueblo Viejo (the Mission Area); the ABR has jurisdiction over all properties within 1000 feet of EPV Part II.

Page 84, Multi-Family Neighborhoods, ¶ 2 – This infill is not just retained by the owners, but consists of a lot of small condominium projects as well.

Page 87, Coast Village Road – Coast Village Road is not “semi-rural” in nature or intensity of development. It would be more appropriate to consider it to be suburban – or even an “edge village.”

Page 89 – Mesa Sustainable Neighborhood – What a great idea! I hope the Mesa residents will embrace the vision, even if they decide to refine it in some ways.

Page 95, Lower Riviera – The draft General Plan proposes changing the zoning around the old St. Francis Hospital from C-O, Medical Office, to R-3. As a long range goal, this may make sense. However, that leaves a lot non-conforming office space. Will these existing offices be able to change use from medical to non-medical offices? It may be necessary to adjust non-conforming rules to allow these commercial uses to remain in place without the loss of the property owners’ investments.

Page 107, Hitchcock, column 2, ¶ 5 – The Draft General Plan calls for the unincorporated areas in this neighborhood to be designated 5 units/acre if they are annexed. This seems appropriate for the Apple Grove area. However, Earl Warren Showgrounds represents a different opportunity. It is already heavily used and has good access to transportation and services. It should be considered for a Medium High Residential designation. This discussion should also encourage the development of a park in the Showgrounds area, if annexed.

Page 125, Lower East – While I agree that the industrial uses and land need to be protected, I believe that the easterly boundary behind Milpas Street should be adjusted. The full half block that borders Milpas Street should be part of the Milpas neighborhood and designated for commercial and medium high to high density residential development. The lots along Milpas Street are smaller than would be suitable for many industrial uses, but will support small retail and office use with residential above or behind. It is close to a variety of services and would support more affordable housing.

Page 126, Milpas – See discussion under Lower East regarding boundary adjustments.

Page 130, column 1, last ¶ - Support of El Presidio’s Master Plan is acceptable, up to a point. It will be a long time, if ever, before closing Santa Barbara and Canon Perdido Streets is appropriate. It is my understanding that the current Master Plan does not include these street closures.

Page 131, West Downtown – This neighborhood discussion should include the status of the lower Mission Creek flood control and habitat improvements below Carrillo Street. These changes, which will occur in the next few years, could have a profound effect on this area.

Page 139, Lower State – Like West Downtown, this discussion should include discussion of the Mission Creek flood control improvements which, like La Entrada, will result in a substantial change to the area.

Page 140 – The Airport should be added as a neighborhood.
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Page 141, Policy LG1, Resource Allocation Policy – This policy, which grants affordable housing the highest priority over all other development is extremely helpful to affordable housing providers. This clearly ties the goals of the Land Use and Housing Elements together.

Page 142, Policy LG2, ¶ 2 – This paragraph is a little unclear. One sentence says that sphere annexations are to be considered separately from the non-residential development limits. The last sentence says that annexed areas are subject to the same non-residential development restrictions as other properties in the city. Does this mean that any non-residential development proposed on the parcel must be developed in the County prior to annexation? This may not be in the city's best interests in terms of design and environmental impacts. Two properties that come to mind include the Earl Warren Showgrounds and the Cieneguitas Triangle.

Page 143, Policy LG5 – This policy calls for housing to include open space benefits. While this is appropriate, will there be flexibility in where such open space can be provided? This is an especially difficult issue for affordable housing, which often needs to increase density to make the project affordable.

Page 144, Implementation Action LG6.2 – This is a potentially good solution to reducing development potential in High Fire Hazard areas, but the city should not lose the zoning reduction potential outlined in the current General Plan Land Use Element (i.e., 10-A-1 zoning).

Page 145, Implementation Action LG8.1 – This is a good idea to support industrial/manufacturing land use. However, this will potentially lead to a lot of non-conforming uses in the M-1 zone.

Page 145, Implementation Action LG8.2 – How much will residential uses be limited in the C-M Zone? This could reduce potential opportunities for affordable housing on somewhat less expensive land close to services.

Page 146, Policy LG10 and Implementation Actions – There should be specific emphasis on providing more senior day care facilities. This need will increase with the aging population.

Page 147, Implementation Action LG13.2.a. – This is a good proposal. This will assist staff in making recommendations and the Planning Commission and City Council to make decisions.

Page 148, Implementation Action LG13.2.c – This is critical to avoiding citywide height limits imposed through the initiative process. The list should also include protection of significant public views.

Page 149, Implementation Action LG14.2 – You may wish to consider lowering the height limit in the entire core of El Pueblo Viejo, not just adjacent to specific historic resources.

Page 149, Policy LG15 – Creating the Multi-Family Design Guidelines should be a priority following General Plan adoption in order to provide more certainty in the design and development review process.
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Page 150, Implementation Action LG17.2 – The La Cumbre Plaza Specific Plan could provide intriguing possibilities for affordable housing providers to participate in such a development. Should timing be included in this Action?

Open Space, Parks, Recreation, and Trails Element

Page 159, Implementation Action OP1.3 – This Action (and corresponding Mitigation Measure) should specifically include preservation of migration corridors.

Page 160, Implementation Action OP2.1 – This Action references existing City Quimby Act and park development fees. There are no such fees. This is not a matter of updating the fees, but establishing them.

Page 160, Policy OP2 and Implementation Actions – How would acquisition and maintenance funding apply to affordable housing projects? What constitutes a “larger project”?

Economic and Fiscal Health Element

Page 171, Economic and Fiscal Health Element – There is no “meat” to this element. There is no discussion of the regional and city economy, what makes it tick, issues, pluses and minuses, business and employment sectors, etc. The introduction does not clearly indicate whether there is more to come. I would also dispute the Element’s statement that there is no discussion of the economy in the current General Plan. There are economic principles and goals outlined in the current Land Use Element. On page 3 of the Land Use Element, there is a critical discussion of “Free Enterprise for the Common Good” from the 1964 General Plan that is as clear a statement on sustainability as can be found in any of today’s writings. It concludes: “...the city is an organic unit. It is a complex structure of interrelated facilities and services, all interdependent, and all affected to some degree from the breakdown or malfunction of any part.”

Pages 10-15 of the current Land Use Element include an extensive discussion of the city and regional economies. Principles 2, 3, and 5 on page 26 of the current Land Use Element are economic principles that may still apply – and certainly indicate an early interest in sustainability. The Goals incorporated into the General Plan in 1974, based on the Citizens General Plan Goals Committee report, also include Economic Goals, including a focus on: Properties and Pensions; Visitors and Tourism; and Research and Administrative Centers.

This discussion only needs to be updated to be current. The Economic Development Plan and Implementation Program (EDPIP) included updated goals for economic enhancement and could also be included in this discussion.

Page 175, EF17.2 – This should include implementation of the Public Art Master Plan.

Page 175, EF19 – This policy on child care for working families should also include senior day care. Many seniors and/or their families may not be able to afford assisted living so adult day care is becoming more important with an aging population.
Environmental Resources Element

Page 181, Environmental Resources Goals – I understand that the goals in the Conservation Element are carried forward into this Plan, by reference. However, I’m disturbed by the focus of these new goals only on the effects of resource use on human beings. There is almost no recognition of the need to be sustainable to protect and preserve the biosphere of this planet for all the flora and fauna, including humans.

Page 182, ER1.3 – This Action related to reducing the Urban Heat Island Effect could include increasing tree requirements in parking lots and in developments in general.

Page 183, ER6.1, Community Choice Aggregation – If Proposition 16 passes in June 2010, this option for energy purchase will become significantly more difficult to implement. See Los Angeles Times Capitol Journal column “Plugging in a Monopoly”, April 19, 2010.

Page 183, ER6.3 – This action should also call for city support of a national standard for charging stations to minimize the different types of stations needed. This will reduce costs to the city and to the consumer, as well as encourage more electric vehicle sales.

Page 184, ER6.4 – Environmental resources that need to be considered in wind generation include birds, bats, and beneficial insects.

Page 184, Policy ER7, Highway 101 Setback – This policy calls for a 500-foot setback on either side of US 101 due to damage to sensitive receptors by diesel particulates, based on California ARB policy. The Draft EIR recommends a change to 250 feet on either side of US 101, stating “These guidelines were based on diesel truck traffic levels much greater than those on U.S. Hwy 101 in Santa Barbara. Based on the existing traffic levels along U.S. Hwy 101 within the City, an analysis conducted for the City concluded that significant health risks from diesel particulate matter extended to a maximum of 250 feet from the edge of the highway (City of Santa Barbara 2009, Appendix E).” If this policy remains unchanged, then it is critical that there be frequent monitoring in this area to check the actual particulate count. This area is a high density residential area that provides major opportunities for affordable housing.

Page 185, Policy ER12 – As written, this policy gives equal priority to native and non-native species. This should be reworded to give higher priority to native drought-tolerant species. This also needs to be made clear in ER12.1: protected exotic trees should only be those that are specimen, visual landmark, or historic trees.

Page 189, Policy ER23 – This policy supporting public and private food gardens should also encourage non-residential development to design for green roofs and rooftop gardens. Many restaurants have had success planting gardens on rooftops to supply their own food – the ultimate “locavore approach.

Page 189, Policy ER 23, bullet 2 – This should also include “and reduce youth obesity”.

Page 189, Policy ER24 – This policy should include “right to farm” (or garden) protection for food gardens.
Page 190, ER27.1 – Undergrounding all utilities in Santa Barbara is a great goal, but, given the cost of undergrounding, it is highly unlikely that complete undergrounding can be achieved by 2030.

Page 191, Policy ER28 – This policy and related action should be expanded to include all areas of the City, not just public open space and natural habitat. Providing increased shielding and darkening skies is beneficial to humans and for astronomical research.

**Housing Element**

The Housing Element needs to include a section that discusses the importance of providing a diversity of housing in Santa Barbara and the South Coast. I think there was a very good explanation of the reasons in a much earlier Housing Element. Because Housing Element updates have tended to build on past elements, this discussion has come to be “incorporated by reference.” It is very difficult to find and review old Housing Elements to read this discussion. A new generation of citizens needs to understand the basis for providing affordable and senior housing, as well as housing for special needs populations, including the homeless. The discussion should include the social, political, economic, safety, and legal reasons for requiring housing diversity.

Page 223, Goal 5, bullet 3 – This should clearly state that subdivision of the property is not allowed under the new provisions.

Page 252, Redevelopment Agency Set-aside Funds – This paragraph should note that the RDA is scheduled to end in 2013, which will result in the loss of the set-aside funds for future housing projects. This will be a significant loss to the city.

Page 283, Air Quality – This section needs to include a discussion of the impact of diesel emissions along US 101 on the ability to provide lower income housing in the high density areas along the 101 corridor, including the Westside, Lower Westside, West Downtown, and Eastside. This is particularly important since Policy ER7 calls for a 500 foot setback on either side of US 101 while the Draft EIR recommends a 250 foot setback. This discussion should include the number of parcels potentially affected by the two setback options.

Pages 283-284, Traffic Capacity – Since residential projects are most likely to contribute to cumulative traffic impacts, the certification of the Final EIR, which includes all the projected traffic impacts resulting from the General Plan Update, will reduce the environmental review process for these projects. This is a major plus for completing the EIR.

Page 286/287 – Financial Costs – This section should discuss what will happen to the city’s ability to support affordable housing construction and rehabilitation when the Redevelopment Agency sunsets in 2013. This could be a significant impact on the city’s ability to provide affordable housing.

Page 301, H6.5 – Senior advocacy should include plenty of public outreach and education to make people aware of what services are available. This is particularly important for family and friends of seniors who may be caregivers or concerned about their well-being.
Page 305 – H13.2, Condominium Conversions – This Action requires all condominium conversions to be consistent with the allowed General Plan density. I’m sure the goal of this change is to protect rental housing, which is an important goal. However, this change could lead to unintended consequences—including the demolition of the rental housing. At a minimum, this change should not apply to the projects converted for the purpose of providing, very low, low, or moderate income ownership units. There are affordable housing providers in the community that would welcome the opportunity to convert existing rental units to affordable ownership units. Additionally, there should be an exception if the conversion will protect historic resources, such as bungalow courts.

Pages 306/307, H15.2, Secondary Dwelling Unit Ordinance – Another way to increase development flexibility would be to remove the requirement that secondary units be attached to the main house as long as there would be no apparent change to the view from the front of the primary unit.

Page 307, Policy H16 – Actions for this policy should clearly state that plan check review by all departments involved in the process should be expedited for affordable housing.

Page 307, H16.7 – This is only acceptable as long as there are on-line meters for each unit. Studies have clearly shown that units without individual water meters use more water than those with meters.

Page 309, H19, Rehabilitation Programs – Actions related to this policy should include finding flexible ways of working with non-profit housing providers to rehabilitate affordable housing.

Page 309, H20.4, Zoning Information Reports – I generally support excluding condominiums from ZIR requirements as long as there is some requirement for notification of sellers and buyers of their need to meet zoning and building requirements. Maybe there could be a list of the most common violations included, such as garage conversion to habitable space or garage use for storage instead of parking (I have personally seen both of these).

Page 312, H24.5 – This action to extend the RDA should focus on the primary purpose of providing affordable housing.

Circulation Element

Page 322, C7.5 – The explanation of this proposed action belongs in the text. However, this proposed Action is problematic because there are a lot of older residential developments without adequate parking in the commercial zones along the edges of Downtown.

Public Services and Safety Element

If this will truly be a Public Services Element, it should include policies to assure that public safety, libraries, and other city services not covered by other elements are addressed in this element.

Page 335, PS6.1, bullet 2 – Desilting Gibraltar Reservoir has been tried before. In a pilot program, special pumps from Italy were used to dredge the material from the reservoir. The desilted material was placed in canyons adjacent to the reservoir. This was extremely expensive. There was discussion about transporting the material downstream to allow it to contribute to beach replenishment. One of
the problems is that there is a substantial amount of mercury in the silt, due to the location of
abandoned mercury mines along the edge of the reservoir. The material is not hazardous sitting at the
bottom of the reservoir because it is encapsulated in water-resistant materials. However, if it is moved,
it must be treated as hazardous waste.

Hazards Avoidance Policies

There should be a clear policy about what is and is not allowed in and above landslide areas.

Page 336, PS9, Bluff Retreat – This policy needs to include more definition about what is allowed on
bluff tops. This will provide better guidance to property owners and planners when considering
development on bluff top property.

Noise Policies

Page 336, PS10.1 – The change from 60 dB (A) to 65 dB (A) for residential noise exposure should only
apply to multiple-family and commercial zones. The lower number should still apply to single family
zones, based on the city's long-time policy of protecting the single-family neighborhoods.

Emergency Preparedness Policies

A policy should be included that requires a formal review process after disasters occur before deciding
to demolish historic and architectural resources.
Attachment 2 - General Plan Update – Typo/Grammar Corrections

General Comments:

Make sure comma usage is consistent throughout the document. When is there a comma before “and” or “or” – any list with three or more items? – Any series of three or more linked phrases? Both or neither? Introductory phrases in sentences also need commas for readability. Additionally, commas are needed to separate some internal phrases for readability.

Replace “utilize” with “use”. Utilize is very bureaucratic.

Most of the language is very passive. Active language would make it a more interesting document.

There are many places in the document where “which” is used, requiring a comma (i.e., improvements are defined by standards, which have been adopted by) that lead to awkward phrasing. Consider replacing “which” with “that” and deleting the comma (i.e., improvements are defined by standards that have been adopted by).

Specific Comments

Acknowledgements

Page 2 – John Ledbetter is the Principal Planner (not Principle) & Rob Dayton is the Principal Transportation Planner

Table of Contents

Page 10 – Table 5 – Hope School District consists of Elementary (not Secondary) Schools.

Page 11 – Table 45 – delete “2” at end of line

Page 13 – Figure 14 – “Overcrowding by Tenure [200?]” [number missing]

Introduction

Page 18 – Bullet 1: “The need for the community to revisit the City’s Charter sections; §1507, living within resource limits, and §1508, managing growth particularly non-residential development, which expired December 31, 2009,“

Page 18 – Bullet 3: “The socio-economic consequences for the city of the types of market housing that have been built throughout the past decade; and”

Page 19 – Bottom of page, Bullet 2 – “Loss of affordable housing and escalating housing costs resulting in additional residents and workers relocating out of town, particularly critical workers such those in the as fire, police, health, and education sectors.”
I12-74 Cont'd.

Attachment 2 – General Plan Update
Typo/Grammar Corrections
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Page 19 – Bottom page, Bullet 5 – “Displacement of small local businesses due to escalating cost of commercial leases.”

Page 20, Public Health, ¶ 1, line 4 – Replace “determinates” with “determinants” (You can look it up.)

Page 20, Public Health, Bullet 2 – “Less opportunity will be provided for people to change their healthier lifestyles in a healthier manner.”

Page 20, Public Health, Bullet 3 – “The community overall will suffer in decreases in productivity and quality of life.”

Page 21, Economic & Fiscal Health, ¶ 1, line 2 – Replace “cyclic” with “cyclical”

Page 21, Economic & Fiscal Health, ¶ 3 – “Though more transitory in nature, but significant nevertheless, the current state of the economy could prolong deferred maintenance of City infrastructure. Continuing to defer maintenance or upgrades to infrastructure will likely increase the overall cost when it is eventually undertaken, and could, possibly in the meantime, delay desired development for lack of capacity.”

Page 22, Bullet 1 – “Difficulties in continuing to provide adequate funding, as public facilities and service costs increase over time; and funding availability for any expansion of services needed to support upgraded service levels or new development.”

Sustainability Framework

Page 24, Community Design – “Carrying on the tradition of preserving both open space and historic buildings for public enjoyment, and preserving both historic buildings and the continuity of emblematic architecture in new development and redevelopment.”

Page 24, Historic Resources – “Retaining continuity over time now between the past and in the future, by preserving historic resources.”

Page 24, Public Services and Facilities – “Understanding that public services and facilities are both limited resources in themselves, and creating technological solutions to safeguard, improve and expand the natural resources of Santa Barbara’s setting. We need to accept their limits, in particular the financial limits associated with them, while applying innovation to maintain or improve the quality of life and protect the natural environment.”

Page 25, Equity, bullet 3 – “All members of the community should be provided with the information about and strongly encouraged to participate in community decisions that affect them.”

Page 26, Economy, bullet 2 – Replace “transition” with “move”

Page 26, Sustainability and Resource Capacity, line 5 “…terms, though it may be at any moment in time. Resource...”
Relationship Between Elements and State Requirements

Page 29, last two ¶s – There is a lot of duplication in these two paragraphs.

Page 30, Content of This and Future Updates, ¶ 2, line 4 – “The updated Land Use Element, Draft General Plan Map, and Housing Element…”

Background and Setting

Page 33, ¶ 3 – “A reservoir and aqueduct system was constructed about 500 feet up Mission Canyon in 1806 to provide water to the growing community living on mission grounds. This system was so well built that it continued to provide water to Santa Barbara until 1993, when it was transferred from Public Works to the Parks Department.”

Page 34, ¶ 2, line 1 – Replace “Americans” with “American”

Page 34, ¶ 3, line 1 – Replace “rail road” with “railroad”

Page 35, Becoming Santa Barbara, ¶ 3, line 2 – Replace “Los Angles” with “Los Angeles”

Page 39, ¶ 3 following bullets – Insert “the” between initiated and Plan.

Page 39, Plan Santa Barbara Process, ¶ 1, lines 2 & 3 – “...Phase 1. Starting in Spring of 2007, Phase 1 consisted of a comprehensive public outreach campaign using several methods for gaining public input on what they public wanted to preserve about Santa Barbara and what issues they thought needed to be addressed in the new General Plan. ...”

Page 40, ¶ 1 – “Starting in 2009 and culminating in this document, the City undertook several parallel efforts: (1) further development and refinement of the sustainability framework, goals and policies for the General Plan update; (2) preparation of the Land Use Element; (3) conversion to digital format, update and revision of the General Plan map; and (4) preparation of the 2007 Housing Element update. ...

Page 41, Quick Facts – Please re-check the Mean Daytime High for Winter. It is more likely that 50° is the mean temperature (day and night). Page 42 indicates the mean daytime temperature in the winter is 65 and in the summer, it is 78. Both numbers need to be corrected in the Quick Facts table. Also, the Climate discussion says the city receives 19 inches of rain annually; the table says 17.7 inches. Please correct.

Page 41, Geography, end of ¶ 1 – It would be more accurate to state that the Airport includes most of Goleta Slough.

Page 41, ¶ 2, line 3 – “...offshore from Santa Barbara, the four of the Channel Islands...” (Santa Catalina, San Nicolas, Santa Barbara, and San Clemente Islands are also part of the Channel Islands.)
Attachment 2 – General Plan Update
Typo/Grammar Corrections
May 17, 2010 Page 4 of 14

Page 42, Climate, ¶ 3 – The first sentence reads: “Indigenous vegetation is diverse and comprises species that are suited to the Mediterranean climate, yet adapted to periodic drought and fire.” The last phrase is redundant as written. If “yet” is deleted, the final phrase is explanatory.

Page 42, Climate, ¶ 3, last line – “...European grasses imported at since the time of the first explorers...”

Page 42, Climate, ¶ 4, first line – “Though scientists have estimated...”

Page 42, Geology, ¶ 2, line 5 – “Overlying the fold belt for much of the city is marine sedimentary rocks. ...”

Page 43, ¶ 2, line 2 – Add “s” to year

Page 44, Economic Characteristics – Given the questions asked on the 2010 Census form, I wish you luck in trying to make any determinations regarding economic characteristics. There are no questions on jobs or income.

Page 45, ¶ 2 – Please explain what “bi-modal profile” means.

Page 45, ¶ 3, line 2 – Replace “loosing” with “losing”

Page 51, ¶ 1, line 2 – Delete “or not”; it is redundant.

Introduction to the Elements

Page 51, ¶ 1, lines 5/6 – “...They may also include goals or policies, that were previously found in either the Land Use or Housing elements, that have been transferred...”

Page 53, Sphere of Influence and Annexation, ¶ 1, line 2 – “…Rincon to Gaviota down to an area slightly less larger than its present day boundaries. ...”

Page 54, Implementation ActionR2.1 – The list of examples should include public safety.


Page 54, Policy R3, ¶ 1 following bullets, lines 4/5 – “to include Mission Canyon Heights and the Santa Barbara Botanic Garden, and northwesterly to Lauro Canyon Reservoir because of its geographical proximity to the Canyon.”

Land Use Element

Page 58, ¶ 1, line 1 – Replace “Salisbury” with “Haley”

Page 58, ¶ 1, line 2 – Add “s” to “1960”

Page 58, Sustainable Development, ¶ 1, line 3 – Replace “it’s” with “its”
Page 59, line 6 - "...traffic congestion, and an erosion of the community's socio-economic diversity."

Page 59, MODA Principles - It would be very helpful to include a small map here that shows the MODA.

Page 59, MODA Principles, ¶ 1, line 3 - Delete the first "and"

Page 60, Mobility, ¶ 1, line 1 - Replace "tenants" with "tenets"

Page 60, Historic Resources, ¶ 2, line 5 - Replace "certainly" with "certainty"

Page 61, Distribution of Land Uses, ¶ 1, line 1 - Replace "reflect" with "reflects" (distribution...reflects)

Page 62, Shoreline, line 6 - Chase Palm Park was not dedicated in 1998. It existed many years before that time. However, it was substantially expanded to cross Cabrillo Boulevard in 1998.

Page 62, Parks, line 2 - Replace "County" with "Country"

Page 63, Hillsides, ¶ 4, line 2 - "...provide regulatory flexibility in order to preserve hillside areas and open spaces."

Page 63, Low Density Residential, ¶ 2, lines 3/4 - It is Miramonte Hill and Campanil Hill, not hills.

Page 64, ¶ 1, lines 1/2 - "...designation is to permit slightly higher single family residential uses... densities while still maintaining..."

Page 65, Office/Low Impact Research and Development, ¶ 1, line 1 - "...designation of Office/Low Impact Research and..."

Page 68, Hotel/Medium High Density Residential, lines 1/2 - It is Dwight Murphy Field, not Dwight Murphy Park.

Page 71, ¶ 2, line 1 - "...the City Parks and Recreation Departments..."

Page 72, Table 2 - Cesar Chavez Charter School is proposing a name change.

Page 73, Harbor-Stearns Wharf, ¶ 1, line 4 - Replace "dependant" with "dependent"

Page 74, Airport Specific Plan, ¶ 1, line 3 - Change "location" to "locations"

Page 74, Airport Specific Plan, ¶ 2, last line - "...and Open Space (Goleta Slough and along the creeks)."

Page 75, ¶ 3, line 2 - "...a number of the resource baselines to determine the starting points..."

Page 77, ¶ 4, line 2 - "...pedestrians, transit users, or bicyclists will linger and return..."
Attachment 2 – General Plan Update  
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Page 77, ¶ 5, line 1 – “It is a challenge trying to respond to the sometimes competing...”

Page 80, El Pueblo Viejo Landmark Districts, ¶ 1, line 5 – Change “for” to “with”

Page 80, Bungalow District, Line 2 – Spell out East for both street names.

Page 81, Redevelopment Area, ¶ 2, line 1 – “The purpose of the plan is for cultural and economic development downtown in the Plan area to bring desirable...”

Page 81, Redevelopment Area, ¶ 2, lines 4/5/6 – Paseo Nuevo should be included in the list of results.

Page 81, Cultural Arts District, line 6 – “...the cultural arts district is because it benefits the community...”

Page 83, Desired Neighborhood Qualities, bullet 2 – “A sense of place and a small town and intimate scale feeling, particularly in the single family and historical districts;”

Page 83, Desired Neighborhood Qualities, bullet 3 – “Development where the size and scale is compatible with the surrounding neighborhood;”

Page 83, Desired Neighborhood Qualities, bullet 6, line 1 – Replace “lacking” with “lack of”

Page 85, Neighborhood Map – St. Vincent’s annexation is not shown on this map.

Page 87, Coast Village Road, ¶ 1, line 1 – Capitalize “Association”

Page 87, Coast Village Road, ¶ 1, line 3 – Replace “goals” with “goal”

Page 87, Upper East Side, ¶ 2, line 1 – Replace “recommended” with “recommend” or delete “did”

Page 88, ¶ 2 lines 3 and 5 – Replace “towards” with “toward”

Page 91, photo on lower right – Delete R

Page 93, Riviera, column 2, ¶ 2 – Replace “A unique characteristic of the neighborhood are its paseos that are found throughout and should be maintained.” With “The paseos that are found throughout the Riviera are unique and should be maintained.”

Page 93, Riviera, column 2, lines 4/5 – “In addition to the theater, other allowed uses allowed by the Specific Plan...”

Page 94, Eucalyptus Hill, column 2, last ¶, line 4 – It is Montecito Country Club, not “County Club”.

Page 95, Lower Riviera, column 1, ¶ 1 – It is not Alameda Padre Serra Street. Please delete “Street”.

Cont'd.
I12-74
Cont'd.

Attachment 2 — General Plan Update

Typo/Grammar Corrections
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Page 97, Campanil Location — Campanil is bordered on the east by the City Limits and lower Las Positas Road.

Page 99, Bel Air, column 2, ¶s 1 and 2 — These two paragraphs are repetitive.

Page 100, Alta Mesa, column 2, last ¶: “Two city reservoirs and McKinley Elementary School are located in the Alta Mesa.”

Page 101, Hope, column 2, ¶ 3 — While the SD-2 overlay applies over the entire area and sets a height limit of 45 feet, it is superseded in the duplex and single family zones by a 30 foot height limit. As written, it implies that the SD-2 height limit rules.

Page 103, San Roque, column 1, last line — Add “overlay designation” to the end of the line.

Page 103, San Roque, column 2, line 3 — Replace “sate” with State Street.

Page 113, Westside, column 2, next to last line — Delete “as”

Page 116, column 2, lines 10-12 — “Recently, the site formerly occupied by Saint Anthony’s Seminary is being converted to San Roque School, with full operation expected by 201?.”

Page 117, East Mesa, column 2, ¶ 3, line 2 — Replace “acquires” with “acquire”

Page 118, West Mesa, column 2, ¶ 2, last two lines — “Most of the neighborhood south of Cliff Drive is in the City’s Coastal Zone.”

Page 118, West Mesa, column 2, ¶ 6, line 2 — Replace “is” with “are”

Page 119, Coast Village Road, Neighborhood Description, column 1, ¶ 2, line 5 — Replace “Montecito Hotel” with Montecito Inn

Page 119, Coast Village Road, Neighborhood Description, Column 2, first full ¶, Last lines — “… would be an important component of future planning efforts for Coast Village in the future.” (redundant)

Page 123, East Beach, column 2, ¶ 3 — Replace “Double Tree Hotel” with “Fess Parker’s DoubleTree Resort” (Yes, DoubleTree is one word.)

Page 123, East Beach, column 2, ¶ 5 — “Since the 1980’s the area has seen significant development and new land uses including the Fess Parker Double-Tree Hotel Resort, the expansion of Chase Palm Park, Villa Del Mar Condominiums, Casa Esperanza, a homeless shelter, and the Santa Barbara Rescue Mission. The western portion of the neighborhood includes city-operated El Esteró, Santa Barbara’s sewage wastewater treatment plant.”

Page 123, East Beach, column 2, ¶ 6 — The first sentence, isn’t.

Page 126, Milpas, column 2, ¶ 1, line 7 — Replace “redevelopment” with “redevelop”
Attachment 2 – General Plan Update
Typo/Grammar Corrections
May 17, 2010 Page 8 of 14

Page 127, Oak Park, column 2, ¶ 1, line 5 – Replace “being” with “is”

Page 127, Oak Park, column 2, ¶ 4, line 6 – Replace “are” with “is”

Page 130, column 1, line 4 – Replace “Affordable” with “affordable”

Page 135, Waterfront, Neighborhood Description, column 1, ¶ 1, last sentence – I count three heavily visited areas, not two.

Page 135, column 2, ¶ 2, line 5 – Replace “strop” with “strip”

Page 135, column 2, ¶ 3, line 5 – “...shoreline for full, balanced public use has been and is a continuing City goal.”

Page 135, column2, last ¶ - “Shoreline Park, East Beach, West Beach, and Chase Palm Park (southern portion) are all located in the Waterfront Neighborhood.”

Page 137, column 2, ¶ 2, last line – Delete “be”

Page 137, column 2, ¶ 3 – County administrative offices are also located downtown.

Land Use Element Goals and Policies

General Comment – There needs to be an explanation of the letter/number combinations in parentheses following some of the policies and implementing actions.

Page 144, Implementation Action LG5.1 – Critical workforce employees should include childcare workers. Also, the last bullet should add children aging out of foster care.

Page 144, Implementation Action LG5.2 – See comments on Policy LG5 above.

Page 144, LG6.3 – This language is awkward and needs clarification.

Page 144, Policy LG6 and Implementation Actions LG6.2 and 3 – ATDR program that transfers density from rural lands and the High Fire Hazard Area has the potential to provide additional opportunities for affordable housing providers.

Page 145, LG7.1.e. – “Development for Special Needs. A project that meets the present or projected...”

Page 147, Implementation Action LG12.3 – There should be a specific timeline attached to this action, maybe every two to five years.

Page 147, LG13.1, line 2 – Change to “Form Based Codes” Also, it should be “Milpas Street” and “Haley/Gutierrez Streets”
Attachment 2 – General Plan Update
Typo/Grammar Corrections
May 17, 2010 Page 9 of 14

Page 148, LG13.2.b.i, line 2 – Replace “decreasingly” with “increasingly”

Page 148, LG13.2.c – “Form Based Codes…”

Open Space, Parks, Recreation, and Trails Element

Page 159, OP1.2, line 6 – “…in lower Mission Canyon and the watersheds of Arroyo Burro and Barger…”

Economic and Fiscal Health Element

Page 171, ¶ 1, line 1 – “The proposed Economy and Fiscal Health Element…”

Page 171, ¶ 3, line 7 – Delete “consequently”

Page 173, Policy EF3, last line – Spell out “SNPs”

Page 174, Policy EF10, line 1 – “Encourage the use of and investment in technology…”

Environmental Resources Element

Page 182, ER1.3.d, line 1 – Replace “Explore” with “Exploring”

Page 182, Policy ER5, line 2 – “…depletion of limited resources, and the various costs of importing…”

Page 183, ER6.2, line 2 – Replace “Resource” with “Resources”

Page 184, Policy ER7, line 2 – Delete “State’s”. It is redundant.

Page 184 ER7.2, line 1 – Replace “Railway” with “ Railroad”

Page 185 - At the end of bullet two of ER12.1, the following should be added: “…especially where such trees have known wildlife, specimen, or historic value.”

Page 186, ER13.2, bullet 4, line 4 – Replace “underutilized” with “underused” and “Stearn’s” with “Stearns”

Page 187, ER13.3, bullet 2, line 2 – Replace “using” with “use”

Page 187, ER16, line 1 – Replace “Encourages” with “Encourage”

Page 188, ER17.2, line 1 – Replace “Prepare” with “Adopt” [more active]

Page 188, ER18.1, bullet 2, line 2 – Replace “provide” with “provided”

Page 190, ER25.3, line 1 – Replace “guideline” with “guidelines”
Attachment 2 – General Plan Update
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Housing Element

Page 207, ¶ 1, last line – “...actions in the 1970's and 1980's...”

Page 208, bullet 2, line 2 – at end of line, add “needs”

Page 208, ¶ 2, line 1 – Replace “includes” with “include”

Page 208, bullet 6, line 2 – Replace “polices” with “policies”

Page 211, ¶ 2 – This paragraph concludes with a statement that “key topics included”, but doesn’t say what those topics were.

Page 211, ¶ 2, line 1 – “In June, 2009, two community workshops...”

Page 211 – List of Grassroots Organizations – It should be “Independent Living Resource Center” (not “independence”).

Page 212, Youth Survey, ¶ 1, line 4 – “…students from eight different schools in the City participated in taking took the survey...”

Page 212, bullet 1, line 1 – Delete “to” at the end.

Page 212, bullet 2, line 1 – Replace “affordable” with “afford”

Page 213, ¶ 1, lines 1/2 – “During the public workshops and grassroots meetings, as well as via comment cards received from City residents, affordable housing...”

Page 213, last bullet, last line – “...or the use of public parking garages.”

Page 213, last ¶, line 1 – Replace “have” with “has” [input...has]

Page 215, ¶ 1, lines 3/4 – “…of the City’s existing goals, policies, and implementation strategies, and documenting results that were achieved...”

Page 215, ¶ 3, line 3 – “…state, and federal funding, ...

Page 217, ¶ 1, line 4 – Replace “of” with “to”

Page 217, ¶ 2, line 2 – “…of housing, human, and community service programs, and...”

Page 218, ¶ 2, line 9 – Replace “was” with “were”

Page 220, Table 9 – Please add “3965 Via Lucero 3/ownership / New Construction ...Low”

Page 222, line 1 – Should be “Goal 3” instead of “Goals 3”
Attachment 2 – General Plan Update
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Page 222, Goal 4, ¶ 1, line 4 – Delete “of”

Page 224, bullet 3, last line – This implies that the Hillside House project is a done deal. Replace “when” with “if”

Page 230, Race and Ethnicity, ¶ 2, line 1 – “data are” instead of “data is” Data is the plural form of datum.

Page 238, last ¶ - “...increased to 14.2 percent (12,079) of city residents...”

Page 241, Figure 9 – The legend should indicate “3+ bedrooms”

Page 244, last ¶ - This paragraph indicates that the median housing price increased from 335,540 in 2001 to $771,463 in 2007 and concludes this was a 43% increase. Please recheck the math. It looks like an approximately 100% increase.

Page 245, ¶ 1, line 1 – Replace “faired” with “fared”

Page 250, Assessment of Conversion, ¶ 3, line 3 – Replace “effectually” with “effectively”

Page 256, 1st ¶ following Table 32, last sentence – This sentence indicates that the City’s disabled are enrolled in college or graduate school at a greater rate than in the State. Earlier in the paragraph, it indicates that the city has 20% of its disabled so enrolled. This last sentence indicates 23% of the state’s disabled are so enrolled. The final sentence needs to be corrected.

Page 259, Census Bureau Homeless Counts, ¶ 2, line 1, Replace “reason” with “reasons”

Page 260, Point in Time Count, line 5 – Replace “person” with “persons”

Page 262, last ¶, line 2 – Replace “legislations” with “legislation”

Page 263, ¶ 3, last line – Replace “dominate” with “dominant”

Page 269, ¶ 3 following Table 44, lines 6/7 – “Therefore, a range of programs are-is needed...”

Page 270, College and University Housing, ¶ 1 – You might also note that Westmont College does provide some faculty and staff housing.

Page 274, ¶ 1, last sentence –A word is missing.

Page 274, Development Review Process, ¶ 1, line 4 – Replace “allows” with “allow”

Page 274, Development Review Process, ¶ 2, line 2 – Replace “has” with “have”

Page 274, Development Review Process, ¶ 2, line 5 – Replace “actions” with “action” or “is” with “are”
Page 278, line 2 – Replace “community’s” with “its”

Page 278, Building Codes and Enforcement, ¶ 1, last sentence – “This change to the code allowed the construction of 62 SRO units for very low-income homeless and nearly homeless individuals.”

Page 279, On-Site, ¶1, last sentence – “Projects, which do not meet the standards, must apply for a Zoning Ordinance modification of the requirement, which can add time and cost to a project.”

Page 279, last ¶ - Does the Public Works Department really look at reducing right-of-way, street, and sidewalk widths? Those are usually already set. The Public Works Department usually looks at reducing right-of-way, street and sidewalk improvements.

Page 281, last ¶, line 5 – “Also, all parking areas, except those for one- and two-family dwellings, are required...”

Page 282, line 4 – Replace “yards” with “yard”

Page 282, Water Availability, ¶ 4, last sentence – This sentence is very unclear. It reads like a series of double negatives.

Page 285, ¶ 1, line 3 – Replace “business” with “businesses” and consider replacing the second “examine” with “inspect”

Page 285, ¶ 1, line 5 – Replace “increase” with “increased”

Page 285, Coastal Zone Housing, ¶ 1, lines 2/3 – “This information has been placed in the Government Constraints section. Over the years, City requests to increase housing opportunities in the Waterfront have been rejected...”

Page 286, ¶ 4, line 2 – Replace “costs” with “cost”

Page 289, ¶ 2, line 4 – Replace “land” with “areas”

Page 289, ¶ 3, line 4 – Replace “issue” with “issues”

Page 294, Suitable Opportunity Sites in Multi-Family Zones, ¶ 3, last sentence – Another concern about new multi-family development raised by concerned neighbors has been incompatibility with the neighborhood.

Page 299, Housing Element Goals – Up to this point in the Housing Element, senior citizens have been addressed both separately and as part of special needs households. However, not all seniors have special needs. Seniors should be listed separately in these goals, as well as in the related policies.

Page 301, Policy H4 – The change to the C-M zone to make emergency shelters a permitted use is a big step in the right direction.
Attachment 2 - General Plan Update
Typo/Grammar Corrections
May 17, 2010  Page 13 of 14

Page 301, H4.1 and H4.2 – Change “Cacique Shelter” to “Cacique Street Shelter”

Page 302, H7.3, line 1 – Delete “the”

Page 303, H10.3, line 1 – Delete “for housing”

Page 305, H11.17, last line – Delete “when it”

Page 307, bullet two – Replace “ease” with “easing”

Page 308, H17.4, line 2 – “…make recommendations for methods of improvements.”

Page 308, H18.1, line 3 – replace “which” with “that”

Page 310, H21.3, bullet 4 – “…as a condition of…”

Page 310, H21.4, last sentence – “Develop a financial plan to purchase Presidio Park Apartments as long-term affordable in 2018 to maintain it as a long-term affordable project.”

Page 311, H22.7, line 1 – Capitalize “Partnership”

Page 311, H22.7, line 3 – Replace “for encouraging” with “that encourage”

Page 312, H24 – “Pursue a joint legislative platform…”

Circulation Element

Page 320, first bullet – This reads more like a policy than an Implementation Action. The Action would be carrying out the improvements in the Bicycle Master Plan.

Page 320, first bullet – Delete “Establish that”

Page 320, C2.1, line 2 – “…through the Santa Barbara County Association of…”

Page 321, C6.2, lines 1/2 – “To manage the travel demand and encourage the alternative modes of transportation,…”

Page 322, Policy C7, line 1 – Replace “me” with “be”

Page 322, C7.8 – “Bicycle, Parking and Other Needs.”

Public Services and Safety Element

Page 334, PS4, bullet 1 – Replace “desalinization” with desalination”
Page 334, PS5.2, line 2 – Replace “proximate to” with “near”

Page 335, PS7.1 – This action should be carried out via an ordinance amendment.

Emergency Preparedness Policies

Page 337, PS12, line 2 – "...are available and resourced to be able ready to respond..."
Response to Individual Letter # I12, Jan Hubbell (April 30, 2010)

I12-1 (Plan SB GPU): Comments and policy recommendations are noted and will be forwarded to decision-makers for consideration. The proposed Plan sustainability principles pertain to environmental resources, including flora and fauna. Please see proposed General Plan Update biological resources policies in the Environmental Resources Element and EIR biological resources mitigation measures. The existing Conservation Element that includes protection of biological resources would remain operational until a comprehensive update of the new Environmental Resources Element (that would include relevant portions of the existing Conservation Element and the new GPU policies) occurs in a subsequent planning phase.

I12-2 (Plan SB GPU): Comment noted. Please see revised text in the General Plan Update and EIR.

I12-3 (Plan SB GPU): Comment noted. The Plan does envision identified principles and programs as tools for long-range planning. Please see Land Use Element Policy LG4, which identifies core commercial areas to direct most future growth, and LG17 (Sustainable Neighborhood Planning) which could provide for improved mobility within other neighborhoods such as the Mesa. Note that additional growth on the Mesa could result in further traffic effects at intersections near the freeway.

I12-4 (Plan SB GPU): As proposed, larger units are permitted but the overall average unit size may not exceed the average as noted on tables 1 and 2. Projects with 3 or more bedrooms could be permitted at higher densities at the largest unit size category. See the average density table in the Land Use Designation section of the General Plan.

I12-5 (Plan SB GPU): Comment noted. The proposed General Plan land use designation identified for Coast Village Road is General Urban, Commercial Medium High Density. The General Plan neighborhood description for Coast Village Road acknowledges that it is a predominantly commercial corridor with some older residential development.

I12-6 (Plan SB GPU): Comment noted.

I12-7 (Plan SB GPU): Comment noted.

I12-8 (Plan SB GPU): Comment noted.

I12-9 (Plan SB GPU): Policy LG10, Multigenerational Facilities and Uses, was added to address this specific issue. See edits to Measure LG17.1 for these uses to be considered also as part of Sustainable Neighborhood Plans for individual areas of the City, and see also Measures LG2 (Non-Residential Growth) and LG5 (Community Benefit Housing).

I12-10 (Plan SB GPU): Comment noted. The City is implementing a Historic Preservation Work Program that is in the process of surveying and identifying future Historic Districts throughout the City. Historic Resources within El Pueblo Viejo will be mapped and evaluated to determine where Historic Districts, permanent buffer areas, and overlay zones should be considered to provide further protection. An additional priority focus will be buffer protection for the historic adobe structures, the Brinkerhoff Avenue District, significant City Landmarks, and El Presidio State Historic Park located in the core of the City. See new policy HR5 added to the Historic Resources Element.

In response to concerns regarding how long it might take to adopt and implement buffer requirements or historic overlay zoning, additional strengthening of draft GP historic policies are proposed to go in effect with GPU adoption. Historic Preservation Policies listed under LG14.5 are proposed as interim buffer protection mechanisms pending future action on other listed implementation actions.
# I12, Jan Hubbell (Continued)

I12-11 (Plan SB GPU): Comment noted. Development of a comprehensive Economic and Fiscal Health Element is not part of the current phase of work for the Plan Santa Barbara General Plan Update, and is slated for a subsequent planning phase. The proposed goals, policies and implementation actions provide initial policy direction. Please see added goal to address Tourism as an economic goal. Continuing policies that are part of the current General Plan or other City documents will be incorporated when the Element is comprehensively updated.

I12-12 (Plan SB GPU): Comment noted. The proposed General Plan Update sustainability principles and policies, as well as Housing Element goals, policies, and implementation actions, emphasize the importance of diverse and affordable housing.

I12-13 (Plan SB GPU): Comment noted. Please see edits to the Constraints chapter of the Housing Element under Air Quality.

I12-14 (Plan SB GPU): Comment noted. When the condominium conversion ordinance is developed, flexibility will need to be built into the findings to allow for conversion for purpose of providing income restricted affordable housing.

I12-15 (Plan SB GPU): Comment noted.

I12-16 (Plan SB GPU): Comment noted.

I12-17 (Plan SB GPU): Comment noted.

I12-18 (Plan SB GPU): Per conversations with the Building Official, after a disaster the City would request that buildings be shored up or otherwise stabilized and then evaluated. Existing CEQA Guidelines, City MEA Guidelines for Archaeological Resources and Historic Structures and Sites as well as ordinances currently exist with implementation that could be expedited if needed in case of an emergency. These ordinances include the demolition ordinances found in the Santa Barbara Municipal Code Chapter 22.22, Historic Structures (sections 22.22.035 and 22.22.037, 22.22.080).

I12-19 (Plan SB GPU): Comment noted.

I12-20 (Plan SB GPU): Comment noted. Please see response I12-1.

I12-21 (Plan SB GPU): Comment noted. Please see edits to GPU “Historic Context” and “Becoming Santa Barbara” sections.

I12-22 (Plan SB GPU): Comment noted.

I12-23 (Plan SB GPU): Comment noted. Please see expanded History of the City in Appendix B.

I12-24 (Plan SB GPU): Comment noted. Please see edits.

I12-25 (Plan SB GPU): Comment noted.

I12-26 (Plan SB GPU): Comment noted.

I12-27 (Plan SB GPU): Comment noted.

I12-28 (Plan SB GPU): Comment noted. Please see History of the City in Appendix B.

I12-29 (Plan SB GPU): Comment noted.

I12-30 (Plan SB GPU): Please see response I12-4.
# I12, Jan Hubbell (Continued)

I12-31 (Plan SB GPU): Comment noted. Please see edits to text.

I12-32 (Plan SB GPU): Comment noted. Please see response to I12-5.

I12-33 (Plan SB GPU): Comments noted.

I12-34 (Plan SB GPU): The Milpas corridor and parcels that front on Milpas Street are proposed as Commercial High Density land use designations.

I12-35 (Plan SB GPU): Comment noted.

I12-36 (Plan SB GPU): Comment noted.

I12-37 (Plan SB GPU): Comment noted.

I12-38 (Plan SB GPU): What is intended by proposed policy LG2 reference to the Sphere is that if you annex land with existing development, the square footage does not count as net new square footage in the City. However, if you annex property and new square footage is proposed to be developed, then it counts as net new square footage and all development plan standards and compliance with the Adaptive Management Plan would apply. This is how annexations and Measure E square footage is currently treated.

I12-39 (Plan SB GPU): Comment noted. Under the proposed GPU policies, existing open space standards would apply until amendments to open space standards are considered for multi-family and commercial zones.

I12-40 (Plan SB GPU): Comment noted.

I12-41 (Plan SB GPU): Comment noted. As proposed, the priority for the C-M Zone would be job-producing, light industrial and service uses; however, residences would continue to be permitted as a secondary use.


I12-43 (Plan SB GPU): Comment noted.

I12-44 (Plan SB GPU): Comment noted.

I12-45 (Plan SB GPU): Migration corridors are included (note “connectivity with open space on adjacent parcels”). Please see also Environmental Resources Element/Biological Resources policies pertaining to migration corridors.

I12-46 (Plan SB GPU): Comment noted. Please see text edits.

I12-47 (Plan SB GPU): Comment noted. Implementation details to be worked out in the subsequent implementation phase.

I12-48 (Plan SB GPU): Please see response to I12-11.

I12-49 (Plan SB GPU): Comment noted. Please see text edits.

I12-50 (Plan SB GPU): Comment noted. Please see text edits.

I12-51 (Plan SB GPU): Comment noted. Recommended policies address protection of biological resources are included in the element.

I12-52 (Plan SB GPU): The proposed ER1.3 b policies include trees.
# I12, Jan Hubbell (Continued)

I12-53 (Plan SB GPU): Comment noted. Please see edits.
I12-54 (Plan SB GPU): Comment noted. Please see text edits reflecting analysis from EIR.
I12-55 (Plan SB GPU): Comment noted. Please see text edits.
I12-56 (Plan SB GPU): Comment noted. Please see proposed Policy ER1.3
I12-57 (Plan SB GPU): Comment noted.
I12-58 (Plan SB GPU): Comment noted.
I12-59 (Plan SB GPU): Comment noted.
I12-60 (Plan SB GPU): Comment noted. Please see response to I12-12.
I12-61 (Plan SB GPU): Comment noted. Please see text edits.
I12-62 (Plan SB GPU): Comment noted. Please see edits to the Constraints chapter of the Housing Element under Air Quality.
I12-63 (Plan SB GPU): Comment noted.
I12-64 (Plan SB GPU): Comment noted. Please see text edits recognizing the sunset of the RDA in 2015. Also please see discussion in EIR Section 19 (Population and Jobs/Housing Balance).
I12-65 (Plan SB GPU): Comment noted.
I12-66 (Plan SB GPU): Comment noted. Please see response to I12-14.
I12-67 (Plan SB GPU): Comment noted.
I12-68 (Plan SB GPU): Comment noted. Please see text edits.
I12-69 (Plan SB GPU): Comments noted.
I12-70 (Plan SB GPU): Comments noted.
I12-71 (Plan SB GPU): Comment noted. No change is presently proposed to current policies and practices, which provide that primary structures would be outside of the identified setback, and accessory structures within the setback could be considered under discretionary permit approval, with consideration of potential impacts and resource protection policies.
I12-72 (Plan SB GPU): Please see response to I12-64.
I12-73 (Plan SB GPU): Comments are noted.
I12-74 (Plan SB GPU): Attachment 2 Pages 1-14 – Please see text edits.
INDIVIDUAL LETTER # I13

Rodriguez, Julie

From: peter hunt [architect789@gmail.com]
Sent: Saturday, May 15, 2010 1:54 PM
To: Community Development PC Secretary
Subject: Plan Santa Barbara

ARCHITECT PETER W HUNT AIA

Planning Commission – City of Santa Barbara

May 14, 2010

Plan Santa Barbara *living within our resources* proposes to build housing in the downtown core because it is close to transit lines and commercial services. It intends to "prioritize affordable housing over all other new development" according to Land Use Goal LG1.

That goal is why Plan Santa Barbara is wrong for Santa Barbara. Why does Plan Santa Barbara insist affordable housing must be in the most successful area of Santa Barbara when there are transit lines close to commercial services in La Cumbre, Milpas, Coast Village Road, and the Mesa? Would the tourist business, so essential to the local economy, diminish if affordable housing were built downtown? Would affordable housing advocates care? Why cannot affordable housing be in older buildings? Why do we need affordable housing anyway?

If the private sector finds it is not economically feasible to build publicly required affordable housing, why does the public sector find it legal to change zoning regulations to enable publicly owned housing? This is not a level playing field.

If new tax payer subsidized housing is indeed affordable, that is, economically sustainable over a 20 to 30 year period, then Plan Santa Barbara should prove how housing will pay for itself and generate enough income to maintain the properties. It has not proven that. It does not *live within our resources*.

Nearly everybody who owns property in Santa Barbara had to save, sacrifice, and scrape up enough scratch to afford a down payment, earn a worthy credit rating, and make the monthly payment. Such people have a vested interest in the future of the community and are concerned about its economic and cultural sustainability.

Affordable housing is a free ride for ‘lottery winners’ asking for potential graft, fraud, and kickbacks from the administrating agency in order to obtain below market rate housing at taxpayer expense.

Plan Santa Barbara recognizes the *new urbanism* is much like the old urbanism in that housing is located near commercial services and transit lines. A far more appropriate location for Plan Santa Barbara is Upper State Street near La Cumbre. That's because it has all the ingredients of the *new urbanism* minus a pedestrian friendly street grid system.

This is a location where such an experiment would not endanger the tourist trade. Most architects and private sector planners I know would find it an exciting challenge to make Upper State Street a dynamic urban area. Planning, designing, and building an urban area where currently there is a suburban context is the kind of metamorphosis we used to know in Santa Barbara when people like Dwight Murphy, Fleischmann, Bradbury, Sheffield, Peabody, and others had vision and resolve. Today's leaders have no skin in the game.

It is not necessary to ‘prioritize affordable housing over all other new development’ because as most people know, commercial development provides revenue in the form of taxes that pays for services residential development requires. Services like police, fire, education, infrastructure and such are not paid from property taxes anymore now that our State government routinely raids the reserves to make up for their irresponsible fiscal ways. Building housing alone without commercial development is a recipe for financial ruin and is not sustainable.
At this point, No Project Alternative is the best option. Allow the General Plan to conform with current zoning and we should be able meet our needs until an economically sustainable vision has backing.

Architect Peter Walker Hunt AIA
1303 B State Street
P.O. Box 92045
Santa Barbara, CA 93190
email: peter@peterwalkerhunt.com
phone: 805-965-5600
www.PeterWalkerHunt.com
Response to Individual Letter # I13, Peter Hunt (May 15, 2010)

I13-1 (Plan SB GPU): Thank you for your comments. Recommended policy in the Plan Santa Barbara GPU directs the next increment of growth to be located principally in the downtown and commercial districts to both reduce environmental impacts and work together to re-enforce these districts as economically viable, culturally significant, and healthy, livable places. Multiple plan objectives coincide in these locations including: more workforce housing; less effect on traffic congestion; proximity to frequent transit service; easy walking and biking access to commercial services (including fresh food), parks and open space.

The policy direction for encouraging affordable and workforce housing in the downtown would not preclude housing development in other areas of the City. The residential High Density land use designation (27-45 du/ac) is also being recommended for La Cumbre Plaza site and Milpas corridor. Currently areas of Upper State Street are zoned C-P which allows a base residential density of 12 dwelling units per acre. The Medium High Density (15-25 du/ac) is recommended along Upper State. While not the highest density that could be permitted, it is an increase from what is currently allowed. In addition, a 50% bonus density is being considered for community benefit housing (e.g., rental, employer sponsored, subsidized affordable) that could occur anywhere in the City that allows residential. The City Council will ultimately decide the densities and location of density designations as part of the adoption process of the General Plan Update.
INDIVIDUAL LETTER # I14

May 17, 2010

Planning Division,
Attn: John Ledbetter
620 Garden St.
Santa Barbara Ca. 93102

Regarding: Plan Santa Barbara

Growth is growth, smart or little, even slow, it is growth.

Can the city of Santa Barbara increase in population and maintain any feeling of a city that so many people want to preserve? I doubt it.

Many activists proclaim we need growth in the downtown area, some have said “stuff the growth downtown”. Remember, real people live downtown. That is workforce housing right now. Not only do people need housing, they need clean air first of all, and then clean water, and finally nourishment.

I disagree with mixed use in its current configuration downtown, or anywhere. Huge out of scale buildings, minimal or non existent set backs, landscaping that cannot survive, condo living with commercial tenants. Those tenants are arriving from their quiet neighborhoods, increasing traffic and density in the downtown area. Or owners converting designated office space to another bedroom.

Some activists reiterate that if we have more downtown residents, there will be neighborhood businesses and commerce creased for the downtown residents. I don’t see that happening now, or in the future. State Street is operating for tourists.

The draft general plan is wishful thinking. Zoning and building codes do not accommodate live/work situations. In the past, it has been difficult to get projects past the building department. Urban guidelines have not been followed.

Adaptive re use, sounds good, but again, building codes are not adaptable.

Sincerely,

Wanda Livernois
533 Brinkerhoff Ave.
Santa Barbara, CA. 93101
Response to Individual Letter # I14, Wanda Livernois (May 17, 2010)

I14-1 (Plan SB GPU): Thank you for your comments. City decision-makers and plans have supported and continue to encourage mixed-use in the downtown. Over the past 20 years, many of the development projects in downtown have been mixed-use. Because of concerns with large residential condominiums on the second and/or third and fourth floors, and concerns with size, bulk and scale, proposed General Plan update policies include limiting unit sizes as well as a number of Community Design Policies to keep building sizes compatible. Proposed Policy LG13 (Community Character, previously numbered CH9 and CH14) recommends strengthening and enhancing design and development review standards and creating development tools such as design overlays, form based codes, floor area ratios, and building setbacks (including guidelines and standards for commercial buildings downtown).

Currently, the City does not have good zoning standards for live-work land uses for home occupations in residential zones. Policy LG11 (Live-Work, previously numbered LG13) calls for providing viable live-work opportunities throughout the City. Future implementation of this policy would include creating zoning standards to address this.

While tourism is one of the main contributors of Santa Barbara’s economy, the vision for the General Plan is that the downtown would be a place to work, live, and recreate for the residents of our community as well.
**From:** YouPlanSB@SantaBarbaraCA.gov  
**Sent:** Saturday, May 15, 2010 8:25 PM  
**To:** YouPlanSB  
**Subject:** Tell Us What You Think

**INDIVIDUAL LETTER # I15**

**Tell Us What You Think**

This comment was submitted on: Saturday, May 15, 2010 at 8:25:15 PM

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From the beginning of Plan Santa Barbara, staff has been dismissive of the full range of public comment. From John Ledbetter at the initial meetings refusing to write down objections specifically to tall buildings, insisting instead this "really meant" maintain small town character, he set the flawed tone for this process.

To more staff in break-out sessions refusing to recognize 14% of housing is already price-fixed and/or subsidized, and insisting instead the biggest driver of Plan Santa Barbara had to be "ensuring more affordable housing". Again, public comment got dismissed and was not even recorded.

And on to claiming after a very skewed early public interest poll that found over 85% of the population knew virtually nothing about Plan Santa Barbara, but concluding from that ignorance that Plan Santa Barbara was "on the right track".

The only track Plan Santa Barbara has been on is to promote, laud and champion the narrow interest group Santa Barbara For All's agenda of high-rise and high density for Santa Barbara. As well as disastrous and punitive attitudes about cars, parking, neighborhood compatibility and personal choice. Plan Santa Barbara all along has been on the very wrong track.

At the last staff meeting with the Planning Commission, only Santa Barbara For All was given public recognition by name. All other community voices were dismissed as "other voices" without a single named recognition of any group other than Santa Barbara For All. (I took notes)

Who were "the others" that staff so casually dismissed as they touted only the voice from Santa Barbara For All?

None other than the thoughtful input from the Citizens Planning Association, the League of Women Voters and Neighborhood Alliance and numerous neighborhood associations who all had to take the dismissive back seat at every hearing in preference to staff letting Santa Barbara For All dominate the Plan Santa Barbara agenda.

And then only at this last I Planning Commission hearing do we finally learn Chairperson Bartlett had been a member of Santa Barbara For All all along. This is the person who now deftly guides the questions, closes off discussion, and never once before disclosed his material conflict of interest being a hidden proponent all along for Santa Barbara For All.

The Santa Barbara For All agenda is highly disturbing. Anyone who still demands Santa Barbara provide ceaseless amounts of price-fixed and/or subsidized (their buzzword "affordable housing") has not gotten out and walked around Santa Barbara.

There is plenty of "affordable housing" well beyond the city's current price-fixed and/or subsidized supply 14% of all housing units. There are additionally hundreds of illegal units, hundreds of small in-fill units, hundreds of homes by size, location, and state of repair fall into this...
category as well.

The Eastside, the Westside, the blocks surrounding State Street are full of small houses, small lots and plenty of apartments.

The following lists homes and condos under $500,000 currently on the market:
ear&gotoURL2=Res&type%5B%5D=Home%2Festate&type%5B%5D=Condo%2Fco-
Op&type%5B%5D=PUD&type%5B%5D=Ranch%2FFarm&priceFrom=0&priceTo=20000000&bedrooms=00&bathrooms=00&sqftFrom=00&sqft
To=999999&acresFrom=00&acresTo=999999&lotsqftFrom=00&lotsqftTo=999999&yearBuiltFrom=00&yearBuiltTo=999999

Zillow.com claims $500,000 homes can be purchased today for approximately $2000 a month mortgage payments. Workers making $35 an hour or two workers making a combination of $35 an hour generate $72,000 a year, more than enough to cover $24,000 in mortgage payments for any number of homes in Santa Barbara, free and clear.

At 14% of the total city housing stock, it is time for the city of Santa Barbara to get out of the housing business. Whether by direct price-fixing or subsidy.

It is time to stop saturating the downtown business district with more price-fixed and/or subsidized housing which concentrates people with little discretionary spending that fail to support the shops, businesses, restaurants and entertainment that will keep downtown Santa Barbara vital.

Plan Santa Barbara missed the mark totally. It is an alien document. It was dismissive of public input. It is the creation of a single voice: Santa Barbara for All, and that voice has no buy-in from any other community group or even many other individuals.

Worst of all, that voice of Santa Barbara For All has no appreciation for Santa Barbara as it has already been built out. It has been disingenuous in its presentations. It is not a voice that ever should have been given the primary it has in this entire process.

From the beginning, Plan Santa Barbara has attempted to inflict a radical vision on our city that already has a huge variety of housing and work options, readily accessible for anyone who still wants to work and earn their way into a home of their own in our town.

Ultimately, city staff let only the voice of Santa Barbara for All dominate this entire planning process from beginning to end, and wasted $4 million dollars in taxpayer money, 4 years of time and irreparable amounts of lost public trust.

One resident said it best when asked how he wanted Santa Barbara to look 30 years from now. His answer was simple but never reflected anywhere in Plan Santa Barbara. He said he wanted Santa Barbara in 30 years to look pretty much like Santa Barbara looked 30 years ago. In otherwords, keep your hand off of us Plan Santa Barbara. Instead we got hundreds of pages of over-bloated, over-planned, inaccessible, over-mirco-managed unworkable nonsense.

That is the voice of Santa Barbara. And that is the voice that repeatedly in so many other ways of saying the same thing, got dismissed and denigrated throughout this entire process.

Something went very, very wrong with Plan Santa Barbara from the very beginning. Nothing rescued it as it now limps brokenly to the finish line. It was a waste of city money, time and good will.

Public trust was violated at every critical point. That is not how we do business in this town. It is time to start over and listen not to just the sole voice of Santa Barbara for All and let them again dominate this public process.

This entire Plan Santa Barbara exercise has been a waste of taxpayer money.
Response to Individual Letter # I15, Joan Livingston (May 15, 2010)

I15-1 (Plan SB GPU): Thank you for your comments, which have been forwarded to decision-makers. The Plan Santa Barbara process has included input from hundreds of citizens and dozens of agencies, organizations, and community groups, as well as direction from the City Council, Planning Commission, and other City advisory boards. Decision-makers as well as staff appreciate the broad community input received from individuals and groups that participated throughout the process, such as Citizens Planning Association, League of Women Voters, Santa Barbara For All, Allied Neighborhoods Association, and Community Environmental Council. Public comments received both in writing and at hearings have been forwarded to the Planning Commission and Council who will ultimately decide the direction of the plan and the vision for our City for the next 20 years.
May 17, 2010

John Ledbetter and Dan Gira  
Planning Division  
Community Development Department

RE: Plan Santa Barbara Draft Environmental Impact Report

Here are my comments on the DEIR:

A major problem this document has is that it is very difficult to follow. It is just not reader friendly. This is in part due to the lack of not having the same items in the Alternatives. They are just not comparable. The amount of non-residential square footage is not consistent in all of the Alternatives and only the Additional Housing Alternative includes the robust TDM Program. The latter leads to confusing and false conclusions. Are results due to having more housing or priced parking?

There is also a lack of specificity of terminology that can lead to different conclusions depending on the reader’s background.

For example, throughout the document, starting with the first couple of pages, mention is made that affordable housing is a priority. There needs to be some clarification of what this means, i.e. affordable to whom. Is the priority for the HUD definition of affordable housing or workforce etc.? Footnotes throughout the document would help.

Clarification of the term “affordable housing” itself is needed. In reference to for-sale units is it talking about “price controlled housing” or units that are “affordable by design” or those that are the result of incentives? Is rental housing part of this and if so, are the rental units to be price controlled or is it assumed that rental housing is by its very nature affordable?

Another term that is bandied about is TDM. While there are many ways of managing transportation, does TDM only become “robust” when parking pricing is involved or what?

Too many such terms are used that could mean different things to different people or require the reader to have background information in order to understand what is really being meant.

The use of assumptions that are not analyzed or examined is a major problem. The impacts, if the assumptions do not work should be included in the document. For example, it is assumed that these new units somehow will be affordable to employees.
Yet we know that there are many existing low income jobs and that this is the type of job that will increase in the future. How is to be guaranteed that the new housing clustered in downtown will be affordable to those in these jobs? What is to prevent the new units from being too expensive given the cost of land and construction? For that matter, what is to prevent these units from being occupied by affluent retired people? If truly affordable housing is desired why are these units not located in the R-3 or R-4 zones where land is somewhat less expensive?

Just because these units are adjacent to transit corridors it is assumed the residents will use public transit. Why? Other studies that are not mentioned have shown that the use of public transit is the result of many conditions. Some studies have indicated that what is important is, will the public transit take people where they want to go in a timely fashion and that these factors are more critical that the point of origin of the trips.

Another assumption is that commuters want to live in downtown condominiums or apartments, when in reality what they really want a house with a yard that they can afford.

What will be the impacts, if the assumptions made in Plan Santa Barbara are wrong?

Page 8 Issues of Known Public Controversy.
Instead of just bullet points, the EIR should have more text describing what are the controversies. There should be references to other pages in the document where there may be more discussion of these items. Footnotes should be used to define such items as AB 32.

Page 9 should have a Table to show Alternatives and their Impacts.

Page 2-7 Variable Density:
Reference is made to a “prescribed set of ratios” It would be helpful to know what these are, so the reader can compare existing zoning and how many smaller units are being proposed.

Page 2-9 Transfer of Existing Development Rights:
This section needs to be clearer. It needs to include specifically what happens when square footage goes from a commercial sending site to a receiving site and how it can become residential. The interplay of TEDR and Mixed-use should be explained in the EIR.

Page 3-2 MODA:
Now that the city has determined that MODA is not a fixed area but a set of policies, needs to be clarified. Are these policies now implementation strategies to mitigate impacts?
Page 3-4. Mention is made to improving the jobs/housing balance through increased affordable housing relative to jobs. It would be helpful to have a table showing what jobs sectors we have and then what type of housing would be applicable or relative to those sectors. For example, service sector jobs are typically low paying, especially in the retail and tourism industry, so this would appear to limit the type of housing that is affordable to this sector such as rental housing or inexpensive condos. This table needs to include salary ranges and then how this translates into what is affordable to those ranges.

In addition, the conclusion that additional housing in the downtown would help the jobs/housing balance is made in some Alternatives. If the housing is not restricted or affordable to the workforce, how can this housing help the jobs/housing balance? What are the impacts, if this housing is bought by non-workers?

The information in the EIR regarding luxury or other expensive housing units generating the need for service workers is inadequate. It is assumed without any basis that there are already enough service workers to fit these needs.

Page 3-5 under “Housing” it is stated that there is no numerical cap proposed for the number of residential units. There should be a discussion about why there is an existing cap and how this is to be changed.

On page 3-18, the issue of numerical caps is also discussed and the document states that this is to be done away with in order to facilitate the provision of affordable housing.

The EIR needs to discuss the impacts of not having any cap or limit. It appears that this is an attempt to do away with the previous down-zoning under the guise of the need for affordable housing. It also appears that the true goal of Plan Santa Barbara is to change our city into a high density city.

Since it is still not clear how there is any guarantee that the housing built will be affordable, what are the impacts of having development of mainly expensive housing? It would seem to make a difference in the type of impacts we have in relation to cost of housing, for example, occupants of expensive units would have more cars, drive more and have more impacts on services. Why is not a residential Measure E type program put forth as a mitigation?

Page 3-5 Under Types of Development it is stated that “Affordable housing for very low, low, moderate and middle income households would be allocated priority for limited resources,..., however, then there is also mention of workforce, rental or transitional (not defined) housing. Just how are our limited resources to be allocated amongst these various housing categories? This needs to be spelled out. Without some mechanism for preserving our limited resources for the types of housing we really need, it would appear that the goals of the Plan Santa Barbara are not really being met. Of course there is also the problem that the categories of affordable housing stated seem to include housing for everyone not making over $200,000.
Information needs to be provided as to existing resources and what happens when additional more expensive resources will be needed, such as more imported water and/or desal. At what point do resources such as water become unaffordable to very low, low income etc households?

Page 4-1 One of the suppositions in the document is that the increased densities in the MODA would be offset by reduction of density elsewhere, such as reduced variable density. There needs to be an explanation as to how this will work. For example, will allowing higher density in one place require contemporaneous down zoning elsewhere? If this is not done, will the increased density adjacent to the transit corridors just lead to higher overall density? What are the mitigations for the impacts of this policy?

Table 4-1 Increased residential growth is listed as having a positive effect on sustainability, yet it is not clear that this increased growth will even cut down on commuting. This is an assumption that the EIR needs to discuss. It is not clear how we are to avoid have both increased residential growth in the city and increased commuting. What then will be the impacts of this?

Table 4-3 There are problems with this table in regards to how the policies relate to sustainability. For example, CH10 and it’s effect on sustainability are not logical. How do reduced and step-backed building heights produce an incentive for community benefit projects versus other projects? H-4 Unit Size and Density: Here again there is a disconnect. How would increased density reduce water demand?

Section 5. Description of Alternatives
Without MODA this entire section on Alternatives needs to be re-written. Since MODA is no longer a designation tied to a particular place of the map, how does this effect the impacts analysis?

Section 6. Air Quality
The EIR fails to address pollution that is generated on major arterials, such as State Street, especially Upper State Street, Carrillo and possibly Milpas. These streets experience heavy traffic at times in the afternoon that are earlier than peak hours. While I realize that anecdotal information is not enough, it is not pedestrian friendly to walk or eat next to these streets. Residents complain of feeling dirty as a result of walking and complain of headaches and other unpleasant respiratory responses. Since APCD does not test the air quality along these streets, the EIR should call for this testing. Further mitigations should include greater set-backs and greater landscaping along these streets. This is especially true where residential is proposed as part of mixed-use projects.

Another item that needs to be included in the EIR is the increase of traffic under the High Housing Alternative. This has the potential of increased traffic and congestion on local streets and thus increased air pollution.

The EIR fails to address the impact of air pollution on respiratory conditions as a result of air pollution along major arterials especially with stop and go traffic. Increased asthma
and other respiratory conditions are not given the full discussion they deserve even though health concerns are a part of Plan Santa Barbara.

Section 10. Historic Resources
It would be helpful to have a map showing the EPV, other historic districts and the specific historic or heritage sites. There should also be a map showing where high density development is proposed. And an additional map showing how they overlap.

Both existing policies and proposed mitigations are inadequate to adequately protect historic resources.

A proposed mitigation that should be added is: that no buildings taller than the historic site be allowed in same block square block. It is not enough to just deal with adjacent buildings.

Without such a mitigation, there is the potential that the Level of Impact should be considered a Class I Significant Impact.

There should be a recommendation that there be a separate Historic Element.

Section 16. Transportation
The TDM program of priced parking is stated to be the most effective means of reducing congestion because it affects everyone. How will this work without having the unintended consequence of hurting the downtown merchants and thus running counter to the goal of financial viability? Why should someone who is not within walking distance, go downtown to shop or eat when other areas offer free parking?

Since public transit use is listed as already high for the size of the city, why would it be assumed that even more people will want to use public transit? Also, why is it assumed that given the convenience of the auto for multiple stop trips and the time it saves for these trips, that just because people live along transit corridors, they will abandon their cars?

Without knowing how many of the commuters are actually going to the city and not other areas in the south coast it seems that some of the assumptions, policies and mitigations are questionable.

The analysis of the Alternatives seems to be skewed because the new TDM programs were only put in the Additional Housing Alternative.

If the TDM is traffic neutral, how can it be said on page 16-32 that there will a 45% or 15% reduction in commuter trips under the Additional Housing Alternative?

How does price parking changes relate to recent statements and assurances made by city staff that the free 75 minute parking will be retained?
An additional Mitigation that should be included in the EIR and could potentially reduce congestion for some impacted intersections is to not allow intensification of uses for projects that are located in Areas 3 and 4. For example, do not allow Elings Park to become a Regional Park, do not allow Val Verde to significantly increase and do not allow Hillside House to become higher density. The traffic model shows that trips in these areas are more likely to be by car.

Another mitigation that would make using alternative transit more available and potentially attractive to people would be the use of shuttles or other forms of non-fixed route transportation, to get people to the fixed transportation corridors.

If mitigations are required in order to offset the impacts of a project, these mitigations need to be in place prior to allowing the new development.

How will TDM prevent workers from parking in neighborhoods, if the neighborhoods have not entered into a program of restricted residential permits? If employees have to park there how will this reduce congestion? Will there not be additional congestion as people drive around more to find free parking?

Santa Barbara had quite a few non-profits and volunteers. Will not the priced parking be a disincentive to them? Not everyone goes downtown to work, shop or eat.

Section 19. Population and Jobs/Housing Balance
It is reasonably foreseeable that the increased density as proposed will not help the jobs/housing balance. As the DEIR points out the RDA will end shortly and there will not be money for affordable housing. Legally there is no way to restrict who buys or rents these units unless government money is involved. While private developers may do small workforce units, these may still not be affordable to many of the existing workers and the projected employees. Given the current reality, the DEIR should not say that the High Housing Alternative achieves the goal set forth of being the best alternative in regard to the jobs/housing balance. This is pure speculation.

It would appear that the best thing that could be done is to recognize that the Low Housing Alternative is environmentally superior. Land should be designated for the future development of affordable housing and restricted in such a way that it is still available at some future date for development by the RDA. Under future legislation there may well be new funding. It is counterproductive to allow this land to be developed now by the private sector by giving them incentives, when the goal of providing housing affordable to all segments of our workers is not met.

Page 19-8 The statement that “Historically, most large institutions such as UCSB and SBCC have not provided employee housing.” is incorrect. UCSB has provided some limited amount of housing for new faculty members.

Catherine McCammon
Response to Individual Letter # I16, Catherine McCammon (May 17, 2010)

I16-1: Thank you for your comments, which will be forwarded for decision-maker consideration.

With regard to document organization and alternatives, the alternatives were structured to permit comparison of impacts for policy differences and varied amounts of housing and nonresidential development. Please also see response O3-2.

With regard to terminology and affordable housing, the EIR reflects language and terminology from the proposed General Plan Update. Affordable housing is generally defined as that affordable to household earning 80-120% of the median income, while the City has also identified workforce housing, affordable to households earning up to 200% of the median income, as a priority. Please see EIR Section 19 (Population and Jobs/Housing Balance) and the draft Housing Element update for a further discussion of this issue.

In regard to Transportation Demand Management (TDM), please see EIR Section 16.3.3 (Transportation/Plan Santa Barbara Traffic Model/Travel Demand Management Strategies) and Volume II, Appendix I for a more complete discussion of TDM. The EIR does identify and evaluate a range of potential TDM measures. The reason that parking pricing is a particularly effective measure for managing traffic congestion is that it would apply not just to the small increment of additional future growth, but would also manage existing traffic.

With regard to assumptions, please see response O3-3. The EIR does not assume that all new units or new housing clustered Downtown would be affordable to new employees; please see EIR Section 19 (Population and Jobs/Housing Balance), particularly Tables 19.11 (Projected Affordable Housing Needs) and 19.12 (Population, Employment, and Housing Growth under Plan Santa Barbara and Alternatives). As described in Section 3 (Project Description), units are clustered Downtown to ease use of alternative transportation and allow for higher density and decreased per unit costs.

With regard to transit, the EIR does not assume that all residents of units on transit corridors will use transit; rather the EIR employs empirical trip generation rates for new development based on observations of the trip making characteristics of development located within certain subareas of the City. It is not assumed that all residents adjacent to transit will use transit, however it will be accessible to do so and a portion of people may choose to do so. It is not necessary for all such residents to use transit or other alternative modes in order to manage traffic levels.

Please see response O1-2. It is not assumed at all commuters would want to live in a downtown condominium, but a portion may want to, which could reduce commuter miles. However, due to difficulties in calculating such effects, the EIR analysis is conservative and does not assume that housing materially affects commuting levels.

With regard to impacts and assumptions, please see response O1-2. The EIR’s assumptions are generally conservative and have received extensive review from both the EIR consultant and City staff. For example, it is not assumed that all new residents will ride transit or that all new housing will be affordable.

I16-2: Comments noted. Please see responses below.

Page 8: CEQA requires a brief EIR summary, including identification of items of known controversy. Please refer to particular EIR sections for more detailed analysis of controversial issues. Please see EIR Section 18.3.2 (Climate Change Policies/California Policies) which discusses AB 32.
Plan Santa Barbara Program EIR Response to Comments

# I16, Catherine McCammon (Continued)

Page 9: Each section of the EIR impact analysis includes evaluation of comparative impacts of the Alternatives. Please also refer to the Executive Summary Table ES-2 Impact of Alternatives Compared to Plan Santa Barbara, EIR Section 22 (Summary of Alternatives Analysis) and Table 22.1 (Summary of Growth and Policy Assumptions) and Table 22.2 (Summary of Comparative Impacts) for comparison of the alternatives.

Page 2-7: EIR Section 2.5 (Background: City General Plan and Growth Management Tools) provides a general overview of the Variable Density Ordinance. Also, please refer to the draft Housing Element for more detailed explanation as well as and the existing City ordinance (www.SantaBarbaraCA.gov). For the sake of brevity, the EIR cannot provide more extensive in-depth discussion of existing City policies and programs.

Page 2-9: EIR Section 2.5.6 (Transfer of Existing Development Rights) provides a general overview of the Transfer of Existing Development Ordinance; please refer to the City’s website for a more detailed explanation of the existing TEDR.

Page 3-2: The MODA principles have always been intended to “mitigate impacts” by reducing trip generation and associated congestion, energy use, pollutant emissions, etc. Please see the draft Land Use Element Goals, Policies and Implementation Section for the current status of the policies.

Page 3-4: This discussion of jobs/housing balance as a part of the Project Description in Section 3.3.1 (Plan Santa Barbara Components/Updated Land Use and Housing Elements) refers to general overall goals. Please refer to EIR Section 19 (Population and Jobs/Housing Balance) for detailed information on job creation and housing demand, particularly Tables 19.9 (Employment Induced by Non-Residential Growth), 19.10 (Employment and Housing Growth), and 19.11 (Projected Affordable Housing Needs).

I16-3: Comments noted. Please see responses below. Please see Section 19 (Population and Jobs/Housing Balance) for a more detailed discussion of jobs/housing balance issues. However, the EIR analysis does not make assumptions that all future housing developed will be affordable. The proposed policy changes to provide for smaller units in targeted locations with some density incentives aim to result in improved potential for some market units affordable for workforce housing. With regard to secondary employment generation, please refer to response O3-3, O3-4 and C13-3.

Page 3-5: There is no historic, existing, or proposed future numerical cap on the number of housing units.

Page 3-18: No numerical caps currently exist for provision of housing and none are proposed as noted on page 3-18. The EIR analyzes and discusses the project as proposed by the City. The City has had a relatively stable rate of residential growth over past decades, and the EIR assumes a continuation of a similar slow rate into the future for the Plan Santa Barbara project. The EIR also looks at the comparative impacts if stronger policy incentives were adopted that resulted in more housing (Additional Housing Alternative). Please see Section 19 (Population and Jobs/Housing Balance) for a discussion of jobs/housing balance and issues with providing adequate amounts of affordable housing.

Updated Measure E provisions are part of the proposed project for non-residential growth, but have never been applied to residential growth. Rather than a cap of residential units or residential square footage, the Plan Santa Barbara General Plan Update proposes policies requiring that resources and services are adequate to support additional housing development, and an Adaptive Management Program that would track housing development and supporting resources and impacts.
# I16, Catherine McCammon (Continued)

Page 3-5: EIR Section 3.3.1 summarizes the project description as proposed by the City. Please see Section 19 (Population and Jobs/Housing Balance) for a detailed analysis of employment and housing issues. An Adaptive Management Program is proposed to monitor resources and development over time. Alternatives are under consideration to compare the advantages and drawbacks of locating the additional density in the Downtown vs. existing residential areas.

Page 4-1/Table 4.1: Please see responses O1-2 and O3-7. EIR Table 4.1 lists the EIR assumptions supporting the project description for purposes of impact evaluation. For a detailed analysis of traffic issues please see Section 16. The EIR employs a very conservative assumption regarding housing and commuting. Although it is expected that additional housing could be beneficial to reduction of commuting, due to the difficulty in providing precise calculations, the analysis does not assume that new housing would materially affect the amount of commuting.

Table 4.3: Please refer to the City’s draft General Plan Land Use Element. In general, projects providing substantial community benefits could be granted greater latitude regarding height and density, while market projects could be more restricted.

I16-4 (Section 5, Alternatives): The MODA principles remain a key component of the Plan. The policies propose in-fill development along transit corridors in close proximity (i.e., walking distance) to a range of uses. Removal of a formalized particular MODA boundary from the proposed Land Use Map does not substantially alter the analysis as a similar policy set remains. For example, as shown on Map 2 of the January 2009 Draft Policy Preferences Report, the MODA boundaries encompassed most of the medium and higher density areas within the City as well as straddling the major transit corridors. The revised policies continue to direct growth to subareas in these same regions.

I16-5 (Section 6, Air Quality): The EIR provides a discussion of potential air quality impacts and concludes, based on both City-specific and statewide studies, that only the U.S. Highway 101 corridor generates sufficiently high levels of pollutants to be of potential concern regarding significant health and respiratory issues. Please see also responses A9-2 and O-3-8. With regard to the Additional Housing Alternative and increased congestion, this Alternative is forecast to have the least congestion of any of the alternatives studied.

I16-6 (Section 10, Historic Resources): Please refer to Figure 10.1 which depicts City Design/Historic Districts and a selection of major sites. Please see Figure 3.1 which shows the City’s existing commercial designations and Figure 3.2 which depicts the proposed Commercial/High Density. Both the existing Commercial designations and the proposed Commercial/High Density designations occupy substantial portions of the El Pueblo Viejo Landmark District and abut the Brinkerhoff Avenue Landmark District. Please refer to the City Master Environmental Assessment historic resources map which identifies historic resources in the City and is available online at www.YouPlanSB.org/Document/Topics/Environmental Resource Maps.

With regard to mitigation, the Plan proposes adding additional policies and design tools and criteria to ensure compatibility of building size and design and protection of historic resources, including form-based codes, floor-to-area ratios, and historic resource buffers. There will also be a separate Historic Resources Element prepared. The EIR analysis finds that the combination of building restrictions, new development codes, and strengthened review process together with existing protections would address potential impacts to Heritage Resources.
# I16, Catherine McCammon (Continued)

**I16-7 (Section 16, Transportation):** Comments noted.

In general, analysis of a project’s economic consequences is outside the scope of an EIR per CEQA. However, it is worth noting that Central Coast cities, such as San Luis Obispo, charge for on-street, surface, and garage parking as do other noted successful downtowns such as Santa Monica and Pasadena. Free parking is likely one factor that shoppers and other patrons of Downtown businesses consider when choosing a retail, entertainment, or cultural destination.

In regard to transit use, the EIR acknowledges the City’s goal to increase transit use and the likely success of this goal under a “robust” TDM program. However, due to the difficulty and expense of obtaining detailed information, the Traffic Model does not quantify trip reduction measures associated with increased transit usage, and the model outputs represent a conservative more worst-case impact scenario. Please see EIR Section 16.3.3 (*Plan Santa Barbara* Traffic Model) and Appendix I for more information.

With regard to number of commuters and composition of the alternatives, please see response O3-2.

The EIR does not assume that TDM is traffic neutral, but that it results in substantial trip reductions for both existing and new uses. Please refer to EIR Sections 16.3.3 and 16.8.

The amount of minutes allocated to free parking are under the control of City decision-makers.

With regard to adding a new mitigation measure to reduce development in outlying areas, *Plan Santa Barbara* provides an array of incentives to develop within the City’s core and disincentives for development in outlying areas. However, please see suggested policy revisions suggesting that the City consider adoption of traffic impact fees for non-beneficial outlying development projects.

With regard to shuttles, the draft General Plan and EIR program additional transit planning to address how best to improve transit service.

Please refer to Section 23, Mitigation Monitoring and Reporting for a discussion of mitigation timing.

Regarding the potential for parking overspill as a result of TDM parking pricing, the majority of Downtown neighborhoods now have parking programs in place, and literature indicates that a majority of commuters will not walk more than ¼ mile from parking to employment locations. Further, the TDM assumptions are based on studies of multiple jurisdictions and are conservative as to effectiveness. Information as to specific effects of TDM on the subset of nonprofits and volunteers is not available and would generally be considered as socioeconomic issues and not environmental impacts.

**I16-8 (Section 19):** Section 19 (Population and Jobs/Housing Balance) does not assume that increased density will help the jobs/housing balance, but rather provides an assessment of the numbers of jobs compared to housing while identifying a significant shortfall of affordable housing. The Additional Housing Alternative is identified as improving the jobs/housing balance based on the very straightforward conclusion that it would provide a limited job growth and high housing growth.

The Lower Growth Alternative is identified as having low employment growth but very low housing, and includes lower densities which are forecast to limit affordable housing production.

With regard to employee housing, UCSB has provided 65 faculty units for a workforce of over 4,000 employees. The EIR also notes that UCSB is moving forward with plans to construct substantial amounts of new student and employee housing.
Dear Mr. Leathutter:

As a resident, I appreciate your professionalism.

However, I am still somewhat in mourning for Dale Young.

Dale was a very kind and thoughtful man.

I hope that things work out for the best.

Please let me know if there is anything I can do to help.

Thank you for your service.

Sincerely,

[Signature]

March 23, 2010

P.S. Please keep in touch. I'm still working on the General Plan issues.

[Handwritten note:]

I hope to have a brief opportunity to speak with you as project Mgr. on the General Plan and focus on the future. The past is past to the

Thank you for having me in advance.

[Handwritten note:]

Please let me know if there is anything I can do to help.

Thank you for taking the matter seriously.

[Handwritten note:]

Richard A. Oliver

705 De Loma

[Handwritten note:]

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Response to Individual Letter # I17, Richard A Oliver (March 23, 2010)

I17-1: Thank you for your comments. The City appreciates your feedback and input. Your property on De La Vina Street is currently zoned R-3, Multiple Family Residential with an existing General Plan Land Use land use designation of Residential -12 Dwelling Units Per Acre. This area does currently permit the use of variable density that would allow a range in residential density of 15-27 dwelling units per acre. The Draft General Plan Update recommendation for this area was for High Density. However, a Medium High Density of 15-25 dwelling units per acre for the multi-family areas downtown is being considered. This would be similar to the existing densities currently allowed. However, these density designations are still under discussion and will ultimately be decided by City Council at the adoption of the General Plan Update.
INDIVIDUAL LETTER # I18

Judy Orias  April 26, 2010

GENERAL COMMENTS ON THE DRAFT OF THE GENERAL PLAN AND EIR

Regarding the EIR

In reading the text it would be helpful if identifications of terms, agencies and plans would be footnoted on the page. For example to find a definition of workforce housing the reader has to go to the definition page section at the end of the report. It would be easier to have a footnote with the page location and number for the definition.

There needs to be clear statements on all the impacts of the various growth plans. Statements that show that all impacts are considered in the evaluation of the various growth plans. Without certain elements that are yet to be written and reviewed it is questionable that all impacts are being considered in the EIR.

The EIR needs to address if the assumptions that require major life styles are reality. The city cannot tell a person where they will work, cannot control how many people live in a unit, cannot restrict the ownership or a car or cars, and make people take the bus. The question of where the current traffic is going during the commute hours. Are they going to our city or beyond? There is need for factual data.

The question of building units to stop the commute. Is this the type of housing that the commuter wants? If the answer is no then the commute will continue.

The question of can the city ever build enough housing for every person who wants to live here?

There needs to be a clear analysis on the demand for increased services and the cost for each growth proposal.

General Plan Comments

The descriptions of the individual neighborhoods consist of a few facts, missing are the impacts that the various neighborhoods deal with. For example Hidden Valley and the High Fire Zones, flood plain, the impacted intersections that serve the neighborhood, location of essential services such as fire etc., location of schools, parks and other amenities. All these issues should be outlined in the neighborhood descriptions.

I do not find a map of the High Fire Zones and one should be included. The map should clearly show the impacted areas and not just vague colors, the reader should be able to identify streets in the fire area. I noted in a previous report that the fire area was removed from Arroyo Burro Creek area in the Hidden Valley area however it was present in another document which identified the high fire zones. There needs to be consistency with the areas in all maps that concern this zone.

The map showing the Flood Zone shows the entire town and again the impacted flood area is so small
that one cannot accurately determine the flood areas. The map should show the impacted areas so that streets are identified.

There appears to be no map which shows the site of the secondary units or granny units. There is a statement that the secondary units would not be allowed in the high fire zones but again there is no high fire map. There is a statement that not all other areas are able to accept the second units but it would be helpful if these were identified.

++++As a broad general statement there should be more maps identifying areas that are subject to the plan. +++

I find it hard to critique the plan with critical elements to be written later. Such an example is the circulation element. There is currently ample data available regarding impacted intersections. These affect air quality and the ability of the adjacent neighborhoods to exit and enter. With density a major driving element in the proposed plan a major question is: How will these important factors be incorporated into the document so that the readers are informed of these problems and concerns.

The document has may errors concerning the history of the zoning ordinances, and the formation of the planning commission. The entire report should be reviewed to make sure that the information within is correct. Any lack of accuracy throws a shadow on the entire plan.

I am concerned that critical portions of the plan are to be written later. Important to our city's tourist trade is our historic image. Not having this area for review makes the question of density and its impact on the historic areas of town a serious omission.

The circulation element is another portion that should be available for review at this time. Again proposed density will impact areas and these should be identified.

++++Unfortunately the omissions and vague statements of the plan leave too many questions in the plan and it should be rewritten to be clear and direct in the proposals. As such the plan is incomplete and it follows that the EIR is also incomplete.++
Response to Individual Letter # I18, Judy Orias (April 26, 2010)

I18-1: Thank you for your comments, which will be forwarded for decision-maker consideration.

Regarding the EIR:

Terminology, terms, agencies, plans, etc. are generally identified or defined once in each major section and then abbreviated thereafter for the sake of brevity. A list of acronyms is provided in Section 26. The difficulty of reviewing multiple acronyms and flipping back to the master list is appreciated; however the use of extensive footnotes and repeated references would unduly break-up text and add to document length.

Regarding the impacts of growth plans, please see EIR Section 22 (Summary of Alternatives Analysis) and Table 22.1 for comparison of the impacts of alternatives.

Regarding assumptions, the EIR does not presume lifestyle changes, and assumptions were carefully reviewed and are clearly spelled out in EIR Section 4. Please see responses I16-1, O1-2 and O3-7.

Please see EIR Section 16 (Transportation) regarding commuting, in particular Section 16.1 (Setting) and Table 16.1.1. Please note that the EIR uses trip generation and distribution assumptions based on empirical data gathered from existing uses, such as housing, to determine impacts. Although provision of substantial amounts of housing may have beneficial impacts on commuting, the EIR does not assume that housing will end or greatly reduce commuting. Please see responses I16-7, O1-3.

The EIR does not assume the City can build enough housing to meet demand. Please refer the Section 19 (Population and Jobs/Housing Balance) for a complete discussion of housing issues.

Please refer to Sections 14 (Public Services) and 15 (Public Utilities) for analysis of the potential impacts of each alternative on Public Services and Utilities, including a general discussion of costs where applicable. However, the EIR is not required to and does not provide detailed economic analysis of all cost-related matters, but considers on basic feasibility.

Regarding the General Plan:

I18-2 (Plan SB GPU):

Re: GPU Neighborhood Descriptions: Comments noted. Additional neighborhood-specific profile information could be added during the implementation of Sustainable Neighborhood Planning phases.

Re: Wildland Fire Plan: Comments noted. The City of Santa Barbara General Plan- Seismic Safety – Safety Element adopted by the City Council in 1979 related to fire hazards, is augmented with the City’s Wildland Fire Plan. The Fire Chief is mandated and has the authority to identify and amend areas within the City jurisdiction that are vulnerable to wildfire and to apply appropriate codes and strategies within these areas to protect life, property, and natural resources. This City’s Fire Master Plan identifies high fire hazard areas and identifies policies and actions focused on reducing the impact of wildfire in our community. The operational High Fire Hazard Area Map is utilized as part of project review, and could be included in the General Plan at the time that the Public Services and Safety Element is updated. The existing Seismic Safety-Safety Element as well as the latest High Fire Hazard Area Map is used for project development and any necessary permit findings.

Re: Flood Map. Comments noted. The City Building Department as the floodplain coordinator in cooperation with the Federal Emergency Management Agency designates the flood zones within the City. The city...
wide flood map is included in the General Plan to comply with Land Use Element requirements to show properties subject to flooding. However, keep in mind that these areas are subject to change over time. Area flood zone studies are conducted periodically and designated floodplain boundaries are updated as needed by the City in coordination with required FEMA procedures. As part of project review, the latest flood zone maps would be consulted.

Re: Second Units: Comments noted. The relaxation of second unit standards, such as unit size limitations, lot size limitations, affordability requirements, and tandem parking restrictions, is under consideration as a measure to provide more diverse workforce housing. The location of these units would continue to be prohibited in high fire districts, and other issues would need to be further examined such as: preferred locations adjacent to transit and commercial services; parking adequacy in single family neighborhoods; and Floor Area Ratios limits consistent with the Neighborhood Preservation Ordinance. The Council will consider the policy direction for secondary dwelling units prior to adopting the General Plan Update. If Council adopts the policy supporting relaxation of the standards in certain single family areas of the City, the details as discussed above would need to be worked out later as part of implementation of Policy H15 (Secondary Dwelling Units) and Implementation Measure H15.1 (Second Units, previously numbered H14), H15.2 (Secondary Dwelling Unit Ordinance), and H15.3 (Loan Program). The zoning amendments would require a public process in which interested residents could participate.

Re: Maps: Comments noted.

Re: Circulation Element: Comments noted. The proposed Plan includes land use and circulation policies to address traffic management and air quality. The EIR provides analysis of Plan policies for traffic impacts.

Re: Historical Background Information: Please see corrections and edits in the revised Draft General Plan Update document.

Re: Portions of Elements to be written at a later time. Your comments are noted. The primary scope of this phase of the General Plan Update is the Land Use Element and the Housing Element, along with limited updated policy direction and amendments for other elements. The other existing elements and any relevant policies would continue to be operational until they receive subsequent updates in later planning phases. With respect to historical resources, the City has extensive existing policies and procedures, as well as proposed new policies in the GPU to add more protection for historic resources. The EIR analysis includes evaluation of impacts of Plan policies on historic resources.
INDIVIDUAL LETTER # I19

COMMENTS ON THE DEIR

FROM JUDY ORIAS      May 11, 2010

In reading the text of both EIR and General Plan it would be helpful if identifications of terms, agencies and plans would be footnoted on the page. This would help the reader in determination of the subject that is being discussed.

There needs to be a clear statement on all the impacts of the proposed growth plans in one location. Without certain elements of the plan that are not yet written and reviewed it has to be questionable that all the impacts are being considered. Especially of concern is the lack of a Circulation Element and a Historic Element.

The EIR needs to address if the assumptions that require a major life style change are in fact a reality. The city cannot tell a person where they will work, cannot control how many people live in a unit, cannot restrict the ownership of a car or cars and make people take the bus.

The question of where the traffic is going on 101 during the commute hours? Are they going to the city or beyond? There is need for factual data.

The question of building units so that people will no longer commute. Is the type of housing that is being proposed an answer to the commute issue? If the answer is no, as some city staff have stated, then the commute will continue.

The potential of families still seeking the single family house outside the city, the commute to jobs, affect on air quality and loss of balance in the type of housing available in the city needs to be discussed and evaluated. ]

The question of can we ever build enough housing to satisfy everyone who wants to live here? If the answer is no than there should be discussion on what is the limit.

Will the lowering of the commute result in additional traffic on city streets and on impacted intersections?

The General Plan has descriptions of individual neighborhoods that consist of few facts. Missing are the impacts that the various neighborhoods deal with. For example Hidden Valley has a high fire zone, flood plain and impacted intersections (level D) that serve this neighborhood with essential services. Also missing are the location of schools, parks and other amenities. All these issues should be covered in all the neighborhood descriptions.

There is no map of the High Fire Zones and one should be included. This matter was questioned in the previous letters. The question of the location of the fire zone in Conditions, Trends and Issues Map #2
High Fire AREA Map and Map #4 Potential Secondary Dwelling Unit Location (Single Family Zones) in the Draft Update entitled City Council direction Jan. 2009 appear to have been resolved by removing the High Fire Zone map from the document. There should a map included showing consistency with other approved documents regarding the location of the high fire areas. The map should clearly show the impacted areas so that the reader can identify the names of streets.

The map showing the Flood Zone shows the entire town and again the impacted flood areas are so small that you cannot accurately determine the flood areas. The map should show the impacted areas so that the streets are identified.

There appears to be no map which shows the location of proposed secondary units or granny units. There is a statement that secondary units would not be allowed in the high fire zones but again there is no map showing this area.

The EIR needs to clearly identify what issues make an area or a neighborhood not suitable for 2nd unit development. The location of services, the ability to walk or bike safely to the location of services, the ability of the neighborhood to evacuate in time of fire. The statement that all other areas are able to accept the second units is vague and leaves all options open.

The proposals to raise density along transportation routes is questionable. Is it necessary to increase density along these routes to make the public transportation financially sound? The reduction of the parking requirement in an effort to make people take the bus could result in adjacent neighborhoods being parked up with cars of the residents of the high density projects.

How does the increased density and population capacity fit into our city’s charter and section 1507 of living within our resources? A recent water supply report indicates a shortage of our water supply in 2013, which is not far away.

Is the sewer line capacity adequate in the areas of proposed high density?

Not discussed or covered by EIR requirement but vital to our city especially in today’s economics is what is the cost of the services required by this increased density? Where will the funds come from?

The document has many errors and omissions. There are many errors regarding the history of our city, the start of the zoning ordinances, and the formation of the planning commission. I would refer you to other comments submitted by other members of our city for further listing of errors. The fact that there are so many errors suggests that a committee be formed of knowledgeable residents to review and correct the document. Any lack of accuracy throws a shadow on the entire plan.

It is very difficult to critique a plan with critical elements to be written later. Important to our city’s tourist trade is our historic image. Not having an Historic Element for review makes the question of density and its impact on the historic areas of town a serious omission. The circulation element is another vital portion that should be available for review. Again any proposed density will have an negative affect on impacted intersections. Affected will also be air quality and the ability of adjacent neighborhoods to exit and enter.

If it is difficult to get into the downtown area shoppers will go where access and parking is available. If this makes shoppers go out of the city this affects the city’s sales tax revenue.
Unfortunately the omissions and vague statements of the plan leave many questions which should be addressed in the plan as well as the EIR. As Dick Thomas former city manager determined that the real limit to growth is the city's financial resources. This issue needs to be addressed fully in the plan. As such the plan is incomplete and it follows that the EIR is also incomplete.

Finally what policies that are implemented need to be examined as they have a lasting effect on our residents quality of life.

Judith Dodge Orias
3788 Torino Dr.
Santa Barbara, Clif. 93105
Response to Individual Letter # I19, Judy Orias (May 11, 2010)

I19-1: Thank you for your comments, which will be forwarded to decision-makers. Please see responses to letter I18.

Regarding the commute, please refer to response letter I18 and Section 16 of the EIR for a complete discussion of local and regional traffic issues, including commuting.

I19-2: Comments noted. Please see responses to letter I18.

Regarding Neighborhood Descriptions, additional neighborhood-specific profile information could be added during the implementation of Sustainable Neighborhood Planning phases.

Schools and parks are shown on the City of Santa Barbara General Plan Land Use Map.

With regard to Fire hazards, please see Figures 9.2 (Wildland Fire Hazard) and 9.3 (Wildland Fire History) in the EIR.

With regard to flood maps, hard copy maps are printed at 1-inch to 3,000-foot scale and are for general information purposes. Please refer to online or electronic versions of the EIR.

Regarding locations for secondary units, Policy H15-Secondary Dwelling Units (previously H14) would permit secondary units throughout the City, but encouraged within close proximity to transit corridors. Areas where second units would be prohibited include high fire hazard areas as identified in Figure 9.2 of the EIR and Map 4 of the Policies Preferences Report (January 2009).

With respect to water supply, the EIR analysis found adequate resources to accommodate future growth under the Plan or alternatives studied.

The EIR reviewed the adequacy of sewer line capacity, including lines Downtown which are capable of serving higher density development.

The EIR considers the adequacy of public services and utilities in Sections 14 (Services) and 15 (Utilities). Where it appears warranted for feasibility consideration under CEQA (e.g., waters supply), the EIR provides analysis of costs. Regarding errors and omissions in the Heritage Resources section please see responses A3-2 and response letter O25. The City and consultant have made every effort to correct such errors. However, it is worth noting that many of these errors concerned generally modest variation in dates of events (e.g., year 1782 vs. 1786) or timing of building construction, etc. that occurred 75 to 200 or more years in the past. While such details are important and will be addressed, these types of errors do not undermine the adequacy of the EIR.

With regard to General Plan elements, the Plan proposes preparation of a Historic Resources Element; please see responses A2-1 and response letter O25. The Circulation Element was comprehensively updated in 1994 and the draft General Plan update provides targeted policy updates to the Element and the EIR provides a comprehensive analysis of transportation and circulation issues.

With regard to Downtown, please see response I16-6.

The City looks forward to working with concerned individuals and organizations to balance new growth and development with available resources and protection of our cherished quality of life.
Could you possibly refer me to the specific individual responsible for writing the below-copied passage in the EIR?

EIR, on Page 21-3:

21.4 “Alternatives Considered but Discarded”

“No Development  This alternative would completely restrict residential and non-residential growth within the City. Although this would eliminate any impacts to natural resources and transportation, it would not meet Plan Santa Barbara policy objectives to improve the jobs-housing balance and support a vibrant local economy and diverse population. In addition, such restrictions would not be legal as they would constitute a “taking” of vested private property development rights.”*

Thanks,
Joe Rution
Response to Individual Letter # I20, Joe Rution (April 20, 2010)

I20-I: Thank you for your comments. The City appreciates your feedback and input. Please see revised text in EIR Section 21 The sentence “In addition, such restrictions would not be legal as they would constitute a ‘taking’ of vested private property development rights” has been deleted.
CRITIQUE of the DRAFT PLAN & EIR:
The Case for Containing our New Development Within the Downtown Core

Joe Rution, April 28, 2010
PREFACE

This proposal is directed to the question of future residential development, and where to put it.

It seems likely that we shall adopt a Plan that accommodates at least 2000 units of new residential development over its 20 year duration. It is also likely that these units will come in the form of fairly large buildings: since the primary motivation for accommodating any new residential development at all is the desire to produce affordable housing, larger developments (consisting of smaller individual units) seem to be the only practical way to achieve any substantial degree of affordability.

2000 residential units in larger buildings equates to a lot of new buildings! If, say, the average building contained 10 units, that would mean 200 such buildings somewhere in the city.

As a practical matter, in our mostly-built out city there are only a few places these buildings can go. They can go in various commercial centers throughout the city (the MODA concept), the downtown, or into the older, established multi-family zoned neighborhoods.

If one were to reject the MODA approach (which would mass new development in variously located commercial nodes), that would leave either the downtown, or the older surrounding neighborhoods, as the primary sites for absorption of the new buildings.

This large number of new buildings that would be required to accommodate 2000+ units will certainly have a transformational effect on either the downtown, or those established neighborhoods.

It is my contention that the transformational effect of these new buildings will be of far greater benefit to the city if that effect were focused on the downtown, rather than within the established neighborhoods.

The older neighborhoods constitute a great but under-appreciated city resource. They are in large measure what give this city its coveted “small town” charm. They can be perpetuated only through preservation, not transformation.

On the other hand, our downtown - and most any downtown - can only benefit from having residents living within it. And, the place in cities where the evolution and transformation inevitably takes place - and makes them what they are (or are not) - is the downtown.

Thus in the following pages I seek to make the case for placing the majority of the new residential buildings where they will have the greatest beneficial impact - and the least detrimental effect. And that seems to be in the city’s downtown.

My submission that follows does not address ALL the big questions raised in the Plan.
proposals. My intent was only to address the questions of how much new residential development to allow, what kind, and where to put it.

My proposal assumes that there will be serious discussion around some of the other major questions - such as design standards for new downtown buildings, and how the selected limits on new development will be enforced - and that those questions would be resolved satisfactorily. The resolution of those questions should be a prerequisite to considering any proposal; no approach is going to make any sense without those questions being resolved.

I believe that the option of doing nothing – rejecting all current proposals and retaining the current Plan and status quo - is untenable. Currently there is nothing preventing a build out in the downtown far exceeding the 2000 residential units I suggest, nor anything preventing the approval of buildings far bigger than the example I suggest as appropriate.

NOTE: If reading on computer, to read the footnotes (printed at bottom of pages) while reading the text, hold cursor over each number and it will pop up.
CRITIQUE of the DRAFT PLAN & EIR:
The Case for Containing our New Development Within the Downtown Core

For a lay citizen to attempt a detailed critique of massive documents like these is daunting - if not impossible.

I'm therefore taking a "macro" approach: focus on the most significant issue, and rely on the axiom that reasoning from the general to the specific is the most effective way to make sense of voluminous detail.

Does such a broad-brush approach do justice to this massively detailed and far-reaching draft Plan (and its EIR)? Think of it this way: if indeed this Plan produces effects meriting historical note they will most likely be encapsulated, in some future history of this city, in a paragraph or two. Trying to anticipate, today, how those paragraphs might read seems like a sensible way to tackle this endeavor.

Therefore I'd like to examine these documents exclusively with respect to how they deal with that most significant issue: growth.

The Core Issue: Growth

Why growth? Because for the last few generations, growth seems to have been our most prominent and perplexing planning issue, and the manner in which we dealt with it is, arguably, our greatest legacy. Historically, to say the least, we've been very skeptical when it comes to growth, and remain aware that excessive growth has the potential to destroy what people cherish most about this place.

A major Impacts of Growth study in the 1970s and subsequent public vote arrived at an "ideal" city population size of 85,000. We have since exceeded that, and scant interest has been expressed for growing any larger - except for what might be absolutely necessary to advance critical community goals. What does that tell us?

I'd suggest it is today the overwhelming public consensus that whatever growth we are to accommodate must have positive benefits: potential for advancing rather than threatening our foremost community values.

How Do You Evaluate the Choices?

That premise gives us a starting point for judging how well these documents deal with the question of growth: Whatever growth they endorse must be justified on the basis of its potential to advance community values and priorities.
But the documents pose choices between several alternative growth scenarios and policies for managing growth. Thus we can add another criterion to our evaluation of these choices: That the choice – the growth scenario we finally select - must be the one that can produce the greatest degree of beneficial effect.

There’s one more necessary criterion.

The proposals and strategies presented as Plan options anticipate or promise certain benefits, but they do not guarantee them. Their success depends upon certain assumptions. It is possible that whatever growth we allow, in spite of all our efforts to “design” it appropriately, may fail to produce the desired effects.¹ That means we may experience the growth, but not necessarily derive any or all of the anticipated benefits from it. If the growth fails to yield the expected benefits, it could produce effects that fly directly in the face of the hopes upon which we pinned the growth allowances in the first place. It has the potential to make things worse! History reveals that the “best laid plans” adage is nowhere more apropos than with long-range urban planning. There are not only often frailties inherent in our planning assumptions, but the courses of cities often turn less on planning assumptions than on unplannable “outliers”.²

Thus we have to add the following to our criteria: Not merely must we consider the effects that the Plan anticipates or promises, but we need to temper our selections by appreciating the possibility that those promises may fail short in their realization, and that in so doing may produce counterproductive consequences.³ The right choice must be the one offering the greatest chance for net beneficial outcomes, and that minimizes potential for counterproductive ones.⁴

¹ Note that the EIR did not examine this question: How valid are the assumptions behind the various policies, approaches, devices and models put forth in the Plan? It simply based its environmental analysis on the assumption that these policies, etc., will produce the effects anticipated by the Plan’s drafters, and proceeded to assess environmental impacts from there.

² This is a somewhat skeptical approach. But in evaluating proposals that are based on possibly shaky assumptions - and which, if they are inaccurate and do not work, will exacerbate the very problems they are designed to ameliorate - I submit skepticism is the appropriate orientation from which to proceed.

³ What unintended consequence? An example: Suppose the new housing does not get occupied, to the degree hoped for, by the “target” workforce, but instead by, say, retirees, speculators, or well-off buyers seeking a Santa Barbara pied a terre. And suppose the occupants do not exhibit the “desired” behavior (drive less, walk more, work locally, use alternative transportation, etc.). There is no guarantee that these “model” expectations will materialize. And the counterproductive result may simply be: more population, more cars, and a generation of the need for ever more workforce.

⁴ There is a dangerous trap we can fall into when evaluating the alternatives Plans offer for selection. We evaluate them, usually, by weighing of the effects they presume or promise to produce. What we often fail to evaluate is the validity of the assumptions behind the promises: the odds of their playing out as expected. This has to be weighted in the deliberation. Past plans have come up short in their assumptions and prognostications - and we must take this possibility into account as we develop new plans.
So here's a summary of usable criteria I'd suggest:

We want to choose the growth scenario that:

a) Promises the most benefit that might be derived from the type and amount of growth that is proposed, and

b) That has the greatest chance of successfully producing those desired benefits, and further:

c) Is the option that threatens the least degree of harm should those benefits not be forthcoming.

The Key Issue: Residential Growth

I want to focus specifically on residential growth. It is the contentious matter of the amount, type and location of residential growth that we are to allow that is the fulcrum upon which many of the key concerns in the Plan hinge (traffic and transportation, housing affordability, carbon footprint, neighborhood preservation, etc.).

So the questions with residential growth are: a) what kind? b) Where should it go? and c) How much?

Plan Santa Barbara has laid before the EIR several options in response to those questions.

Without reviewing all of those options, I will state a case for what I believe to be the best choices:

THE BEST CHOICE OF OPTIONS FOR RESIDENTIAL DEVELOPMENT:

- The “lower growth” option (2,000 additional residential units), and

- Locating most of the units within the downtown core (within three blocks from State Street).

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5 As for commercial growth there seems to be a community consensus to continue fairly strict limitations upon it. While it is an important issue, interlocking with the residential growth issue, it appears to be a much less contentious one at this point.
a) What Kind of Housing?

The “what kind” decision seems to have been already decided for us on the basis of economic and practical considerations as well as by community consensus. Most private housing undertakings, in order to hold any promise of yielding significant shares of affordable units, will take the form of moderately sized multi-unit projects. And within these projects, smaller unit sizes are deemed to offer the greatest hope of affordability.

b) Where Should the Development Go?

Here is where my choice varies somewhat from what is proposed in any of the draft Plan’s several options.

Essentially, the draft Plan (“the Project”) recommends locating almost all of the new growth in proximity to several main commercial areas, transit nodes, and in the residential neighborhoods adjacent thereto (in densities, in those neighborhoods, that increase relative to their proximity to those commercial corridors).

I would suggest an approach that shares the same logic and philosophy, but significantly differs in focus.

My preference is for locating most of the units within the downtown core - meaning within three blocks of State Street.

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6 I have exempted public or subsidized lower-income housing from the limitations I am suggesting. It appears unlikely that we could ever build enough public or subsidized low income housing to serve the needs of those in lower income categories. It seems virtually impossible to find sufficient funding to build so much of this type of housing that it would ever challenge the capacity of our resources to support it, or adversely impact any of our other community goals. Therefore I foresee no issue with respect to this type of housing (except, perhaps, where to put it, but that has never seemed to have created any real public controversy here in the past).

As for high-end housing, there seems to be a consensus that it furthers none of our priorities. Except for how much might be necessary to satisfy RHNA, there appears to be no real interest in developing new high-end units.

7 Certainly larger than triplex, though smaller than, say, Chapala I: Casa De Las Fuentes at 922 Casville Street might be an appropriate example.

8 At least we have made the hopeful assumption that smaller units will be within the affordability ranges of workforce, and will be occupied by local workforce. But this is by no means a guaranteed outcome.

9 Between, approximately, the Freeway and Sola Street. This would put the new units only a one, two or three block walk from State Street.
Why so close? This proximity gives the residents a feeling of living right in the heart of the city - where a car ride to it would be unthinkable, where their proximity makes them, effectively, stewards of the downtown; it is their neighborhood.

The Essential Rationale: Put the Housing Where It Can Do Most Good (and Least Harm)

How does this choice square with the selection criteria I posed earlier: that growth be limited to that which most reliably promises the most benefits with the least downside risk? Why is tucking the housing in close to downtown more likely to yield higher benefits, and pose fewer risks, than relegating it to a somewhat more dispersed pattern, as recommended in the Plan Santa Barbara draft? Why is right, smack downtown better?

First off, why the most benefit?

What Downtown Needs: More Residents.

As downtowns go, ours has almost everything. The one glaringly absent element, in the eyes of most local observers, is more locals living within it (and businesses catering to locals). It lacks and needs people looking over it; being out on its sidewalks; shopping locally; patronizing local establishments, entertainment spots, etc. For a city to be safe, viable and vibrant it needs more than just tourists and shoppers from the outside. It needs its own residents. It needs commercial activity oriented to locals - and it is reasonable to expect that this would be generated by residents living in its midst.

You hardly need me to hold forth on why a downtown benefits from a concentration of residents; anyone who has followed enlightened urban thinking from Jane Jacobs onward can probably state the case better than I.

What About other MODAs?

If one is to find cogency in the MODA idea, downtown is the most realistic application: all the necessary ingredients already exist (transit access, conveniences, shopping, worksites, cultural attractions, etc.). SEE: "APPENDIX: Why Not The Other MODAs?"

Won't all this development transform the downtown?

Hardly; we aren't talking about turning it into a Santa Monica. We are only considering a fairly small increment of residential construction, in the 2,000 - 3,000 unit range over 20 years.

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10 In neighborhoods even a couple of blocks further away this is not necessarily the case. It is an enduring paradox why, even in this city that would seem most conducive to it, more people don't walk even relatively short distances.
The draft *Plan* deems new housing an asset that will bring benefits to the city. Then why not treat it as a precious asset and seek to extract from it maximum return? I am suggesting that the way to get maximum return from this limited asset - this relatively small increment of new housing - is to channel it into downtown, rather than diluting its potential for benefit by spreading it around as suggested in the Plan draft.

**What are the “downside risks”, and why will placing the housing downtown minimize them?**

The draft Plan proposes placing the new housing not just in the downtown core, but also in adjacent neighborhoods, and in other commercial corridors and transit nodes (Outer State, Milpas, Mesa, etc.): the MODA concept. And it is promised – or at least assumed – that placing housing there will precipitate certain community benefits that advance the *Plan’s goals*: produce housing units affordable to and occupied by local workforce; house a population that will work, shop, and recreate nearby, a population that, due to proximity, will take alternate transit and drive less – even own fewer cars. But all that is not a given: it is a hopeful assumption, an ideal, a package of assumptions based on a model.\(^\text{11}\) To work as planned would require a confluence of fortuitous outcomes; most all of the assumptions would need to be spot-on. A Plan based on such a package of assumptions carries uncalculated risk.

What if the hopes and assumptions don’t play out as expected and the promises do not come into fruition? What do we end up with then? It is not hard to fathom: simply more population, more cars, more traffic, less “small town” flavor, more angry neighborhoods appealing project approvals.

**Why is putting the housing downtown instead a “win/win”?**

Of course if all the hopeful assumptions I cited above play out felicitously, everybody ends up happy as clams: we have new residents downtown in housing they can afford, and walking to work and shopping, taking public transit, driving less, all the good stuff that we hope for in a MODA.

But what if the assumptions were just too rosily optimistic - and fail?

Even if that happened, if we located the development downtown we’d still get the giant benefit of people living in a downtown and bringing to it those benefits that only local dwellers can bring. The benefit a city core derives from people living within it is not a

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\(^{11}\) Models used to predict how policies and strategies may work in a certain place are based upon assumptions about comparable circumstances: how things work in other places under apparently analogous conditions. But this is very tricky (and why, historically, models in the social sciences often prove to be so unreliable). The devil resides in the detail of determining what are completely analogous conditions and circumstances. What appears to be - might not be. One little hidden or apparently insignificant detail can entirely unravel the expectations. This is especially true in applying apparent analogies to very unique environments - and Santa Barbara is inarguably a unique environment, with many eccentricities. For example, our unique “desirability factor” can raise havoc with assumptions about housing affordability efforts - strategies that might prove to work very effectively somewhere else.
contingent assumption. Even if the other assumptions fail, we’d avoid the total lack of benefit that would result if we had put the development elsewhere (i.e. just more of the problems we sought to mitigate).\textsuperscript{12}

Besides, placing the development downtown enhances the chances that the rosy assumptions will play out.\textsuperscript{13}

\textbf{a) How Many Units?}

Why select the lower number (2,000 unit) option? If I am right that building downtown is the choice that produces the most benefits with the least downside risk (remember, we are solely tolerating the building of more units for the benefits they will yield), then placing fewer units where they are likely to yield more benefits is a better choice than more units in places where the benefits are more contingent.

If our “Adaptive Management” attempt is at all effective, we can observe what effects actually play out. If the new housing succeeds in yielding the benefits foreseen of it, it would seem to be easier to then “ramp up” development, rather than to initially build (and be stuck with) too many projects that fail to live up to expectations.

The EIR points out the reality that choices, such as those posed by this Plan, are a matter of balancing competing community values and interests. It is axiomatic that a smaller increment of growth – positioned where it can do the most good – conflicts least with competing values - such as retaining a small city, and preservation of established neighborhoods.

\textbf{How to Do It?}

How can we accomplish this? City officials blanch at the mention of “downzone”. But what I’m suggesting might be accomplished simply by removing the development incentives – like bonus or variable densities - in those neighborhoods outside the immediate downtown. And by “tightening up” the urban densities in the new land use map – focusing them within a block or two of State Street.

\textsuperscript{12} Adding residents, \textit{per se}, to the outlying areas simply does not yield the beneficial “punch” that adding them to a downtown does. And it provokes conflict that arises when we try to stick larger multi-unit projects into or near residential neighborhoods. Keep in mind that preservation of established neighborhoods is also a Plan goal, presumably on parity with the others.

\textsuperscript{13} For example: a downtown resident is going to have a greater incentive to drive less and own fewer cars than one living at, say, LaCumbre or Milpas. More likely to walk, shop locally, add to the vitality of the downtown, become a steward of the street and involved in the fabric of his (more closely-knit) immediate community.
Summary:

Putting the development smack downtown helps assure it will yield the benefits assumed of it, minimizes the downside risks should those assumptions prove vulnerable, and assures a major benefit in any outcome scenario. Why even consider other locations where the chances of success are lesser? Every bit of the increment of new housing development we locate elsewhere detracts from the benefit that might be bestowed upon the worthier location.

And That History Book Paragraph ... 

I’d bet that posterity would deem the Plan Santa Barbara effort a landmark success if that passage were to read:

"In 2010 the City decided to contain its future residential growth into its immediate downtown core. As a result it is the gem of a compact little city we see today, and not an elite enclave, presumptuous tourist attraction, or sprawly, contrived concoction that most all the other of the world’s nearly ideal locales have become. Instead it is a vibrant, self-contained living environment that has retained its historic structure, character and identity. The bustling downtown is – as it has always been – immediately abutted by its original charming residential neighborhoods that have preserved their early-20th century look and much of their original architecture."

APPENDIX

Why Not The Other Proposed ("MODA") locations?

To reiterate: The reason I advocate putting the new housing downtown rather than dispersing it among other commercial centers and residential neighborhoods is simple: If housing is to yield a benefit, and we are going to build a limited amount of it (which is a given), why not focus that limited benefit to the place where it can most likely do the most good. And if ultimately it does not yield all the specific benefits expected of it, new residents will provide a special benefit to the downtown (a benefit that would not accrue if placed in the other areas). In contrast to the suggested MODA areas out on outer State, the Mesa, Milpas, etc., the downtown possesses a concentration of more of the elements that the MODA (transit facilitation) or Urban Village formulas need to work effectively: more shopping, more cultural attractions within a short walk, more close-by recreation, and a higher chance of a work site being within a walking distance (a lot more incentive not to drive a car). In the outlying commercial areas these elements would have to be created over time.
Why not Outer State?

Because Outer State is essentially a commercial strip. As such it possesses inherent impediments to becoming a "village" hub or offering anything approaching an urban experience — ingredients that abet the successful functioning of a MODA. It is unlikely that someone taking advantage of housing there would work there — at least the odds would be fairly long against it. The buses run there certainly, but there are not the incentives to take them instead of a car that exist in a true urban environment (e.g. truly unendurable traffic and impossible parking). Walking is hardly an attractive proposition since there simply are not concentrations of places to walk to: the blocks are too long, the business frontages too wide, and the thoroughfare (State Street) itself is too wide and busy to create a tempting walking experience. (Who wants to walk past a bunch of motels, fast food drive ins, banks, expanses of admirably drought tolerant commercial landscaping, and cross four lanes of traffic?). Plus, it is evident from recent experience that increasing housing density up there is a contentious subject with nearby neighborhood residents.

Why not Milpas?

It seems equally unlikely that those who might buy new units on Milpas will find themselves integrated into a "village" atmosphere. There simply are not a sufficient variety of activities and enterprises to attract them to the sidewalks. I owned a shop at Milpas and Haley for 31 years, and walked to work every day. But I can almost count the number of times I was induced to walk down to Milpas for other reasons. Would placing residents down there help? Maybe yes, maybe no. But it certainly would not yield the benefits of placing them downtown.

Why not the Mesa?

Similar reasons. I ask: Who would be more likely to drive less and spend more time on the sidewalks, a resident of the Mesa or a resident of downtown?

Why not the nearby (R-2 or R-3) neighborhoods?

It certainly sounds plausible that a resident of any of these neighborhoods (like mine in the St. Francis area) would exhibit behavior similar to one who lives closer to downtown - we are only a few additional blocks distant. But my (admittedly anecdotal) evidence of 30 years — gathered from the observation post of my front porch — does not support that expectation. Most the walkers I see are dog walkers. Few schlep shopping bags. Few take the bus, or drive any less than friends who live in the farther-out suburban areas. You would expect that the hoped-for "model" behavior, if it were to exhibit itself
anywhere, would do so in abundance in a neighborhood like mine, where the walk to downtown is pleasant and the weather perfect most every day of the year. But, to any substantial degree, it does not. That 5 or 6 block difference in accessibility to downtown makes a big difference.

When proposed in these neighborhoods, the larger multi-unit projects (which are the most likely type to result from our housing policies) almost invariably result in tumultuous battles. Many residents of the older established neighborhoods deem them incompatible and transformational. They have some justification. The zoning currently applicable to some of these (R-3) older neighborhoods is archaic. It is based on projections of development trends made years ago that never came about. Instead of becoming increasingly multi-family, some of these neighborhoods have virtually "preserved themselves" in their original development patterns (primarily single family and duplex). Hardly any multi-unit buildings or apartments have been built in them since the 1960s, yet the zoning permitting such units remains. Their residents expect help from the City in preserving the neighborhoods as they themselves have substantially preserved them for the last few generations. Instead they face development that displaces original dwellings - simply because of the precedent of some multi-unit projects and apartments that went up over 40 years ago.

I needn't have to remind that neighborhood preservation is a priority community value (and Plan objective) that deserves respect.

**The (often overlooked) Legacy of our Old Neighborhoods**

Our old neighborhoods all over town – some of which immediately abut the downtown - that are filled with original old houses. Victorians, bungalows, and houses of varying sizes of numerous architectural styles in near-original configuration remain in large numbers. While relatively few qualify for historic protection programs, they are still, taken in the aggregate, historic resources (albeit much under-appreciated ones). They offer us streetscapes relatively unaltered since the times of their original development, visible illustrations of the evolution of the city itself.

I submit that they are a major contributor to what is so often reverently referred to as our "traditional, small-town feel".

Having such charming neighborhoods so close to the city core is a rare asset - although some are as yet "undiscovered", and might seem a little shabby at this point.

These old units would be displaced by the new housing projects, were they to be located as suggested in the draft Plan.

We should not let this happen by default - for not having been mindful of the consequences - as we go about pursuing other community priorities.

**AN IMPORTANT NOTE:** There are some very fine, historical residential neighborhoods within the downtown area that Idelineated for the concentration of new residential
development. The area around Brinkerhoff and Bradbury comes to mind. These are examples of neighborhoods the preservation of which is a prime motivation for my proposal (to focus the development downtown). Such neighborhoods, therefore, should be identified and given special protections to insulate them from the potential of transformation by way of new development.

Respectfully submitted,

Joe Rution,
607 East Sola Street
Santa Barbara, CA 93103
joerution@cox.net

April, 2010
Response to Individual Letter # I21, Joe Rution (April 28, 2010)

I21-1: Thank you for your comments. The City appreciates your feedback and input. Your critique of the Plan has been forwarded to decision-makers. Please refer to Section 10.3.1 (Heritage Resources) and Section 10.6.3, as well as Section 13.3.1 (Open Space and Visual Resources) and Section 13.6.3 of the EIR for projected numbers of larger buildings under both Plan Santa Barbara and the Additional Housing Alternative.

I21-2 (Plan SB GPU): Comments noted. A major goal of Plan Santa Barbara is to ensure that new growth is comprised to the extent feasible of “community benefit uses.”

I21-3 (Plan SB GPU): Comment noted. The City’s decision-making process and identification of a potential “hybrid alternative” is focused on identifying the least harmful and most beneficial alternative.

I21-4: Comments noted. The assumptions supporting the EIR analysis were rigorously reviewed and conservative approaches were taken. For example, the EIR does not assume that City programs to provide workforce or affordable housing will be successful. Rather the EIR identifies new housing demand associated with job growth, identifies housing needs associated with this growth, and concludes that a very substantial shortfall of affordable housing will occur under Plan Santa Barbara. Please refer to EIR Section 19 (Population and Jobs/Housing Balance). Please also see responses O1-2 and O3-7.

I21-5 (Plan SB GPU): Comments noted. This generally reflects the approach utilized by the City’s decision-makers during the General Plan update adoption process.

I21-6 (Plan SB GPU): Comments noted. The type of housing units and areas targeted for additional density will be determined by City Council as part of their adoption process for the General Plan Update.

I21-7 (Plan SB GPU): Comments noted.

I21-8 (Plan SB GPU): Comments noted. The City Council will make final decisions on densities and bonus density provisions as part of the adoption process for the General Plan Update.

I21-9 through I21-15 (Plan SB GPU): Comments noted.
INDIVIDUAL LETTER # I22

SUBMISSION TO: Plan Santa Barbara
RE: Draft General Plan Revision

Zoning Modifications

The subject of the granting of zoning "modifications has been the subject of considerable controversy in recent years.

The "modification" is provision or device unique to our zoning ordinance. It was created, presumably, to address anomalies resulting from a residential downzoning that was done several decades ago, but has been used to address instances ranging beyond those situations that inspired its adoption within the ordinance. The regular granting of modifications became controversial because of the degree of discretion allowed for their granting and the absence of clear criteria to govern that discretion.

It would seem reasonable for the General Plan amendments to address serious and/or controversial shortcomings within the key land use regulatory apparatus the City uses to implement the Plan. The subject of modifications would seem to be a perfect candidate.

Respectfully Submitted,

Joe Rution
Member, Plan Santa Barbara Outreach Committee

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CASE PLANNER, APPLICANT(S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

515
Response to Individual Letter # I22, Joe Rution (May 17, 2010)

I22-1 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input. Some of the frequently requested modifications include bonus density modifications for Affordable housing and workforce housing projects. As the implementation program for the average density program as well as implementation for Community Design Policies (LG13) and Parking Policies (C7) are considered, regulatory standards such as lot area, setbacks, open space, and parking requirements will be considered. This should result in reduction of some of the commonly requested modifications.
INDIVIDUAL LETTER # I23

SUBMISSION TO: Plan Santa Barbara
RE: Draft General Plan revision

THE NEED TO PRESERVE OLDER NEAR-DOWNTOWN RESIDENTIAL NEIGHBORHOODS

The draft General Plan fails to recognize and appreciate the critical role played by our older, near-downtown residential neighborhoods - and the need to preserve and protect them from transformational development.

Page 83 of the Draft Land Use Element lists under “Neighborhood Qualities”:

- A sense of place and small town and intimate scale, feel, particularly in the single family and historical districts.

I take issue with the qualification: “...particularly in the single family...” (if by that is meant primarily those that are zoned single family), and the limitation to “historical districts” (if by that is meant only those currently afforded some sort of formal historical recognition or protection).

I contend that it is the close-in, old residential neighborhoods - most of which are currently zoned multi-family (R-2, R-3, or that fall within the commercial zones) that especially give our city its sense of place, small-town charm and intimacy. And it is these that require protection if they are to continue to do so.

What is our “Small Town Character” anyway?

What really gives Santa Barbara its small town flavor? It is a very unique feature that somehow endeavored to survive here: the older, primarily single family and duplex residential neighborhoods that immediately surround the downtown: neighborhoods that exist very much in the original form in which they developed in the early part of the last century.

These old neighborhoods - that provide us glimpses of life here from the late Victorian era through the 20s and 30s - are seamlessly contiguous with the urbanized downtown core (no belts of “transitional” buffer intervene). Ours is one of the rare cities where you can literally walk a few blocks from downtown into neighborhoods that evoke images from Sinclair Lewis and Sherwood Anderson.

This is a trait usually limited to our most charming small cities (examples like Natchez, Marblehead, Ojai, Naples (FL) come to mind). It is exceedingly rare in medium sized cities (beside Boulder, I can think of very few). We can’t afford to lose these.
neighborhoods, even for the sake of pursuing hopes of achieving housing affordability (there are better places for the location of new housing - such as right in the downtown core, where there are numerous sites that could benefit esthetically from well-designed mixed use buildings).

If we really want to preserve our traditional small town character and charm, we should preserve this unique aspect of Santa Barbara.

**What puts these neighborhoods at risk?**

These old streets, houses and neighborhoods are really under-appreciated assets - endangered assets. My fear is that one of our most unique, essential resources may suffer the fate of so many things that get ignored simply because they are too close, too familiar, and hiding right under our noses.

The need to preserve our older residential streetscapes and neighborhoods can easily be overlooked. For example, some of the old houses on the streets just off lower State might look, today, a little seedy, funky and disposable (sometimes cited as “opportunity” sites for new multi-unit projects). We need only look at what is being done in some other cities that have come to appreciate what proper nurturing of old neighborhoods can afford them.

Instead of trying to protect what historic character exists, we allow, as a matter of policy, the existence of past instances of incompatible development within these neighborhoods to serve as justification the development of new incompatible structures, which further erode their character. We allow transformational development on the basis of existing zoning that does not reflect the de facto character of these neighborhoods. We fail to reward these neighborhoods for having “preserved themselves”, in spite of archaic zoning that has existed for generations and would have, if exploited, permitted their transformation.

Gems of houses and streetscapes that lie within the downtown commercial zone are subject to unconscionable instances of incompatible development as the result of the recent dropping the setback requirements for mixed use projects that can be built within those neighborhoods.

**What are we missing?**

Anybody with a little foresight can see that these dwellings may one day be integral parts of charming neighborhoods that border and complement a downtown core that itself could become vital, lively and filled with residents. We see this happening in other places throughout the country, as people begin to cherish and embrace every bit of physical history that can be salvaged and incorporated into their cities’ modern fabric.

This approach could also greatly benefit our tourism industry. Opportunities to visit and experience authentic and viable “retro-oriented” residential communities are enduringly
and increasingly - popular. And this is one tourist industry boon that benefits local residents - by enhancing our sense of “community”. (These phenomena became very evident to me during a recent trip to the old cities of the Mississippi Delta.)

**What about the potentials of Historic Protection?**

The lack of historical protection afforded old residential neighborhoods in this city— in light of the lip service given our “historical and traditional” ethic - has always astounded me. We walk through gems of old neighborhoods – like those just off of, and literally the length of, the downtown core (both east and west) – and realize that, with the exception of one street (Brinkerhoff), they are unprotected. In contrast to the degree to which we dote over the historic commercial downtown (El Pueblo), the lack of appreciation afforded the nearby residential areas is shocking.

I lived in a North Carolina town, much smaller and relatively ordinary in comparison to Santa Barbara, that today has eleven historical districts, most of them protecting residential neighborhoods. This is not uncommon in cities in which historical consciousness weighs heavily.

The timidity with which we approach the subject of historical protection of our neighborhoods is appalling. The attitude seems to prevail here that only neighborhoods of pristine and unadulterated authenticity qualify for protection consideration. Judging by what is being done in other cities, this is not at all necessary. Our adherence to such a standard has greatly inhibited the potential for preserving an urban element that is responsible in large measure for the character (and tourism potential) of this city.

**This deserves a place in the General Plan**

It would be a shame if the new General Plan should not give this matter its due attention. Failure to do so would be an opportunity lost that will haunt us in the future.

Respectfully Submitted,
Joe Ruion
Member, Plan Santa Barbara Outreach Committee
Response to Individual Letter # I23, Joe Rution (May 17, 2010)

I23-1 (Plan SB GPU): Thank you for your comments. Maintaining the character of the older, near downtown residential neighborhoods is also important for the community. Please see edits to Desired Neighborhood Qualities in the Santa Barbara’s Neighborhoods section to add, “older, established neighborhoods.”

I23-2 (Plan SB GPU): Comments noted.

I23-3: Comments noted. The EIR provides programmatic level analysis of potential impacts to neighborhoods in two sections. Please refer to Section 10 (Heritage Resources) for an analysis of potential impacts to historic districts and structures and to Section 13 (Open Space and Visual Resources) for a description of the visual characteristics of City neighborhoods and possible impacts to these neighborhoods (refer to Impact VIS 3.6)

Policy LG 13 (Community Character) calls for design overlays for selected non-residential and residential areas of the city (including Downtown) through Form Base Codes, Floor Area Ratios, building setbacks, landscaping, open space requirements and design guidelines. As these implementation actions are developed, the historic character of the neighborhoods will be an important consideration.

I23-4 (Plan SB GPU): Comments noted.

I23-5 (Plan SB GPU): Comments noted. The General Plan Update policies proposed in this planning phase would provide updated policy direction for Historic Resources protection, for immediate use upon adoption, and also to provide direction for the development of a comprehensive new Historic Resources Element in a subsequent planning phase. See proposed additions to LG14 regarding buffers around historic structures and HR5 regarding historic resource protection including identifying historical districts. In addition, existing historic protection policies of the City within the Charter, General Plan Conservation Element, Ordinances, and Guidelines and the project permitting, design review, and environmental review processes will continue.
The draft Plan proposes to enforce the development limitations that will be settled upon, not by revamping the zoning to reflect those limits, but by a process described as Adaptive Management.

Adaptive Management is to be a monitoring mechanism that relies upon analysis of feedback data in order to create a self-adjusting system to accomplish our goals and objectives. The draft Plan (p. 26, et seq.) describes, in very general terms, how this system is to work. In essence, the idea is: "let's go ahead with what is proposed; our safeguard for keeping it on track and in control is that we will carefully monitor how well or how poorly the development accomplishes the effects intended of it".

People involved in planning back in the 60's-70's will (or should) remember that we tried that, and soon abandoned it.

The movement was billed as PPBS ("Planning/Programming/Budgeting Systems"). It was modeled, as I recall, on McNamara's DOD systems for monitoring effectiveness and efficiency of expenditures and deployment of resources. It was adapted to urban planning, and was widely and enthusiastically employed by many planning authorities.

It was all the rage, but fell by the wayside for a number of reasons, a primary one being that it was simply impossible to generate useful and unambiguous feedback data in a timely manner. The "feedback mechanisms" - accurate and objective apparatus to not only measure development, but to ascertain an accurate cause-and-effect relationship between it and what might be identified as its effects - were unworkable. The capacities and competencies to provide the pertinent data and methodologies for their objective interpretation never could be
adequately developed. At last that was my recollection from back in the early 70s.

The technology and methodology simply was beyond the scope of local government (all governments, as it turned out). To my knowledge, nothing new in the way of sophisticated capability – at least at the local level - has since come about to change that.

It was a promising premise that simply overreached.

I'd request, before pursuing and relying upon "Adaptive Management", that the EIR investigate whether capabilities now exist that assure that the approach can safely be relied upon (i.e., that it is more than just a good sounding idea).

That investigation should inquire, at the very least, into the following: Does the City now have the technical capacity to compile the data necessary to make the critical measurements and determinations? Does it have the criteria necessary to interpret the data accurately, unambiguously and objectively? Can it safely guarantee that such capability will exist at such time these determinations are to be made?

This, at the very least, is necessary since it was the failure of such technical capabilities that lead to the abandonment of similar "adaptive" management and planning endeavors in the past.

Respectfully Submitted,

Joe Rution

Member, Plan Santa Barbara Outreach Committee
Response to Individual Letter # I24, Joe Rution (May 17, 2010)

I24-1 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input.

I24-2: Comments noted. Please refer to Section 23 Mitigation Monitoring and Reporting Program and Table 23.1 which sets forth the general timing, agency responsible, and source of funding for mitigation implementation. As required by CEQA, the EIR provides of a general analysis of the feasibility of mitigation implementation and the City’s ability to implement required measures.

The concept of an Adaptive Management Program (AMP) as a feedback mechanism for the General Plan policies evolved through the Plan Santa Barbara process, and specifically from Planning Commission input. The Adaptive Management Program would evaluate the results of policy implementation to track progress toward the General Plan goals. The AMP would provide: periodic snapshots of what the city looks like under the policies of the updated General Plan; the identification of trends to evaluate the relevancy of objectives or the effectiveness of policies; and recommendations for amendments, when needed.

The AMP will provide the ability to make mid-course corrections toward the agreed-upon goals of the Plan and maintain its currency. Clearly, a key use of the AMP will be to monitor growth to determine the effectiveness of growth management policies in the plan. Monitoring would allow timely identification of growth trends, and thus amendment of policies in order to meet growth management goals.

Implementation action LG3.1 (previously numbered AM1 – AM4) calls for developing a comprehensive AMP to monitor, assess, adapt and inform the public and decision makers about implication to resources from the next increment of growth. The details of the program are still to be worked out. One option is to focus on the most critical planning goals and AMP objectives to include in a pilot program for City Council’s consideration. Once the benefit of monitoring these objectives has been demonstrated, the program could be expanded to include additional objectives.
INDIVIDUAL LETTER # 125

SUBMISSION TO: Plan Santa Barbara
RE: Draft EIR

CITY OF SANTA BARBARA
PLANNING DIVISION

EIR DISMISSAL OF "NO GROWTH" AS A VIABLE POSSIBILITY

In the Draft EIR, section 21.4 “Alternatives Considered but Discarded”, the concept of “no growth” was summarily discredited. It reads:

“No Development This alternative would completely restrict residential and non-residential growth within the City. Although this would eliminate any impacts to natural resources and transportation, it would not meet Plan Santa Barbara policy objectives to improve the jobs-housing balance and support a vibrant local economy and diverse population. In addition, such restrictions would not be legal as they would constitute a “taking” of vested private property development rights.”

No “viability” without “growth”? Who says?

Some cities reach the limits of the resources at their disposal to support growth ... and stop growing (“developing”, in terms of physically expanding). It certainly is a possibility, at some point, for Santa Barbara.

At the beginning of the Plan Santa Barbara process, we hoped that the possibility of a “no growth” scenario would be carefully and seriously examined. To have adopted a pledge, as Santa Barbara did, to “not exceed our resources” certainly implies that it is possible to reach the limits of resources for supporting further growth, at which point “no more growth” would be a practical inevitability (as it has become for many other cities). If and how a city can remain viable when it reaches that point (and stops growing) seems like a mandatory inquiry.

Whoever wrote this piece of dictum in the Draft EIR has summarily decided the question for us. They concluded that without growth it is impossible to deal with such things as a jobs/housing balance, to have a vibrant economy, or a diverse population. Period.

What if we had reached the point where our resources could not support added development? Would that doom us to the fate they describe? That would seem to be a harsh verdict for any community that might approach the limits of its resources yet wished to be vigilant about not exceeding them.

Was the author of this passage qualified to make such an assessment? Is the statement merely an unsubstantiated opinion or reflection of ideological bias? Such a pronouncement demands substantiation – especially since it purports to address a question that may one day (potentially within the duration of this Plan) have to be faced by this city.
Illegal “takings”?

The author of the paragraph in question not only condemns the concept of “no growth”, but also proclaims its illegality.

Suppose we were to reach the limits of our supporting resources. Were that to happen it might be perfectly reasonable a step to rezone in order to *completely restrict residential and non-residential growth within the City* (i.e. limit the volume of development to pretty much what exists now – “no growth”). Would that be an illegal “taking”? I’d like to see the legal authority from which that conclusion was drawn. Last I checked, the state of the law was that government would have to preclude any practical use of one’s land before a regulatory “taking” is deemed to have taken place.

I assume whoever made this claim in the draft EIR is a qualified to render legal advice, because one is indeed proffering legal opinion by proclaiming that action “would not be legal” - especially when it is proffered in a document for which the City paid over a million public dollars for qualified professional and technical advice.

* I’m assuming that the alternative they are referring to here - that they characterize as “no development” or “completely restricting growth” - is essentially the “no growth” option - as opposed to a blanket freezing of any and all development activity (like rehab of a building or replacing one with a new one of similar size). It would be silly to think they had such an implausible notion in mind, and to equate it with “no growth”.

Respectfully submitted,

Joe Rutten

Member, Plan Santa Barbara Outreach Committee
Response to Individual Letter # I25, Joe Rution (May 17, 2010)

I25-1: Thank you for your comments. The EIR assesses the impacts associated with the proposed project and identifies a reasonable range of alternatives that could potentially reduce one or more significant impacts, based upon City identified project objectives. The range of alternative growth and policy sets selected also reflects the range of growth and policy option under community discussion, based on the extensive community opinion received. The EIR itself does not presume growth itself to be either beneficial or adverse, but rather assesses the impacts of such growth. In terms of the legal issues surrounding an absolute no growth alternative, State law generally provides broad discretion to jurisdictions regarding the type, location, and rate of growth. However, such discretion is tempered by factors such as the need to provide some use of existing legal parcels, requirements to strive to meet State mandated housing goals, etc. Please see revised text in EIR Section 21.4 (Alternatives Considered But Discarded) which elaborates upon these issues.
Dear Chair Bartlett

In regards to the General Plan Update and Draft EIR, I urge you to adopt the Low Growth Scenario for your growth policy. I also recommend you include height restrictions in the downtown area in the General Plan Update as recommended by Sheila Lodge in the 2/11/10 City Council Workshop looking at projects affordable by design. Thank you for your hard work and your consideration.

Warm thoughts,
Deborah Slaght
Response to Individual Letter # 126, Deborah Slaght (May 4, 2010)

I26-1: Thank you for your comments. The City appreciates your feedback and input. Policy LG14 (Historic Structures, previously numbered CH10) calls for protecting historic structures through building height limits and other development standards in the Downtown. It has been proposed to add an implementation action to LG14 to establish buffers around historic resources to ensure that uses and structures nearby will be compatible.
May 17, 2010

City of Santa Barbara
Planning Division
Attn: John Ledbetter
60 Garden Street
Santa Barbara, CA

Re: Plan Santa Barbara/Draft General Plan Update

For creekside properties I’m concerned that broad stroke policies may not be appropriate, and that policies should be considered property by property. Creek setback policies currently being considered in Plan Santa Barbara may cause hardships and may make individual properties so constrained as to be considered a taking. For such properties, flexibility needs to be incorporated into the process.

For homeowners with small homes on creekside properties (for example, a less than 1,200 sq. ft home on an acre, which is my situation) flexibility in the process for an addition could include allowing additional square footage on a second story above the original footprint of the home. Also consider an addition away from the creek, which may involve a front yard or side yard modification to facilitate an appropriate and necessary addition.

Sincerely,

Sally Sphar

P.O Box 1323
Santa Barbara, CA 93102
May 17, 2010

City of Santa Barbara
Planning Division
Attn: John Ledbetter
60 Garden Street
Santa Barbara, CA

Re: Plan Santa Barbara/Draft General Plan Update

For creekside properties I'm concerned that broad stroke policies may not be appropriate, and that policies should be considered property by property. Creek setback policies currently being considered in Plan Santa Barbara may cause hardships and may make individual properties so constrained as to be considered a taking. For such properties, flexibility needs to be incorporated into the process.

For homeowners with small homes on creekside properties (for example, a less than 1,200 sq. ft home on an acre, which is my situation) flexibility in the process for an addition could include allowing additional square footage on a second story above the original footprint of the home. Also consider an addition away from the creek, which may involve a front yard or side yard modification to facilitate an appropriate and necessary addition.

Sincerely,

Sally Sphar
P.O Box 1323
Santa Barbara, CA 93102
Response to Individual Letter # I27, S Sphar (May 17, 2010)

I27-1 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input. The General Plan does not address the specific details of individual parcels. It is not anticipated that the proposed policies cited would deny expansion of an existing small home adjacent to a creek, especially where the home is on one acre. EIR mitigation measure for creek and riparian habitat and species protection MM Bio-2.c (Creek Setback Development Policies), which is proposed to be added to the General Plan as Implementation Action ER16.1, would establish a general creek setback standard of 25 feet or greater, consistent with existing City ordinance provisions for Mission Creek. Proposed General Plan Policy ER18 (previously numbered ER 27) also calls for a follow-up process for considering and establishing more detailed updated creek setback and restoration standards for new development and redevelopment along creeks. Until updated creek setbacks are developed, projects would be continue to be considered on a case-by-case basis as is current planning policy, using the general new guideline. Limiting new development, avoidance of the site’s most sensitive resources, and implementation of habitat restoration or other mitigation measures could be required to offset potential impacts.
INDIVIDUAL LETTER # 128

Dear Planning Commission,

New developer, what is the Pearl Chase legacy? Save the town.

Life of Santa Barbara is filled with imagining the past. Plan General

Estes, a man of influence, the town plan. Plans are not

hm. "From the 12th ed. and Draft 12th

years of buildings and buildings, the town. Please read

date with Redwood trees and buildings. The town.

ool, a few years ago and later. I love the town.

The whole town is a grid of buildings.

The buildings are almost throughout. The land on Sacred

20,000 acres and mine. Never ever excavate. Never

tear down buildings on sidewalks or parking lots or

the trees, never. The land, the documents are

based on development. There is no place to develop. It is built on.

Chase saved every tree, Every park. I did it. It is the legacy

and need. Otherwise it is or built. Never Already.

Fan too much has been done. Don't purchase not held.

Put full rest up and down. Good. It. It is the land.

Illustrate the whole town. Never build.

Pearl Chase is incredible. Never every tree down. Town still

the fire. Buildings need not expect. No. It is the town. The

Earthquakes built generally in Arizona. The removed buildings.

The old buildings are valuable. Never touch it. Never change the

It is our home. Development as necessary. Concept. Never

that development does not fit the town. At the town

stop all development. Never again in. Never again.

The town. Buildings are made of wood and brick and


Chase did when a lot of good homes be taken. Never

all. Not. It is gener. The town. The buildings are needed. The


Sincerely,

[Signature]

[Name]

[Address]
Response to Individual Letter # I28, P Westbury (April 27, 2010)

I28-1 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input. Proposed demolition of an older un-surveyed structure, feature, or site is currently regulated under Santa Barbara Municipal Code 22.22.035. The ordinance outlines the assessment and planning process that needs to occur to establish if the resource has potential historic resource significance and if a Historic Structure/Site Report is necessary to determine whether the structure should be considered for designation as a City Historic Resource. Demolition of any listed Historic Structure or Structure of Merit requires very specific criteria and approval by the Historic Landmarks Commission would have to occur.

New policies for protection of historic resources have been added to the General Plan. Please see new buffer protection mechanisms added to policy LG14 (Historic Structures, previously numbered CH10) and new policy HR5.

Policies encouraging the adaptive reuse of buildings, including historic buildings, are included in the General Plan Update. These include LG14.3 (Historic Structures/Adaptive Reuse), HR1 (Adaptive Reuse, previously numbered CH1), and EF11 (Re-Use of Commercial Space).
Dear Planning Commission,

The plan S.B. is unusual. People are planning for the future, the population figures are wrong, the figures should be used. People have to accept the Chapala St. structures as good. They are necessary. S.B. is not monotonous. It is a lowly front with significant structures throughout. People live in them. Never tear down the town for any reason at all. People made up future population goals and expect to develop because that is their work. They make money building at low cost money. What happens? Traps are immense. Fires have always been a problem solution. Never expect building killed the people use. The fire rebuilds are not faster. They are delayed. The new rebuilds wrap, people will suffer. The plan is the old plan. Never build faster. Keep the overflow, new population. The garrisons are not overcrowded. hot when the buildings will fall down in them. There are very little to used this evil. Never pass Shove them the City expects to build more. Never continue to develop. The buildings in the City expect to build more. Never continue to develop. The City expects to build more. Never continue to develop. The buildings in the City expect to build more. Never continue to develop. The City expects to build more. Never continue to develop. The City expects to build more. Never continue to develop. The City expects to build more. Never continue to develop. The City expects to build more. Never continue to develop. The City expects to build more. Never continue to develop.
Response to Individual Letter # I29, P Westbury (May 5, 2010)

I29-1 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input. General Plan Community Design Policy LG13 (Community Character) calls for strengthening and enhancing design and development review standards and process to protect and enhance community character. It is expected that design standards, including development of Form-Based Codes and/or Floor Area Ratios for Downtown would be developed in the future. In addition see response to I28 regarding policies addressing the protection of historic resources and adaptive reuse of existing buildings.
INDIVIDUAL LETTER # I30

Rodriguez, Julie

From: CASA Magazine - publisher [publisher@casasb.com]
Sent: Monday, May 03, 2010 10:40 AM
To: Community Development PC Secretary
Subject: Fees for street parking and honor racks on the street

Honorable Chair and Planning Commission Members:

I am writing in regards to the proposed new street parking fees and associated honor racks, that have been moved up in priority from Plan Santa Barbara and the EIR currently being processed.

I have serious concerns about the economic ramifications of this move, because of the similar moves being made in the planning process concerning parking and circulation. Beside the immediate negative impact to local merchants, it will derail the master plan for parking and circulation in the Plan Santa Barbara document. The EIR and mitigations are also processing this same information and have not reached conclusions in this area of review.

It is inappropriate to preempt the planning process, especially with data still being gathered and not yet reviewed appropriately.

I would like to request that this item be tabled by the Planning Commission until it can be reviewed in conjunction with the EIR and overall master plan for parking and circulation being put together for 2030 Plan Santa Barbara.

Sincerely,

Mark

Mark Whitehurst

Publisher
CASA Magazine
23 East Canon Perdido
Santa Barbara, Ca. 93101
(805) 965-6448 Fax: (805) 966-9827

Publisher
CASA Magazine
23 East Canon Perdido
Santa Barbara, Ca. 93101
(805) 965-6448 Fax: (805) 966-9827

5/5/2010
Response to Individual Letter # I30, M Whitehurst (May 3, 2010)

I30-1: Thank you for your comments. The City appreciates your feedback and input. Please see response C1-6 regarding economic issues and parking. The EIR analysis and mitigations are based on technical analysis as to effectiveness (please see EIR section 16.3.3 Plan Santa Barbara Traffic Model, and Volume II Appendix I6 Trip Reduction Impacts Analysis). Public on-street priced parking, if determined to be a desired implementation, could be phased in gradually over time. Additional data gathering would likely be necessary to determine appropriate parking rates and locations.
INDIVIDUAL LETTER # I31

PAUL R. ZINK, AIA

779 Calabria Drive
Santa Barbara, CA 93105
(805) 569-3909
ZinkAIA@aol.com
www.ZinkAIA.com

April 28, 2010

Santa Barbara Planning Commission

RE: Plan Santa Barbara – Secondary Dwelling Units – Section H15

I moved to Santa Barbara in 1992 and the second place that I happened to call home was an illegal residence behind a garage. The family was still able to park two cars in the garage. The rental was complete with boot-legged plumbing and kitchen. It appeared that this residential unit was well over 20 years old when I was living in it. I know that it was non-permitted because I am an architect and the construction was not done correctly.

The reason why I tell you this is that there are more existing illegal secondary residential units than the City is willing to recognize. These units are part of the social fabric of our community. One positive factor is providing a partial family relationship for the tenant with the main house residents. In my case I was the unofficial house sitter and took care of the dog when the family was on vacation. Several times I was invited to Sunday evening dinner with the family. They looked out for me and I for them.

In Santa Barbara, we have many houses with empty nesters who raised their children and now have empty rooms. At one time there were many more people living in the house; perhaps even high school children with their own cars living at the house. What is the difference between a high school or college age child with a car parked at the street and a tenant with a car at the street? This is not an increase of density in the neighbor. Not every house has young family members at home with a car and not every house will have a Secondary Dwelling Unit.

I would like for the Plan Santa Barbara to proceed with the Option ‘D’ Additional Housing Alternative that contains the provisions for additional residential units covered under Section H15. Under this section the regulations pertaining to Secondary Dwelling Units would be revised to become a viable option in the zoning ordinance while at the same time protecting the character of the existing neighborhood.

Sincerely,

[Signature]

Paul R. Zink, AIA
Response to Individual Letter # I31, Paul Zink (April 28, 2010)

I31-1 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input. The relaxation of second unit standards, such as unit size limitations, lot size limitations, affordability requirements, and tandem parking restrictions, is under consideration as a measure to provide more diverse work force housing. The location of these units would continue to be prohibited in high fire districts, and other issues would need to be further examined such as: preferred locations adjacent to transit and commercial services; parking adequacy in single family neighborhoods; and Floor Area Ratios limits consistent with the Neighborhood Preservation Ordinance. The Council will consider the policy direction for secondary dwelling units prior to adopting the General Plan Update. If Council adopts the policy supporting relaxation of the standards in certain single family areas of the City, the details as discussed above would need to be worked out later as part of implementation of Policy H15 (Secondary Dwelling Units) and Implementation Measure H15.1 (Second Units, previously numbered H14), H15.2 (Secondary Dwelling Unit Ordinance), and H15.3 (Loan Program). The zoning amendments would require a public process in which interested residents could participate.
Dear Ms Shelton:

We write to express our concern about this year’s updated draft General Plan, which shows Elings Park as a “Regional Park” in the Open Space Map on page 167.

This is not accurate: Elings Park is NOT a Regional Park, and this designation should by no means be awarded without public input, environmental review, and serious consideration by the City Council and Planning Commission.

The Regional Park designation would lift all City restrictions and allow the “nonprofit” Elings Park Foundation to build and operate a wide range of proposed facilities that are highly incompatible with the surrounding residential neighborhood.

Under the name of “Regional Park,” Elings Park would, in effect, become a commercial operation offering venues for large gatherings ranging from company parties and weddings to sporting events and public performances. These could include PA systems and amplified music, over which the City of Santa Barbara would have no control.

As close neighbors of Elings Park we are aware that many events at the park already cause a public nuisance, bombarding our neighborhood with noise far in excess of the limits the city allows, and lighting the night skies with the glare of floodlights. Additional facilities proposed by the Elings Foundation would compound these problems. And with a “Regional Park” designation, the city would lose the ability to enforce limits on noise, and on the nature of activities allowed in the park (such as overnight camping).

For these reasons, we oppose this change in Land Use Designation. We urge both the City Council and the Planning Commission to conduct further studies and hear public comment before allowing any such change.

Sincerely,

[Signature]

Els Andersen
Dennis Andersen
IEP1-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

Elings Park, both the north and south side, has a current designation of Community Park, although the park functions in some ways as a regional park. The proposed General Plan Update text, Draft General Plan Parks and Open Space Map, and EIR Section 14.1.3 (Public Services Setting/Parks and Recreation), have been corrected to show that Elings Park is designated as a Community Park. Changing the land use designation to Regional Park would have to be initiated by the City Council. City decision-makers may consider the appropriate land use designation for Elings Park as part of the General Plan Update adoption process. Your comments will be considered by City decision-makers, along with the relationship of any previous County actions or restrictions to the City's decision.
INDIVIDUAL ELINGS PARK LETTER # IEP2

Rodriguez, Julie

From: Shelton, Barbara
Sent: Tuesday, April 27, 2010 10:53 AM
To: Community Development PC Secretary
Cc: Ledbetter, John
Subject: FW: Comment on Proposed Update to General Plan

From: Elizabeth Becker [mailto:ebecker77@cox.net]
Sent: Monday, April 26, 2010 6:06 PM
To: Shelton, Barbara
Subject: Comment on Proposed Update to General Plan

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden St.
Santa Barbara, CA 93101

Dear Ms. Shelton:

I have reviewed the proposed updated General Plan documents, and would like to present the following comments:

1) I strongly oppose the "Regional Park" designation of Elings Park on the Draft General Plan Parks and Open Space Map on page 167 of the draft General Plan.

2) I also strongly oppose the reference to Elings Park as a "Regional Park" as mentioned on Page 14-7 of the Draft EIR on the Plan. This page refers to Elings Park as a Regional Park as if it were in operation as such today, which it is not.

Currently, Elings Park is designated with two different zoning designations:

1. The southern portion of Elings Park (Elings Park South) is currently zoned as Undeveloped Parkland.
   b. Over 1,000 supporters of Save Elings Park support this designation, and do not want it changed
      a. The uses associated with a "Regional Park" designation of Elings Park South are in violation of a County of SB "Covenant Restricting Use" which was agreed to by the park in 1999, and is in effect until 2029.

2. The northern portion of Elings Park (Elings Park North) is currently zoned as A1 Residential
   a. A Regional Park designation is not an appropriate designation due to the impacts of traffic, noise, and general neighborhood compatibility associated with "Regional Park" zoning.
      b. Neighborhood groups and environmental activists support a change to a more appropriate zoning designation, such as Neighborhood Park, or Sports Fields.

Thank you for your consideration of my comments.

Sincerely,

Elizabeth Becker
ebecker77@cox.net

4/27/2010
Response to Individual Elings Park Letter # IEP2, E Becker (April 26, 2010)

IEP2-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

Elings Park, both the north and south side, has a current designation of Community Park, although the park functions in some ways as a regional park. The proposed General Plan Update text, Draft General Plan Parks and Open Space Map, and EIR Section 14.1.3 (Public Services Setting/Parks and Recreation), have been corrected to show that Elings Park is designated as a Community Park. Changing the land use designation to Regional Park would have to be initiated by the City Council. City decision-makers may consider the appropriate land use designation for Elings Park as part of the General Plan Update adoption process. Your comments will be considered by City decision-makers, along with the relationship of any previous County actions or restrictions to the City's decision.
Ms Shelton....

Please advise the City Council & Planning Commision of our opposition to the presumption of designation of Elings Park as a "Regional Park", and all that that entails.

In the proposed General Plan map being made a part of the “Plan Santa Barbara” General Plan update process, the Draft General Plan Parks and Open Space Map on page 167 of the draft General Plan shows Elings Park as “Regional Park” already. Page 14-7 of the Draft EIR on the Plan also refers to Elings Park as a Regional Park as if it were in operation as such today.

This is completely incorrect. Elings Park is NOT a "Regional Park", and we oppose it being given that status, seeing as how that would completely change the use of the space from it's current and originally intended purpose.

Thank you.

Steve & Sharen Comstock
1424 Cantera Avenue
Santa Barbara, CA 93110
805-682-5406 home
713-254-0938 cell
Response to Individual Elings Park Letter # IEP3, S&S Comstock (May 23, 2010)

IEP3-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

Elings Park, both the north and south side, has a current designation of Community Park, although the park functions in some ways as a regional park. The proposed General Plan Update text, Draft General Plan Parks and Open Space Map, and EIR Section 14.1.3 (Public Services Setting/Parks and Recreation), have been corrected to show that Elings Park is designated as a Community Park. Changing the land use designation to Regional Park would have to be initiated by the City Council. City decision-makers may consider the appropriate land use designation for Elings Park as part of the General Plan Update adoption process. Your comments will be considered by City decision-makers, along with the relationship of any previous County actions or restrictions to the City's decision.
From: Bruce Giffin [mailto:Bruce@GiffinandCrane.com]
Sent: Tuesday, April 27, 2010 7:22 PM
To: Shelton, Barbara
Subject: PlanSB Draft EIR - In Support of Elings Park

Dear Barbara,

Please forward onto the Planning Commissioners and appropriate staff my comments in support of Elings Park for the Plan SB Draft EIR hearing.

As an immediate neighbor of Elings Park, living adjacent to Godric Grove, I am in favor of the Park's proposed project and re-zoning to Regional Park. I choose to live next to the Park as I view it as an asset not only to me, but to the entire community. That has always been the mission of Elings Park – answering a regional need for recreation.

I've served on the Elings Park Board for 14 years. I've participated with the other volunteer directors and Park staff in enhancing the Park and improving its services. From its inception, Elings Park has a history of responding to the whole community's needs for recreation. While there is always room for improvement, Elings Park continues to work with the surrounding neighborhoods to mitigate the impacts of our citizens playing in the Park.

If you go back through the newspaper clippings and government records of the development of Elings Park, you will find that Elings Park was always intended to serve a regional need for recreation. It was designed to do that and has done so since the beginning. A few examples:

- March 17, 1965 – City Recreation Commission recommends to City Council that the former dumpsite be planned and developed as a "Major Recreational Area".

- March 28, 1977 – City Council concurs with Parks and Rec Commissions recommendation that the Las Positas Park property be developed as a regional major sports and recreation complex, and that the City, through its staff and Commissions, explore the possibility of entering into a joint venture with the County, in development of this complex.

- December 5, 1984 – The EIR for the then Phase III plan was certified by the City. It included plans for an Aquatic Complex, Tennis Complex and a large Community Building of 45,000 square feet.

- February 24, 1987 – The City Council determines that the then Phase III plan's definition of "major event" allowed up to 1000 people for aquatic seating and 1500 people for the Tennis Complex.

- December 10, 1987 – The Las Positas Park Foundation’s mission statement is defined, "A public regional center, privately developed and operated, to provide cultural and recreational enjoyment for everyone."

- April 17, 1990 – Mayor Sheila Lodge sends letter to County Supervisor Tom Rogers, asking the County Supervisors to work together with the Los Positas Park Foundation and the City to acquire the Jesuit Property. She writes "The Park is a regional facility
that serves many County residents as well as City residents."

I could go on, but you get the point. There is no reason to re-write history. As a regional park, Elings is doing what it always has done, providing recreation for the betterment of the entire community, thanks to the leadership of the community!

With best wishes,

Bruce Giffin
1490 La Cima Road
Santa Barbara, CA.
Response to Individual Elings Park Letter # IEP4, B Giffin (April 27, 2010)

IEP4-1: Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility.

Elings Park, both the north and south side, has a current designation of Community Park, although the park functions in some ways as a regional park. The proposed General Plan Update text, Draft General Plan Parks and Open Space Map, and EIR Section 14.1.3 (Public Services Setting/Parks and Recreation), have been corrected to show that Elings Park is designated as a Community Park. Changing the land use designation to Regional Park would have to be initiated by the City Council. City decision-makers may consider the appropriate land use designation for Elings Park as part of the General Plan Update adoption process. Your comments will be considered by City decision-makers, along with the relationship of any previous County actions or restrictions to the City's decision.
INDIVIDUAL ELINGS PARK LETTER # IEP5

Rodriguez, Julie

From: Shelton, Barbara
Sent: Tuesday, April 27, 2010 10:53 AM
To: Community Development PC Secretary
Cc: Ledbetter, John
Subject: FW: Proposed updated General Plan comment

From: Michelle Howard [mailto:michelle@wyp.org]
Sent: Monday, April 26, 2010 7:16 PM
To: Shelton, Barbara
Subject: Proposed updated General Plan comment

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden St.
Santa Barbara, CA 93101

Dear Ms. Shelton:

I have reviewed the proposed updated General Plan documents, and would like to present the following comments:

1) I strongly oppose the "Regional Park" designation of Elings Park on the Draft General Plan Parks and Open Space Map on page 167 of the draft General Plan.

2) I also strongly oppose the reference to Elings Park as a "Regional Park" as mentioned on Page 14-7 of the Draft EIR on the Plan. This page refers to Elings Park as a Regional Park as if it were in operation as such today, which it is not.

Currently, Elings Park is designated with two different zoning designations:

1. The southern portion of Elings Park (Elings Park South) is currently zoned as Undeveloped Parkland.
   a. The uses associated with a "Regional Park" designation of Elings Park South are in violation of a County of SB "Covenant Restricting Use" which was agreed to by the park in 1999, and is in effect until 2029.
   b. Over 1,000 supporters of Save Elings Park support this designation, and do not want it changed

2. The northern portion of Elings Park (Elings Park North) is currently zoned as A1 Residential
   a. A Regional Park designation is not an appropriate designation due to the impacts of traffic, noise, and general neighborhood compatibility associated with "Regional Park" zoning.
   b. Neighborhood groups and environmental activists support a change to a more appropriate zoning designation, such as Neighborhood Park, or Sports Fields.

IEP5-1

4/27/2010
Thank you for your consideration of my comments.

Sincerely,
Michelle

P.S. Please see also this editorial that I published in the Independent in response to the plans to develop Elings Park:


--
Michelle Howard
Development Director
Wilderness Youth Project
www.wyp.org

Nature makes children smarter, healthier and happier.
Response to Individual Elings Park Letter # IEP5, M Howard (April 26, 2010)

IEP5-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

Elings Park, both the north and south side, has a current designation of Community Park, although the park functions in some ways as a regional park. The proposed General Plan Update text, Draft General Plan Parks and Open Space Map, and EIR Section 14.1.3 (Public Services Setting/Parks and Recreation), have been corrected to show that Elings Park is designated as a Community Park. Changing the land use designation to Regional Park would have to be initiated by the City Council. City decision-makers may consider the appropriate land use designation for Elings Park as part of the General Plan Update adoption process. Your comments will be considered by City decision-makers, along with the relationship of any previous County actions or restrictions to the City's decision.
INDIVIDUAL ELINGS PARK LETTER # IEP6

Rodriguez, Julie

From: on behalf of Community Development PC Secretary
Subject: FW: Plan SB: Proposed updated General Plan comments

-----Original Message-----
From: james johnson [mailto:jcjusa@yahoo.com]
Sent: Wednesday, April 28, 2010 12:31 PM
To: Shelton, Barbara
Cc: saveelingsparksouth@gmail.com; jcjusa@yahoo.com
Subject: Plan SB: Proposed updated General Plan comments

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden St.
Santa Barbara, CA 93101

Dear Ms. Shelton:

I have reviewed the proposed updated General Plan documents, and would like to present the following comments:

1) I strongly oppose the "Regional Park" designation for Elings Park on the Draft General Plan Parks and Open Space Map on page 167 of the draft General Plan. The northern portion of Elings Park should be designated as a "Neighborhood Park" and the southern portion as "Undeveloped Parkland" in the GP.

2) I also strongly oppose the reference to Elings Park as a "Regional Park" as mentioned on Page 14-7 of the Draft EIR on the Plan. This page refers to Elings Park as a Regional Park as if it were in operation as such today, which it is not.

Currently, Elings Park is designated with two different zoning designations:

1. The southern portion of Elings Park (Elings Park South) is currently zoned as Undeveloped Parkland.
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   b. The uses associated with a "Regional Park" designation of Elings Park South are in violation of a County of SB "Covenant Restricting Use" which was agreed to by the park in 1999, and is in effect until 2029.

2. The northern portion of Elings Park (Elings Park North) is currently zoned as A1 Residential
   a. A Regional Park designation is not an appropriate designation due to the impacts of traffic, noise, and general neighborhood compatibility associated with "Regional Park" zoning.
   b. Neighborhood groups and environmental activists support a change to a more appropriate zoning designation, such as Neighborhood Park, or Sports Fields.
Thank you for your consideration of my comments.

Sincerely,
James Johnson and Karin Hodin
2435 Calle Almonte, SB
Response to Individual Elings Park Letter # IEP6, J Johnson (April 28, 2010)

IEP6-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

Elings Park, both the north and south side, has a current designation of Community Park, although the park functions in some ways as a regional park. The proposed General Plan Update text, Draft General Plan Parks and Open Space Map, and EIR Section 14.1.3 (Public Services Setting/Parks and Recreation), have been corrected to show that Elings Park is designated as a Community Park. Changing the land use designation to Regional Park would have to be initiated by the City Council. City decision-makers may consider the appropriate land use designation for Elings Park as part of the General Plan Update adoption process. Your comments will be considered by City decision-makers, along with the relationship of any previous County actions or restrictions to the City's decision.
INDIVIDUAL ELINGS PARK LETTER # IEP7

Rodriguez, Julie

From: Shelton, Barbara
Sent: Tuesday, April 27, 2010 10:52 AM
To: Community Development PC Secretary
Cc: Ledbetter, John
Subject: FW: Proposed updated General Plan comment

From: theokracke@gmail.com On Behalf Of Theo Kracke
Sent: Monday, April 26, 2010 5:06 PM
To: Shelton, Barbara
Subject: Proposed updated General Plan comment

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden St.
Santa Barbara, CA 93101

Dear Ms. Shelton:

I have reviewed the proposed updated General Plan documents, and would like to present the following comments:

1) I strongly oppose the "Regional Park" designation of Elings Park on the Draft General Plan Parks and Open Space Map on page 167 of the draft General Plan.

2) I also strongly oppose the reference to Elings Park as a "Regional Park" as mentioned on Page 14-7 of the Draft EIR on the Plan. This page refers to Elings Park as a Regional Park as if it were in operation as such today, which it is not.

Currently, Elings Park is designated with two different zoning designations:

1. The southern portion of Elings Park (Elings Park South) is currently zoned as Undeveloped Parkland.
   a. Over 1,000 supporters of Save Elings Park support this designation, and do not want it changed
   a. The uses associated with a "Regional Park" designation of Elings Park South are in violation of a County of SB "Covenant Restricting Use" which was agreed to by the park in 1999, and is in effect until 2029.

2. The northern portion of Elings Park (Elings Park North) is currently zoned as A1 Residential
   a. A Regional Park designation is not an appropriate designation due to the impacts of traffic, noise, and general neighborhood compatibility associated with "Regional Park" zoning.
   b. Neighborhood groups and environmental activists support a change to a more appropriate zoning designation, such as Neighborhood Park, or Sports Fields.

Thank you for your consideration of my comments.

Sincerely,

Theo Kracke

4/27/2010
Response to Individual Elings Park Letter # IEP7, T Kracke (April 26, 2010)

IEP7-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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Ms. Shelton:

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   b. Neighborhood groups and environmental activists support a change to a more appropriate zoning designation, such as Neighborhood Park, or Sports Fields.

Thank you for your attention to this matter.

Paul Kuhn

Paul C. Kuhn
Managing Director

phone: 805-965-4600
fax: 805-965-6700
e-mail: kuhn@sasset.com
http://www.sasset.com/

CONFIDENTIALITY NOTICE: This e-mail and any attachment to it may contain confidential and legally privileged information. This information is intended only for the recipient named above. If you are not the intended recipient, take notice that any disclosure, copying, distribution or taking of any action based upon this information is prohibited by law. If you have received this e-mail in error, please return it to the sender and delete this copy from your system. Thank you.
Response to Individual Elings Park Letter # IEP8, P Kuhn (April 27, 2010)

IEP8-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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Rodriguez, Julie

From: on behalf of Community Development PC Secretary
Subject: FW: Proposed updated General Plan comment

From: jackieolinctin@aol.com
Sent: Wednesday, April 28, 2010 1:31 PM
To: Shelton, Barbara
Subject: Proposed updated General Plan comment

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden St.
Santa Barbara, CA 93101

Dear Ms. Shelton:

We have reviewed the proposed updated General Plan documents, and would like to present the following comments:

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Thank you for your consideration of our comments.

Sincerely,

Ron and Jackie Lincoln
Response to Individual Elings Park Letter # IEP9, J Lincoln (April 28, 2010)

IEP9-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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Barbara:

I am sending this e-mail to your attention and ask that it be forwarded to the appropriate individuals on the Planning Commission and City Council in connection with the meeting to be held April 26th to discuss the “Plan Santa Barabara” General Plan.

I, along with many other neighbors, have signed a petition to oppose the current development plan proposed by the Elings Park Foundation. As I know you are familiar with the proposed plans, I will not detail them in this e-mail. I would like to cite, however, the specific reasons we are opposed to these plans, as listed in our petition:

1. The proposed major construction violates the S.B. County “Covenant Restricting Use” agreed to by the Park Foundation in 1999.
2. The proposed BMX track night time operations will cause light pollution.
3. The proposed amplification PA system at the BMX track will cause noise pollution.
4. Increased use in the Elings South will necessarily increase traffic in the area.
5. A negative impact on its wildlife.
6. The above proposed developments can conveniently “pave the way” for other future developments, particularly with re-zoning of the area.

(Note: these items were taken directly from the petition).

In addition to the above, the overriding concern is the intent to classify Elings as a Regional park. This is evidenced in the General Plan’s Open Space Map, pg. 167, where it shows Elings as a Regional Park. And in the EIR Report draft, pages 14-17, Elings is again referred to as a Regional Park.

We urge you to oppose this proposed classification, as well as the proposed changes that have been outlined above.

Respectfully submitted,

Linda G. Melchiori
Response to Individual Elings Park Letter # IEP10, L Melchiori (April 22, 2010)

IEP10-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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From: Hugh Michaels [mailto:catmanhugh@gmail.com]
Sent: Monday, April 26, 2010 7:33 PM
To: Shelton, Barbara
Subject: Proposed updated General Plan Comment

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden St.
Santa Barbara, CA 93101

Dear Ms. Shelton:

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Thank you for your consideration of my comments.

Sincerely,

Hugh Michaels
Mesa Resident
Response to Individual Elings Park Letter # IEP11, H Michaels (April 26, 2010)

IEP11-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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Thank you for your consideration of my comments.

Sincerely,

Timothy Leigh Rodgers, M.D.
Response to Individual Elings Park Letter # IEP12, T Rogers (April 26, 2010)

IEP12-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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From: Charles Vehrs [mailto:c_vehrs@msn.com]
Sent: Sunday, April 25, 2010 6:43 PM
To: Shelton, Barbara
Subject: Opposed to Regional Park Status for Elings

Dear Ms. Shelton,

I and most of the neighbors that live on Manitou Rd and the neighborhoods surrounding Elings Park are strongly opposed to Elings Park becoming a Regional Park. Elings Park is nestled in quiet residential neighborhoods. A regional park would be more appropriate in a large remote area where loud noise and high traffic are not a problem. Regional park status would remove noise and other limits that would will impose a severe burden on the neighborhoods.

Because I live on edge of the park, living in my house will become untenable. We need the protection of the City intermittent noise laws for residential zoned areas.

Please do not give Elings Park Regional status.

Thank you,

Chuck Vehrs C_Vehrs@msn.com
Response to Individual Elings Park Letter # IEP13, C Vehrs (April 25, 2010)

IEP13-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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-----Original Message-----

From: Lori Williams [mailto:williams@nmia.com]
Sent: Monday, April 26, 2010 4:21 PM
To: Shelton, Barbara
Subject: Proposed updated General Plan comment

Barbara Shelton, Environmental Analyst
City of Santa Barbara
630 Garden St.
Santa Barbara, CA 93101

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Thank you for your consideration of my comments.

Sincerely,

Lori Williams
2536 Cliff Dr.
Response to Individual Elings Park Letter # IEP14, L Williams (April 26, 2010)

IEP14-1 (Plan SB GPU): Thank you for your comments. The City looks forward to working cooperatively with Elings Park and surrounding neighbors to balance appropriate levels of park development and use with natural resource protection and neighborhood compatibility. The City strives to work with the managers of parks and other institutional uses adjacent to or within residential neighborhoods to minimize conflicts associated with noise, light and glare and other issues. To that end, the EIR identifies general impacts associated with amplified music (refer to Impact Noise-3.1), light and glare (Impact VIS-4), and the loss or fragmentation of important habitats in the Las Positas Valley (Impacts BIO 1.1 and 1.3).

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The following summarizes public comment at recent Planning Commission hearings on the Plan Santa Barbara draft General Plan and EIR documents. Written responses to public comments on the DEIR will be provided as part of the proposed Final EIR.

**April 28 and May 6, 2010 (public comments on Draft General Plan and DEIR documents)**

**AGENCIES**

Richard Rozzelle, District Superintendent, Channel Coast Division, California State Parks [Letter submitted]

- El Presido de Santa Barbara State Park: The State Parks Department with the SB Trust for Historic Preservation and City have an MOU partnership for historic preservation of the Presidio.
- Historic Resource Context: Need to protect the “sense of place” and context around this historic resource by recognizing it in the Plan and establishing boundaries; considering an historic overlay around it and surrounding densities

Steve Maas, Santa Barbara Metropolitan Transit District [Letter submitted]

- Transit Service: We appreciate that Plan Santa Barbara policies support transit. Future demand for MTD service will be affected by future development in City.
- Transportation Demand Measures (TDM): TDM measures are effective tools to manage congestion, but the Plan Santa Barbara policies and DEIR analysis and mitigation are unclear as to what is entailed with the modest vs. robust TDM measures. The robust TDM measures (EIR mitigation MM Transp-1 and -2) show substantial traffic reduction.
- Transit and TDM Policies: Recommend two refinements to policies in PlanSB GPU: (1) require a robust TDM program; and (2) develop new sources of funding; strengthen language in Policy C.5 Transit Funding.

**ORGANIZATIONS**

Cathie McCammon, Allied Neighborhood Association [Letter submitted]

- Draft EIR Assumptions and Impact Analysis: DEIR fails to assess its analytical assumptions, and we question the validity of assumptions. The EIR needs to analyze what would happen if assumptions don’t occur. Examples:
  - Analysis assumes high density housing downtown location will result in beneficial transportation effects and get commuters off the road, although housing policies are identified as having neutral effect. If people don’t get out of cars, will have the housing but still commuters and intersection impacts.
o Analysis assumes policies will result in housing affordable for workforce, which will help jobs/housing balance. The Housing Element is stressing non-subsidized and rental housing. It is unlikely that these policies are effective enough to meet the aims to be affordable to the target group, so wouldn’t affect jobs/housing impacts.

o Transportation Demand Management (TDM) policies are supposed to constrain congestion increases. If these measures don’t get implemented, such as parking pricing, but the housing occurs, will have increased congestion.

- **Growth Limits**: Allied supports a one million square foot limit on new non-residential development; and a 140 du/year year limit on residential development with no carry over.

- **Maximum Residential Density and Smaller Unit Sizes**: Maximum residential density should be an average of 20 du/acre. We support the Medium Density designation, which should be spread throughout City; with units subject to compatibility standards for neighborhoods, including neighborhood resources. We support change in variable density at current densities for smaller unit sizes.

- **High Density**: Eliminate the High Density designation from the Plan, and we request that all references to increased density be removed.

- **Commercial Zone Design Standards**: Need a special open public process for identifying new design standards in commercial zones for building setbacks, open space, and height limits.

- **Employer-Support Housing**: We support policies for employers providing housing.

- **Mobility Oriented Development Area (MODA)**: Support removal of the MODA boundary, and other references should be deleted too.

- **Affordable Housing**: Affordable housing is a regional issue. The City has a stellar record for provided affordable housing. Too much burden is being put on the City to do more.

**Paul Hernadi, Citizens Planning Association** [Letter submitted]

- **Growth Limits**: Limit to 1 million sq ft non residential and 2800 residential units. Annually monitor to keep within 50,000 sq ft non-residential and 140 units per year.

- **Community Benefit Basis for High Density**: Replace the proposed overall upzoning by continuing the policy of allowing increased density only for exceptional projects for rental and affordable small units that provide real community benefit.

- **Medium Density Residential**: Amend the variable density to be based on unit sizes, not number of bedrooms, to make as many units as possible affordable by design.

- **Employer-Provided Housing**: Incentivize employer subsidized housing, both rental and for-sale, as one of the most effective means of providing affordable housing, which needs more emphasis in the policies.

- **Parks and Schools**: Increase efforts to establish new schools and neighborhood parks commensurate with population growth over time of individual neighborhoods.

- **Environmental Protection Policies**: Ensure that we live within our natural and infrastructure resources, including water, public safety, and road capacity, without the excessive need for costly mitigation such as desalination plant or new landfill capacity.
• **Historic and Visual Resources**: Protect historic and visual resources through architectural design, setbacks, and open space requirements.

• **Air Quality**: Supports 500 foot buffer setback with landscaping from Highway 101 for new residential development per the State Guideline to protect health.

**Margaret Weiss, Coalition for Community Wellness** [Letter submitted]

• **Public Health**: Commend Plan emphasis on public health (active life, recreation, healthy food); General Plan gives the opportunity to be a “model community” for public health.

• **Density**: Don’t be afraid of density; it can be accomplished in sensitive way. Buildings can “age in place”. Access to resources is important.

**Debbie Cox Bultan, Coastal Housing Coalition** [Letter submitted]

• **Results of Existing Policies on Housing Prices and Commuters**: In the last 25 years, City policies resulted in greatly increased housing prices and numbers of commuters, affecting environment, traffic, economy, and quality of life. Housing prices went from 4-5 times the median income to now 10 times the medium income, and one-third of our workforce commutes from Ventura or North County.

• **Policy Alternative**: Supports Additional Housing Alternative to support affordable housing, which must be addressed if we are to provide a sustainable future for Santa Barbara. This is still a small amount of growth of 5% over 20 years or about ½ percent per year, half of the historic controlled growth rate. The DEIR found the Additional Housing Alternative the only one to meet all plan objectives.

• **Housing Policies**: Support Housing Element policies for providing housing for all income groups; incentivising small units; allowing higher densities in the downtown; and improving the jobs/housing balance. Support policy for incentives for employer-supported housing.

• **Residential Densities**: Concerned that the proposed residential densities proposed are too low and shrinking the development envelope will not provide for the affordability needed to meet our housing needs. Lower building sizes would be missing a unique opportunity to provide workforce housing. Need to rethink densities.

**Megan Birney, Community Environmental Council** [Letter submitted]

• **State Legal Requirements**: Plan policies need to follow State mandates of AB 32 and SB 375.

• **Policy Alternative**: The Additional Housing Alternative is clearly the EIR environmentally preferable alternative, with reduced impacts on air quality, biological resources, hydrology and water quality, open space, transportation, energy, climate change, population and jobs/housing, and socioeconomic effects, and because it meets the Plan sustainability objectives.

• **Building Heights**: We oppose further height restrictions options.

• **Community Character Impacts**: There are no threshold standards or guidelines to define community character impacts.

**Connie Hannah, League of Women Voters** [Letter submitted]

• **Policy Alternative**: Advocate “living within our resources”. Economics symposium indicated Santa Barbara County has been largely insulated from the recession due to its slow growth policies. Recommend choosing the Lower Growth scenario for future development.
- **Residential Density**: Remove the denser MODA plan, and limit density to 27 du/acre. Market-rate housing results in more low paying service jobs and more commuting. Only Housing Authority subsidized housing can provide acceptable projects at higher densities.

- **Transportation**: Include the robust TDM measures under all alternatives, but phase it in gradually; and stop if they do not work. Provide adequate parking for business and residences.

**Kellam de Forest, Pearl Chase Society** [Written comments submitted]

- **Air Quality**: The DEIR does not address that technology is changing very rapidly. Electric cars may make gasoline effects short term.

- **Vacation Housing**: EIR does not take into account weekend/vacation units that do not make provision for workforce housing. East Beach area is estimated at 50% or more weekend residents.

- **Water Supply**: The DEIR is overly optimistic that the water supply could support increased growth.

- **Building Heights/Earthquakes**: The effect of building heights during earthquakes should be considered.

- **Incomplete Elements**: Will the incomplete elements in Plan Santa Barbara be approved (e.g., historical element)?

**Mickey Flacks, Santa Barbara For All** [Letter submitted]

- **Policy Support**: Support many of the Plan policies, including (1) Resource capacities can be increased or decreased based on many factors; and (2) Sustainability for socioeconomic diversity, environment, and economy.

- **Policy Alternative**: Support the Additional Housing scenario and associated policies, which meet sustainability goals of *Plan Santa Barbara* and would improve the jobs/housing balance.

- **Land Use and Housing**: Must consider the Housing Element & Land Use Element together. Support LG4 to focus residential in downtown commercial corridors, LG5 to prioritize affordable housing, and LG6 to encourage new residential to be located in locations with high density designations.

- **Building Heights**: The voters rejected the 40 foot height limit; and further height limitation options are not supported.

- **Residential Density**: Support direction to change variable density ordinance and promoting smaller unit sizes, but current formulas need refinement before adoption. The economic analysis indicated higher densities needed to feasibly provide affordable workforce housing. Not clear if minimum density.

- **Transportation Demand Management (TDM)**: Support the robust TDM provisions.

- **Community Character and Historic Resources**: Need more precise definition of resources needing protection.

**Brian Hofer, Architect, Santa Barbara For All**

- **Residential Density**: Need to adjust the Residential Density Tables up; the High Density table proposes 27 to 34 du/ acres. Examples slides of existing development around town show that these densities are too low, and higher densities fit into Santa Barbara design:
Courtyard projects, generally single story, with densities of ~15-26 du/acre.

Multi-story projects, with densities of 39-46 du/ac: 111 Chapala (37 du/ac); 2333 De la Vina (39 du/ac); 106 W. Mason (42 du/ac); 1628 State (46 du/ac); 1406 Garden (45 du/ac); 109 W. Mason (45 du/ac); 1015 Orilla del Mar (45 du/ac); 316 W. Anapamu (39 du/ac).

Joe Andrulaitis, Architect, Santa Barbara For All

- **Floor Area Ratios (FAR):** We advocate use of Floor-to-Lot Area ratios to define building volume for multi-family residential. The Land Use Element (p. 67-68) tables with density and unit size establish FARs of .45 for Medium High and .62 for High Density. These are too low and formulas need to be rethought. Examples around town show how higher densities fit into and enhance the character of Santa Barbara:
  - 1406 Garden has .53 FAR (2-story, small units, 45 du/ac); couldn’t be built under proposal.
  - 316 W. Anapamu has .66 FAR (12 600-SF 2B units) and couldn’t be built.

John Campanella, Santa Barbara For All

- **Unit Sizes:** Examples unit sizes for Cottage workforce housing (2B 1100 SF) and Casa de la Guerra.

  - **Unit Sizes:** Need to adjust High Density table Unit Sizes to provide appropriate square foot unit sizes for for-sale housing Downtown. 930 SF or less will be a 1B unit. Average household size in SB is 2.35 persons per unit.

  - **Building Heights:** Need multiple stories to bring housing prices down. As an example to illustrate the economics of developing residential: A two-story with FAR of .62 (27,000 SF over 1-acre lot) results in cost of $1.3 million/unit. If add a third story, price can be reduced to $800,000/unit. If add a fourth story at 45 foot height, price can be reduced to 633,000/unit. An FAR of 1.5 is more appropriate.

  - **Jobs/Housing Balance:** 1-2 million square feet of commercial development is proposed. Can assume about 1 person or job per 250 square feet, so 1-2 million SF equates to 4,000 to 8,000 jobs. But paring this with 2,000 housing units which doesn’t match up or start to address existing imbalance. Only the Additional Housing Alternative with 4,300 DU matches up.

Lisa Plowman, Santa Barbara For All

- **Average Density Provisions:** Support concept of amending variable density, but not specific average density figures. Needs more input and analysis. Request it be removed from the Plan and done as a subsequent implementation measure.

- **Air Quality:** New policy calls for moratorium within setback. Instead should focus on reducing trips on the freeway to mitigate impacts. Many affordable projects are within that setback, as that is the area of more affordable land costs. There are other mitigations through closed circulation systems.

- **Growth Assumptions:** The DEIR assumption of 60-80 multi-story buildings over the next 20 years is an overstatement of the number of 3- and 4-story buildings that could be built. There have been only 34 buildings exceeding 45 feet in the last 100 years. The overstatement of growth creates an overstatement of impacts.

- **Community Character:** This is not a standard CEQA issue, very subjective, and no thresholds, so the DEIR analysis is problematic. Suggest the community design discussion be softened.
Randy Rowse, Santa Barbara Downtown Organization [Letter submitted]

- **Economic Sustainability**: We agree with the concept of sustainability, including economic sustainability. Request additional implementation strategies to promote economic vitality, as identified in our letter.
- **Transportation Measures**: Traffic, circulation, and parking are primary concerns.
- **Downtown Organization Assistance**: DO would help City gather better data about downtown employees to assist evaluation of effectiveness of traffic reduction measures. Additional data DO could help with include downtown parking master plan; converting PBIA to enterprise fund; improved notification system for downtown street closures and utility work; and cultural and arts master plan.

Jerry Jackman, Executive Director, Santa Barbara Trust for Historic Preservation [Letter submitted]

- **El Prisidio Historic Park**: This four-block historic park is a cultural asset to the community and designated State and Federal historic resource. Open space needs to be defended around this resource. Packing in density is not a good idea. Currently the draft plans show a portion of this area possibly could be developed with housing.

Fred Sweeney, Vice President, Upper East Association [Letter submitted]

- **Retain Upper East Character/ Edge Effects from Density**: We need to preserve the historical character and density of Upper East neighborhood. Increased land use densities near the edge of the Upper East neighborhood could affect the neighborhood.
- **Additional Tools Needed**: With the proposed density changes, we request sufficient tools and criteria for review of projects, such as form-based codes.
- **Institutional uses**: Need more specific criteria for Institutional Uses. There are over 20 identifiable institutional uses within Upper East Side neighborhood (both public and private). The proposed GP map identifies some, but the map and zoning codes have no specific language for institutional uses. We encourage development of more definitive tools to deal with institutional uses.

INDIVIDUALS

John M. Ackerman, MD retired [Written materials submitted]

- **Drinking Water Quality**: Would like the Coalition for Community Wellness to add to its GPU recommendations to include programs for additional monitoring, testing, and upgrading of drinking water quality by the City of Santa Barbara. Recommend testing on a contract basis with an independent firm (note that some firms may provide this service in exchange for energy credits.)

Linda Anderson

- **Policy Alternative**: The Lower Growth alternative in the DEIR best protects community character and environmental resources.
• **Transportation and Jobs/Housing:** The jobs/housing imbalance should be studied with a regional approach to transportation.

• **Housing:** Need other creative ways to make housing available to low- to medium-income workers, such as rental housing. High rise condos with 15% affordable workforce units means more service demands and impacts.

**Gil Barry, local resident** [Written comments submitted]

- **GP Process:** Have been involved in throughout the GP process in good faith. Originally was dismayed when the draft documents came out that entire process has been slanted to smart growth side, but the SB For All comments of dissatisfaction made me see that the Plan is in between the smart growth and lower growth camps.

- **Policy Alternative:** The existing GP is better than the proposed GP. The proposed GP is growth-inducing, and the EIR needs to recognize that. Suggest a hybrid plan be identified with the best features from among the four scenarios that have community common ground (e.g., 1 million sq ft non-residential, 2800 unit, variable density by unit size); then conduct a traffic model run with TDM. If did a model run on the GP with reduced Nonresidential SF and TDM would reduce impacts below the Additional Housing Alternative.

- **High Density:** Could live with General Plan if took out the high density category.

- **Housing Location in R2 and R3:** Most new units would be better in R-2 and R-3 zones and not all downtown; affordable by design in lower/east and lower/west, don’t pay high cost of downtown.

**Norbert H. Dall, representing Thomas Felkay, property owner on El Camino de la Luz** [Letter submitted]

- **Sustainability Policies:** Supports sustainability as core Plan concept, especially (1) the mandatory incorporation of renewable energy components in all new development in the City; (2) rigorous water conservation and beneficial reuse; (3) maximization of alternative non-fossil fuel transportation modes; (4) urban infill development within the City; and (5) full transparency of all documents and processes of the Plan update.

- **Traffic Lights:** Suggest synchronized traffic lights.

- **Land Use Map:** GPU Land Use Map referenced as parcel based and GIS interactive has not been available and needs to be made available.

- **Coastal Bluff References:** In DEIR, “coastal bluff” is included within “shoreline” designation but is not defined. Inclusion on maps identifies unspecified aesthetic impact on property owners in that area, rendering properties unable to develop.

- **Cliff Erosion:** The 75 year sea erosion line note on DEIR figure 18.1 states that the estimates shown are not accurate enough to be used for planning purposes.

**Peter Hunt, architect** [Letter submitted]

- **Policy Alternative:** Supports the “No Project/Existing Policies” alternative with a twist: Santa Barbara developed organically (example: R-2 zone along Valerio up to Riviera Theater), which is reflected by zoning. The General Plan is not in conformance with zoning ordinance. If made the General Plan consistent with what zoning allows, would get more units done by people that are vested in the community. Recommends General Plan be guided by existing zoning.
• **CM Zone**: Does not support loss of land designated for businesses (CM), or allowing housing in CM zone, because need that area for plumbers, sheet metal workers, etc, and sales tax revenues, and also there are flooding and geologic problems there.

• **Non-Residential/ Residential Growth**: If limit commercial and increase houses, it is unsustainable because houses use services. Additional Housing alternative is financially and economically unsustainable. Housing such as Artisan Court project would not support itself fiscally and would need subsidized revenue from business sales tax for housing and public services, such as police, fire, education, etc.

Jean Holmes, local resident

• **Water Supply**: Supplementing water supplies should be treated with caution. The DEIR discusses potential for distant imports of water and desalination, both of which are highly energy intensive operations. The EIR should discuss the sustainability of supplemental water supply.

Kristen Jepson-Foos, local resident

• **Elings Park**: Opposed to Regional Park designation of Elings Park. The General Plan should be the same a current zoning designations.

Theo Kracke, resident, Save Elings Park [Written comments submitted]

• **Proposed Regional Park Designation**: Draft GPU p. 167 map designates Elings as “Regional Park” Currently, the southerly part is designated “Undeveloped Parkland” and the northerly part is zoned “A1-Residential”. The Regional Park designation is inappropriate on the south side, because the zoning ordinance allows activities for Regional Park designation that would violate the covenant restriction of use that the Elings Park Foundation agreed to in 1999 until 2029. The General Plan designation should stay “Undeveloped Parkland”, and consider changing it in 2030. On the north portion, it is a park, including active uses, but would be more appropriate as a “Neighborhood Park” designation.

• **DEIR Parks Discussion**: DEIR page 14-7 identifies types of parks in the City, and references Elings as a regional park, which is not right.

Deborah Slaught, local resident [Letter submitted]

• **Policy Alternative**: Supports the Lower Growth Alternative

• **Building Heights**: Supports lower heights and height restrictions.

Paul Zink, Architect [Letter submitted]

• **Policy Alternative**: Support Additional Housing Alternative

• **Second Units**: Support program H15 for second unit amnesty program. Many illegal second units exist in our town. Let’s acknowledge, create guidelines, amnesty, and legalize. There are many advantages to these units for relatives, sources of income, and broader use of large homes. The program would provide for building codes and health and safety. I offer assistance to draft second unit provisions.
### June 3, 2010 (Public comment on additional information in Staff Report and presentation)

Mickey Flacks, Santa Barbara For All [Letter submitted]
- **Historic Provisions**: Projects near historical structures, such as the Granada Garage and housing project couldn’t occur with greater historic buffers.
- **Policy Alternative**: We endorse most of the proposed GPU policies and direction for a hybrid alternative.
- **Density**: Sustainability equals Affordability equals Density. We need a minimum of 40 du/ac for affordability. The proposed base density is too low for sustainability. We support 100% bonus density for all rentals and income-controlled and employer-provided housing.
- **Compatibility**: Slides of older projects with these higher densities showed that they are compatible through design, landscape, and limited parking. Downtown mixed-use needs different landscape and setback standards to allow for ground-floor commercial window shopping.
- **Height**: Voters decided to maintain current Charter maximum height provisions of 60 feet and four stories.
- **Rental Unit Size**: Provide a range of sizes for rental units, not all small or all 3-bedrooms.
- **Policy and Implementation**: Complete policy direction now; detailed implementation to follow.

Randy Rouse, Downtown Organization [Letter submitted]
- **Parking Pricing**: The Downtown Organization reaffirms concerns about parking pricing having negative effect on downtown business. Need to phase in changes over time and identify criteria to trigger them.

Laura Bridley, Montecito Association [Letter submitted]
- **Coast Village Road Land Use Pattern**: Coast Village Road (CVR) cannot support MODA principles; parking and transit is limited. Needs to be treated differently than Downtown commercial areas.
- **Reduce Land Use Designations**: City land use affects County residential areas. Support a decrease in City land use designations.
- **Affordable Housing**: Support 25% inclusionary and other housing provisions.
- **Coast Village Road Guidelines**: Request expedited development of CVR Guidelines for traffic, parking, and historic character or district provisions.

Debbie Cox Boulton, Coastal Housing Coalition [Letter submitted]
- **Affordable Housing Consensus**: There is community support and Planning Commission consensus for more affordable housing to get some of the 30,000 commuters off the road, and maintain economic and population diversity.
- **Policy Alternative**: Support the Additional Housing Alternative which meets the Plan Santa Barbara sustainability objectives. This is not a “high growth” scenario; it is 0.5 % per year, half of the historic growth rate.
- **Housing Density**: Examples shown of higher density housing are consistent with Santa Barbara character and needed for affordability and to address the jobs/housing imbalance.

Lisa Plowman, Santa Barbara For All and Herself [Letter submitted]

- **Housing Density**: Examples slides show the type of design and building size that work with Santa Barbara character.
- **Policy Alternative**: Support the Additional Housing Alternative with densities up to 60 du/ac. The Economic Study said that 34 du/ac was too low to be feasible.
- **Downtown Development Standards and Incentives**: The Plan targets Downtown location for affordable housing, but need zoning and development standards and incentives get development there. More regulations reduce the envelope to develop and the affordability. The proposed 1,000 sq ft Average Unit Size provisions together with the density range establishes a Floor Area Ratio (FAR). Should wait to adopt the Unit Size provisions in concert with the Form-Based Codes and FARs.

- **Building Heights**: The voters decided the building height issue. Should not change.
- **Transportation Demand Management (TDM)**: Support the robust TDM measures.
- **Second Units**: Support relaxing the Second Unit provisions to get more rental housing in existing neighborhoods.

Paul Hernadi, for Himself [CPA Letters submitted]

- **Amount of Residential Development**: Part of the Planning Commission recommendations should be the amount of residential development: 2,000, 2,800, or 4,360 du. Why isn’t that part of the matrix?
- **Percentage Growth**: References to 5% residential growth over 20 years are not accurate (Staff Report p. 7). The projected residential growth for all alternatives is greater than 5% over existing housing.
- **Residential Density**: Ranges for the Medium High and High density are stated as base density, but these are not the maximums for these categories. With 15-25% inclusionary affordable housing and 100% rental bonus density, 34 du/ac becomes 40 du/ac, and 68 du/ac (not 60 du/ac).

Connie Hannah, League of Women Voters [Letter submitted]

- **Policy Alternative**: We endorse the Hybrid plan with the best features. The EIR demonstrates that the worst choice is the No Project Alternative. The League supports the Lower Growth Alternative because it has the least need for public services.
- **Housing Provisions**: We support some density increase for permanent rental units only. We support 25% inclusionary affordable.
- **Historic Resources**: A 100-foot buffer is not enough for some areas and resources.
- **Adaptive Management Program**: We support the AMP.

Michael Chiacos, Community Environmental Council [Letter submitted]

- **Policy Alternative and Density**: We support the Additional Housing Alternative or a close Hybrid. Should target growth in the Downtown.
- **Housing Density**: Support the highest density for sustainability, affordability, and improving the jobs/housing balance. Support the 100% bonus density for rental overlay.
- **Transportation**: Support unbundled parking provisions, and incentive car sharing. Support the robust Transportation Demand Management (TDM) and parking pricing provisions.
- **Building Heights**: Support option for four-stories with design measures.
- **Second Units**: Support relaxed standards for second units near transit.

**Bill Marks**
- **Affordable By Design**: Concept is good, but skepticism is okay.
- **Inclusionary Housing**: Needs skepticism too. More building does not mean more affordability.
- **EPV Historic District**: Tools now deal with heights and building size on a case-by-case basis, and wouldn’t necessarily be effective over time. An EPV Historic District with development standards is a good idea to provide predictability for builders and more cost effective design.

**Joe Rution** [Written comments submitted]
- **Density and Affordability**: Density doesn’t ensure affordability. You need something more.
Response to PC Public Comments # PC (April 28, May 6, June 3, 2010)

PC-1 (Plan SB GPU): Thank you for your comments. Please refer to responses A2-1 and A2-6.

PC-2 (Plan SB GPU and EIR): Thank you for your comments. Please refer to response A13-4.

PC-3 (Plan SB GPU and EIR): Thank you for your comments. Please refer to responses O1-2, O1-3, O1-4, and I16-1.

PC-4 (Plan SB GPU): Thank you for your comments. Please refer to responses O2-2, O2-3, O2-4, O3-3, O3-4, and O3-8.

PC-5 (Plan SB GPU): Thank you for your comments. Please refer to response O5-1.

PC-6 (Plan SB GPU): Thank you for your comments. Please refer to responses O7-1, O7-2, and O7-3.

PC-7 (Plan SB GPU and EIR): Thank you for your comments. Please refer to responses O9-1 through O9-6.

PC-8 (Plan SB GPU and EIR): Thank you for your comments. Please refer to responses O11-1, O12-1, O13-2, and O13-3.

PC-9 (Plan SB GPU and EIR): Thank you for your comments. The EIR air quality analysis does account for technological change; however, CEQA requires a reasonable worst-case analysis of impacts. It is unreasonable to assume there will be a large shift away from fossil fuel-powered vehicles over the life of Plan Santa Barbara. With regard to vacation housing, please refer to responses CPA O2-2 and O3-3; housing impacts account for housing created and new jobs created. The EIR water supply forecast has been prepared by technical experts; please see Section 15, Public Utilities, for revisions to water supply analyses. With regard to building height impacts associated with potential earthquakes, please refer to Section 8, Geological Conditions; impacts are addressed by the Uniform Building Code. Please refer to response O18-1 regarding a Historic Element.

PC-10 (Plan SB GPU and EIR): Thank you for your comments. Please refer to responses O23-1 through O23-6.

PC-11 (Plan SB GPU): Thank you for your comments. Please refer to responses O22-1, O22-2, and O22-5.

PC-12 (Plan SB GPU): Thank you for your comments. Please refer to responses A2-1 and A2-6.

PC-13 (Plan SB GPU): Thank you for your comments. Please refer to responses O26-1 and O26-6.

PC-14 (Plan SB GPU): Thank you for your comments.

PC-15 (Plan SB GPU and EIR): Thank you for your comments. Comments are noted. Please refer to Section 16, Transportation, for discussion of regional impacts to transportation, including jobs-housing issues. Also please see proposed General Plan Update policies addressing these regional issues, including Land Use Element Policy LG9 (Regional Planning, previously numbered LG14) and Implementation Action LG9.1 (Regional Land Use/Transportation Plan), Circulation Element Policy C2 (Regional Transportation and Commuter Transit, previously numbered C6), Housing Element Policies H22 (Work to Solve Regional Jobs/Housing Imbalance), H23 (Sustainable Regional Housing Solutions), and H24 (Cooperation on Legislative Changes), Economic and Fiscal Health Policies EF21 (Regional Economic Strategy) and EF23 (Jobs within the Region for Local Residents).

PC-16 (Plan SB GPU): Thank you for your comments. Please refer to responses letter I2.
PC-17 (Plan SB GPU and EIR): Thank you for your comments. The proposed General Plan incorporates Intelligent Transportation Systems (ITS) such as synchronized traffic lights (please see proposed Circulation Element Policy C1.5 (Optimize Capacity, previously numbered C5). Please also refer to responses I9-5, I9-6, and I9-48 (under Draft General Plan Update) and I9-2 and I9-3 (under Draft EIR).


PC-19 (Plan SB GPU and EIR): Thank you for your comment. EIR Section 17.7.2, Energy and Climate Change, includes detailed evaluation of energy use and sustainability with regard to supplemental water supply.

PC-20 (Plan SB GPU): Thank you for your comment. Please refer to response IEP1-1.

PC-21 (Plan SB GPU): Thank you for your comment. Please refer to response IEP7-1.

PC-22 (Plan SB GPU): Thank you for your comment. Please refer to response I26-1.

PC-23 (Plan SB GPU): Thank you for your comments. Please refer to response I31-1.

PC-24 (Plan SB GPU): Thank you for your comments. Please see responses O23-1 through O23-6.

PC-25 (Plan SB GPU): Thank you for your comments. Please see response O22-4.

PC-26 (Plan SB GPU): Thank you for your comments. Please see response O16-1, O16-2, O16-3, O17-1, O17-3, and O17-4.

PC-27 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input.

PC-28 (Plan SB GPU): Thank you for your comments. Please refer to responses O23-1 through O23-6.

PC-29 (Plan SB GPU): Thank you for your comments. Regarding the amount of residential development, unlike the non-residential growth cap policy, the proposed General Plan does not include a policy cap on the number of residential units, other than the general policy that new development is to be supported by adequate resources. Historically, the City has not limited or paced residential development, although the rate has been relatively stable in past decades. Because there is no specific project description policy, estimates for residential build-out to the year 2030 were identified as analytic assumptions for each alternative studied based on the associated policy sets, for the purpose of evaluating environmental impacts.

PC-30 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input. Please refer to responses A2-1 and A2-6 regarding historic buffers.

PC-31 (Plan SB GPU): Thank you for your comments. The City appreciates your feedback and input. Please also refer to responses O9-2 and O9-4.

PC-32 (Plan SB GPU): Thank you for your comments. PC-33 (Plan SB GPU): Thank you for your comments.
The following is a summary of Planning Commission discussion by topic, taken from staff notes. This is intended to provide a sense of the issues discussed, and does not represent a transcript or chronological minutes.

TRANSPORTATION

Jordan

- **Number of Commuters**: What are the latest credible numbers for daily number of commuters into Santa Barbara?
- **TDM Measures for Commuters**: The analysis recognizes that Transportation Demand Management (TDM) strategies address people here now, along with up to a few thousand future dwelling units, but is there little or no impact on 30,000 existing commuters? If strategies and TDM result in picking up gain of commuter who lives downtown, how does that factor into the parking pricing mitigation math?

Jacobs

- **Traffic Model Areas**: Regarding Figure 2.1, Santa Barbara County and South Coast Region map in DEIR Section 2-1: What if regional planning were the map; how would we get people around on this map? How does MTD anticipate to get money for improved headways on routes or additional routes?
- **Improved Bus Schedule Information and Bus Stop Facilities**: MTD is a regional system in and out of City. Shuttle is local in town. What about putting real time signage at some bus stops and improving bus stop areas?
- **New Bus Routes**: Re: Slide 27 Opportunity Zones Map: if new bus routes are planned, this map would be the one to look at. How is bus service on Milpas?
- **Parking Pricing**: Went to workshop with Don Shoup and it is incredible how priced parking results in relief from congestion, and changes to circulation. Confident that this works.

Jostes

- **Transit Improvement Priorities and Funding**: More frequent bus headways give biggest bang for the buck. Should concentrate joint funding for the big return on investment.
- **Ventura Funding Proposal**: Ventura County is considering a voter-approved tax increase similar to our Measure A. If it passes, will this spill over to MTD to enhance the Coastal Express which fulfills a valuable role?

Larson

- **Transit Funding**: Could parking revenues from downtown fund MTD to provide stronger transit? If taking cars from people, need to give back what they need.
- **Car Ownership**: Lower than average car ownership statistics in Santa Barbara is interesting.
- **Commuters**: How do Sheila Lodge’s commuter figures fit in?
TRANSPORTATION (cont.)

Lodge

- **Commuters**: Figures on commuting corrected by Mr. Epperton of SBCAG. They are trying to figure out how many people are coming to the City of Santa Barbara.

- **Additional Housing Option – Commuter Change**: How many people would the Additional Housing option expect to change where they live? (of 17,000 commuters)?

- **TDM and Project Alternatives**: Could the robust TDM be used with the Lower Growth Alternative?

- **Parking Pricing**: Is parking pricing program only on the street or in the public garages too? Need to be very careful as to how this affects Downtown business, as La Cumbre parking is free. People could decide to not shop Downtown.

- **Transportation Priorities**: Interconnectedness between the housing challenge and transportation. Transportation is an essential component of the Plan, and transit enhancements are a key.

- **Healthy Economy and Transit**: We need to promote a healthy economy, with appropriate set of well-paying jobs that retain and attract workers to live and work in SB. What incentives to attract those types of new and growing small to midsize employers? A healthy and enhanced transit system is critical. Much hinges on economic vitality.

- **Cost of Bus System Improvements**: What would it cost to provide General Plan build out with robust bus system strategies?

Schwartz

- **Parking**: One of the charms of downtown is that there is some free parking. Need to maintain the community as welcoming and accessible as possible.

Bartlett

- **Reduced Units and Traffic Effects**: The proposed draft Plan Santa Barbara density and unit size provisions could result in smaller building sizes, which could reduce the potential number of units. What traffic assumptions from these draft policies?

- **TDMs and Alternatives**: What are the potential synergies of the different parts of Transportation Demand Management (TDM) strategies? What benefits and what counteracts different policy and growth alternatives?

- **Policy Set Adjustments**: Need to clarify which TDM knobs we can adjust.

GROWTH AREAS AND MODA PRINCIPLES

Lodge

- **MODA Density Policies**: What happened to the idea of decreasing densities outside MODA?

Jordan

- **Infrastructure and Services to Support Growth Areas**: Can older infrastructure support additional growth for example downtown?
GROWTH AREAS AND MODA PRINCIPLES (cont.)

Jostes

- **Reducing Traffic Congestion**: What are trip savings of shrinking the area where MODA policies apply?
- **MODA Clarification**: Need some clarification on MODA. There are four basic policy layers and a feedback loop: Sustainability Principles, Policy Drivers, General Plan Elements/Policies, and the MODA. The MODA involves implementation-based strategies to implement the GP Element policies.

Bartlett

- **MODA Name**: Confusion could partly be the name itself. Assumes area but now a principle.

DENSITY, AFFORDABLE HOUSING, AND DESIGN POLICIES

Jostes

- **Additional Design Guidelines**: Added implementation detail under LG 13.2-Building Size, Bulk, and Scale is good.
- **Feasibility of Density Provisions**: Remaining question is whether the density/unit size provisions are feasible. Economic study was done, but was a pro forma run done on the average density now proposed? There is skepticism, as expressed by Santa Barbara For All, that the proposed Density/Unit Size provisions won’t feasibly produce affordable units because densities are not high enough. Is there a contingency approach?

Jacobs

- **Rental Incentives and Historic Resources Protection**: Should the measures for historic structures protection and adaptive re-use be included in the Plan document with the rental incentive policies? *(B Weiss: Can add references p. 149 LUE; Historic El; Housing El)*
- **Regional Housing Needs Allocation (RHNA)**: Why do we need to include the RHNA number in the documents? It changes every few years.

Bartlett

- **Density/Unit Size - Feasibility as Affordable Housing Incentive**: If the metric for measuring density reduces the volume of developable space for the units in the high density zone, then how is that a carrot for developers to produce affordable units? The developable envelope is being shrunk. This is actually driving the price up because less square footage allowed to develop.

Lodge

- **Issues With Higher Density Projects and Mixed Use**: Paseo Chapala has 900 sq ft units that are still for sale; Chapala One had only two affordable units sold; at 121 W. De la Guerra, all three sold.

Also land use conflicts with noise, such as Paseo Chapala and Elsie’s bar and restaurant at De la Guerra and Chapala. This is not conducive to a happy living situation.
DENSITY, AFFORDABLE HOUSING, AND DESIGN POLICIES (cont.)

Lodge (cont.)
Casa de la Fuentes is good. It has 54 units and three stories, but the third story is set back with enough open space, and it is not mixed use. I could support projects such as this. Maybe need to separate commercial from residential uses downtown.

- Livable Housing: How do you get housing that people want to live in?
- Commuter Factors: Most commuters may have a family member working at their home location, so may not want to move back. This question could be added to SBCAG survey.
- Density and Housing Cost: Increasing density will not necessarily reduce the cost of housing. Harvey Molotch noted that Manhattan has high density but also high prices.

Larson
- Vacation Rentals: LG 5.1. The pie chart needs to reflect vacation rentals. Would want to see people living in the units.
- Historic Element and EPV: Provide transparency of El Pueblo Viejo (EPV). Historic Element not fleshed out. Want to see where we are putting the footprint around EPV.

Jordan
- Building Height Limits: Is there a specific height limit policy number in the document?
- Types of Housing Units: Will these types of units attract persons who are willing and can afford to live here?

Lodge
- Second Homes: Can’t prohibit someone from buying a second home that is not their main residence? Casa de la Fuentes is workforce housing units requiring job in the area (area you can work in has been expanded to Milpas Street).

Bartlett
- Redevelopment Agency Funding: What happens when RDA funding for affordable housing sunsets?
- Timing for Implementation Tools: Neighborhood Preservation Ordinance took three years to establish a .45 Floor Area Ratio (FAR) for 6000 sq. ft. lots. How many years will we live under Mesa track home type standard while we implement Form Base Codes (FBC).

LAND USE MAP AND ZONING ISSUES

Jordan
- Institutional Uses/ Upper East: Do institutions default to the neighborhood zoning?

Jacobs
- Institutional Use Permitting: What triggers CUP or reconsideration when a use exceeds that that is permitted? Do we need a policy to help neighborhoods deal with unregulated uses in institutional uses? Is there a CUP for 2300 Garden Street, where there appears to be a cluster
LAND USE MAP AND ZONING ISSUES (cont.)

Jacobs (cont.)

of unregulated activity; historically a church, but also a tourist attraction. Similar questions for Elings and Upper Eastside when loud parties in what used to be places of worship. Are CUP institutional use documents on-line for Elings and Jesuit Property? Looking for tools neighbors can use to track institutional uses and impacts in their neighborhoods.

- **Land Use Map Designation Changes**: Draft General Plan Update, page 312, Table 3.3: Identify old designations as well as new to see the change, and also identify anything that is taken off, such as the green buffer zones.

- **Land Use Map Accuracy**: Need to feel confident that the Land Use Map is correct. One property is incorrect and we need to see it changed. Would like to see revised information.

- **Historic Resources and State Parks letter**: Need to correct map designation for El Prisidio.

Lodge

- **Elings Park**: Elings Park has always been considered a regional park. This does not mean that the highest level of use necessarily builds out. Even as a regional park, we will want it to be a compatible neighbor.

Schwartz

- **Elings Park Designation**: Regarding Elings Park and letters received – is the assertion correct that a Regional Park designation would be in violation of covenant with County?

DRAFT ENVIRONMENTAL IMPACT REPORT ANALYSIS

Larson

- **Energy: Fuel Cells**: What is concept of fuel cells at the Las Positas former dump site. What size and technology?

- **Hazards**: Would the Elings former dump site be included on the man-made hazards map in the EIR?

- **Final EIR**: How will Final EIR reflect text changes?

Jostes

- **DEIR Transportation and Air Quality Impacts**: Two messages that stick out from DEIR analysis: traffic will get worse, and air quality is dirtier the closer you get to the freeway. I have a basic trust that with the traffic model we have a good planning tool with respect to transportation/parking issues.

- **DEIR Class 2 Less Significant Impacts**: If 90% of future development in Downtown and individual projects Downtown are exempted, don’t understand the impact level for Biological Resources on upland habitat and other Class 2 and 3 impacts. Concerned that much of the DEIR is focused on less than significant impacts, which stretches beyond the intended use to identify and mitigate significant impacts. Public policy prescriptions for the mitigation measures may be based on mitigations that have not received public vetting.
Jostes (cont.)

- **MODA**: Need clarity on the MODA analysis in DEIR. There is specific acreage to MODA in the EIR impact analysis and the old MODA map. The staff report now says MODA does not have boundaries.

- **Air District Guidelines**: Comments from State to County 1 ½ years ago (can forward prior letters). Earlier PlanSB policy was screening criteria with health risk assessment. What about Cancer Center proposal?

- **Community Character**: Community character is a critical part and policy driver but why is it included in the DEIR as an environmental impact? This is a policy issue not an environmental standard. There are a number of 45-60 foot tall buildings built in the City that were all found to be categorically exempt, now creating a community character impact analysis. This does not make sense. Is this a new CEQA threshold?

- **DEIR Impact Analysis Assumptions**: What is guidance as far as using worst case and making findings and overriding considerations on those worst case scenarios? Concerned that Staff and consultants have used worst case analysis for deciding classification of impacts on a programmatic level.

- **DEIR Alternatives**: Understanding the trade offs and preferred alternatives will be important.

- **Dune Habitat**: What is feasibility of restoring coastal sand dune habitat on the Waterfront?

- **Prioritizing Mitigation Measures and Recommended Measures**: Is there a way to prioritize per importance, or if not necessary or not defensible.

Schwartz

- **Air Quality Sensitive Receptors**: Request clarification of “sensitive receptors”.

Bartlett

- **DEIR Density Assumptions for Alternatives**: DEIR Summary Pages 22-6, numbers show up with density ranges from 9 – 50 units for low growth and 38-140 units for high; need better understanding of what the numbers represent.

- **DEIR Growth Assumptions and Impacts**: Growth assumptions and impact-related assumptions for number of buildings that could develop: How did we arrive at the numbers summarized in EIR? Opportunity sites reflected at about 2,900 sites that yielded only 9,000 units. Seems like a small ratio. Where is the carrot?

- **Air Quality/ Highway 101 Setback**: Need more discussion on the 101 setback issues. Explain evolution and other sensitive receptor projects.

Jacobs

- **Environmentally Superior Alternative**: The DEIR has two environmentally superior options and it seems like we should not. Which is the environmentally superior alternative for the local community, not region, and how do we incorporate it into a hybrid policy set?

- **DEIR Summary**: On EIR Summary page 26, I question some of the discussion and how conclusions were made.
**Jacobs (cont.)**

- **Economic Feasibility of Alternatives and Mitigation**: If do not have the money to implement an alternative, can that be a factor for feasibility?
- **TDM Mitigation**: Do we consider TDM a mitigation?
- **Questions on Economic Vitality**: What are the economic effects of, for example, parking pricing? Economic consequences of housing downtown?

**Lodge**

- **DEIR Analysis of Alternative Density Policies**: Questions assumption that higher density alternative would ease pressure on development outside the MODA. Explain how got to that conclusion.
- **DEIR Environmentally Superior Alternative**: Does CEQA require that environmentally preferable alternative be stated?
- **Urban Forest**: Was urban forest analyzed?
- **Regional Jobs/Housing Issues**: Santa Barbara has carried the brunt of the regional burden. We have more high density, more affordable housing, and more apartments. It shouldn’t be our responsibility to address a regional problem just within the City of Santa Barbara.
- **Water Resources**: Living Within Our Resources and water resources: it is not that easy to meet water demand.
- **Food Resources**: Why does the Living Within Our Resources policy discussion include reference to food? There is no way any community can generate all their own food within the community. This should be reworded.
- **Parks Information**: DEIR Table 13.1, should add Arroyo Hondo and Scofield parks.

**GENERAL COMMENTS/ PROCESS ISSUES**

**Jostes**

- **Planning Effort**: Thousands of pages of documents needed to be read and understood. Tremendous amount of civic capital and community hours over the past six years.
- **Council Role and Planning Process**: City Council needs to understand the policy preferences and draft elements so that they can participate in this process as early on as possible. Need to know sooner if Council is not supportive of any of the concepts.
- **DEIR Process**: Need another discussion by PC after the end of comment period (May 17th).
- **Process for Identifying Hybrid Plan**: How do we get to the hybrid? Conditions Trends and Issues (CTI) identified five points as the key organizing questions to resolve land use issues. The DEIR page 8 identifies competing objectives and trade-offs. Need to adjust the graphic equalizer of the planning policies to get a hybrid that accomplishes most project description objectives and Council goals and that get us there efficiently. The DEIR Section 5 Alternatives includes policy assumptions that are ingredients of trying to work through hybrid. The matrix approach is a good start.
GENERAL COMMENTS/PROCESS ISSUES (cont.)

Schwartz

- **Plan Process:** We may not achieve complete consensus, but we need enough impetus to get there with City Council. This is a technical, social, and political process.

- **Policy Implementation Timing:** Sequencing and timing of changes that get supported will be very important.

- **Jobs/Housing, Affordable Housing, Transportation:** While we cannot fix the existing jobs/housing imbalance, we can take steps moving in direction of more affordable housing. Not sure how it will fit into the improved transportation and climate change models if this is not looked at in a holistic perspective.

- **Household Sizes:** Observes increase in number of people co-habitating for economic reasons, for commuting purposes, job access.

- **Implement Policy Aims:** Need to give great care to considering how we are going to live out our values that we are talking about.

- **Visual and Community Character:** Re. 13-26, Existing Policies – There is an emerging concern that the single family design guidelines not adequately protecting visual resources, community character, and neighborhoods. An example is the Mesa where character is changing. Where should this concern be folded in?

- **Impacts, Mitigation, Socioeconomics:** Important for Planning Commission and City Council to understand environmental impacts and mitigations and also socioeconomic factors.

- **Feasibility Analysis and Monitoring:** Feasibility analysis and follow-up monitoring is important. Need to identify fiscal effects in next year’s budget. Important to assure fiscal resources for monitoring and compliance.

- **Adaptive Management Program (AMP):** Are there adequate City staff resources for the Adaptive Management Plan in light of budget? For new commissioners, we would like prior information, AMP report, and prior Planning Commission hearing to review.

Jordan

- **Additional Information:** Would like prior information on Adaptive Management Plan and Economic Study.

Bartlett

- **Balancing/Priorities Among Objectives to Reach Decision:** How do we get to finish line? What are the implications of separating out the elements (e.g. Housing Element)? Identifying prioritization among objectives will be important.

- **Process and Timing for Completing Plan:** What is the timing of developing a hybrid alternative? Does this mean another round for EIR consultant and traffic consultant? How do we fit into schedule? How do we mix and match?

Lodge

- **Views, Openness, and Small Town Feel:** What we love about Santa Barbara includes views, openness, small-town feel, which are important both for residents and tourist economy. It is vital that we protect these things.
GENERAL COMMENTS/ PROCESS ISSUES (cont.)

Larson

- **Mesa Neighborhood**: Due to costs, people are staying put. When a neighborhood has a quality of life that is desired, including proximity of services, it is very hard to leave.

Jacobs

- **Funding for General Plan Implementation and Adaptive Management**: Ebb and flow of funding can affect effectiveness of General Plan. Adaptive Management Program (AMP) funding needs to be insulated.

SUSTAINABILITY PRINCIPLES/ CITY VS. REGIONAL SUSTAINABILITY

Jostes

- **Reaffirming Sustainability Principles**: The Sustainability Principles are the basis for GPU policies. There are new members on the Planning Commission members, and the Commission should reaffirm Principles.

- **Community versus Regional Objectives**: The entire General Plan has a sustainability framework. We have to weigh the most beneficial alternative to the community without compromising the ability of the region to address its sustainability. It comes down to whether the City at our local level wants to help address regional sustainability.

Bartlett

- **City versus Regional**: Local City vs. Regional sustainability?

Schwartz

- **City versus Regional**: Issues are interrelated regionally, but the General Plan Update is for the City of Santa Barbara. Need to balance among principles.

Jacobs

- **City versus Regional**: The General Plan Update is for the City of Santa Barbara, not to solve regional problems. Solving would be ideal, but there are problems with regional planning, e.g., RHNA. Why offer up City resources for regional? Need a County regional blueprint – a County and SBCAG responsibility.

Lodge

- **City versus Regional**: Agree with Jacobs. We may all agree on Subsustainability Principles, but different views on how to get there.

Bartlett

- **City versus Regional**: Don’t want to dump our impacts on our neighbors.

**Sustainability Principles - Straw Poll**: Agreement with Sustainability Principles as the basis for the General Plan Update policies: All concur.

Jostes

- Reaffirmed new Commission is still going in the same direction.
GROWTH LIMIT POLICY OPTIONS

Larson

- Non-Residential Growth Limits: How much of Measure E non-residential square footage is left?
- Residential Growth: How many residential units approved and pending? How many assumed for Plan Santa Barbara to 2030?

Jostes

- Refined Project Policies: Refining plan and project objectives. Alternatives measured against objectives and reducing significant environmental impacts. How does Staff see this being carried forward?

Bartlett

- Approved and Pending Projects: Approved and pending permits that are not yet built are part of the total future non-residential square foot limit?
- Non-Residential Growth Limit: Can we identify other options for the amount of non-residential square footage (other than 2 million square feet for Plan Santa Barbara project or 1 million square feet for alternatives)?

Schwartz

- Growth Rate and Density: Letter from Santa Barbara For All noted less than 1% growth rate. Growth per se doesn’t reflect density.
- Complex Balancing of Issues: More complex than adding more units and square footage. Need to consider historic growth, policies, commuters, etc. Otherwise environmental effects with more people cramming into available units. Need to allow for some additional adaptive reuse or will be compound environmental effects of people cramming into housing.
- Assessment of Economic Vitality: Economy is struggling. Need a diverse economy. Need creative strategic planning to attract those to live and play here and contribute to community.

Lodge

- Population, Housing Units, Nonresidential Growth: Census figures for SB show that persons per household is less than in Santa Maria and comparable to U.S. As far as population and new housing units, the City has grown very little. Santa Barbara between 2000-2010 grew by 1.4% in population. Unemployment rate now 5.8% in Santa Barbara, half of State rate (State Dept. of Finance). City has been growing slowly, and thriving economically. I disagree that 2 million square feet equals economic vitality.
- Non-Residential Growth Limit: City is built out. Most development is demolition/redevelopment, so 1 million sq. ft. net additional commercial is ample.
- Tourism Factor: Tourism has low-paying jobs and is down due to overall economy.
- Jobs: Past Economic Development conferences indicated that good high-tech jobs are attracted by good environment, small-town charm, and climate.
**GROWTH LIMIT POLICY OPTIONS (cont.)**

**Jacobs**
- **Restriction to Residential or Total Square Footage**: Can we restrict the total square footage of development in the way that we restrict non-residential square footage under Measure E growth control?
- **Census Information**: Helpful to look at census information rather than just anecdotal information.

**Jordan**
- **Priorities for Remaining Non-Residential Square Footage**: At what point can we start discussing what uses should be encouraged or incentivized as priority for remaining square footage?

**KEY DECISION OPTIONS: MATRIX TO IDENTIFY A HYBRID POLICY SET**

**Jacobs**
- **Conflicting Objectives**: On the Matrix there are conflicts for policies on (1) building size, bulk, scale, and height, (2) historic and cultural EPV protection, (3) additional density.

**MATRIX STRAW VOTES AND COMMISSIONER COMMENTS**

<table>
<thead>
<tr>
<th>Decision Points</th>
<th>Straw Vote</th>
<th>Commissioner Comments</th>
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<tbody>
<tr>
<td><strong>Growth Management (Non-Residential)</strong></td>
<td>1.0 million – 5 (Bartlett, Jacobs, Jostes, Larson, Lodge)</td>
<td>Jordan – LG7 implementation</td>
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<td>1.5 million – 2 (Jordan, Schwartz)</td>
<td>Jacobs – How would institutional uses be included?</td>
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<td>Schwartz – Institutional uses</td>
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<td><strong>Residential Density (Highest Standard)</strong></td>
<td>15-27 du/ac – 1 (Lodge)</td>
<td>Lodge – We have achieved permanent affordable housing such as Casa de la Fuentes and Cottage workforce housing with existing zoning. Existing zoning is best for preserving SB character on which tourist economy is based. Jacobs – Predominantly 15-30. But a project with all the right components – transportation zone, partner with City, rental housing needs, right location could go up to 50 du/ac with special zoning. Larsen – Agree with Jacobs Jostes – Balance of some increased density plus not exceeding resources plus strong controls in Plan to protect heritage and community character. A few projects with density higher than 27-34 doesn’t address affordable housing. Not up to 60, but maybe 30-45 du/ac) Schwartz – Agree with Jostes. In-between the 27-34 and higher to 60. But need enough design controls for higher density which we don’t have yet. Wish had abundance of developers to build these types of units.</td>
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<td>15-27 (Plus higher?) – 2 (Jacobs, Lodge)</td>
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<td>27-34 du/ac -2 (Plus higher?) (Jostes, Schwartz)</td>
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<td>27-60 du/ac - 2 (Bartlett, Jordan)</td>
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<td>Topic</td>
<td>Description</td>
<td>Comments</td>
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<td><strong>Average Unit Sizes</strong></td>
<td>1000 sq. ft. – 7 (unanimous) (Bartlett, Jacobs, Jordan, Jostes, Larson, Lodge, Schwartz)</td>
<td>No PC comments.</td>
</tr>
<tr>
<td><strong>Residential Parking Standard Downtown</strong></td>
<td>1 Max/Unbundled – 2 or 3 (Bartlett, Jostes; Jacobs-1 or 1.5) 1.3–1.5 Max/Unbundled – 1 (Lodge)</td>
<td>Jacobs – Reduced requirements helps historic preservation and building sizes.</td>
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<td>1.5 Max/ Unbundled – 3 or 4 (Jordan, Larson, Schwartz, Jacobs-1 or 1.5)</td>
<td>Jordan – Impacts?</td>
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<tr>
<td><strong>Predominant Building Size, Bulk, Scale, and Height</strong></td>
<td>2-3 Stories – 4 (Jordan; Larson, Lodge, Schwartz) 2-3 Stories Plus 4th Story Elements– 2 (Jacobs; Jostes) 3-4 Stories – 1 (Bartlett)</td>
<td>Jordan – With community benefit, etc. Jacobs – Not exclude 4th story elements Jostes – Need some criteria for 4th story with compelling community benefit argument. Revise box 2 to provide flexibility for 4th story element for community benefit uses.</td>
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<td><strong>Inclusionary Housing</strong></td>
<td>25% - 7 (unanimous) (Bartlett, Jacobs, Jordan, Jostes, Larson, Lodge, Schwartz)</td>
<td>Lodge – How realistic is 40%? (Weiss – Current 15% standard is feasible. Study supports 25% - cost of parking a big factor.) Jordan – Requirement affects projects with ten or more units?</td>
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<td><strong>Rental Overlay</strong></td>
<td>50% - 5 (Jordan, Jostes, Larson, Lodge*, Schwartz) 100% - 2 (Bartlett, Jacobs*) *With measures to permanently restrict to rental and design restrictions</td>
<td>Lodge – how assure units remain rental? Jacobs – Would like further analysis. Bartlett – What type of densities needed to avoid making projects non-conforming? Larson – Tear down to change use is not sustainable. Schwartz – If rental property owner requested conversion to condos, are there City requirements for changes to interior?</td>
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<td><strong>Second Units Requirements</strong></td>
<td>Strict/Status Quo – 2 (Jacobs, Lodge) Relax Adjacent to Transit – 4 (Bartlett, Jostes, Larson, Schwartz) Relax Citywide – 1 (Jordan)</td>
<td>Lodge – Concerned about more land paved over and more cars parked on neighborhood streets. Unless 2nd unit is within existing building. Jacobs – Page 306, Policy H.15. Need softer language. If better crafted language, possibly consider adjacent to transit. Larson – Adjacent to transit, additional cars and more parking. Need better information on current. Schwartz – If done properly, many benefits for family members, additional income.</td>
</tr>
<tr>
<td><strong>Targeted Growth For Medium- and High-Density</strong></td>
<td>Existing Designations – 1 (Lodge) Adjacent Transit/DT Core</td>
<td>Lodge – Need protection for historic resources, sunshine, openness. LUE LG13.1 Design requirements. How “target” growth – these are individual decisions.</td>
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<td>Plan Santa Barbara Draft GPU &amp; DEIR -13-  Planning Commission Comments April-May 2010</td>
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<td>expect exclude EPV, some additional Upper State – 3  (Jacobs, Larson, Schwartz)</td>
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<td>Adjacent Transit/DT Core -2  (Bartlett, Jordan)</td>
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<td>Adjacent Transit/DT Core but expand to coastal zone -1  (Jostes)</td>
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<td>Jacobs – Locate higher density in DT core with grid to manage traffic, except for EPV, and potentially including some USSS. GP/EIR identify buffers for historic, yet EPV core is targeted for growth. Larson – Agree with Jacobs. Exclude EPV. Schwartz – Adjacent to transit DT except exclude EPV. Protect historic resources, preserve CM areas, avoid traffic effects. Why not USSS? Bartlett – Adjacent to transit with protections. Jordan – Adjacent to transit plus protection for historic. Jostes – Adjacent to transit but expand zone to coastal zone (not west side). This allows additional area to keep option open for regional transfer of development rights. Efficient urban space. Note protections LG 13, 14, 15 plus Historic 1, 2, 3, plus Boards and Commissions GP consistency findings. Modify to clarify policies.</td>
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<td>Congestion  No Change in TDM – 1  (Lodge)</td>
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<td>Moderate TDM/Parking Pricing – 1  (Jordan)</td>
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<tr>
<td>Robust TDM/Parking Pricing - 5  (Bartlett, Jacobs, Jostes, Larson, Schwartz)</td>
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<td>Lodge – Parking report showed only 63% parking occupancy on Saturday. Not evenly spread out. So do more with existing parking. Jacobs – Robust within 20 years. May not implement quickly. Monitor congestion in five years. RDA expiration in five years an issue. Larson – Use transit improvement money. Schwartz – Recognize some of Lodge’s concerns. But there is a high cost to free parking. With 20-year time frame, plan for robust. Identify better funding sources.</td>
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Plan Santa Barbara Draft GPU & DEIR -13- Planning Commission Comments April-May 2010
Response to City Commission Comments Letter # C1, Planning Commissioners (Hearings of April 28-29 & May 6, 2010)

Thank you for your comments.

Transportation

C1-1 (Jordon): Comments are noted. Regarding commuters, please see revised text in EIR Transportation Section 16.1.1 (Transportation Modes). With regard to the effects of housing Downtown and of Transportation Demand Management (TDM) on existing commuters, the EIR traffic analysis does not assume that all Downtown housing will be developed for the workforce, and does not assume that affordable housing is taking people off the highway – housing located Downtown is expected to have beneficial trip reduction effects, but cannot be quantified. The model assumes that travel behavior of occupants of new Downtown units will be similar to that of existing units in the area, and result in lower average per unit new vehicle trips. Further, the most significant trip reduction benefits of a vigorous TDM program would be reductions in trips of existing commuters, as the number of existing commute trips far outweigh the traffic increase of new development projected under Plan Santa Barbara. However, none of the scenarios indicate that the City would be able to reverse the trend of employees moving for affordable housing reasons.

C1-2 (Jacobs): Comments are noted. MTD currently offers both regional express and local bus service with frequent regional peak hour express bus service connecting South Coast destinations such UCSB and Carpinteria; MTD service costs approximately $100/hour or $500,000/bus and is funded by fare box revenues, State and Federal funds, and Measure A which together comprise the MTD annual budget of approximately $21 million dollars. There are also some federal and State one-time funds, such as stimulus funds and CMAC grants.

In addition to South Coast-wide service, SBCAG manages regional bus service from between North County communities such as Lompoc, Santa Maria, and Buellton and the South Coast, as well as between Ventura and the South Coast (in cooperation with Ventura County Transit Commission). However, a robust regional transit system is not yet fully in effect, particularly with regard to rail service.

C1-3 (Jostes): Comments are noted. The Santa Barbara Metropolitan Transit District (MTD) and Ventura County Transit Commission (VCTC) coordinate on providing regional transit.

C1-4 (Larson): Comments noted. The goal of proposed TDM program would not be to take cars away from people, but to improve the attractiveness and utility of alternative modes of transportation to manage congestion. Parking revenues could potentially be used to help fund transit operation, but such a decision would need to go through all appropriate City committees and involve all stakeholders such as the Downtown Organization, COAST, etc. Please refer to EIR Section 16.1.1 (Transportation Modes) discussion of commuter estimates.

C1-5 (Lodge): Comments are noted. Please see revised text on in EIR Section 16.1.1 (Transportation Modes) regarding commuters. The EIR did not quantify or forecast the precise number of commuters that could be affected by the Additional Housing Alternative. However, the EIR Section 19.6.3 (Population and Jobs/Housing Balance, Additional Housing Alternative) discussion and Table 19.12 describe the Additional Housing Alternative’s beneficial effect on the City’s jobs/housing balance. Please see also response C1-2 above.
# C1, Planning Commissioners (Continued)

The more robust TDM program could be applied with any of the alternative growth scenarios to manage traffic; it would be expected to be more effective when paired with policies to increase affordable housing Downtown and improve infrastructure for alternative modes. The EIR analysis did not apply the robust TDM to the Lower Growth Alternative, because its policy set included a policy to maintain or increase parking requirements, which would conflict with the approach of the robust TDM. This scenario allowed the EIR to evaluate whether traffic could be managed through policies for lower growth alone, with the conclusion that it could not.

Expansion of the City parking pricing program contemplates adding on-street parking pricing, however it could also be applied in garages. Please refer to response C1-2 above regarding transit costs.

C1-6 (Schwartz): Comments are noted. Managing future congestion may involve trade-offs between various programs and approaches. Free on-street parking has a cost associated with contributing to Downtown congestion. The City, interested organizations, and the community will need to consider the appropriate balance between growth, congestion, limited available road improvements (and associated costs and impacts), and TDM programs such as priced parking. Some communities address concerns over the effects of parking pricing by offering the first 60 minutes free (Pasadena and Santa Monica) which can help change employee behavior and save the free spaces for shoppers, while others such as San Luis Obispo don’t charge for evening parking or on Sundays or holidays.

C1-7 (Bartlett): Comments are noted. The land use assumptions that were utilized in the traffic model analysis assumed the distribution of growth based on available sites, zoning, historic trends, and City staff’s experience. The assumptions were not so fine-grained as to account for unit size reductions, and the traffic model was designed to account for unit type (single- vs. multiple-family) and location (e.g., Downtown vs. outlying areas). Although the largest effect of the TDM Program on reducing congestion is from existing commuters, TDM does work in concert with land use and should be considered jointly.

Growth Areas and MODA Principles

C1-8 (Lodge): Comments are noted. The traffic model indicated that decreasing densities outside the MODA did not result in any appreciable traffic congestion relief. The MODA as a defined area has been eliminated from the project, and is represented by the MODA principles (GPU Policy LG4). Also please refer to the EIR Transportation chapter discussion of different trip generation rates for the four areas of the City (EIR Section 16.3.3 (Plan Santa Barbara Traffic Model).

(Jordan): Comments are noted. The Downtown grid system has capacity to handle additional growth. Systems undergo upgrades as needed, and it is less expensive to do so in a concentrated area versus a large area. Also please refer to EIR Sections 14 (Public Services) and 15 (Public Utilities) for evaluation of the adequacy of infrastructure and services. Per existing and ongoing City processes, parks and recreation services and capital improvement projects would be planned and implemented as needed. Also see Draft GPU Economic and Fiscal Health Element Policies EF9 (Infrastructure Improvements) and EF25 (Development Impact Fees).

(Jostes): Comments are noted. Contracting the MODA to more tightly focus on the City’s core (identified as Areas 1 and 2 in Figures 16.4 in the DEIR) would have the benefit of focusing development on the areas with the lowest trip generation rates within the City. For example, a new multiple-family housing unit in Area 1 (i.e., downtown) with one car, would generate approximately 0.42 peak-hour trips and 4.2 average daily trips (ADT) as opposed to .062 peak-hour trips and 6.2 ADT in more outlying areas of the City, such as Areas 3
and 4. In addition, the EIR provides information on the effects of different MODA boundaries between Plan Santa Barbara and the Additional Housing Alternative, which assumed reduced MODA coverage. Please refer to EIR Appendices (I-3, Travel Demand Model Overview, Table 5 and I-6, Plan Santa Barbara Trip Reduction Impacts Analysis).

The revised MODA policies reflect the four basic policy layers, including sustainability Principles, Policy Drivers, General Plan Elements/Policies, and the MODA/implementation, but also account for economic development emphasis. The success of these measures would be subject to a monitoring loop with the Adaptive Management Plan.

Density, Affordable Housing, and Design Policies

C1-9 (Jostes) (Plan SB GPU): Comments are noted. A separate follow-up economic performance study has not been done on the revised average density now proposed, however the initial economic study, work sessions with the Planning Commission, and discussions with local developers were used in identifying the current proposal.

C1-10 (Jacobs) (Plan SB GPU): Comments are noted. Please refer to GPU policy updates pertaining to historic resources protection, adaptive re-use, and rental incentives, including LG14 (Historic Structures), HR 1 (Adaptive Re-use), HR5 (Historic Resources Protection), and H13 (Rental Housing). The Regional Housing Needs Allocation (RHNA) number analysis is required by the Housing Element by State Law and, therefore, incorporated into the Housing Element and EIR analysis. The reference to the RHNA number will be removed from the Land Use Element because it is a 20-year plan.

C1-11 (Bartlett) (Plan SB GPU): Comments are noted. The GPU policies do envision smaller building envelopes to address compatibility and community character, but with greater densities through smaller units. Additional densities would also be allowed for Community Benefit projects such as rental, workforce, and employer-sponsored housing.

C1-12 (Lodge) (Plan SB GPU): Comments are noted.

C1-13 (Larson) (Plan SB GPU): Comments are noted. Please see Policy HR5 regarding interim protection of historic resources that would be in place until the time that the Historic Resources Element is developed.

C1-14 (Jordan) (Plan SB GPU): Comments are noted. No changes to City height limits are proposed. Proposed policy changes would require special findings for a fourth story. The Plan emphasis is on promoting housing that is affordable to the local workforce, particularly rental and employer-sponsored housing. It can be expected that a portion of the workforce would choose to avail themselves of affordable units and avoid commuting.

C1-15 (Lodge) (Plan SB GPU): Comments are noted. Price-restricted housing restricts who can buy it based on income levels, but otherwise people are not restricted from purchasing property. For employer-sponsored housing, funding mechanisms may be added to tie housing use to employment.

C1-16 (Bartlett) (Plan SB GPU): Comments are noted. When Redevelopment Agency affordable housing funding sunsets, affordable housing projects will need to rely on other sources of grant funding for subsidization or local regulations that encourage or require affordable housing. GPU Housing Element Policies H23 (Sustainable Regional Housing Solutions) and H24 (Cooperation on Legislative Changes) propose actions to identify replacement funding.
Form Base Codes will take time to implement. In the meanwhile, the primary housing strategy is to encourage higher density rental projects subject to the Design Review Process and general design direction in the updated GPU policies.

Land Use Map and Zoning Issues

C1-17 (Jordan) (Plan SB GPU): The base zoning applies and the City also requires a Conditional Use Permit for quasi-public uses, such as educational institutions, churches, and day care centers. Many CUP uses predate the permit requirement, so churches and schools were permitted at one time. GPU policies such as LG16 (Low Density Single Family Zoned Areas) and LG17 (Sustainable Neighborhood Plans), as well as EIR Recommended Measure RM Noise-1 (Neighborhood Noise) contemplate additional measures to address neighborhood land use compatibility issues.

(Jacobs) (Plan SB GPU): Comments are noted. The allowed uses need to comply with the base zoning or permitted Conditional Use Permit (CUP) for the site. Typically, any intensification of use is subject to review to determine if the use is in substantial conformance or if in compliance with the parameters of the CUP. However, some institutional uses are “non-conforming” and were never issued a CUP. A new policy has been added to the Land Use Element to review the permitting process for government public facilities and institutional uses, to strengthen findings when located in residential areas. Typically if a CUP was established, the Planning Commission resolution that defines the CUP can be found in the Planning Files. Please see Land Use Map for revisions.

(Lodge) (Plan SB GPU): Comments are noted. The 130-acre Elings Park South property is owned and operated in its entirety by the Elings Park Foundation. Annexation of the Elings Park South property to the City was approved by the Local Agency Formation Commission (LAFCO) in April 2008. The City designated the Elings Park South Open Space and Community Park, and zoned the property PR, Park and Recreation (Undeveloped Parkland Category). The current General Plan designation shows the northern portion of Elings Park as Recreation and Open Space, Proposed City Park (Community Park), with an underlying zoning designation of A-1, One-Family Residence Zone. Therefore, both north and south portions of Elings Park currently have the Open Space, Community Parks General Plan land use designations.

C1-18 (Schwartz) (Plan SB GPU): Comments are noted. The Covenant Restricting Use for Elings Park (Las Positas Park Expansion) was made and entered into by the County of Santa Barbara and the Las Positas Park Foundation and pertains to 130.650 acres of land. The City of Santa Barbara is not a party to the Covenant. By the Covenant, the Foundation agreed that the uses of the property would be confined and restricted for a period of 30 years beginning January 1, 1999. In summary, the Covenant restricted 120 acres to passive recreation and the preservation of wildlife habitat. Under the Covenant, this portion (commonly referred to as Elings South) would not be used for active recreation without prior approval by the County Board of Supervisors. The remaining 10 acres could continue in agriculture uses, or be converted to passive recreational uses or wildlife habitat. For purposes of the Covenant, passive recreation included activities such as hiking, trails, horseback riding, jogging, hand-gliding, operation of radio operated airplanes, picnic grounds, park benches, restroom, open public gathering meadow, a road, and no more than 60 parking spaces cumulatively. Passive recreation would not include activities such as ball fields, tennis courts, outdoor auditoriums, and other activities that alter the natural land.
# C1, Planning Commissioners (Continued)

Changing the City’s Community Park land use designation to a Regional Park designation would require a General Plan amendment and verification that any uses recommended for Elings Park South would be in compliance with the Covenant Restricting Use described above. The Draft GPU Land Use Element does not identify any proposed land use designation change for the Elings Park property.

Draft Environmental Impact Report Analysis

**C1-19 (Larson):** EIR Section 17 (Energy) recommends use of fuel cells to convert methane to energy at landfills such as Tajiguas; however, Las Positas is an unlikely site. The former dump site was closed per regulations and is not considered to constitute a hazard (refer to Figure 9.1 in EIR). The proposed Final EIR will be brought back to the Planning Commission for certification and will include a Response to Comments section along with any associated changes within the text of the EIR shown in underline/strike-out.

**C1-20 (Jostes):** Comments are noted. The DEIR analyses the cumulative effects over time of incremental projects citywide. All topics in the DEIR started as citywide potentially significant impacts. The EIR analysis found many to be Class 3 (less than significant) with existing regulations and proposed GPU policies, or Class 2 (less than significant with mitigation). Regarding Biology, the policy objectives may direct development to the core commercial areas, but there would still be some development potential in outer areas. For example, approximately 35% of all residential development or almost 1,000 units are forecast to occur outside of the core commercial mixed-use development areas. With limited remaining upland and riparian habitats, there is potential for gradual loss cumulatively, and measures are identified to further protect it. Similar analysis occurred with other impact topics. The DEIR public review period and Planning Commission and City Council consideration of the draft General Plan and EIR at multiple public hearings is the public vetting process for EIR identified mitigation.

With regard to the MODA and analysis within the EIR, the DEIR Project Description was the Plan Santa Barbara Policy Preferences Report initiated by City Council for environmental review. Since the time when the DEIR was under preparation, the MODA policy has been evolving to utilize the MODA principles rather than a specific mapped boundary, however this refinement would not change the EIR impact analysis.

With respect to individual projects proposed, the proposed General Plan Update policies are not in effect until adopted, however, the project-specific environmental analysis for the Cancer Center project determined that residential uses would be outside the highway setback identified in EIR Mitigation Measure AQ-1 (Highway 101 Setback) and the revised Draft GPU Policy ER7 (Highway 101 Setback, previously numbered ER12 in the earlier GPU Draft).

With regard to Community Character, this analysis was scoped into the DEIR as a component of Open Space/Visual assessment. This is not new but a standard issue as part of the Initial Study for individual projects, as well as this EIR. Please refer to EIR Section 13.3 (Open space and Visual Impact Evaluation Methodology) for discussion of impact significance guidelines. The programmatic analysis is qualitative in nature and identifies the potential cumulative citywide impact of gradual growth over two decades as less than significant, due to the extensive City design review process, existing guidelines, and stronger policy protections proposed in the General Plan Update. Also please refer to addition policy language identified as Recommended Measures to add detail to the General Plan policies to further protect sense of place and manage the built environment. In addition, please see responses O23-6 and I23-3.
# C1, Planning Commissioners (Continued)

With regard to use of a worst-case scenario, the analysis employs a reasonable worst-case analysis of impacts as required under California Environmental Quality Act (CEQA) provisions. This means that a realistic (not unrealistic maximum) future growth scenario over the next two decades was utilized which considers historic build-out rates and draft policies proposed in the Plan Santa Barbara General Plan Update.

With regard to potential impacts to coastal dune habitats, as required by recent amendments to the State CEQA Guidelines, the DEIR identifies potential impacts on coastal dune habitat associated with potential future sea level rise and potential increased flooding of low-lying areas. Part of the low-lying area has sand dune habitat including presence of threatened species such as the Snowy Plover. Identified mitigation is considered to be feasible as part of a comprehensive shoreline management plan.

With regard mitigation measures, identified measures have been considered for general feasibility by staff and consultants and have defensible basis. Final determination of feasibility of mitigation measures and recommended measures, their support by substantial evidence, and their adoption is made by City Council. Only feasible mitigations have to be implemented. Mitigation Measures for Class 1 and 2 impacts are required to reduce potentially significant impacts. Recommended Measures for Class 3 (less than significant) impacts are not required to reduce identified significant impacts, but would be environmentally beneficial additions to the General Plan Update.

C1-21 (Schwartz): For purposes of this air quality issue, which involves involuntary exposure of lengthy duration, sensitive receptors are primarily identified as residential uses and schools, and potentially some types of medical facilities involving extensive stays.

C1-22 (Bartlett): Comments are noted. Growth and density assumptions were based on review of potential opportunity sites, historic development patterns, economic analysis, and the projected effect of existing and revised policies on development under each alternative development and policy scenario. Please refer to further discussions of EIR analytic assumptions in EIR Sections 3 (Project Description), 4 (EIR Growth and Policy Assumptions), and 5 (Description of Alternatives).

With regard to setbacks from U.S. Highway 101, the EIR discusses potential health effects of diesel particulates, the California Air Resources Board 500-ft general guideline, and the City-specific study that identified 250 feet as an interim guideline. Please also see response A9-2.

C1-23 (Jacobs): Comments are noted. The EIR concludes that both the Lower Growth and Additional Housing Alternatives are each environmentally superior for different issue areas. The Lower Growth Alternative tends to be superior for impacts related to local and site-based resources, constraints, or issues confined to the City, such as biology, geology, visual resources, public services, etc., while the Additional Housing Alternative tends to be environmentally superior for citywide or regional issues such as traffic, air quality, energy, and jobs/housing balance. City decision-makers will need to consider the information in EIR Section 22.3 (Environmentally Superior Alternative) to determine if there is a clear environmentally superior alternative or if aspects of each of these alternatives should be considered as environmentally superior. CEQA does not address socioeconomic issues unless they cause associated physical impacts; the EIR’s focus is on impacts on the physical environment. Direct impacts are evaluated at the level commensurate with project specificity; secondary impacts at a lesser level.
# C1, Planning Commissioners (Continued)

With respect to the EIR Summary discussion of the Alternatives analysis and the basis of conclusions, note that each EIR impact section includes a discussion of Alternatives in more detail, and also please refer to EIR Section 22 (Summary of Alternatives Analysis).

The State CEQA Guidelines (§15364) provide that “feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, legal, social, and technological factors. Identified Mitigation Measures and Recommended Measures for this programmatic plan were considered by document preparers to be feasible, given the two-decade horizon for plan implementation and occurrence of impacts. However, decision-makers make the final determination of feasibility. Decision-makers will have to consider substantial additional information beyond the EIR when considering approval action on the General Plan Update, including input from agencies, community organizations, citizens, City advisory boards, and staff; and other information not from the EIR, such as economic information.

A moderate expansion of TDM measures is proposed as part of the Draft Plan Santa Barbara General Plan Update Policies (see Circulation Element policies). The EIR traffic analysis identified stronger TDM measures as Mitigation Measure Trans2.c (Expand TDM Program) to address significant traffic effects.

C1-24 (Lodge): Comments are noted. The EIR does recognize that strengthening policies to further promote and provide incentives for workforce housing downtown could reduce pressure to provide for housing demand in outlying areas. Please see further discussion in EIR Section 4 (EIR Growth and Policy Assumptions) and individual impact discussions of the Additional Housing Alternative throughout the EIR.

Please refer to EIR Section 22.3.1 (Identification of Environmentally Superior Alternative/Introduction) for discussion of CEQA requirements in this regard.

Please refer to EIR discussions of the urban forest in Sections 7.4 (Biological Resources/Impact Bio-4: Urban Forest and Individual Specimen Trees), as well as discussions and references in Sections 6 (Air Quality), 13 (Open Space and Visual Resources), and 18 (Global Climate Change).

Regarding the local and regional jobs/housing balance, EIR Section 19 (Population and Jobs/Housing Balance) Table 19.12 portrays estimated population under each alternative based on the number of new housing units and average occupancy per household.

In regard to water resources, please refer to EIR Section 15.1.1 (Public Utilities/Water Supply) for a detailed discussion of water supply (see also Tables 15.2 and 15.3).

Food resources policies were added to the Draft Plan based on public comment.

Please see changes to EIR Section 13 (Public Services/Parks) Table 13.1 for addition of Skofield and Arroyo Honda parks.

C1-25 Additional Planning Commission Discussion (Plan SB GPU): Additional Planning Commissioner comments are noted including general comments regarding General Plan process issues, and discussion of Draft General Plan Sustainability Principles, City versus regional sustainability, General Plan growth limit policy options, and the key decision options matrix to identify a hybrid policy set. Please refer to the revised Draft General Plan Update document for policy refinements, and the proposed Final EIR Hybrid Alternative Analysis.
The following is a summary of Planning Commission discussion by topic, taken from staff notes. This is intended to provide a sense of the issues discussed, and does not represent a transcript or chronological minutes.

### HISTORIC RESOURCES

**Jordan**
- **Historic Buffers:** If develop 100’ buffer circles around historic resources, would height restriction only apply to area of the buffer or would it include the entire lot where circle falls? C2-1
- **Historic Preservation District Downtown:** If created an historic district in the downtown El Pueblo Viejo, would parcels that are farther away be restricted the same as if in the historic district?

**Jacobs**
- **Historic Buffers/ How Much Protection:** Not clear how buffers around resources would work and what kind of protections would be provided. Example – Bradbury project. C2-2
- **Timing for Historic Buffers:** Could be an expensive and long undertaking to establish buffers before historic preservation is in place, during which time higher densities could be allowed.
- **Guidelines Implementation Funding and Timing:** What about timing/funding for Form-Based Codes (FBC) and other implementation tools? Upper State Street design guidelines did not go forward with FBC due to costs. FBC for downtown would be even more expensive, so wouldn’t happen soon. Referencing FBC as a tool in our toolbox is misleading.
- **Structure and District Buffers:** Plan should include two types of historic resource buffers; for example 250’ around a district, and smaller 100’ around an actual structure.
- **El Presidio State Park:** Plan map must show State-owned El Presidio park lands.

**Larson**
- **Demolition By Neglect:** Need an ordinance addressing loss of historic resources due to neglect. C2-3
- **Properties Becoming Historic:** Many new parts of City will be turning 50 years old and falling under historic criteria for consideration.
- **Adaptive Reuse:** Support adaptive reuse as a sustainable implementation measure.
- **Historic Districts:** Small area near Bradbury should be included in a historic district. Shouldn’t shy away from multiple small historic preservation districts.

**Schwartz**
- **EPV Buffers and Interim Tool:** Could have a lengthy process to implement a buffer overlay zone in EPV. Concerned with incremental and cumulative effects of development. What else could be done in the interim to make projects more compatible and provide better predictability for developers? Existing tools not strong enough to protect historic areas. C2-4

**Jostes**
- **Targeted Growth Areas and Buffers:** Suggest change targeted growth areas to accommodate 100’ buffers around EPV historic district areas and El Presidio. C2-5
TRANSPORTATION

Jordan
- Parking Pricing and Local Economy: Seems counter intuitive that parking pricing stimulates economic vitality. Program expects a percentage of parking will always be available, so a greater chance of finding parking, but increased cost to park. How does it lead to economic vitality downtown? Need better outreach and discussion and gradual implementation.

Jacobs
- Traffic Analysis Areas: What is the purpose of Area 2 on the analysis zone map (staff report Exhibit A)?

Lodge
- Parking Pricing: Would parking pricing be in the garages only? Would the first 75 minutes stay free? Parking pricing will provide the incentive for people to shop somewhere else where it doesn’t cost to park.
- Traffic: The idea of more people downtown but less traffic doesn’t make sense.

Jostes
- Congestion Reduction Tools: Transportation Demand Management tools have strong support. Propose that the TDM tools need to be decoupled from discussion of the MODA land use policies.

Jostes/Jordan
- Parking Pricing: Need a public forum with Donald Shoup or other expert on parking pricing issues if we are to move that idea forward. Jordan offers to provide venue for event.

RESIDENTIAL DENSITY/ AFFORDABLE HOUSING/ HOUSING TARGET AREAS

Jordan
- What type of “Affordable” Housing: Need better explanation of “affordable” terms, i.e., low-income vs. workforce housing and what locations for different types. If the aim is to reduce traffic trips downtown, some of the replacement housing needs to include people that can afford to shop downtown. What categories of affordability do we want to target?
- Employer-Provided Housing: Are there additional incentives for employer-supported housing separate from rental housing? Need to engage employers about their housing needs, and find a way so employers can work with each other to provide housing.
- Rental vs. Employer Housing Controls: Are we assuming the same or different incentives and controls for rental vs. employer housing?
- Density Policies/ Implementation Timing: Density seems to be questioned as a result of recent projects where density has been overused in the design process. Should density be addressed now or later as part of Form Based Codes?
- Density and Design: Controversy about density is based in fear, i.e., what assurance that if greater density, the design process will result in compatible project.
- Economic Feasibility and Design Charettes: Need more information on whether units envisioned can be feasibly built. As mentioned in staff report, community charettes on unit design would also be
RESIDENTIAL DENSITY/ AFFORDABLE HOUSING/ HOUSING TARGET AREAS (cont.)

Jordan (cont.)

- helpful to see what density tables on p.67-68 would look like and dispel fear; suggest use actual developable lots.

Lodge

- **Current Downtown Density**: What is density now downtown?
- **State Street Building Heights**: I expect that State Street will not change much, remaining mostly 1-2 stories. Only Granada and Balboa buildings taller. Did not anticipate people merging lots for larger buildings, but we can’t regulate this.
- **Density and Land Costs**: Won’t higher density drive up land costs?
- **Housing Types, Density, Affordability**: Not sure that allowing increased density will result in something or somewhere people will want to live (note example of Chapala projects), but density does support housing affordability, but increasing won’t get us there.
- **Density Options**: I support staying with the density that we have now. Concerned with interior living environments and changing the character of the town. Santa Barbara only grew 1% over last ten years or so. Many good examples with two stories, and City has provided affordable housing. There is not a great push from the public for higher density. I could go for higher density if greater restrictions on building size, bulk, and scale.

Schwartz

- **Affordability Language**: The draft plan is defining affordable housing as synonymous with workforce housing. How do we define workforce?
- **Continued Affordability**: What zoning provisions or other mechanisms could provide that workforce housing continues to remain affordable?
- **Density Bonus**: Does 100% density bonus equate to 60 du/acre? I am interested in a category nearing 40 du/ac.
- **Density Option and Population Diversity**: Sustainability for whom? Santa Barbara wants a community that supports a diverse socio-economic community, including a middle class. Added density moves us in that direction. If clarify where in town and provide design guidelines, can get there and the community will be more comfortable.

Bartlett

- **Affordable Housing Plan Provisions**: Key questions are what type of affordable units we want and where? When Average Unit Size is linked with the Base Densities identified, we are locked into a Floor Area Ratio (FAR) which greatly reduces the available development envelope. How do we incentivize the smaller type of units we want?
- **Density Table**: Recommend that there be no bottom to the average density table so that can get the smaller units such as Casa de Las Fuentes at higher densities – we need incentives. Maximum top end densities are too low to be an incentive for rental housing. How do we craft hybrid Plan provisions without rules that become barriers rather incentives.
- **Floor Area Ratio (FAR)**: The FARs resulting from the proposed Density and Unit Size provisions represent a big reduction in the building envelope compared to what we have had. Reduction in parking requirements will reduce the apparent mass of the building.
RESIDENTIAL DENSITY/AFFORDABLE HOUSING/HOUSING TARGET AREAS (cont.)

Jacobs
- **Density Bonus for Rental**: Staff report page 5, middle paragraph, should read “additional density of 50% with up to 100% for rental overlay on a case by case basis”.

Larson
- **Plan Provisions for Downtown**: State Street needs to be preserved. The MODA policies would impact the Downtown. Need to facilitate other areas, so that the Downtown does not become an isolated neighborhood.
- **Unit Sizes**: Examples provided of very small less than 400 sq ft units don’t seem a good fit for Downtown Santa Barbara.

Jostes
- **Density Bonus**: Propose 50% density bonus for rental overlay.
- **Inclusionary Housing Requirements**: Recommend increase to 25%.
- **Base Density for Land Use Categories**: Suggest we move toward a 27-60 du/acre with a super majority and findings to allow the higher density for exceptional community benefit. Allows some flexibility for exceptional projects. Consider using overlay zones to target where.

ADDITIONAL ISSUES

Lodge
- **Tourism and Income from Retired**: The economic report identified the importance of tourism. The 1964 General Plan and 1974 Impacts of Growth Study noted how property and pensions of wealthy retirees are a large part of the local economy.
- **Building Heights**: 70% would have voted for lower heights if campaign literature in reference to Cottage Hospital had not come out. People do not want more Chapala Ones. Don’t need four-story buildings.
- **Form-Based Code Tool**: Some analysis indicates FBC are best in new areas not yet developed that don’t have traditional zoning, so may not work here. We have views that need to be addressed.

Larson
- **Transfer of Development Rights (TEDR)**: How does TEDR work for air space?
- **Public Comment**: Appreciate all the public comment.

Jordan
- **Second Units**: Agree with some comments in Paul Zink letter and Lisa Plowman that relaxation of second unit standards citywide would have benefit in providing needed affordable units. Neighborhoods have evolutions, and we have a lot of wasted space resources in neighborhoods.

Jostes
- **Second Units**: Suggest relaxation of standards for second units citywide with assurances of parking adequacy and same FAR as NPO as neighborhood, so don’t overbuild sites, create parking problems or compromise neighborhood compatibility.
ADDITIONAL ISSUES (cont.)

Jostes (cont.)

- **Building Sizes**: Predominantly 2-3 stories, but with exception of fourth story elements up to 45-50 or 60 feet with a super majority vote and supportive findings of community benefit, to provide flexibility to increase height if needed.
- **Sound Community Planning**: Need to refine the vision statement and guiding principles into sound community planning principles and findings, to give more comfort level with uncertainties.
- **Criteria for Hybrid Project**: In identifying the best mix of refined Plan policies, we should include the following:
  - Mitigate significant impacts to maximum extent feasible,
  - Address the Plan’s objectives,
  - Internal consistency/ the policies work together,
  - Operational on the ground, needs to work,
  - Live within our resources, and
  - Stimulates economic vitality.

PROCESS ISSUES

Larson

- **Response to Comments**: How will all the public comments be responded to?

Jostes

- **Project Approval Findings**: Do we make findings and overriding considerations in decision making? Should include Draft Findings for PC review.
- **Development of Hybrid Project**: In providing guidance to Council, we need to come up with as much consensus at the PC as possible and urge City Council to do the same. Need to identify non-starters, for example, if the PC does not support MODA then take it off, and work on the things that can go forward. We should ask Council to reaffirm core assumptions for sustainability, goals, and objectives.

PLANNING COMMISSION MOTION

Motion: John Jostes/ 2nd Schwartz, carried by a vote of 5 to 1 (Lodge opposed, Jacobs not present)

Based upon the matrix in the packet, the Planning Commission supported the following changes:

1) **Congestion**: Robust TDM and Parking Pricing as being decoupled from the MODA;
2) **Targeted Growth**: Accommodate 100’ El Pueblo Viejo Historic Buffer Zone as presented by Staff, as well as special treatment of the area around the Presidio in order to insure preservation of the Presidio and its context;
3) **2nd Units**: Allow the possibility to move toward City-Wide/Relax Standards, only in cases where it does not create parking problems in single family neighborhoods and respects the overall FAR limitations that exist in the NPO;
4) **Rental Overlay**: 50% Density Increase;
5) **Inclusionary Housing**: 25% Requirement;
6) **Building Size; Bulk, Scale & Height Target**: 2-3 Stories with up with the possibility of going to 4 story with a super majority vote and specific findings of exceptional community benefit;
7) **Highest Density Residential**: Move to a 27-45 dwelling units/acre allowable density with the possibility of allowing up to 60 unites/acre with a super majority vote and specific findings of exceptional benefit.

Commissioner Lodge could only support second units as stated in middle column (near transit corridors downtown) but not citywide; could not support four stories, and felt that adequate density could be gained in three stories. Commissioner Larson supported the motion primarily to move the Plan along.

For City Council:
- Staff notes on Commission meetings to be forwarded to Council so they will capture diversity of opinion and extent of work.
- A refined update of the policy matrix.
- Meet with PC subcommittee before pulling together Council Agenda Packet.

Joint Meeting may be structured as follows:
- Tuesday, June 22 Eve (6:00 pm) – Presentation and public comment
- Wednesday, June 23 (1:00 pm) – PC and CC discussion.
Response to City Commission Comments Letter # C2 Planning Commissioners (Hearing of June 3, 2010)

C2-1: Thank you for your comments.

Historic Resources

C2-1 (Jordan) (Plan SB GPU): Comments are noted. Please see refinements to draft policies in the Land Use Element (LG14.5) and Historic Resources (HR5) to further address buffering of historic resources, and establishment of historic districts.

C2-2 (Jacobs) (Plan SB GPU): Comments are noted. Please see response to comment C2-1. New policy language includes protection of El Presidio de Santa Barbara State Historic Park, and all properties owned by the State are proposed for designation as Park on the General Plan Land Use Map. Re: Guidelines implementation funding and timing: the adoption process will take time; however, the City has multiple mechanisms in place along with proposed new policies to address potential issues in the interim. Please refer also to EIR Section 23, Mitigation Monitoring and Reporting Plan and Table 22.1 which identifies development of form-based codes during 2011-2016.

C2-3 (Larson) (Plan SB GPU): Comments are noted. Please refer to proposed GPU Historic Resources Element policies (HR1 Adaptive Reuse, previously numbered CH3) and various Housing Element policies addressing adaptive management.

C2-4 (Schwartz) (Plan SB GPU): Comments are noted. Please see responses to comments C2-1 and C2-2.

C2-5 (Jostes) (Plan SB GPU): Comments are noted. Please see response to C2-1 and C2-2.

Transportation

C2-6 (Jordan) (Plan SB GPU): Comments are noted. Parking pricing provides an improved assurance to customers that parking will be available near their destination.

(Jacobs) (Plan SB GPU): Comments are noted. Traffic Analysis Areas depict different areas in the City where existing land uses display different trip generation characteristics, based on their mix of land uses, the road system, proximity to other land uses, transit availability, etc. EIR Figure 16.4 is discussed in EIR Section 16.3.3 (Plan Santa Barbara Traffic Model/Development of the Forecast Volumes), as well as in Appendix I.

(Lodge) (Plan SB GPU): Comments are noted. It is expected that an expanded parking pricing program would focus on adding on-street parking pricing, but adjustments to garage parking pricing could be considered as well.

(Jostes/Jordan) (Plan SB GPU): Comments are noted.

Residential Density/Affordable Housing/Housing Target Areas

C2-7 (Jordan) (Plan SB GPU): The affordable housing that is being targeted is workforce housing including higher densities for rental housing and employer sponsored housing. Proposed Policy LG5.1 (Affordable Housing) would require development of standards to encourage affordable community benefit housing. Residential density provisions and any additional density allowances for rental and workforce housing will be established prior to adoption of the General Plan. However, additional densities provisions can be further considered at the time that Form Based Codes and standards for market rate housing are developed at a later phase.
# C2 Planning Commissioners (Continued)

**C2-8 (Lodge) (Plan SB GPU):** Comments are noted. The density allowed in Downtown is currently 15 to 27 dwelling units per acre. Land use density designations can affect land costs. Smaller affordable units could be expected to be attractive to a portion of the workforce. The City already has ample high-end units. The proposed density changes are being considered together with stronger design controls to ensure building size, bulk, and scale is compatible and protects community character.

**C2-9 (Schwartz) (Plan SB GPU):** Comments are noted. Price-restricted affordable housing units are price to be affordable to households with low and moderate incomes, defined by State Housing and Community Development to be those households with incomes of less than or equal to 120 percent of the area median income. The City recognizes the need for affordable housing for household income groups earning up to 200 percent of the area median income, which include middle and upper-middle income households, sometimes referred to as “work force” housing. To date, provisions that restrict affordability have only been applied to subsidized Housing Authority housing, not market housing. Density bonuses would continue to be applied in addition to base density.

**C2-10 (Bartlett) (Plan SB GPU):** Comments are noted. Please see response C2-7 regarding the type of affordable units the draft GPU policies are targeting. The average residential density table has been expanded to allow for higher densities the smaller the units. The GPU policies do envision smaller building envelopes to address compatibility and community character, but with greater densities through smaller units, and potential higher densities for community benefit residential projects.

**Jacobs (Plan SB GPU):** Comment is noted.

**C2-11 (Larson/Jostes) (Plan SB GPU):** Comments are noted. The City Transfer of Existing Development Rights (TEDR) program applies only to existing developed non-residential property or approved projects. Some communities have programs allowing transfer of development potential or “air space.” The City has not historically included transfer of air space rights, and there is no proposal to do so.

**C2-12 (Lodge/Larson/Jorden/Jostes) (Plan SB GPU):** Comments are noted.

**C2-13 (Larson) (Plan SB GPU):** Comments on the DEIR and Draft GPU received during the 60-day public comment period are responded to in the proposed FEIR with associated revisions to text and policies in the documents.

**Jostes** Comments are noted. Decision-maker findings will be required for certification of the EIR and adoption of the General Plan.

**C2-14 (Jostes/Schwartz) (Plan SB GPU):** Comments are noted. The action by the Planning Commission was forwarded to City Council.
City of Santa Barbara
Parks and Recreation Department

Memorandum

DATE: April 28, 2010
TO: City Council
Planning Commission
FROM: Parks and Recreation Commission
SUBJECT: Draft General Plan Update Comments and Recommendations

The Parks and Recreation Commission reviewed the draft General Plan and the Draft Environmental Impact Report (DEIR) at a special meeting on April 14, 2010, and has the following comments and recommendations to the City Council and Planning Commission.

Overall, the Commission believes that the draft General Plan policies are going in a good direction, since they identify desired neighborhood characteristics, such as enhancing physical and social connectivity, and provide for open space enhancement, local community centers, and pedestrian improvements. In addition, the Commission supports the overall sustainability framework of the draft General Plan.

The Commission has comments on a number of policies and issue areas, as outlined in the following bullets:

➢ Support the draft General Plan Open Space & Parks Element Policy OP1.1, Park and Open Space Standards and Planning. There is a critical need to establish standards that identify how many and what types of additional parks are needed in different neighborhoods.
   o Examples of park needs include the shortage of soccer fields, and need for small parks in dense neighborhoods.
   o The analysis in the DEIR does not thoroughly consider the potential variety of needs since it combines all park acreage to conclude that overall there is an adequate amount of park space.

➢ Support OP2. Open Space, Park and Recreation and Trails Acquisition and Maintenance Funding, including:
   o Development of Quimby Act funding (OP2.1). Quimby Act funding mechanisms have been very successful in other jurisdictions. It is especially needed for denser areas that need additional facilities.
   o Prioritize parkland and facility acquisition in under-served neighborhoods.
Funding to maintain park resources (OP2.2). For example, the Street Trees USA program requires expenditures of $2 per capita for a jurisdiction to receive the Tree City USA designation.

- Support Land Use Element Policy LG17. Sustainable Neighborhood Planning. Neighborhood plans should be a priority but should not preclude development of individual components (such as parks) separate from the planning process.

- Provide a stronger connection in the draft General Plan between the neighborhood planning policies in the Land Use Element and the Parks and Recreation policies.

- In Housing Needs section of the plan, identify needs for seniors with dementia and long-term care needs. Santa Barbara does not have adequate services.

- As part of the connectivity and transit policies, suggest that review of new development should consider transportation requirements to high schools to limit vehicle congestion.

The Commission also recommends that Planning Commission and the City Council prioritize a complete update of the Parks, Recreation, and Open Space Element and the parks and Recreation Master Plan.
Response to City Comments Letter # C3, Parks and Recreation Commission (April 28, 2010)

C3-1 (Plan SB GPU): Thank you for your comments. Your input is appreciated and your comments have been forwarded to decision makers.

C3-2 (Plan SB GPU and DEIR): Comments noted. More specifically identifying park needs will certainly be a part of implementing Policy OP.1 (Park and Open Space Standards and Planning), as well as part of the future update to the Open Space, Parks, Recreations, and Trails Element. As Sustainable Neighborhood Planning occurs in individual neighborhood areas of the City (Policy LG17), neighborhood-serving park and recreational services can also be addressed.

EIR Section 14.1.3 (Public Services Setting/Parks and Recreation) notes “that park and recreational service are sufficient overall, but not optimal in all park categories or locations….” Please also note the discussion in EIR Section 14.4 (Citywide Impacts to Public Services/Impact Serv-3: Parks and Recreation Services): “Future demand could also increase for specific recreational facilities such as sports facilities or ball fields that are currently near capacity.” EIR Table 14.6 (Impacts of Alternatives on Demand for Park Land) also identifies increased demand for seven different types of park facilities and identifies specific acreages of needed park land, including 17.55 acres of neighborhood parks.

C3-3 (Plan SB GPU): Comments noted.

C3-4 (Plan SB GPU): Comments noted. Also, please see edits to Land Use Element Policy LG10.1 (Multi-generational Facilities and Services) and Housing Element implementation action H6.3 (Upgrade Facilities for Seniors) to emphasize support for land uses and services for seniors with long-term care needs. Staff agrees that absence of preparation of a neighborhood plan would not preclude development of individual components such as a park.
MEMORANDUM

DATE: May 11, 2010

TO: John Ledbetter, Principal Planner

FROM: Rebecca Bjork, Water Resources Manager

SUBJECT: Transmittal of Water Commissioners’ Comments on the Draft General Plan EIR

Attached please find the comments of the Board of Water Commissioners on the Plan SB Draft EIR and Draft General Plan Policies. At their meeting of May 10, 2010 the Water Commission voted 5/0 to finalize and forward these comments.
General Plan EIR Comments Memorandum

To: John Ledbetter, Principal Planner, General Plan, City of Santa Barbara, Community Development Dept.

From: City Water Commission

Date: May 10, 2010

Re: General Plan EIR Comments

The Water Commission submitted a Comment Memorandum to the General Plan EIR Notice of Preparation that stated in part: "The Water Commission is very interested in the Water Supply section of the General Plan EIR and believes it will be a critically important water planning tool for the City at its publication and for the City's future. We hope that the Water Commission will be given the opportunity to be informed on, and have input to the Water Supply section of the document." We also pointed out that the City Charter states in relevant part:

"The Water Commission shall act in an advisory capacity to the City Council in all matters pertaining to the management and operation of the Water Department and water facilities of the City including development, production and use of water, operation of all dams and water facilities and recommend to the City Council plans, rules and regulations pertaining to the same."

The preparation and submittal of this Comment Memorandum is the Water Commission's first opportunity to formally participate in the General Plan process. These are our Comments to the EIR. We first address the EIR SUMMARY. We then address PUBLIC UTILITIES, Section 15. We conclude with some General Comments. We wish to point out that it is not our intent to challenge the legal adequacy of the EIR. We agree with the most important finding that the City has an adequate water supply to serve what we understand to be the Preferred Alternative, Plan Santa Barbara. In addition to being our first opportunity to participate in the General Plan process, we see this Comment Memorandum as fulfilling our advisory role under the City Charter as stated above, on this most important planning document. We believe these Comments facilitate the purpose of information dissemination to the decision makers and the public that is at the heart of an EIR.
EIR SUMMARY

p. 5 – **MAP** Cater, El Estero, Vic Trace Reservoir, and perhaps other water facilities are shown in light blue, which is indicated in the legend for both “Civic and Hospital” and “Public Schools.” However, the water facilities are not labeled. The Santa Barbara Mission (a Catholic church?) is the same color, as are several water bodies and the Pacific Ocean. Clearer labeling and perhaps an additional color are needed for water facilities.

p. 7 – **Discussion of Alternatives** Under “Lower Growth Alternative,” it states “Policies... include... to constrain traffic and parking effects and water use.” For the other two Alternatives no mention is made of water use. All three should have it for consistency.

p. 8 – **Areas of Known Public Controversy** includes bullets for “Reliability and sources of the City water supply” and “Water Quality effects from discharge of treated wastewater into the ocean” – no substantive comment, but for editorial style, the two bullets should be sequential.

p. 14 – **Biological Resources**, policies for Creek and Riparian includes “Protect Water Quality.” This apparently refers to surface water in creeks, but may be confusing in not being differentiated from “City water supply” and “quality of wastewater.” Also, the creek water in fact is used to recharge groundwater.

p. 16 – **Hazards**, policies for Wildland Fires – does NOT include subsidized ag rate water for avocado growers.

p. 18 – **Hydrology and Water Quality** “... to protect and improve surface and ground water quality...” Possible confusion with p. 14. “Ground water” (usually spelled as one word in the trade nowadays, e.g. Section 15.0) is not mentioned again, but a policy to “protect Water Quality” includes “establishment of additional... standards... and guidelines.” The connection of this to quality of the water supply is not clear.

p. 21 – **Public Utilities** – Longer discussion in 15.0 “... long-term water supply, be adequate... especially during droughts? “Policies... manage long-term water supply, expand... conservation and recycling.. avenues to store and purchase.” “... reduce future wastewater generation... by conservation... and gray water.” “... impacts less than significant.”

pp. 37-38 – **MM Bio-2** “... existing concrete lining shall be removed from creek channels...” This could impact groundwater recharge.

2.
15.0 PUBLIC UTILITIES

Introduction to Water Supply and Service

As an introductory Comment we note throughout the Water Supply Section discussion of future water supply strategies, plans and policies. We are not aware of the source of these discussions other than the Community Development Department staff identified as Report Preparers and the EIR consultant. These plans and policies are certainly not the product of this Water Commission or this City Council. We hope it is understood and agreed by all involved, the City Attorneys’ Office, Community Development Dept., Water Resources and the Council that in certifying the EIR and approving the General Plan, that these future water supply plans and policies are not considered binding on the City. The Council has already authorized and budgeted and we have made progress towards developing a new Long Term Water Supply Program (“LTWSP”). The last LTWSP was approved in 1994 and is outdated and that is why substantial financial resources, Commission time and staff resources are being dedicated to developing the new LTWSP. The new LTWSP should be complete and before the Council for approval after the General Plan is approved and we hope by the end of the year. The Water Commission will consider the full spectrum of future water supply plans and policies in developing the LTWSP. We will recommend a new LTWSP to the Council for approval after that informed consideration. We hope it will not be construed that the plans and policies discussed in this EIR will be considered binding on the City, and restrict the discretion of the Water Commission and the Council to potentially adopt different and alternative approaches, plans and policies in the new LTWSP. This issue should be expressly addressed and clarified in the Response to Comments and the Final EIR to help avoid any confusion on the issue in the future.
Table 15-2: Typical Water Supply and Demand

Comment: We will specifically address each of these Comments under the heading for each water supply source, below. These are the revisions we would propose for Table 15-2.

Gibraltar Reservoir 3,206 instead of 3,612
State Water 858-1,122 instead of 1,650
Groundwater 1,000 instead of 1,300
Recycled Water should be separately addressed from potable water supply

Total Potable Water Supply 14,766-15,030 instead of 17,064
Reserved for Safety Margin 1,477-1,503 instead of 1,706
Estimated Current Potable Demand 13,800 (13,200 through Potable System, 600 through Recycled System)

Available Surplus Without Safety Margin 966-1,230

Water Supply Sources

pp. 15-4—15-9

Lake Cachuma

Although we agree with using the contractual entitlement of 8,277 afy as the yield for Cachuma for the General Plan EIR it should be noted that the EIR identifies the fact that at the end of the planning period there will be reduction in yield of approximately 300 afy as a result of siltation. There are also challenges to Cachuma production from both the State Water Board Water Right hearings and the proposed Steelhead Recovery Plan. We are well represented in both forums and it would be speculative today to anticipate their outcome. There is no question that Cachuma production will never go up, and there is a possibility that it could go down.

Gibraltar Reservoir

As discussed in the EIR we are attempting to implement the Pass Through Operation for the first time. History should teach us that anticipating yield from a new operation on the Santa Ynez River is always a challenge and we should be conservative. Operations at Cachuma are
becoming increasingly complex. Downstream Water Right releases have first priority; environmental releases for fish and other environmental resources have the next priority; Cachuma operations and State Water operations must be accommodated; and then we will see how the Pass Through Operations will be implemented. We recommend using the yield figure found at Table 15.3 of 3,206 afy, instead of 3,612 until actual operations provide more reliable information.

The feasibility of sediment removal should be studied and if determined to be feasible, implemented.

**State Water Project**

Several studies are referenced in this Section. Glaringly absent is the Water Supply Planning Study prepared for the City by our consultant Carollo Engineers dated August 2009. The City paid well over $100,000.00 for this Study. A significant Section of the Study is the State Water Reliability Assessment. It is Carollo’s recommendation that the City use a reliability yield figure of a range between 26% - 34% of Table A amount, or 858-1,122 afy.

At the beginning of this Water Year DWR was proposing to deliver only 5% of Table A amount, the lowest in history. After the substantial and above normal rainfall and snowfall this winter and Spring, including the month of April, that has now been increased to only 40%. The State Water Project is facing tremendous challenges that will not be rectified any time soon. It is imperative that we be conservative in anticipating future State Water Project yield for land use and water supply planning purposes. The EIR’s use of a 50% reliability factor is difficult to understand at this point in history. It is our understanding that it is staff’s opinion that so long as the current restrictions on State Water pumping remain in place, that are the result of environmental litigation and at least two current Federal Court Orders, the maximum delivery the City should expect in any one year is 50%. Over the course of the 20 year planning period for the General Plan it is unreasonable to expect average annual deliveries to be 50% in light of these existing conditions. After the substantial investment the City has made in the Water Supply Planning Study, and absent any better information at this point, we recommend that the 26-34% range recommended in the Study be used by the City as the State Water Project reliability factor, rather than the 50% used in the EIR.

Although the Legislature has approved submission of a ballot measure to the electorate for the November election to approve bonds to initiate funding for Delta “fixes”, the success of that ballot measure in these economic times is anything but assured. Even if successful, the bonds would only provide the first increment of funding necessary to address the multitude of problems faced by the State Water Project. Preliminary estimates are that overall proposed
program costs would exceed $33 billion dollars. The ballot measure this year, if successful will only provide $11 billion. We can also anticipate lengthy litigation and regulatory challenges to the implementation of these plans. In a best case scenario, improvements to the State Water Project will not be operational to significantly increase anticipated yield, until after the 20 year planning period for this General Plan.

It is Commissioner Neustadt’s opinion that the City should use a reliability factor of 22%. The EIR at pp. 15-6 and 7 discusses anticipated yield during a critical drought and estimates average annual delivery at 22%. Historically the City has done its reliability planning based on critical drought year water supply. It is Commissioner Neustadt’s opinion that the 22% reliability figure should be used for the State Water Project for purposes of this General Plan EIR, with a yield of 726 afy.

**Groundwater**

The 1,300 afy figure used for the EIR is a maximum average long term production figure. We believe that over the course of the General Plan planning period it is more likely that the City will produce 1,000 afy on an average basis, which is more in line with historic production. Producing groundwater at a groundwater basin’s maximum safe yield may not be a prudent management approach. We are just now initiating a comprehensive groundwater management study with the USGS. When that Study is complete we should be better informed to address anticipated long term yield from groundwater production.

**Recycled Water**

We all support maximum use of recycled water. For purposes of full disclosure and information in this EIR we must discuss the fact that we currently have a water quality problem that, as discussed, requires significant blending of potable water in the system. We have approximately 800 afy of customer demand for recycled water. We use approximately 300 afy of water from the recycled system for effluent dilution process water at the wastewater facility. The system therefore has a current demand of approximately 1,100 afy. In the last Water Year we were required to blend approximately **615 afy of potable water** in the system, more than 50% of the demand. This is our current condition and the CEQA baseline. We do not know today exactly what needs to be done to rectify this condition; how much it will ultimately cost; nor when we can anticipate that it will be successfully accomplished. We fully support continued efforts to resolve the matter and we are confident that eventually it will be successfully addressed.

For these reasons and others we believe it provides a more accurate picture of our water supply condition to separate out recycled water supply and demand from potable water supply.
and demand when addressing these matters. Potable water and recycled water are in fact very different resources and they should be analyzed and quantified separately to give the decision makers and the public an accurate understanding of our current water supply and demand condition.

**Desalination**

It should be understood that the approximately $20 million re-activation cost stated in the EIR is in 2008 dollars and would be inflated to a present value figure if re-activation is actually required in the future. The entire discussion of rate impacts in the second paragraph under this heading found at p. 15-9 is based on information that the Water Commission has never seen. When doing that sort of analysis the assumptions used are critical to the result reached. How was it calculated to repay the $20 million plus, re-activation cost? How were those payments allocated? The 6% rate increase figure is not explained. The statement is made, “During the period of operation, drought surcharges equivalent to an additional average 16 percent increase would be required to fund operating costs.” We have no information on the basis for that discussion. Suffice it to say, re-activation of the Facility would be extremely costly and have a significant impact on water rates. We support maintaining the Facility as an emergency back-up water source (which costs us over $100,000.00 per year) and we hope that during the General Plan planning period it will not be necessary to implement re-activation.

If the Facility is activated to provide a regular supply of water, the capacity should be increased so that the emergency capacity is reserved for that purpose.

**Water Supply Planning Issues**

**State Water Project Reliability**

p. 15-10

In addition to the 2007 Wanger decision discussed here, in a separate Federal lawsuit Judge Wanger has issued a subsequent Order that has further reduced pumping and therefore, yield.

Please see our Comments above, on the State Water Project.

**Desalination**

p. 15-11

The document states that the Facility is considered as a feasible planned and funded water source. The re-activation costs are not currently funded and as discussed above, are prohibitive.
absent a serious emergency condition. If the Facility is proposed to be activated in the future, that would be the subject of a discretionary decision by the Council that would include a determination on how the re-activation cost would be funded and paid for.

**Reliability Improvements and Supply Augmentation**

pp. 15-11 and 12.

*Increased Carryover at Lake Cachuma; State Water Project Carryover; Water Banking.*

In considering the new LTWSP the Water Commission will study these and other approaches to water supply during times of shortage. These are not the exclusive approaches available for that purpose.

*State Water Project Conveyance Improvements.*

Please see our Comments, above, on the State Water Project.

*Expanded Recycled Water Use.*

We support prioritizing the remedy necessary to rectify our existing water quality problem with the Recycled Facility which is of course a prerequisite to expanding use.

*Sediment Removal at Gibraltar*

Increasing water storage at Gibraltar through sediment removal should be studied and if determined to be feasible, implemented.

**Water Demand**

p. 15-12 and 13

As discussed above, we believe it gives a more accurate picture of the City’s water supply and demand picture to separate out recycled water supply and demand, from potable. The City’s current potable water demand is approximately 13,800 afy, 13,200 through the potable system and 600 afy through the recycled system.

p. 15-13

Please see our comments above, regarding quantifying potable supply.
Table 15.3 Critical Drought Period Water Supply

p. 15-13, line items within Table 15.3

State Water, Non-Table A

This will be an area of study for the new LTWSP. The information stated here has not been studied and approved by the Water Commission or the Council.

Groundwater

These high production figures we understand will be sustainable after the current upgrades to the City's facilities are complete. The Water Commission has not been presented with the information to support these production figures at this time.

Desalination

This approach to drought water supply has not been studied and approved by the Water Commission. It will be one of the elements of the new LTWSP. It may be the case that there are more effective and much less costly means to supply water during a 5 year drought than re-activating and operating the Desalination Facility.

15.3 Public Utilities Impact Evaluation Methodology

p. 15-20

15.3.1 Project Components

Just to re-iterate, the Policies identified in the second paragraph of this Section are apparently the product of Community Development Dept. staff and the EIR consultant. They have not been adopted or approved by the Water Commission or the City Council. We hope and expect that the Water Commission and the City Council will have complete discretion to adopt these or other and alternative plans and policies in developing the new LTWSP.
15.4  Citywide Public Utilities Impacts

p. 15-22

IMPACT PU-1: FUTURE WATER SUPPLY AND DEMAND

Potential increase in water demand, and adequacy of water supply to support future growth.

Impact PU-1.1. Increased Demand and Existing Water Supplies.

p. 15-22

The residential demand figures in the first paragraph are based on new water duty factors that are less than those historically used by the City. The Water Commission was shown the Report (Appendix H, Public Utilities) that is the source of these new water duty factors but we were not asked to spend much time on it, nor to approve it. We hope they prove accurate. The same for the non-residential water duty factors addressed in the second paragraph.

pp. 15-22 and 23

The evaluation of supply and demand is not consistent with the Water Commission's Comments, above. It is our opinion that our potable water supply is in a range of approximately 14,766-15,030 a fy. Our current potable demand is approximately 13,800 a fy. Add the projected new demand from Plan Santa Barbara of 791 a fy for a future projected demand of 14,591 a fy. Although we agree with the finding that the City has an adequate water supply to serve Plan Santa Barbara, we do not concur with the comment that "and a substantial surplus would remain."

p. 15-23

Discussion of five year critical drought supply and demand.

Please see our Comments on water supply sources, above, and our Comments to Table 15.3 Critical Drought Period Water Supply, p. 15-13 above. We expect that the major revisions to the new LTWSP, from the 1994 document will be in the plans and policies to be proposed for dealing with drought water supply.
Impact Significance:

p. 15-24

As discussed here, we agree with the impact finding that the City has an adequate water supply to serve the projected water demand from implementation of Plan Santa Barbara. We do not agree with the approach used to analyze current supply and demand. It is our position that potable supply is in a range of 14,766-15,030 afy. Current potable demand is approximately 13,800 afy.

p. 15-24

Issues to be examined in the process of developing the new LTWSP.

The Water Commission intends to study these and other plans and policies that may be suggested by Water Commissioners, staff, consultants and the public.

State Water Project (SWP)

p. 15-25

Please see our Comments above on the State Water Project. This is obviously one of the critical issues to address in developing an accurate and conservative picture of our anticipated water supply for the General Plan planning period and we believe the 50% reliability factor used in the EIR is unreasonable in light of current conditions.

Desalination Plant

5-25

Please see our Comments, above, on Desalination. If the Plant is activated to provide a regular supply of water, its capacity should be increased so that the emergency capacity is reserved for that purpose.
Existing Policies and Programs

pp. 15-26 and 27

State Water Project Carryover; Groundwater Banking

Please see our Comments, above, to pp. 15-11 and 12 and to the State Water Project. These approaches will be studied as we develop the new LTWSP. These plans and policies are not in fact part of existing approved City policy. We have not yet had a great need to pursue these approaches but we will need to thoroughly investigate all such approaches as we plan for the future.

Recycled Water Expansion

p. 15-26

Please see our Comments, above, on Recycled Water. We support recycled water use expansion and that is why we must prioritize addressing the existing water quality problem. There is over 600 afy of potable water already at issue, in addition to the 300-400 afy in potential new customer use identified here.

"A conceptual demineralization project has been identified" to eliminate the use of potable water. What are the details? We do not recall hearing of this project. When? How much will it cost? What effect will it have on recycled water quality?

We should explore treating recycled water to a quality that can be injected into the groundwater basins as a supplemental supply. At the minimum use it as a barrier to salt water intrusion that will be exacerbated by sea level rise. These steps would greatly increase the use of recycled water and justify increased investment in the system.

Long Term Water Supply Program Update

p. 15-27

The EIR states: "Multiple scenarios will be investigated for cost-effectiveness, feasibility, and conformance with Plan Santa Barbara policies." We are not aware of these policies and we hope that it is not intended that they establish a criteria that must be conformed with, thereby restricting the discretion of the Water Commission and Council as we study the full spectrum of potential plans and policies as we develop the new LTWSP.
15.6 Comparative Impacts of Project Alternatives

p. 15-33

Table 15.4: Public Utilities Demand Under the Project and Alternatives

Please see our Comments, above, regarding new water demand, water duty factors, at p. 15-22.

15.6.3 Additional Housing Alternative

p. 15-36

We will leave it to the EIR consultant and staff to assess the finding on adequacy here in light of our prior Comments on available potable water supply. We do not agree with the finding stated that, “The City’s water supply would retain a surplus, in addition to the 1,705 AFY safety margin.”

15.7 Extended Range (2050) Public Utilities Impacts

p. 15-37

Water Supply and Demand

As discussed above, the supply and demand figures used in this Section are not consistent with our Comments here. At this time we believe it is premature for the Water Commission to address Extended Range issues in this Comment Memorandum. We will address Extended Range issues in the new LTWSP. We also note that the demand figures in Table 15.5 are based on the new, lower water duty factors discussed above at our Comments to p. 15-22.

15.9 Recommended Measures

p. 15-41

3. Sedimentation Projections and Management Opportunities.

Given the prospect of future intense rain events that will greatly exacerbate siltation of Gibraltar Reservoir and Cachuma Lake the removal of sedimentation should be prioritized. The State has recommended that more storage be created as water will come in intense bursts followed by periods of no rain. We should capture all the water we can for the short time it is available. Increasing water storage capacity and moving the sediment to the beach would benefit everyone in Santa Barbara County. How will a project or projects be initiated?
15.1.2 Wastewater Treatment

pp. 15-14 to 15-16.

Increased water conservation and diversion of gray water away from the collection system will pose challenges to the system. With less water in the collection system the percentage of solids will increase. During the last drought this led to problems in moving solids to the treatment plant. Additional collection system cleaning resources may be needed so we should budget and plan for that eventuality.

Lower water flows may also have an impact on the treatment plant. We should ask about their experience during the last drought.

We see no discussion of bio-solids. Unless we can divert them to a useful use (i.e. composting) we face the prospect of continuing to transport them to landfills or land application. Both of these methods are being limited over time as no one wants bio-solids so the cost of disposal will continue to rise or worse we will have no place to dispose of them. We need to plan and budget for future difficult bio-solids disposal.

El Estero is located at a low elevation. In the past it has become an island during big rain events. We must plan and budget for the eventuality that rising sea levels and intense rain events will cut off the plant and maybe even cause it to fail.

Cross Connection Program

There is no mention of the current or future cross connection program(s). With gray water storage and use on site and recycled water use in more buildings the cross-connection program becomes even more important than it is today. It is not a big dollar item, but it is very important.

General Comments

Certain Commissioners believe the City should pursue an agreement with the Montecito Water District that would allow the City to have exclusive jurisdiction over the approval of water service to those properties that are in the City limits, but are currently served by the Montecito Water District (MWD), primarily on Coast Village Road and properties in that vicinity. Such an agreement could provide a water credit to MWD for water used in that area so that such service would have no impact on MWD water supplies, and eliminate the current problem of

14.
having joint jurisdiction over new development approvals in that area. The water supply and demand impacts, which should be relatively minimal, would need to be quantified.

At some point in time during the General Plan planning period the similar, so called “Overlap” issues with the Goleta Water District should be resolved.

**Cross Connection Program**

There is no mention of the current or future cross connection program(s). With gray water storage and use on site and recycled water use in more buildings the cross connection program becomes even more important than it is today. It is not a big dollar item, but it is very important.
Response to City Comments Letter # C4, Water Commission (May 10, 2010)

C4-1: Thank you for your comments. Please refer to February 10, 2010 memo to City Council from Rebecca Bjork and John Ledbetter detailing the numerous opportunities and instances of coordination and formal participation in the General Plan process by the Water Commission over the past several years.

C4-2: Comments noted. Please see discussion below:

- **Map:** The proposed General Plan Land Use Map has been edited to label and represent all institutional facilities as one light blue color. Please see revised map.

- **Alternatives:** Comment noted. The Lower Growth Alternative was specifically crafted to address the listed issues; the other alternatives were not.

- **Public Controversy:** Comment noted.

- **Biological Resources:** Comment noted. The title and discussion refer to “additional water quality and creek protection and restoration standards…”

- **Hazards:** Comment noted. Agricultural water rates are not discussed in the EIR Summary or EIR Section 11 (Hydrology and Water Quality).

- **Hydrology:** Comment noted. Water quality/pollution concerns are addressed in this EIR section, but are also applicable to biological resources. Water issues overlap with a number of other environmental issues. This issue is not specifically related to water supply. Please note use of “groundwater” spelling in revised text.

- **Public Utilities:** Comment noted.

- **MM BIO-2:** Comment noted. Such impacts would most likely be beneficial; however, there is some debate whether increased recharge associated with removal of concrete lining would be a net benefit to groundwater supplies or whether benefits would be negated by increased discharge from the shallow (and possibly deep) groundwater.

- **RM HAZ-3 Wildland Fires:** Comment noted.

- **RM HYDRO-2:** Comment noted. The City owns and manages El Estero Wastewater Treatment Plant.

- **RM PU-1 Future Water Supply and Demand Protection:** Comment noted. Please see revision.

C4-3: Comment noted. The Water supply section of the EIR was prepared by AMEC in consultation with the City Community Development Department and Public Works Department Water Resources Division. The analysis is based upon existing City documents such as the Long Term Water Supply Program (LTWSP) and the Urban Water Management Plan Update, State documents such as the State Water Project Delivery Reliability Report and the Water Supply Planning Study prepared by Carollo Engineers for the City. The recent City water supply consultant studies have been provided to and discussed at the Water Commission, and are expected to also be referenced in detail during the upcoming LTWSP update. Based on these and other studies, the EIR sets forth a detailed projection of long-term water supply and demand. Because substantial newer information on both supply and demand are available, these projections differ from those in the adopted LTWSP; however, the basic water supply planning policy framework from the adopted LTWSP remains the policy principle guiding this analysis.
# C4, Water Commission (Continued)

Upon certification, the City will deem this analysis adequate and complete for purposes of environmental review requirements of the General Plan update, including the EIR’s assessment of the adequacy of long-term water supplies. The City will be bound by this information to the extent it is reflected in adopted General Plan policy. It would be anticipated that the following planning work to update the LTWSP would provide additional detailed analysis and policy refinement for water supply management beyond the General Plan EIR analysis and broad General Plan policies. To the extent the updated LTWSP digresses from the analysis provided in the EIR, additional environmental review could be required if new potentially significant environmental impacts could be associated with any such changes. However, based on the findings of any future required environmental review, the City Council retains broad discretion to amend or alter different approaches, plans, and policies within a new LTWSP.

C4-4: Comment noted. Please see the responses outlined for each water supply source below. As noted above, analysis of projected available water supplies is based upon the general policy direction approved by the Water Commission and City Council in the adopted LTWSP, but accounts for the best information available from new sources of information published since publication of the 1994 LTWSP.

Lake Cachuma: Comments noted. Please refer to recommended measure RM PU-1(3), which identifies the need to assess sediment removal/management at Lake Cachuma and Gibraltar Reservoir.

Gibraltar Reservoir: Comment noted. While it is appropriate to be conservative in an EIR, the projected yield from Gibraltar Reservoir of 3,612 acre-feet per year (AFY) is already a conservative estimate, as described in EIR Section 15.1.1 (Water Supply Sources/Gibraltar Reservoir). The figure of 3,206 AFY from Table 15.3 is projected yield during the first year of a drought. Basing long-term average year yields of a key water supply source on drought year yields is inappropriately conservative as it effectively adds yet another buffer onto the City’s already cautious 10% drought buffer. Prudent management of available supplies is balanced with planning for water availability during critical droughts. Unnecessarily constraining typical available supplies based on drought year yields would constitute a policy shift from the existing City Council approved LTWSP, which uses the 10% drought buffer to account for variations in yields. Such a shift in policy also goes beyond CEQA requirements to employ a reasonable worst case analysis.

Please refer to mitigation measure RM PU-1(j) which identifies the need to study and possibly pursue sediment removal/management from Lake Cachuma and Gibraltar Reservoir.

State Water Project (SWP): Comment noted. Please see EIR Section 15.1.1 (Water Supply Sources/State Water Project) for expanded discussion of the Water Supply Planning Study analysis of SWP reliability. The distinction between assumed SWP deliveries during normal and drought years is important in identifying reasonable, conservative assumptions. Carollo Engineers and the principle author of the SWP chapter of the Water Supply Planning Study have confirmed that estimates of deliveries during two-year droughts are appropriate for a critical drought period, but not for typical/non-drought years. DWR’s latest draft SWP Delivery Reliability Report projects median deliveries of 63 to 65 percent of Table A amounts. To reflect recent experience, the EIR analysis assumes typical deliveries would be 50 percent during typical non-drought years. DWR’s draft report projects 32 to 36 percent average annual deliveries during a six-year drought, and Carollo Engineers recommends using a range of 26 to 34 percent. The EIR estimate assumes an annual average of 22 percent during multi-year droughts. Regarding potential improvements to SWP reliability from various Delta fixes, the EIR projections do not assume any of these will be in place during the 20-year planning period.
Groundwater: Comment noted. The figure of 1,300 AFY represents the City’s portion of the safe yield of Storage Unit #1 and the Foothill groundwater basin of 1,800 AFY. The projected figures of long-term groundwater yields reflect improved City management of its groundwater resources through conjunctive use and creation of a more sustainable well field positioned to maximize groundwater yields while minimizing potential for seawater intrusion. Basing estimated long-term groundwater supplies on historic pumping ignores these changes in management practices and the accepted approach of using groundwater basin safe yields as an appropriately conservative approach for water planning. However, seawater intrusion is an additional factor in Storage Unit #1, and plans to pump safe yield on a prolonged basis need to be tested by USGS modeling, consistent with Recommended Measure PU-1.6 (Future Water Supply and Demand Protection/Groundwater Management Analysis).

Recycled Water: Comments noted. Please see text revisions. The LTWSP treats recycled water as part of the City’s long-term water supply. Recycled water demand is identified as 800 AFY because this is the connected customer demand on the recycled water system. Similarly, potable demand is identified as 13,200 AFY from potable connections. As noted in the comment, it is important to recognize that this presently is met in part with potable water used for blending, which is described in the EIR Section 15.1.1 (Water Supply Sources/Recycled Water). It appears unnecessarily complex and confusing for report reviewers to separate out this water source. Rather, as with other water supply sources, the EIR characterizes the issues facing this supply source, but accounts for it within the City’s total water supply. The Water Commission may want to recommend a different policy approach to the City Council as part of the next update of the LTWSP.

Desalination: Comments noted. A correction has been made in EIR Section 15.1.1 (Water Supply Sources/Desalination) to note that the reactivation of the facility is not currently funded, but is within the capability of the City to fund. Regarding costs and rate impacts of reactivation, the EIR contains updated information on costs and rate impacts based on capital cost of $17.7 million to reflect that the required distribution system improvements are now planned to move ahead in the near term, based on benefits to the overall operation of the system. The annual debt service cost is derived from a standard amortization calculation of a $16.2 million financing with a 20-year term and 5% interest. The financed amount is based on $17.7 million capital cost, less the available $3 million desalination reserves, plus 10% costs associated with bond issuance. A rate increase of 5% to cover the debt service component is calculated as the quotient of added debt service of $1.3 million divided by projected revenues of $28.5 million, including an assumed 10% demand reduction. Operating costs are calculated as 3,125 AFY times $1,470/AF, or $4.6 million per year, which is 16 percent of $28.5 million.

As discussed in EIR section 15.1.1 (Water Supply and Service) and Table 15.1, the City has completed over $120 million in improvements to its water supply system. Desalination is a relatively expensive water source, however it is expected to be within the financial capability of the City to reactivate and utilize this supply source if required. The public, City Council, and Water Commission will have the opportunity to more fully consider this matter and related policy issues as part of the update of the LTWSP.

If reactivated in its current configuration, the Desalination Facility could have a capacity to produce 3,125 AFY. This level of production could both meet extended drought demand and, if determined appropriate by City decision-makers, provide a significant component of ongoing water supply without expansion of the facility. As noted in the EIR and discussed in the Water Commission comment letter, the City currently has adequate supplies from other sources to meet increased demand associated with projected growth under the proposed Plan Santa Barbara General Plan Update, even if the Desalination Facility is not expanded.
# C4, Water Commission (Continued)

**C4-5:** Comments noted. Note that EIR Recommended Measure PU-1 (Future Water Supply and Demand Protection) suggests adding detail to the General Plan Public Services Element policies regarding assessment and coordination with other agencies on sediment removal from reservoirs.

**C4-6:** Comment noted. Please see response C4-4 above.

**C4-7:** Comments noted. Please see response C4-4 above. Consideration of alternatives to desalination, as well as other current water supply policies, is the specific intent of recommended measure RM PU-1 in EIR Section 15.9 (Recommended Measures).

**C4-8:** Comments noted. The policy contents of this section have been initiated by the Planning Commission and City Council as part of the public draft of Plan Santa Barbara. All policies will be subject to final review and approval by the City Council. Although discretion would remain to interpret these policies, after adoption, future changes to these policies would require an amendment to the City’s General Plan. Please see also response C4-3 above.

**C4-9:** Comments noted. Please see detailed responses below.

**Impact PU-1.1 (Future Water Supply and Demand/Increased Demand and Existing Water Supplies):** The updated water demand figures were compiled based on actual 2006 and 2007 aggregate consumption data for City water customers. The City’s former water demand factors were based on a 20-year-old study reflecting the state of water use efficiency in place at that earlier time. The updated water demand factors provide a basis for continuing demand management analysis as part of the LTWSP update and over the 20-year planning period. The Water Commission will be able to continue to review these demand projections in additional detail during the development and adoption of the updated LTWSP.

In regards to evaluation of supply and demand, please see response C4-4 above and the revised text in Section 15.1.1 of the EIR.

**Discussion of five year critical drought supply and demand:** Comments noted. Please see response C4-4 above.

**C4-10:** Comments noted. Please see responses C4-4 above and the revised text in Section 15.1 of the EIR.

**C4-11:** Comments noted, please see detailed responses below.

State Water Project: Please see response C4-4 above and the revised text in Section 15.1 of the EIR.

Desalination Plant: Comment noted. Please see response C4-4 above.

**C4-12:** Comments noted. Please see detailed responses below.

State Water Project Carryover; Groundwater Banking: Comments noted. These sources are included because water supply availability and planning has evolved considerably since adoption of the 1994 LTWSP. The comment regarding the need to investigate such approaches is consistent with the language of the draft GPU water supply policies and EIR water supply analysis and recommended policy additions. Please also see response C4-4.

Recycled Water Expansion: Comments incorporated. Please see revised text under Impact PU-1.2 (Reliability of Future Water Supply). The conceptual water quality improvement project is summarized in EIR Section 15.1.1 (Water Supply/Recycled Water). For further information, see page 4-59 of the Water Supply Planning Study (City of Santa Barbara, 2009b) or page 6 of the November 2009 Staff Summary: Water Supply Planning Study.
# C4, Water Commission (Continued)

**Long Term Water Supply Program Update:** Comments noted. Please see draft Public Services and Safety Element policies PS4 through PS6 which address Water Supply and Wastewater. Please also see response C4-3 above.

**C4-13:** Comments noted. Please see response C4-4 and C4-9 above.

**C4-14:** Comments noted. Please see response C4-9 above.

**C4-15:** Comments noted. Please see draft General Plan policy PS6 (Citywide Public Utilities Impacts/Impact PU1.1-Increased Demand and Existing Supplies) and Implementation Action 6.1 (Gibraltar and Cachuma Reservoirs). The EIR’s Recommended Measure PU-1 calls for consideration of these issues as part of the LTWSP update. As part of this process, the Water Commission would provide recommendations to staff and City Council to initiate the regional coordination necessary to protect and enhance these reservoirs.

**C4-16:** Comments incorporated. Please see revised text in Section 15.1.2 (Public Utilities Setting/Wastewater Treatment).

**C4-17:** Comments incorporated. Please see revised text in Sections 15.1.1 (Public Utilities Setting/Water Supply) and 15.4 (Citywide Public Utilities Impacts/Impact PU1.1-Increased Demand and Existing Supplies).
CITY COMMENTS LETTER # C5

City of Santa Barbara
Parks and Recreation Department

Memorandum

DATE: May 12, 2010

TO: City Council, Planning Commission, and Parks and Recreation Commission

FROM: Creeks Restoration and Water Quality Improvement Program Citizens Advisory Committee

SUBJECT: COMMENTS AND RECOMMENDATIONS FOR "PLAN SANTA BARBARA" GENERAL PLAN UPDATE

The Creeks Restoration and Water Quality Improvement Program Citizens Advisory Committee (Committee) appreciates the opportunity to provide written comments on the Draft Environmental Impact Report (DEIR) and proposed policy amendments prepared as part of the "Plan Santa Barbara" General Plan Update.

The Committee has been active in the "Plan Santa Barbara" process for several years. In November 2007 and August 2008, the Committee conducted public hearings regarding "Plan Santa Barbara" documents and subsequently provided specific written input to the Planning Division and Park and Recreation Commission. The 2007 and 2008 comment letters focused on priority creek and ocean-related issues, policy considerations, and suggestions for the scope of environmental review. We are pleased to recognize that staff and the City’s consultants incorporated the Committee’s comments into the March 2010 proposed general plan policies and DEIR.

On April 21, 2010, the Committee conducted a public meeting to discuss the proposed policy amendments and DEIR. In addition to receiving a presentation from John Ledbetter, Principal Planner, the Committee discussed the proposed policies and DEIR, and suggested that the Watersheds Subcommittee schedule a follow-up meeting to prepare a draft comment letter for review and approval of the full Committee at its May meeting. The Committee met again on May 12, 2010, finalized this comment letter and the suggested policy language revisions (attached), and unanimously requested that it be forwarded to the Parks and Recreation Commission, Planning Commission, and City Council.

The attachment includes suggested additions, modifications, and clarifications to proposed general plan policies within the jurisdiction of the Committee. Following the suggested policy language, the Committee included language from the DEIR that is
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May 12, 2010
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relevant to and supports the Committee’s proposed modifications. In addition to the
attached comments regarding specific policy language, the Committee makes the
following general comments:

- The Committee supports the “Lower Growth” and “Plan Santa Barbara”
  alternatives to the extent that they will reduce adverse impacts to water
  quality, creeks, and riparian habitat. If the City proceeds with some or all
  of the “Plan Santa Barbara” alternative, the Committee recommends
  inclusion of the specific policy language identified in the attachment to this
  letter.
- If the proposed general plan policies are going to be considered as
  mitigation for future development under any of the four alternatives, then
  implementation of those policies must be mandatory ("shall") rather than
  discretionary ("should"), and must be in place before the development
  causing the adverse impacts is approved and constructed. The
  Committee recommends that all "Mitigation Measures" proposed in the
  DEIR be in place within two years of certification of the EIR or adoption of
  the revised policies. The Committee further suggests that all
  "Recommended Measures" proposed in the DEIR be in place within five
  years of certification of the EIR or adoption of the revised policies.

Cc:  Nancy L. Rapp, Parks and Recreation Director
     Jill E. Zachary, Assistant Parks and Recreation Director
     Paul Casey, Assistant City Administrator/Community Development Director
     Bettie Weiss, City Planner
     John Ledbetter, Principal Planner
     Barbara Shelton, Project Planner

Attachment
Open Space, Parks, Recreation and Trails Policies

OP1. Variety and Abundance. Provide ample open space through a variety of types, including nature reserves, parks, beaches, sports fields, trails, urban walkways, plazas, paseos, pocket parks, play areas, gardens, and viewpoints, consistent with standards established for this city.

Implementation Actions

OP1.1 Park and Open Space Standards and Planning. Establish or update standards for:

- The number of acres for each type of open space per increment of population (e.g., 1,000 residents) appropriate for Santa Barbara;
- Optimal walking distances to parks, recreational areas and gardens, including pocket parks and small play areas; and
- Types of open space, parks or recreational facilities to satisfy different needs, or appropriate in different locations (e.g., multi-purpose pocket park for infill vs. total lot in single family residential neighborhood) suitable for the demographics of each neighborhood. (LG16)

- Protecting view corridors to creeks and riparian areas.

Using these service ratio standards, develop accessibility goals, identify facility deficiencies, establish priorities, and determine options for addressing needs, such as through joint use (and funding) of school districts' recreational facilities. (LG16)

OP1.3 Protect Contiguous Open Land. All new development within identified key open space areas shall be sited and designed to preserve contiguous tracts of open space and connectivity with open space on adjacent parcels. “Connectivity” includes connected habitats and wildlife corridors. [MM VIS-1]

OP1.4 Public Lands. As part of the next Recreation Facilities Master Plan Update and/or in each Sustainable Neighborhood Plan, identify all publicly owned vacant or underutilized property (e.g., park lots, road rights of way, etc.) and assess the potential for conversion of all of a portion of these properties for park, open space, and recreational use, such as pocket or neighborhood park, play area, plaza, public seating area, trail or community garden, habitat restoration, and/or other publicly accessible green space, as well as water quality improvement projects.

OP1.5 Community Gardens on Vacant Land. Establish a program for use of vacant or underutilized properties for temporary community gardens throughout the City, to enable residents who do not have access to land to grow food, orchards or other crops. (See also Policy ER34.) (LG18) Community gardens shall not be sited within a creek setback.

OP2. Open Space, Park, Recreation and Trails Acquisition and Maintenance Funding. The City shall develop a variety of ways and options to support acquisition and maintenance of public open space, and new development and re-development shall contribute commensurate with the incremental need generated.

OP2.2 Maintenance Funding. Develop funding mechanisms for maintaining public parks, recreational facilities and/or usable open space in the urban core. Require a contribution...
Relevant and Supporting DEIR Information

Potential for future new development to lead to loss or fragmentation of important open space areas.

The majority of the City is built out, and most substantial existing open spaces are already protected under public or private ownership such as Parma Park, the Montecito Country Club or the Douglas Family Preserve. However, some larger areas of open space exist in the Las Positas Valley, foothills, and on Mesa and Riviera hillsides, with smaller pockets at scattered locations along major creeks, which may be subject to incremental future development under Plan Santa Barbara. Such development could result in incremental loss of open space, and fragmentation and disruption of open space corridors as discussed below. (DEIR page 13-20).

Creek Corridors. The ribbons of wooded corridors that extend through many City neighborhoods provide an important open space resource in these areas. Incised stream channels lined with mature trees, often native oaks and sycamores, provide openness amid urban development in many neighborhoods. Although potential for new development along creek corridors is limited, the potential impact to open space resources is high due to scenic nature of creeks, their importance as open space in individual districts and neighborhoods citywide, and the potential for new development to disrupt or eliminate these open space characteristics or to separate the community from creek corridor open space.

Increased development of limited remaining open lands in the City could result in potentially significant impacts associated with loss or fragmentation of larger open spaces due to residential, institutional or recreational development and incremental potential degradation of the City’s scenic hillside backdrop, or loss of smaller but scenic open spaces such as creeks, urban canyons, etc. As discussed above, the potential for impacts is particularly high in areas within larger open tracts of land in the Las Positas Valley and foothills and on the steep highly visible slopes of the Mesa and Riviera. (DEIR page 13-21).

Proposed Policies: Proposed Plan Santa Barbara policies that most directly address protection of open space resources include ER40-Scenic View Protection, which requires adoption of policies to protect scenic views and ER41-Visual Resource Protection, which requires that the update of the General Plan require new development to protect scenic resources (e.g., creeks, trees, etc.). Policy ER22-Native Species Habitat Planning would benefit open space resources through protection of scenic native habitats, and Policy LG17-Park, Recreation and Open Space Acquisition and Maintenance Funding (e.g., Quimby Act funding) could provide funds for open space purchase and protection. These policies would further protect open space, and the Adaptive Management Plan would provide a vehicle to review and adjust policies to further open space protection.

Impact Significance: Existing City policies and regulatory processes provide a framework for preservation of the integrity of open space resources. Additional Plan Santa Barbara policies
Climate Change Policies

ER1. Climate Change. Private development and public facilities and services shall incorporate measures to minimize contributions to climate change and to adapt to climate changes anticipated to occur within the life of each project.

Implementation Actions

ER1.1 Comprehensive Climate Change Action Plan. Within two years of adopting this policy, prepare a comprehensive climate action plan, toward compliance with AB32, to address climate change concerns including reducing greenhouse gas emissions, green-house gas absorption, and adaptation to climate change. The climate action plan will include evaluation of community energy use (i.e., energy used by buildings and infrastructure); waste and recycling; water and wastewater systems; transportation; importance of natural creeks and wetlands to assimilate wastes and pollutants, absorb flood flows, and provide wildlife habitat; and community design. (ER3) Include objectives and indicators in the Adaptive Management Program to monitor greenhouse gas emissions, and natural phenomena related to climate change, such as sea-level rise, weather patterns, and wildlife behavior.

All elements of the General Plan will identify which specific policies contribute towards the reduction of greenhouse gases. (Green house gases include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons and perfluorocarbons, among many others.) (ER3)

ER1.3 Urban Heat Island Effect. Improve carbon sequestration and reduce the urban heat island effect by:

a. Amending the Zoning Ordinance within two years of adopting this policy to establish standards that decrease impermeable surfaces and building areas relative to lot size;

b. Increasing vegetation on private and public property, especially with suitable tree species, as appropriate (e.g., does not increase fire hazards), and include an objective in the AMP with a goal of planting 10,000 additional trees in the city by 2030 (note: 1,000 trees can sequester approximately 22 metric tons of CO2e per year). (RM Climate-1)

c. Providing incentives such as expedited permitting for building projects that incorporate green roofs; and
Relevant and Supporting DEIR Information

The surface water in City creeks, as well as coastal beach water, have at times harbored levels of pathogens (e.g., bacteria, viruses) not meeting adopted water quality protection standards. The City has undertaken a wide range of measures to improve water quality in the area, which have resulted in dramatically improved conditions and reduction in instances of inadequate water quality.

Global climate change is projected to adversely affect surface water quality due to changing temperatures, decreased stream flow, runoff rates and timing, increased flooding, and the ability of watersheds to assimilate wastes and pollutants (Willkinson 2002; DWR 2005). Higher temperatures and nutrient loads could reduce the oxygen content of water, negatively affecting aquatic organisms. More intense rain events could result in greater amounts of sediment, nutrients, pathogens, and toxic inputs into water bodies from non-point sources (i.e., urban runoff). (Gray et al. 2008). These factors could adversely affect water quality in City creeks such as Arroyo Burro and Mission creeks, and downstream beaches such as East Beach and Arroyo Burro (Hendry's) Beach (refer to Section 11.0, Hydrology and Water Quality). Sea level rise could also increase the risk of saltwater contamination at the SWP supply intake in the Sacramento-San Joaquin Delta, and intrusion into coastal aquifers such as the City groundwater basin (Wilkinson 2002). Refer to Section 11.0, Hydrology and Water Quality for more information on existing water quality and the potential influences of global climate change.

Overall, the implications of global climate change for the City's water supply and the quality of water in area rivers and creeks are likely to be adverse; however, existing policies and programs aimed at maintaining safe yields, identifying new sources, and encouraging conservation would help offset potential reductions in traditional City supplies or reductions in water quality. (DEIR pages 18-5 and 18-6).

Flood hazards in the City are largely related to the floodplains associated with Mission Creek in portions of Downtown, from the Laguna Channel and Sycamore Creek on the City's Eastside, and from Arroyo Burro Creek in the Upper State Street and Hitchcock Avenue areas and along Modoc Road. (DEIR page 18-6).

Global climate change has the potential to increase both the frequency and severity of flooding from the City's creeks in several ways. First, increasingly erratic weather patterns are projected to result in an increase in high magnitude rainfall events, with possible increased flood flows, and the associated potential for an increase in the depth and velocity of floodwaters, resulting in a larger area subject to flooding. (DEIR page 18-6).

Second, increased fire frequency and severity could increase the vulnerability of areas downstream from burned watersheds in the Santa Ynez Mountains due to more rapid runoff from denuded watersheds and obstruction of creek channels by debris flows. Further, these two factors could
Third, as described below, rising sea levels could exacerbate existing backwater effects along lower Mission and Sycamore Creeks and particularly the Laguna Channel, causing periodic increases in the back-up of flood waters into developed areas of the City. Backwater flooding is an existing issue in lower-lying areas of the City and has been identified as a global climate change-related issue of concern in low-lying coastal areas (Florsheim 2004). In addition, if it becomes necessary to alter Lake Cachuma’s operations to emphasize water supply retention in wet years as opposed to flood control, such changes in operating rules may occur at the expense of some potential for increased flooding outside the City along the lower Santa Ynez River. Refer to Section 11.0, Hydrology and Water Quality for a discussion of existing flood zones. (DEIR page 18-6).

Overall, implications of global climate change for biological resources would be adverse and potentially considerable, especially for certain sensitive species that are not able to easily shift their range. Particular strategies for aiding species to adapt to global climate change may vary; however, preserving larger contiguous habitats and linkages between habitats may aid in species adaptation and migration. For aquatic species in area streams such as the southern steelhead, minimizing water withdrawals to maintain stream flow, and preserving or restoring riparian woodland to provide shade and cover may assist such species in adapting to changes in stream flows. However, there are no guaranteed methods to fully offset global climate change impacts on individual species; only substantial reductions in existing and future GHG emissions would arrest or reverse future global climate change impacts on biological resources. (DEIR page 18-15 and 18-16).

Biological Resources Policies:

ER12. Native and Other Trees and Landscaping. Protect and maintain native and other urban trees, and landscaped spaces, and promote the use of native or Mediterranean drought-tolerant species in landscaping to save energy and water, incorporate habitat, and provide shade. (ER17)

Implementation Actions

ER12.1 Tree Protection Ordinance. Within two years of adopting this policy, update ordinance provisions to protect native oaks and other native or historic and non-invasive exotic trees. (ER17)

- New development shall be sited and designed to preserve existing mature healthy native and non-native trees.
- Within two years of adopting this policy, the City shall modify existing tree protection ordinances to require protection of all native trees larger than 6 inches in diameter at a height from ground of 4.5 feet (this would include multi-trunk oak trees with a cumulative diameter of 6 inches and at least one trunk greater than 3.5 inches) where such trees are located within native habitat areas or wildlife corridors (e.g., riparian corridors). Native specimen trees outside such habitat shall be protected. Ordinance modification should also clarify protection standards for large...
ER12.2 Urban Tree Protection and Enhancement. Within two years of adopting this policy, create a City-wide enforcement and mitigation program for removal, severe pruning without a permit, or neglect, of protected trees (street trees, trees in front yards, native trees in wildlife corridors, and historic or otherwise designated trees). In accordance with state and federal law, no mechanized pruning shall be permitted during bird nesting season without a prior biological survey. (ER18)

ER12.3 Oak Woodlands. Avoid development in oak woodlands to the greatest extent possible without affecting a regulatory taking of private property. Within and adjacent to oak woodlands:

- Avoid removal of specimen oak trees;
- Preserve and protect oak saplings and native understory vegetation within areas planned to remain in open space;
- Provide landscaping compatible with the continuation and enhancement of the habitat area, consisting primarily of native species and excluding use of invasive non-native species;
- Include conditions of approval for habitat restoration of degraded oak woodlands where such development creates direct or indirect impacts to the affected habitat. [RM BIO-11]
- Prohibit installation of high water use vegetation (e.g., lawn) under the drip line of oak trees.

ER12.4 Riparian Woodlands. Avoid development in riparian woodlands to the greatest extent possible without affecting a regulatory taking of private property. Within and adjacent to riparian woodlands:

- Avoid removal of specimen riparian trees;
- Preserve and protect riparian tree saplings and native understory vegetation within areas planned to remain in open space;
- Provide landscaping compatible with the continuation and enhancement of the habitat area, consisting primarily of native species and excluding use of invasive non-native species;
- Include conditions of approval for habitat restoration of degraded riparian woodlands where such development creates direct or indirect impacts to the affected habitat.

ER13. Wildlife and Native Plant Habitat Protection and Enhancement. Protect, maintain, restore, and expand the City's remaining diverse native plant and wildlife habitats, including ocean, wetland, coastal, creek, foothill, and urban-adapted habitats. (ER19)

Implementation Actions

ER13.1 Designate Habitats. Within two years of adopting this policy, map and designate important City upland habitats and wildlife corridors that merit long term protection.
enhancement, and preservation for habitat and wildlife values. Include criteria and monitoring objectives such as large areas of contiguous coastal sage scrub (generally five acres or greater), oak woodlands (generally one-half acre or greater), perennial grasslands (generally 0.25 acres or greater), annual grasslands (generally five acres or greater), and important wildlife movement corridors including creeks and tributaries. (Refer to Figure 7.1 in EIR and MM VIS-1). [MM BIO-1 a] 

ER13.2 Multi-Use Plan for Coast. Within two years of adopting this policy, develop updated multi-use plans and monitoring guidelines for beaches and other coastal areas to provide for both recreational use and protection of coastal habitats and wildlife/native plant species. (ER21)

- Within two years of adopting this policy, establish a Waterfront habitat and wildlife management program that provides measures to improve the extent and quality of native coastal habitats within the City waterfront, with the following objectives:
  - Restoration of coastal dune habitat along the City waterfront, including the removal of non-native and/or invasive plants.
  - Restoration and enhancement of the estuaries of Mission and Sycamore creeks and the Laguna Channel, including appropriate revegetation of estuary margins, and removal and control of invasive species. Measures should be considered to enlarge these estuaries where feasible to maximize biological production and ecological function, taking into consideration the dynamics of ocean waves and currents, and ongoing movement of sand along the City's coast.
  - Completion of a public access management plan that maintains public access to and along the shoreline, but channels the public to appropriate access locations through and around newly created dune habitats, estuaries and other potentially sensitive areas of the beach. This plan should identify underutilized areas of the dune and beach between Laguna Channel and the Cabrillo Bathhouse that could be closed to public use and set aside for resource habitat for the western snowy plover and other special status species. [RM BIO-3.a] 

ER13.3 Native Species Habitat Planning. Protect and restore habitat areas for native flora and fauna and wildlife corridors within the City, including for chaparral, oak woodland, and riparian areas. In particular, provide land use/design guidelines to:

- Require buildings and other elements of the built environment, and landscaping to be designed and maintained to enhance the wildlife corridor network as habitat. (ER22)

- Ensure that the City and new development preserve existing trees within identified wildlife corridors, and promote planting new trees and using appropriate native landscaping in new developments within or adjacent to important upland wildlife corridors and all streams. [MM BIO-1 b]

- Protect, maintain, restore and enhance habitat for special status species.

Relevant and Supporting DEIR Information
Potential future development could displace or disturb important creek and riparian habitats and associated status species.

**Impact BIO-2.1. Riparian Habitats and Wildlife.**

Riparian habitats support many wildlife species including songbirds, raptors, fish, reptiles, and amphibians, and also provide important values for water quality, air quality, and visual resources. Riparian trees and other vegetation shade in-stream aquatic habitats and maintain cooler water temperatures for in-stream wildlife. (DEIR page 7-22).

Under Plan Santa Barbara land use designations and MODA policies, some incremental additional development could occur on less developed parcels adjacent to City creeks through the year 2030. Such parcels exist at multiple locations adjacent to and in some cases within the riparian corridors of these creeks. Future development could have potentially significant effects on riparian habitats and other creeks and associated wetlands due to direct disruption or destruction of habitat and wildlife corridors, and disturbance to wildlife from adjacent development.

Development of even urban parcels adjacent to such riparian areas could result in removal or damage to mature native trees from construction of buildings, foundations, paving and drainage improvements, removal of saplings, clearing of understory vegetation, installation of invasive non-native vegetation (e.g., periwinkle, ivy), and vegetation clearance or installation of bank stabilization for flood protection.

Residential development, redevelopment, and/or land divisions of property could incrementally degrade riparian woodlands in the foothills, particularly where older small homes or fire rebuilds are remodeled and substantially expanded. Potential larger developments or redevelopment projects, such as redevelopment of La Cumbre Plaza or additional residential or recreation development in the Las Positas Valley or foothills could also impact riparian areas. However, such development also offers real potential for habitat enhancement and/or restoration. Additionally, increased human presence, domestic animals (e.g., cats), noise, and lighting can impact bird and other wildlife populations.

Additional development associated with the Santa Barbara Airport could potentially impact freshwater creeks associated with the Goleta Slough; however, extensive habitat planning and mitigation of impacts to habitats is currently in place at the Goleta Slough.

Impacts would be of particular concern along sensitive reaches of creeks with well-developed natural vegetation, perennial stream flow including the “headwaters” of these creeks higher in the foothills or lower perennial reaches, such as Arroyo Burro Creek south of Modoc Road and Mission Creek near the Museum of Natural History, due to their greater ability to support sensitive aquatic species.

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1 Outside of the Coastal Zone, major known wetlands or wetland complexes (e.g., vernal pools) occur within the City or sphere of influence, with the exception of Laguna Lake in Hope Ranch. However, wetlands do occur within area stream channels or in association with such drainages. These include springs and seeps that feed area streams such as those that occur in the Las Positas Valley and Verona Springs neighborhood along Arroyo Burro Creek and throughout the foothills. Such springs and seeps are often located within or adjacent to riparian corridors or associated tributaries and as such would be subject to protection under City policy. For impact analysis purposes, such wetland areas are treated as part of the riparian system.
However, all major creeks in the City serve as migration corridors for the endangered steelhead trout and many City creeks have the potential to host a variety of other special status species, particularly song birds, amphibians, and the southwestern pond turtle. Wildlife can be adversely affected by loss of mature trees, removal of riparian understory, decreased water quality, and increased noise, light, and activity from new residents and domestic animals.

Existing Policies: Existing State and Federal environmental and wildlife protection regulations help ensure that creek protection and restoration is included in creekside development projects. Existing City policy and regulations also protect riparian habitats. Conservation Element Policy 5.2 states that “development in or adjacent to creeks shall not degrade creeks or their riparian environment.” Architectural Board of Review (ABR) Guidelines for development near creeks, the Mission Creek Development Setback Ordinance, and the City MEA Guidelines also provide for creek habitat protection and restoration for individual development projects. Extensive adopted and funded (Measure B) City Creeks Division programs would additionally ensure that restoration of creek habitat quality would be an ongoing effort over the 20-year Plan Santa Barbara General Plan horizon. (DEIR page 7-23).

Proposed Policies: Proposed new Plan Santa Barbara policies provide general direction to develop further protection for riparian habitats and wildlife, including ER19-Protection of Wildlife and Native Vegetation, ER22-Native Species Habitat Planning guidelines, ER26-Creek Setbacks and Restoration standards and guidelines, and ER27-Creekside Development Guidelines. Additionally, implementation of an AMP, which would evaluate, provide feedback, and allow for revisions to components of the General Plan for achievement of Plan Santa Barbara goals, would allow for strengthening of habitat planning and protection measures throughout the 20-year planning period.

Impact Significance: Given the fragility of riparian systems and the proximity of existing and potential new development to these habitats, ongoing incremental habitat degradation could still occur over time, with associated effects on special status and endangered species. Even with existing and proposed protective regulations, policies, and programs, the potential combined citywide effect of incremental development could be substantial by 2030. However, mitigation measure MM BIO-2 would implement additional measures to improve the ecological value and habitat quality of City creeks, including measures to increase the amount of open natural creek channel within the City, increase the acreage and linear extent of riparian habitat along creeks, and establish an updated development setback policy for creeks that reflects current practices. These measures would also aid recovery of steelhead trout and guide development to maximize protection of creeks. With implementation of these measures, combined with existing policies and those proposed within Plan Santa Barbara, impacts to riparian woodlands, creeks, associated wetlands, and wildlife species would be less than significant with mitigation (Class 2). The recommended measures identified in Section 11, Hydrology to address flood issues along creeks would also serve to benefit wetland and riparian habitats and species.

Impact BIO 2.2, Creek Water Quality.

Increased impermeable surfaces associated with future development could potentially increase polluted runoff containing oils, grease, heavy metals, pesticides, and sediment from new buildings,
roads, parking, and landscaping. During storm events, these pollutants could be transported via drainage systems to riparian woodlands or into creeks, causing long-term impacts to water quality, including decreased oxygen content, alterations in pH and increased temperature and nutrient levels. Siltation and changes in water chemistry can adversely affect wildlife reproduction, bury eggs, and create adverse changes in fish, reptile, and amphibian populations, and may cause algal blooms which could further decrease water quality. (DEIR page 7-24).

While much of the proposed development would involve redevelopment of existing developed parcels, high-value, larger, multiple-story projects can be anticipated to often increase impervious surfaces on older lower-value parcels. In addition, development of some of steeper remaining undeveloped or less developed sites could lead to increased erosion and sedimentation.

Existing Policies: Existing Federal, State, and City environmental and wildlife protection regulations require the maintenance of water quality standards to protect human health and native species and habitats. Multiple City policies and programs that encourage low impact site design are in place to minimize storm water runoff and pollutants from new development, particularly the City’s Storm Water Management Plan (SWMP) and updated Storm Water Best Management Practices Guidance Manual. In addition, City General Plan policies for creek and water quality protection, ABR Guidelines for development near creeks, the Mission Creek development setback ordinance, and State and Federal regulations would also protect creek water quality.

Water quality improvement projects and public education projects are also ongoing by the City Creeks Division to improve water quality and reduce pollutants from both existing and future development. An example is the Upper Las Positas Creek Restoration and Storm Water Management Project to detain and treat storm water runoff and improve downstream creek quality, as well as to reduce peak flow.

Proposed Policies: Proposed Plan Santa Barbara policies direct the City to establish additional water quality and creek protection and restoration standards and development guidelines (Policies ER24-Creek Resources and Water Quality, ER25-Storm Water Management Guidelines, ER26-Creek Setbacks and Restoration, and ER27-Creekside Development Guidelines). Additionally, implementation of an AMP, which would evaluate, provide feedback, and allow for revisions to components of the General Plan for achievement of Plan Santa Barbara goals, would allow for strengthening of water quality protection measures throughout the 20-year planning period.

Impact Significance: With existing regulations, policies, and programs, and proposed Plan Santa Barbara measures, potential impacts to surface water quality from future development would be less than significant (Class 3). The mitigation measures identified for wetland and riparian habitats above and the recommended measures in Section 11, Hydrology, that would address flood issues, would also benefit creek water quality and creek habitats and species. (DEIR page 7-24).

Potential for future development to displace or substantially disrupt important coastal habitats (creeks, estuaries, dunes, beaches, bluff scrub, and woodlands) and special status species.

Increased development adjacent to sensitive coastal habitats such as creeks, estuaries, coastal bluff scrub, dune scrub, and beaches could impact such habitats through direct removal of native
vegetation, increased noise and light, changes in the quantity or quality of runoff with associated potential for increased erosion, sedimentation, pollutant inputs and water quality degradation.

Such potential impacts could occur along the Waterfront and adjacent hotel zone and on bluff faces on the Mesa and in Hope Ranch. New development and associated increases in human activity within and adjacent to areas that support special status or endangered species such as the southern steelhead or western snowy plover could lead to increased disturbance of or impacts to such species. Thus, new development and increased human activity can lead to incremental or cumulative impacts to these habitats. Potential impacts to coastal habitats such as coastal sage scrub, oak woodlands, oak trees, and riparian areas are addressed in Impacts BIO-1, -2 and -4. In general, Federal, State, and City regulations and policies which protect these habitats and associated wildlife are stronger in the Coastal Zone and would help diminish potential impacts to these resources in the Coastal Zone. (DEIR page 7-25).

Impact BIO 3.1, Creeks and Estuaries

A small amount of future development adjacent to creeks and estuaries could occur, including expansion or upgrades to hotels, parks, and public drainage or sanitation infrastructure (e.g., El Estero Treatment Plant) adjacent to the lower reaches and estuaries of Sycamore and Mission creeks and the Laguna Channel. These ecosystems are surrounded by urban and recreational development, and continue to provide habitat for shorebirds and waterfowl such as skimmers, terns, gulls, plovers, cormorants, herons, egrets, geese, and ducks, as well as the southwestern pond turtle, endangered tidewater goby, and endangered southern steelhead.

Development or redevelopment of public and private facilities adjacent to the lower reaches of streams and estuaries could potentially result in removal of or damage to some native vegetation from construction of buildings, foundations, paving, pipelines and drainage improvements, increased night lighting, installation of invasive non-native vegetation (e.g., ice plant), and installation of bank stabilization for flood protection. Increased human presence associated with new development, increased tourism, noise, and/or lighting could impact bird and other wildlife populations, particularly through disturbance of nesting and roosting activities in local estuaries.

Existing Policies: Existing State and Federal environmental and wildlife protection regulations ensure that creek protection and restoration is included in creekside and estuary development projects. Existing City policy and regulations also protect riparian habitats. Conservation Element Policy 5.2 states that "development in or adjacent to creeks shall not degrade creeks or their riparian environment." ABR Guidelines, requirements for development near creeks, the Mission Creek Development Setback Ordinance, and the City MEA Guidelines also provide for creek habitat protection and restoration for individual development projects. Extensive adopted and funded (Measure B) City Creeks Division programs would additionally ensure that restoration of creek and estuary habitat quality would be an ongoing effort over the 20-year Plan Santa Barbara General Plan horizon.

Proposed Policies: Proposed new Plan Santa Barbara policies provide general direction to develop further protection for riparian habitats and wildlife, including ER19-Protection of Wildlife and Native Vegetation, ER22-Native Species Habitat Planning guidelines, ER26-Creek Setbacks and
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Restoration standards and guidelines, and ER27-Creekside Development Guidelines. Additionally, implementation of an AMP, which would evaluate, provide feedback, and allow for revisions to components of the General Plan for achievement of Plan Santa Barbara goals, would allow for strengthening of habitat planning and protection measures throughout the 20-year planning period.

Impact Significance: A small amount of new development could lead to incremental degradation of these fragile habitats over time, with associated effects on special status and endangered species. Even with existing and proposed protective regulations, policies, and programs, the potential combined citywide effect of incremental development could be substantial by 2030; however, mitigation measure MM BIO-2, Creeks and Riparian Habitat and Wildlife Protection would substantially improve habitat quality of City creeks and aid in recovery of steelhead trout. When combined with existing standards and proposed Plan Santa Barbara General Plan policies, potential impacts to creeks and estuaries and associated wildlife would be potentially significant, but subject to feasible mitigation (Class 2). In addition, recommended measure RM BIO-2 (in Section 7.9 below) would expand restoration and protection of creeks and estuaries. (DEIR page 7-25).

Hydrology, Water Quality and Flooding Policies

ER16. Creek Resources and Water Quality. Encourage development and infrastructure that is consistent with City policies and programs for comprehensive watershed planning, creeks restoration, water quality protection, open space enhancement, storm water management, and public creek and water awareness programs. (ER24)

Implementation Actions:

ER16.1 Creek setback standard. A creek setback greater than the existing Mission Creek ordinance standard shall be applied for new structures, additions and hard surfaces adjacent to all creeks, with a defined bed, bank and channel. [RM BIO-2.b]

ER16.2 Comprehensive Creek Action Plan. Within two years of adopting this policy, prepare a comprehensive long term action plan for protecting and enhancing creek water quality, riparian area habitat values, steelhead use, and maintaining or enhancing flood management.

ER16.3 Master Drainage Plan. Within two years of adopting this policy, develop a comprehensive drainage plan that identifies the existing system, policies and development standards to address drainage and water quality issues, areas appropriate for drainage retention/detention, future capital improvements, and a funding plan to finance the projects. (ER28)

ER17. Storm Water Management Policies. The City’s Storm Water Management Program’s policies, standards and other requirements to reduce storm water run-off volumes, rates, and water pollutants are hereby incorporated into the General Plan Environmental Resources Element. (ER25)
Implementation Actions

ER17.1 Storm Water Guidelines. The City's Storm Water Management Guidelines provide information on implementation measures such as ground water recharge, pervious surfacing, bioswales, detention basins, and green roofs. Update measures for street sweeping, storm-drain stenciling, and public outreach for inclusion in conditions of approval or as mitigation measures. Encourage the conversion of excess street paving between sidewalks and streets to bioswales. (ER25)

ER17.2 Wash-Down Policies. Within two years of adopting this policy, prepare or update regulations to limit the practice of hosing down driveways, to conserve water and reduce pollutants carried through urban run-off and conserve water per State Water Resources Control Board regulatory guidelines for storm water management. (ER29)

ER17.3 Floodplain Mapping Update. Update the Flood Insurance Rate Maps (FIRM) floodplain boundaries for the Special Flood Hazard Areas such as the Mission and Sycamore Creek drainages, Arroyo Burro Creek and Area A near the Estero. (ER30)

ER18. Creek Setbacks and Restoration. Protection and restoration of creeks and their riparian corridors is a priority for improving biological values, water quality, open space and flood control in conjunction with adaptation planning for climate change.

Implementation Actions

ER18.1 Setback Standards. Within two years of adopting this policy, establish updated creek setback and restoration standards for new development and redevelopment along all creeks, and prepare or update guidelines for restoration, increase pervious surfaces and appropriate land uses within designated creek side buffers. (ER26) In developing creek restoration and setback standards, consider applicable creek standards in surrounding jurisdictions. Hard banks should be identified for removal and replacement with biotechnical stabilization methods. Softening of hard banks shall be prohibited.

- Where the City determines that a structure must be constructed within proposed creek setbacks or where a project would be exposed to unusually high risk of bank erosion or collapse, non-intrusive bank stabilization methods shall be used rather than hard bank techniques such as pinned rip-rap, concrete, gabions, or pipe and wire revetment. [RM HYDRO]

ER18.2 Creekside Development Guidelines. Within two years of adopting this policy, establish design guidelines for development and redevelopment near creeks, such as measures to orient development toward creeks, and better incorporate creeks as part of landscape and open space design. Utilize a native riparian plant palette for landscaping along creeks, and prohibit the use of non-native invasive plants. Encourage public creekside pedestrian paths where appropriate to increase connectivity and provide pocket parks and signage to improve public awareness and enjoyment of the City's creeks. (ER27)

Relevant and Supporting DEIR Information
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Impact HYDRO-1.2. Development Adjacent to Creek Banks:

A small amount of development and redevelopment could continue to occur along the City’s major creek corridors in the next 20 years under Plan Santa Barbara policies. High-velocity floodwaters pose the risk of creek bank erosion and potential damage to new or expanded buildings and associated facilities such as parking, yards, and landscaping. The actual risks of exposure to major creek bank erosion varies by stream and is affected by variables such as soil type, creek morphology, creek meanders, the presence of erosion-reducing native vegetation, etc. Such erosion often occurs along the outside bend of a creek meander in the creek’s channel or in instances of a channel obstruction (e.g., fallen tree, flood debris) that directs high-velocity floodwaters toward an exposed creek bank.

Existing Policies: The City Municipal Code currently requires a minimum 25-foot setback for new development from the top of bank of Mission Creek. This 25-foot minimum setback standard is also used as a guideline in City development review and permitting for individual projects next to other creeks, based on site-specific studies and general flood protection policies of the General Plan Conservation, Open Space, and Safety Elements, Local Coastal Plan, and Storm Water Management Program. Greater setback distances are often established when feasible. Setbacks provided are generally greater in more outlying areas with natural creek banks and smaller in more urbanized settings containing more hardanking devices such as concrete or rip rap.

Proposed Policies: Proposed Plan Santa Barbara ER26-Creek Setbacks and Restoration identifies a program to establish updated creek setback standards for new development in proximity to the top of creek banks, along with guidelines for creek restoration, pervious surface, and appropriate land uses within creekside buffers.

Impact Significance: Existing City policies and programs for development adjacent to creeks combined with the proposed Plan Santa Barbara program ER26, Creek Setbacks and Restoration, to establish more specific creek setback standards for all City creeks would substantially reduce potential impacts. With the application of existing policies in combination with Policy ER26, potential impacts of future development on creek erosion flooding hazards would be less than significant (Class 3).

Additional recommended measures could help to further minimize impacts. MM BIO-2.c in Section 7, Biological Resources recommends an addition to the proposed Plan Santa Barbara policy ER26, Creek Setbacks and Restoration, to establish an initial creek setback policy update of greater than 25 feet from the top of bank of creeks for new structures and hard surfaces as General Plan policy, consistent with existing practices. Recommended measure RM HYDRO-1, Flood Hazards, suggests considerations for the ER26 process for updating creek setback standards, including that creek buffers be adequate to provide protection from flood, erosion, and geologic hazards, and support habitat, and consideration of surrounding jurisdiction standards.

Impact HYDRO-1.3. Increase in Storm Water Runoff:

Additional impervious surfaces associated with intensification of uses and new development could potentially create incremental increases in surface runoff. New roads, driveways, and buildings do not allow water to be absorbed into the ground. If not offset, this additional runoff can result in increased peak runoff, which could incrementally increase the potential for downstream flooding.
Existing Policies: Several existing City storm water policies require that new discretionary development demonstrate, to the degree feasible, that post-development peak storm water runoff discharge rates would not exceed the estimated pre-development rate. Where possible and appropriate, development projects are required to integrate on-site storm water detention facilities into site plans and to incorporate Best Management Practices (BMPs) to reduce runoff, which can significantly reduce the needed size of downstream facilities.

Proposed Policies: Plan Santa Barbara Policy ER25-Storm Water Management Guidelines would incorporate guidelines from the adopted City Storm Water Management Plan into the General Plan. Proposed program ER28-Master Drainage Plan would develop a comprehensive drainage plan that identifies the existing system, development standards to better address drainage issues, and opportunities for drainage retention/detention. Both of these measures would provide citywide coordination of existing City storm water management policies that are applied on a project-by-project basis, to the benefit of reduced storm water runoff.

Impact Significance: Existing regulations and policies, and the proposed Plan Santa Barbara policies and programs provide that new development would not contribute to downstream flooding hazards, a less than significant impact (Class 3).

Also see further discussion of longer-range climate change flood issues in the Extended Range discussion below and in Section 18, Global Climate Change.

Potential for future development to impact water quality of creeks and groundwater.

Under Plan Santa Barbara policies, most additional development to the year 2030 is projected to be located within the MODA; however, a small amount of development could also occur throughout the City in areas such as the Las Positas Valley and the foothills.

Construction activities and increased impervious surfaces associated with future development could potentially result in increased pollutants in storm water runoff. During storm events, pollutants such as oils, grease, heavy metals, pesticides, and sediment are transported via drainage systems into creeks. Potential short-term water quality impacts can result from grading and construction activities. Long-term impacts to water quality, including decreased oxygen content, alterations in pH, and increased temperature and nutrient levels, can result due to increased urban runoff. Polluted runoff could also percolate into underlying groundwater.

The combined citywide effect on water quality from incremental projects over time is potentially significant. Impacts to surface water quality would be of particular concern for projects sited near or adjacent to City creeks where surface water runoff could flow into these waterways. Areas which could have major redevelopment such as the La Cumbre Shopping Center adjacent to Arroyo Burro Creek could have impacts, but also offer opportunities for restoration of degraded stream systems.

Existing Policies: Multiple City policies and programs are in place to minimize storm water runoff and pollutants from new development. Both construction and post-construction water quality protections are identified in the adopted City Storm Water Management Plan (SWMP) and updated...
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Storm Water Best Management Practices Guidance Manual, and are applied as conditions of approval for development projects. City storm water standards encourage the use of low-impact development site designs, and require that runoff be conveyed through permanent storm water treatment devices. City General Plan policies for creek and water quality protection, Architectural Board of Review Guidelines for development near creeks, the Mission Creek development setback ordinance, and State and Federal regulations would also provide that water quality and creek protection and restoration provisions are included in creekside development projects. Finally, the City’s Creeks Division is beginning the preparation of Watershed Plans for the major creeks in the City.

Water quality improvement projects and public education projects are also ongoing by the City Creeks Division to improve water quality and reduce pollutants from both existing and future development. An example is the Upper Las Positas Creek Restoration and Storm Water Management project to denitrify and treat storm water runoff and improve downstream creek quality, as well as reduce peak flow.

Proposed Policies: Plan Santa Barbara policies direct the City to establish additional water quality and creek protection and restoration standards and development guidelines (proposed Policies ER24-Creek Resources and Water Quality, ER25-Storm Water Management Guidelines, ER26-Creek Setbacks and Restoration, and ER27-Creekside Development Guidelines).

Impact Significance: With existing regulations, policies, and programs, and proposed Plan Santa Barbara measures, potential impacts to surface and groundwater quality from future development would be less than significant (Class 3). Implementation of mitigation measures proposed elsewhere in this EIR (e.g., MM-B10-2) and recommended RM HYDRO-2 below would further offset any potential impacts to surface and groundwater quality.

Potential for additional wastewater, storm water, and litter from future development to impact ocean water quality.

Impact HYDRO-3.1. Treated Wastewater Discharge.

Additional future development to the year 2030 and associated population growth would result in additional wastewater discharges to the ocean from the El Estero Wastewater Treatment Plant, estimated to be less than a 10 percent increase.

Incremental increases in the discharge of wastewater constituents including pharmaceuticals (including synthetic hormones), pathogens (especially drug-resistant pathogens), fecal indicator bacteria (FIB), metals, and nutrients such as nitrate, could potentially degrade the quality of offshore receiving waters, a potentially significant impact. Contaminants such as unregulated synthetic hormones typically settle to the seafloor (Braga et al 2005) and could potentially concentrate over time through the actions of particulate-feeding animals such as shellfish.

Existing Policies: Standards for acceptable wastewater quality are established by Federal and State agencies. Existing treatment in compliance with existing regulations substantially reduces pollutant levels in discharged effluent. In addition, the wastewater outfall location more than 1.5 miles offshore and effluent dispersal through release over a 720-foot span of pipeline substantially dilutes...
pollutant concentrations in receiving waters. Even with increased discharge, the National Pollutant Discharge Elimination System (NPDES) Permit requirements for the El Estero Wastewater Treatment Plant would continue to prohibit discharged effluent from exceeding standards outside of the permitted mixing zone. Thus the concentrations of regulated pollutants in the nearby coastal ocean would not pose an unacceptable risk to human health or aquatic life, as defined by regulations.

The County of Santa Barbara together with the City and other local jurisdictions have been conducting public education campaigns and collection days for proper disposal of pharmaceuticals, which would also help to reduce discharges through wastewater. Ongoing drop-off locations for pharmaceuticals have been established at Sheriff stations.

**Impact Significance:** Existing Federal and State regulations and City policies and practices that direct operation and upgrades of the El Estero Wastewater Treatment Plant in compliance with regulations would ensure that incremental increases in wastewater discharges do not substantially impact the quality of offshore waters. Potential wastewater discharge impacts of future development on marine water quality would be less than significant (Class 3).

A recommended measure (RM HYDRO 2-Pharmaceutical Waste Education and Collection) is identified for a continuing City program to coordinate with South Coast agencies on public education and collection programs for proper disposal of pharmaceuticals.

**Impact HYDRO-3.2. Storm Water Discharge into Marine Waters.**

As discussed in Impact HYDRO-2 above for creeks and groundwater quality, future citywide development to 2030 has the potential to result in increased urban pollutant run-off and sedimentation, which could also potentially affect ocean water quality.

**Existing Policies:** Refer to Impact HYDRO-2 for existing policies related to stormwater quality.

**Proposed Policies:** Plan Santa Barbara policies that direct the City to establish additional water quality and creek protection and restoration standards and development guidelines (proposed Policies ER24-Creek Resources and Water Quality, ER25-Storm Water Management Guidelines, ER26-Creek Setbacks and Restoration, and ER27-Creekside Development Guidelines) would reduce any effects on ocean water quality from stormwater discharge.

**Impact Significance:** Based on existing regulations and City policies for new development to avoid increases in runoff and pollutants, including application of best management practices during construction and post-construction water treatment, as discussed further above, and proposed Plan Santa Barbara policies, potential impacts to ocean water quality from stormwater runoff of future development would be less than significant (Class 3).

**Impact HYDRO-3.3. Debris Leftovers.**

Potential future development and population increase in the City could result in incrementally greater release of litter, plastic bags, and other trash reaching City creeks and eventually carried downstream to the ocean.

The City has existing efforts toward reducing such debris, including installation of metal screens and public information signs at storm drains, provision of reusable bags, and public education campaigns.
to educate and encourage shoppers to use re-usable bags. Voluntary public efforts to reduce disposable bags have been underway supported by the retail industry. The City has commissioned a study of a possible tax on single-use bags.

**Impact Significance:** The potential increase in litter from additional development and population would have a *less than significant impact (Class A)* on coastal and marine water quality.

Recommended measure RM HYDRO-3 further suggests that the City consider a ban on plastic bags in larger retailers such as supermarkets and pharmacies, as was done in San Francisco. See also the discussion of solid waste issues in Section 15 – Public Utilities.

### Aesthetics and Visual Resources Policies

ER25. Visual Resources Protection. New development or re-development shall preserve or enhance important public views and viewpoints for public enjoyment, where such protection would not preclude reasonable development of a property. (ER41)

**Implementation Actions**

| ER25.3 Vegetation Protection. Within two years of adopting this policy, prepare guidelines and standards for removal of significant trees and for planting replacement or additional trees, and protect significant natural vegetated areas from inappropriate development. (ER41) |
| Deleted: P |

| ER25.4 Scenic View Protection. Within two years of adopting this policy, further protect public scenic views of the coast, hillsides, open spaces, creeks and historic resources by incorporating guidelines as part of Form-Based Codes, project design guidelines, and environmental review guidelines. (ER40). Also encourage protection of private views of creeks and riparian corridors. |
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### Maps

Please add Upper Las Positas Creek (on Santa Barbara Golf Club property) to all maps.
Response to City Comments Letter # C5, Creeks Restoration and Water Quality Improvement Program Citizens Advisory Committee (May 12, 2010)

C5-1: Thank you for your comments. The City appreciates the level of effort and feedback provided by the Citizens Advisory Committee on Plan Santa Barbara and the EIR.

C5-2 (Plan SB GPU): Comments noted. The Committee’s qualified support of the Lower Growth and Plan Santa Barbara Alternatives will be forwarded on to decision-makers.

With regard to mitigation measure (MM) and policy wording, EIR identified mitigation measures required for potentially significant impacts are worded in the affirmative (i.e., “the City shall…..”), while recommended measures (RM) use “should”. Policies generally reflect this approach: where measures are considered essential to implement key goals identified by the City Council, stronger wording equivalent to “shall” is utilized, while desirable but non-essential measures are worded less strongly. In addition, General Plan level policies are typically broad and strive to both provide direction and also remain appropriately applicable to a variety of site-specific circumstances that may require a measure of design flexibility. Specific Committee recommendations on individual mitigation measures or policies are responded to in detail below.

In regard to the proposed policies and timing of implementation for mitigation measures, the draft General Plan and EIR contain an array of measures that address water quality and creek protection, many with a particular emphasis or goal that cannot be closely linked to a two- or five-year horizon, or even pending development. For example, MM BIO-2b sets forth ambitious goals for restoring 20 acres and one linear mile of riparian habitat. This measure will take substantial planning effort and funding and, although it may be achieved sooner, is projected to occur incrementally over the 20-year life of the new General Plan, as development and associated impacts is also projected to occur incrementally. In addition, MM BIO-2 requires existing concrete lining to be removed from creeks wherever possible, and that previously underground creeks be “daylighted.” Although portions of this measure may be implemented by individual development projects, broad progress on this measure will require planning, time, and substantial funding.

Please refer to Table 23.1 of the EIR Mitigation Monitoring and Reporting Program, which sets forth initial recommended timing for many of these programs. In general, where mitigation measures or policies are required to avoid significant project-level effects or achieve a key City policy goal, they are identified for implementation prior to, concurrent with, or within a set time frame after project implementation. For example, fencing and erosion control measures to protect habitat must be in place prior to construction, while habitat restoration may take place over a 1-3 year period following initial construction.

The Committee’s support for active implementation of mitigation measures is also noted. Please see revisions to MMRP Table 22.1 which identifies Committee involvement in planning for and reviewing relevant mitigation measure implementation.

C5-3 (Plan SB GPU): Comments incorporated in appropriate EIR mitigation measures and proposed General Plan policies. See revised policy text in Open Space, Parks, Recreation and Trails Policies, and EIR Section 13.8, Mitigation Measure VIS-1 (Open Space Protection and Restoration).

C5-4 (Plan SB GPU): Comments noted and partially incorporated; please see revised text. The City will make every effort to move forward expeditiously with a Comprehensive Climate Change Action Plan. Please refer to EIR Section 23 (Mitigation Monitoring and Reporting Program-MMRP) and draft General Plan implementation schedule
C5, Creeks Restoration and Water Quality Improvement Program Citizens Advisory Committee (Continued)

for proposed timelines. There are a number of complexities with regional coordination, funding, and staffing availability, and it is not likely to be possible to commit to a two-year timeline. City Council will determine implementation and funding priorities among all the General Plan implementation actions.

C5-5 (Plan SB GPU): Comments noted and partially incorporated; please see revised General Plan document text. The City will make every effort to move forward expeditiously with adoption of appropriate tree protection mechanisms, habitat mapping efforts, and adoption of a multi-use plan for the coast. It is not likely to be possible to commit to a two-year timeline. City Council will determine implementation and funding priorities among all the General Plan implementation actions. Please refer to EIR Table 23.1 (MMRP) which provides the proposed timing for these programs based on the EIR’s findings, available City resources, and the severity and timing of potential impacts, and the draft General Plan implementation schedule.

Protective measures during nesting season are addressed by existing Federal and State resource agency provisions. Specific City control provisions for mechanized pruning during nesting season are detailed measures that could be more appropriately developed and addressed as part of a tree protection ordinance or guidelines, rather than at the General Plan policy level. Similarly, “minimizing or avoiding” high water use landscaping within oak drip lines could be more appropriate direction at the General Plan level than an outright prohibition. All other suggested changes have been incorporated.

C5-6 (Plan SB GPU): Comments noted and partially incorporated; please see revised General Plan document text. The City will make every effort to move forward expeditiously with adoption of a Comprehensive Creek Action Plan, Master Drainage Plan, driveway washing guidelines, and standards related to creek setbacks and development. It is not likely to be possible to commit to a two-year timeline. City Council will determine implementation and funding priorities among all the General Plan implementation actions. Please refer to EIR Table 23.1 (MMRP) which provides the projected timing for these types of programs based on the EIR’s findings, available City resources and the severity and timing of potential impacts, and the draft General Plan implementation schedule. Other suggested changes have been incorporated into appropriate mitigation measures and policies.

C5-7 (Plan SB GPU): Comments noted and partially incorporated; please see revised General Plan document text. The City will make every effort to move forward expeditiously with adoption of vegetation and scenic view guidelines. It is not likely to be possible to commit to a two-year timeline. City Council will determine implementation and funding priorities among all the General Plan implementation actions. Please refer to EIR Table 23.1 which provides the projected timing for various programs based on the EIR’s findings, available City resources, and the severity and timing of potential impacts, and the draft General Plan implementation schedule. Suggested map modifications have been included.
CITY COMMENTS LETTER # C6

TCC – April 22, 2010 – Item 6 - Plan Santa Barbara Update

All members in attendance. (CC and PC liaisons not attending.)

Rob Dayton – Power Point presentation

Committee Questions & Comments

Chair Bradley noted that the question has been raised about whether increased housing in Downtown closer to jobs would generate demand for more services and create more traffic. He pointed out that it seemed unlikely because services already there. He also asked about the model. Mr. Dayton replied that it depends on where housing is put. Downtown housing is neutral for traffic, and the grid system has an effective capacity. The other side of the freeway, or upper State Street shows that there would be an increase in congestion.

Mr. Bradley also remarked that although parking policies would account for much of the ability to reduce traffic effects, there is synergy with systems for alternative modes of transportation. He commented that parking pricing only works if there are adequate alternative modes of transportation; otherwise, people will pay.

Mr. Bradley commented that the model did not use quantitative data to apply trip reductions for transit, pedestrian, and bicycle use because there was inadequate data. There is new evidence/meta data which he offered to send to the consultants. He suggested that this issue perhaps could be re-visited in EIR. Mr. Dayton replied that the EIR took a conservative approach, and only included reduced trip rates that are supported by empirical data. He agreed to forward the data to the transportation consultant for consideration.

Mr. Bradley asked Mr. Dayton to return to the decision point slide. He remarked that the slide indicated balancing among land use and traffic management policies and was curious about the phasing of work, for example, if decisions utilizing the Land Use (LUE) and Housing Elements (HE) are decided before the Circulation Element is updated? He is not sure how balance can be achieved if these decisions are happening at different times. The Traffic Demand Model (TDM) could be used as mitigation for some of the differences, but the decision is not being made until after. He stressed the importance of considering the LUE and HE together. Mr. Dayton replied that they will be considered together with Plan SB.

Committee Member Tabor commented that the report gave good information on housing in the downtown, and the relationship between housing and traffic. The argument can be made that if we build housing downtown, it doesn’t guarantee that someone who works downtown will live there. Most downtown jobs are retail and people can’t afford million dollar condos. They may also have a car.

Mr. Tabor also commented that the analysis provides good information about the relationship between the type and location of housing downtown and traffic. The analysis brings up items regarding mode share issues, and things in Circulation Element, giving staff the ammunition to go forward.

Mr. Tabor remarked that other parking issues aside from pricing are equally important. Availability and parking standard requirement reductions are necessary to have an impact of the downtown employee parking shuffle. He noted that maybe the City should not be providing so many spaces for commercial downtown.
Mr. Tabor also pointed out that TDM needs carrots as well as sticks to make it work. He suggested that incentives could be provided. He expressed surprise at the idea of having a parking kiosk as opposed to parking stickers as the neighborhood parking program does.

Mr. Tabor reminded everyone of the evolution of State Street, pointing out that a lot of Mom & Pop businesses were lost in the evolution, which was one of the downsides of that process. He is pleased about the downtown commercial business owner’s ideas of supporting housing, which will bring a living customer base to the downtown area. He also noted that the City of Ventura’s experience is that the freeway divides the housing and commercial/industrial, resulting in traffic at the downtown interchanges. They have policies to move housing and commercial to the other sides of the freeway.

Committee Member France pointed out that it is a good time to look at parking assumptions. He feels that parking availability and pricing vs. traffic congestion are quality of life issues. He indicated that it is critical that the TDM package and its impacts be considered. Additionally, rethinking the parking criteria, and figuring out some good incentives is also important.

Committee Member Pritchett said that people need to better understand what TDM means. Staff needs describe the list of measures and say the whole word, so people will better understand. Spell it out in every presentation.

He pointed out that the traffic model shows an imbalance between jobs and housing. Mr. Dayton replied that with the additional housing alternative, the gap is being closed, but the problem is not being solved.

Mr. Pritchett asked if the model includes passenger rail? He expressed that this is needed to address freeway congestion. Mr. Dayton replied that the model did not show much of an effect for rail. The Empirical data shows that the combination of the HOV lane, telecommuting and SBCAG’s Vista/Coastal Express service is effective.

Mr. Pritchett asked to be shown the histogram slide again. He commented that the histograms show the number of intersections going to LOS D, E, and F and asked if the TDM be used to address congestion.

He also commented on the last slide on decision (Land Use – TDM – Congestion), and asked how much congestion can the City tolerate? The data shows that 21 of 100 intersections get worse. He suggested that a practical goal could be to go halfway and take the difference between the Baseline and No Project (about 14 intersections) and figure out what level of TDM/parking fees are needed to mitigate to 14 intersections. How do we identify units of TDM – such as number of block faces, parking prices? He also remarked that the model provides great tools to show traffic issues.

Mr. Bradley asked if there are the other measures identified besides LOS? The model has travel times and flows, should be able to provide delay time measure. Mr. Dayton answered that there are other measures that can be uses, such as vehicle miles traveled.

Committee Member Blackerby asked if the assumption was that the robust parking management is not just for on-street parking, but also for a pricing increase in structures? Mr. Dayton replied that it could be, but adding the on-street parking is the main change.

She also asked how the difference between the moderate and robust TDM are described or measured. Mr. Dayton replied that it depends on the amount of control of on-street parking and
the cost of the pricing. The document identifies the estimate of $0.66/hour at the zero blocks, and $0.30 in the outer areas. He also remarked that it would need to be designed as disincentive for employees, more customer-friendly, and to reduce congestion from cars circling the blocks looking for parking.

Ms. Blackerby also asked if there are other cities that have done the on-street parking management that we could model. Mr. Dayton replied that a number of coastal towns, such as Santa Cruz, Santa Monica and Ventura have done their on-street parking different. Technology allows for swiping cards and providing cell phone numbers so that customers can be notified when time is up they can add more time. UCSB uses a phone system.

Committee Member Coffman-Grey was pleased that the model shows that downtown housing on the transit corridors has no increase in congestion. He cautioned that staff needs to be careful about the amount of parking pricing on the street for customers, because people may decide to go elsewhere. Downtown business revenues are already down, so there is a preference for a more modest TDM, as opposed to the robust TDM.

Mr. Coffman-Grey also suggested that more be done with employee incentives/subsidies such as bus passes. When the DT bus pass program went away, fewer employees taking the bus.

Committee Member Maas indicated that the large drop in impacted intersections is largely due to the TDM-based measures. He asked if, with additional housing units downtown that are workforce units, there would be a lower jobs/housing imbalance. Mr. Dayton replied that the model results are based on location, and don’t distinguish between high-end and affordable units. The model assumes that the occupants of a new unit will behave in a similar way to those of other units around it. An affordable unit may change behavior. Mr. Dayton also indicated that limited parking for residential downtown is less a traffic issue than an issue of affordability and building size.

Mr. Maas commented that the Plan Santa Barbara scenario shows very little reduction in congestion from the No Project scenario. He indicated that it should have the robust mitigation, plus new funding sources for transit, pedestrian, and biking.

Mr. Bradley brought up that the model does not show that reduced maximum parking requirements make much of a difference in trip generation, but that is only because of the way the model is set up. He added that the type of housing would affect trip generation. Mr. Dayton replied that the trip rates in downtown are represented by an average, from people with no cars, one car and two cars.

He suggested that for future presentations, there should be more detail from the model, as well as examples to explain why added housing is neutral on traffic generation downtown, as people are likely to resist this idea. Also, he suggested that perhaps someone from one of the other cities that has parking pricing could give a presentation to the PC, TCC, and DPC.

He indicated that in objective C-2 – 50/50, mode share with SOV by 2020, there is no model output and asked if assumptions on the number of trips people make be made to give an estimate of how the area would fare on this. Mr. Dayton replied that he will set up a conference call with Mr. Bradley and the Fehr and Peers consultant to discuss.

Mr. France indicated that the model is helpful. He would like to see the focus on the shuffle
problems for employees, as well as businesses and visitors.

Mr. Pritchett inquired as to what mechanism could be used to synthesize and forward initial Committee comments on the Draft policies and DEIR? Mr. Allen replied that we will have minutes, and Committee Members could email Rob individually with comments. Staff could provide the draft summary documents, and the Committee could take action following the May 13, 2010 joint meeting with Downtown Parking Committee, which would be within the May 17 comment deadline.
Response to City Comments Letter # C6, Transportation and Circulation Committee (April 22, 2010)

C6-1: Thank you for your comments. Please refer to staff responses included within the Committee comments summary/meeting minutes.

The EIR discusses the synergistic effects of adequate or improved alternative transportation systems with parking pricing in Section 16.3.3, Plan Santa Barbara Traffic Model.

In regards to the ability to describe or quantify trip reductions for pedestrian, bicycle or transit use, please see added discussion in Section 16.3.3 (Plan Santa Barbara Traffic Model) regarding general reductions in trips from these modes of transportation.

In regards to the appropriate balance and interaction between the land use, Housing and Circulation Elements, the updated Land Use and Housing Elements recognize and implement many of the goals from the City’s existing Circulation Element. The goals and policies of the Circulation Element have been both validated and refined by the new Traffic Model and quantified information on the effectiveness of various TDM measures. The balance between these three key elements will be considered together by City decision-makers during adoption of the General Plan Update as well as during upcoming implementation.

C6-2: Comments noted.

As discussed in Section 16.3.3 of the EIR, the relative transportation benefits of housing Downtown are not necessarily related to an assumption that future residents will both live and work Downtown, but due to the substantially lower average vehicle trip generation characteristics of Downtown housing as measured by empirical data provided by the Traffic Model (refer also to Appendix I). Because the Downtown has a mix of land uses, goods and services are close by, and infrastructure for alternative modes is in place, it is more likely that Downtown residents will choose to make a larger portion of their trips via non-auto modes than in other parts of the City.

In regards to TDM, both Sections 16.3.3 (Plan Santa Barbara Traffic Model) and Section 16.8 (Mitigation Measures) describe both “carrots and sticks” for TDM, including “car and van pool incentives”, parking cash out (i.e., paying employees not to drive), subsidized transit passes, and permitting telecommuting and alternative work schedules.

C6-3: Comment noted. Both the EIR and draft General Plan Update recommend improved TDM. City decision-makers will consider and balance among sometimes competing quality of life issues in selecting the updated policy direction.

C6-4: Comment noted. EIR Section 16.3.3 (Plan Santa Barbara Traffic Model) and Appendix I set forth Transportation Demand Management (TDM) measures in substantial detail. As noted in the EIR discussion, other studies have identified passenger rail as effective. With regards to the effectiveness of TDM in reducing congestion, please refer to discussions in EIR Sections 16.3.3, 16.5 (Regional Impacts to Transportation), and 16.8 (Mitigation Measures), as well as Appendix I.

C6-5: Comment noted. Please refer to EIR Section 16.3.3 (Plan Santa Barbara Traffic Model) and Appendix I for detailed discussion of various TDM programs.

C6-6: Comment noted. It is important to note that Downtown housing has the lowest congestion-related impacts of any housing in the City (please see “blue box” discussion at the beginning of EIR Section 16.3).
# C6, Transportation and Circulation Committee (Continued)

An expected advantage of parking pricing to customers and businesses is that customers could be more assured of the likelihood of finding a parking spot close to their destination. There are a number of communities that have instituted parking pricing programs to benefit economic vitality.

C6-7: Comments noted.

C6-8: Comments noted.
SPECIAL JOINT MEETING
DOWNTOWN PARKING COMMITTEE
&
TRANSPORTATION AND
CIRCULATION COMMITTEE
MEETING MINUTES
Thursday, May 13, 2010
7:30 A.M. – 9:00 A.M.
Gebhard Meeting Room
630 Garden Street
Santa Barbara, CA  93101

1) CALL TO ORDER:  7:30 a.m.

2) ROLL CALL

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<th>DPC MEMBERS</th>
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<th>CITY STAFF PRESENT:</th>
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<tr>
<td>Randy Rowse</td>
<td>Present</td>
<td>Browning Allen, Transportation Manager</td>
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<td>Tom Williams</td>
<td>Present</td>
<td>Victor Garza, Parking / TMP Superintendent</td>
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<td>Eric Kelley</td>
<td>Present</td>
<td>Brandon Beaudette, Administrative Assistant</td>
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<td>Bill Collyer</td>
<td>Present</td>
<td>Rob Dayton, Principal Transportation Planner</td>
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<td>Matt LaBrie</td>
<td>Present</td>
<td>Rebecca Jimenez, Parking Supervisor</td>
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<td>Gene McKnight</td>
<td>Present</td>
<td>John Ledbetter, Principal Planner</td>
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<th>TCC MEMBERS</th>
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<tr>
<td>Hillary Blackerby</td>
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<td>Grant House, City Council</td>
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<td>David Tabor</td>
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<td>Steve Maas</td>
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<td>David Pritchett</td>
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<td>Keith Coffman-Grey</td>
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<td>Edward France</td>
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<td>Mark Bradley</td>
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3) PUBLIC COMMENT:

G. Lenker from New Beginnings Counseling Center gave a background and an update on the RV Parking Program. The program has to take a 10% cut in funding from the General Fund. He stated the program could not be sustained with that cut. R. Rowse asked if this could be brought back as an agenda item at a later Downtown Parking Committee meeting. He is interested to see the numbers on the transition of individuals out of the program.

4) APPROVAL OF MINUTES FOR THE REGULAR MEETING OF APRIL 8, 2010

B. Collyer would like the minutes amended to show M. LaBrie moved to approve the Annual PBIA report not R. Rowse.

It was moved by B. Collyer and seconded by M. LaBrie to approve the minutes. The motion was carried 5 yeas/0 nays.
5) REVIEW OF MEMO TO CITY COUNCIL IN REGARDS TO DOWNTOWN PARKING BUDGET

R. Rowse would like to further edit the proposed memo before sending it on to the City Council. He stated that he would like the message that the Downtown Parking Program is under pressure from other General Fund needs. He feels the memo needs to come from the Downtown Parking Committee and not staff generated. T. Williams suggested an itemized list with the accompanying dollar amounts of the items that are affecting the Downtown Parking fund.

E. Kelley moved that R. Rowse draft a memo of concern to the City Council on behalf of the Downtown Parking Committee. The Committee would get a copy of the letter and would either talk to council members individually or be present at a public council meeting. G. McKnight seconded the motion. The motion was carried 5 yeas/0 nays.

6) PLAN SANTA BARBARA – REVIEW OF THE DRAFT GENERAL PLAN UPDATE AND ENVIRONMENTAL IMPACT REPORT (DEIR)

R. Dayton provided a background on Plan SB.

R. Rowse asked how the data was gathered. R. Dayton answered that the stats are based on a computer model that utilizes large amounts of empirical data. The model is then checked based on volumes from existing data.

R. Rowse stated if you limit commercial growth then you potentially limit residential growth. He believes that there seems to be a disconnect between commercial and residential growth. J. Ledbetter replied that R. Rowse is correct in thinking there is a disconnect. He added that different tools are being looked at to increase affordable housing but are doing what is able to be done by looking at the different tools.

G. McKnight inquired if Commercial Growth includes the Airport property. J. Ledbetter answered that it does. G. McKnight added that with a lower cap on commercial growth then need to allow some growth downtown. If not the vitality of downtown suffers. J. Ledbetter replied that he appreciates that comment as he has not heard much from commercial owners in regards to the cap. He believes it is good for the Planning Commission and City Council to hear this kind of input.

S. Maas noted that in Santa Barbara, subsidizing is not as effective as improving service for alternative transportation. He also added that the robust TDM would substantially increase the service for the bus lines. The cost to provide such service would need to be accounted for.

M. Bradley believes the model does separate out commuters from other users. That would be useful to know. Model could also point out time spent in one’s vehicle during traffic congestion. This would be meaningful to a lot of people. He would like to see more information from the model.

D. Pritchett stated he appreciates receiving the letter from the Downtown Organization. However, the letter doesn’t speak to congestion. How much congestion are the business owners willing to tolerate? Perhaps if that is stated then that will help determine as a city what must be done to achieve that level of congestion. He recommends this can be done by the Downtown Parking Committee and the Downtown Organization.

R. Dayton wanted to add that priced parking cannot happen at this economic time. The cost could be done incrementally according to the economics at the time rather than the environment.
H. Blackerby is sold on the robust TDM but asked what a moderate TDM means and can it be effective. R. Dayton answered that the moderate TDM can be effective and the Parking Survey would be a good indicator of the pros and cons of the different strategies.

T. Williams commented he is only concerned with the economic vitality of downtown. Downtown is competing with the other areas that have plenty of free parking. The main priority is to increase vitality, not reduce congestion. Priced Parking goes against improving the economic vitality of the downtown.

M. LaBrie inquired if the model looked at housing and how it distributed housing downtown or was it by opportunity. R. Dayton replied that the opportunity was downtown so it wound up being the same.

M. Bradley stated that you can’t separate congestion and economics. If your customers can’t get to your place of business then no need to worry about parking. He wondered why the downtown businesses asked about parking management by its economic impacts. R. Dayton replied that it is the age old question. How can ample customer parking be provided.

E. Kelley commented that on-street parking is not full. So priced parking won’t work now if already under 80% occupied. R. Dayton replied that priced parking can work now. It will work as long as not affecting customer usage then employees will start finding other parking and finally get alternative transportation. E. Kelley responded that employee will go to outer areas and that will still affect freeway congestion.

G. House stated he was glad to see these two groups come together to discuss Plan SB. He commented on how it would seem that Priced Parking would go against the economic vitality of the downtown. He pointed out that the Circulation Element exists to protect the economic vitality of Santa Barbara. He would like to hear from the various groups how can our living environment be made better so a strategy to achieve this goal can be selected. He added that some people find living downtown as a bad thing. As a business owner he views a downtown resident as a permanent customer. If there is a way to support downtown residents then it should be looked at. He would like the DPC to see how it can take the most advantage of the downtown parking lots.

7) DOWNTOWN ON-STREET PARKING SURVEY

R. Dayton presented the results of the Downtown On-Street Parking Survey which was conducted in June of 2009. The survey was conducted on a Friday in March between 11 am – 7 pm and a Saturday 3 pm – 11 pm. The survey provided an inventory of Supply, Occupancy, and turnover (duration). R. Dayton stated that the consultant was not able to be there and would prefer to bring them back at a later time to get down to the nuts and bolts of the survey.

R. Rowse talked about the methodology of the survey. Friday and Saturday can be a bit of an anomaly downtown as furloughs and Farmers Market can affect those days. In addition, some of the times were after enforcement hours so that also affects the survey. The survey does not identify the users so it is taking leaps to draw conclusions.

K. Coffman-Grey asked if the 75 minute zones include the Residential Parking Program (RPP). R. Dayton replied that yes they accounted for any Residential Parking Permits but not many were actually found.

D. Pritchett would like to see the data without the RPP. He stated that the data is inconclusive. He would like to see results that were more consistent. He also feels the lack of enforcement greatly affected the results. He also noted that showing the results of after enforcement hours could go a long way with rationalizing more Parking Enforcement Officer’s.
G. McKnight commented that the length of stay would indicate that the parkers were not
downtown employees. R. Dayton replied that surveyors witnessed employees shuffling/moving
their vehicles. G. McKnight would be interested in seeing the occupancy of the parking garages
on the dates the surveys were done. R. Dayton answered that the consultant has that information
but did not draw any conclusions between the two. Again, he would like to have the consultant
back to show any impacts.

T. Williams stated that enough people from the two committees have questioned the validity of the
survey. He asked what the city plans on doing with the survey. R. Dayton replied that the right
metrics were measured in the survey in regards to traffic congestion. The survey itself was
relatively inexpensive to do if the committee’s would like to redefine the survey.

E. France commented that he feels the survey provides a lot of good information. He would like
to see a breakdown of employees, residents, and visitors to the downtown. He would also like to
see elasticity including distance traveled and length of stay for the various groups.

E. Kelley noted that the length of stay of vehicles by the freeway would indicate they are
employees are possibly residents. He would like to see the survey span more eastward as that
area is notorious for employee parking.

S. Maas added that the types of surveys that are being requested are a whole different animal as
it is a bit more intrusive to the participants. R. Dayton replied that these types of surveys are
possible but would come at more of a cost.

R. Rowse agreed with S. Maas and would come at more of a cost. He added that if more
decisions are going to be made then more conclusive data is needed.

T. Williams asked if there is a problem of there is plenty of parking. R. Dayton answered that is
for the business owners to decide. If more customer parking is needed then different strategies
need to be looked at.

M. Bradley ended with noting that the goals of the survey were occupancy and that was achieved.
Interview sampling is difficult as a valid sample is hard to difficult to achieve.

8) ADJOURNMENT: The meeting adjourned at 9:27am.
Response to City Committee Comments Letter # C7, Downtown Parking Committee and Transportation and Circulation Committee (May 13, 2010)

C7-1: Thank you for your comments.

C7-2: Comments noted. Please refer to Meeting Minutes for staff responses to comments at the meeting.

In regards to transit, the EIR describes the importance of transit frequency and provides recommended mitigation measures that transit be increased along key transit routes.

The model separates commuters into three categories: those who both live and work within Santa Barbara (internal to internal commuters), those who live in Santa Barbara and commute to work locations outside Santa Barbara (internal to external commuters), and those who live outside Santa Barbara and commute to work locations inside Santa Barbara (external to internal commuters).

The model has been calibrated to account for congestion and reflect an increase in travel-time accordingly. For the portion of trips within the model area, the model can produce data related to free-flow and congested travel conditions, and can produce relative numbers between the two conditions. As such, it is currently possible to say that travel on corridor N during congested periods is X percent greater than travel on corridor N during uncongested periods. Similarly, it is possible to account for the percentage delay experienced by all commuters or subsets of commuters. Field data collection of travel times would be necessary in order to estimate the change in specific times along specific corridors.

In regards to moderate TDM, the components of such a program are described on pages 16-28 through 16-31 of the EIR (see also Table 16.5 and Appendix I).

In regards to on-street parking utilization, overall, Downtown on-street parking is not 100% utilized, however many desirable high demand areas receive full utilization, while some outlying are not fully occupied. The propensity of a given commuter to travel great distances in search of free parking is influenced by a number of factors. These factors include the extent to which the commuter values their time (which tends to rise with an increase in income), the extent to which the distant parking is still time competitive with other available options (including transit, ride-sharing, walking, or biking), and the extent to which the search for available free parking impacts the reliability of their travel time (i.e. the search for free parking may take 3 minutes or it may take 15 minutes, and the resulting walk time from that parking can vary dramatically).

Plan SB includes numerous provisions to address these factors by enhancing and promoting transit, ride-sharing, walking, and biking, all of which diminish the appeal of distant parking and hiking. Further, placing time limits on neighborhood streets for non-residents (residential parking permits) can nearly eliminate this option for commuters.

C7-3: Comments noted. There is no ideal time to perform a comprehensive parking survey as variables such as the seasons, special events, and festivals can all affect occupancy and turn-over. The consultant selected Friday and Saturday as the most representative of peak-demand on parking resources. The parking survey provides clear conclusion that certain areas of the City consistency receive high demand while other more outlying areas can be underutilized. The parking study confirmed that employee movement of vehicles (e.g., 90-minute shuffle) was a factor in both on-street and in-garage parking. For the purposes of the EIR, the parking study provides useful background information on the relationship of parking availability and traffic congestion. Further studies may be able to share more light on the breakdown of employees, residents, and visitors to the downtown, as well as exploration of the effect of employee parking on both the Eastside and...
# C7, Downtown Parking Committee and Transportation and Circulation Committee (Continued)

Westside. However, more detailed surveys can be expensive and more intrusive on participants. In closing, the goals of this initial survey were to assess occupancy of on-street parking and the study met that goal.
CITY COMMENTS LETTER # C8

Santa Barbara Planning Commission
P.O. Box 1990
Santa Barbara, CA 93101

May 13, 2010

Subject: Comments on Draft Plan SB and Draft EIR

Honorable Members of the Santa Barbara Planning Commission

I am writing as current Chair of the Transportation and Circulation Committee (TCC) to comment on the recent Plan Santa Barbara documents. I believe that City Staff has done a good job in obtaining the best technical advice that their resources allowed in analyzing the probable future impacts of various land use scenarios and transportation policies. Based on my consulting experience in the field, my opinion is that the traffic modeling effort is based on the best combination of methods currently available to projects of this type, and that the way that the consultants used those methods appears to be sound. My only significant critique of the way the models was used is that they could provide a good deal of additional detail that would benefit the policy discussion, beyond the simple criterion of the number of city intersections beyond a certain congestion threshold. In particular, the freeway congestion levels and the amount of time that travelers spend in congestion delays is important both economically and socially, as are the differences in how the scenarios and policies will benefit residents versus non-residents and commuters versus leisure travelers.

Thinking of the long discussions ahead, I would advise the Planning Commission to carefully specify a limited number of additional model runs for the staff and consultants to carry out, focusing in on the effects of the most desirable mix of land use policies, and perhaps further refining the package of TDM measures that is most environmentally and economically attractive in mitigating the impacts of growth. It would also be valuable to think about what additional output information from the model would be most useful to you in evaluating the scenarios, and to request that that information be provided to the extent possible.

Based on evidence from around the country, it seems clear that a well-designed parking pricing and management program, supported by other TDM measures, can be both environmentally and economically attractive for the City and its businesses. Over the coming months, I'm sure that we will be hearing more about the experiences from other cities that have introduced comparable parking and TDM policies. I urge you to keep an open mind when evaluating the evidence.

Specifically, I support all of the TDM and circulation policies listed in "MM Trans-2" and in the Circulation Element, C1-10. Further implementation of the Bicycle Master Plan and Pedestrian Master Plan are critical to provide safe and attractive alternatives to auto travel—particularly in
combination with an affordable and frequent local transit service and the improved commuter rail and inter-regional bus services which are planned for the coming decades.

To reduce traffic congestion, I also support the ‘Additional Housing’ scenario, implemented in a way that will provide as much workforce housing as possible to counteract the trend towards longer commute distances into the city. Implementation is the key—I believe this is one area where the traffic model has underestimated the potential benefits of housing policy for transportation and circulation, by assuming that all new downtown residents will have the same characteristics as the ones who live there now. As Casa de las Fuentes has demonstrated, housing projects can be designed to attract people with low automobile usage. Private developments can also be steered in that direction by setting maximum on-site parking limits, unbundled parking and by requiring secure bicycle parking facilities as well as one or more parking spaces reserved for carsharing vehicles (Zipcar). The MODA principles are also critical to ensure that downtown residents can fulfill as many of their daily activities as possible traveling by foot, bike or transit.

By considering land use and transportation policy together in a forward-thinking plan, Santa Barbara can be one of the first cities in California to seriously tackle the challenges set forth in SB 375 and set an example for the rest of the state.

Thank you for your efforts,

Sincerely,

Mark Bradley
Response to City Comments Letter # C8, Transportation and Circulation Committee-Chair Bradley (May 13, 2010)

C8-1: Thank you for your comments. Your concerns and recommendations will be forwarded on to the City’s decision makers and considered by Community Development and Public Works Department staff during their formulation of recommendations to the decision makers.
CITY COMMENTS LETTER # C9

Rodriguez, Julie

From: on behalf of Community Development PC Secretary
Subject: FW: comments @ Plan SB

From: Coffman-Grey Home Office [mailto:cfmngrey@cox.net]
Sent: Wednesday, May 12, 2010 8:42 AM
To: Dayton, Rob
Cc: Mark_Bradley@cox.net
Subject: Re: comments @ Plan SB

Rob,

Here are a few comments about the Draft General Plan Update regarding Transportation issues. I will only be able to attend tomorrow's joint Downtown Parking Committee Meeting and TCC from 7:30 - 8:15am due to prior work commitments.

You cannot separate housing and transportation issues so even though we are a transportation committee I have included some housing issues.

HOUSING
1.) Need affordable by design housing in the downtown area. (limit number of larger housing units)
2.) Housing should be allowed to be denser on transit corridors downtown (also includes State Street from Mission to beach)
3.) limit heights to maintain the charm of Santa Barbara.
4.) more workforce housing like Casa Las Fuentes.

TRANSPORTATION / PARKING
1.) We need to be very careful in raising the cost of parking in our downtown lots for customers. Our sales tax base has already been deeply hurt by the recession and customers have already been going elsewhere where there is free parking.
2.) Lack of employee incentives to use alternative modes of transportation has effected the availability of parking for shoppers. The city needs to go back to the 10 ride free bus pass system for downtown employees.
3.) I am in favor of a moderate TDM for onstreet parking pricing if those funds are brought into a program for the 10 ride free bus pass program and also to help support the continued limited free parking time in downtown parking lots. The on street parking pricing TDM parking funds could also help subsidize keeping commuter lot monthly parking fees lower. By keeping commuter lots pricing lower you will ease the parking in city lots that are designed for customers. The generated funds should not go into the general fund but into the Downtown parking fund.
4.) As needed add additional Bike Stations downtown.
5.) Outreach program to businesses to encourage employees to use alternative modes of transportation.
6.) In city lots have priority parking for future electric cars and current hybrid cars in addition to current handicap parking.

Keith Coffman-Grey

Coffman-Grey Home Office Services
1615 Calle Canon
Santa Barbara CA 93101
805.569.0561
805.569.0526 fax
cfmngrey@cox.net

5/17/2010
Response to City Comments Letter # C9, Transportation and Circulation Committee-Member Coffman-Grey (May 13, 2010)

C9-1 (Plan SB GPU): Thank you for your comments. Your concerns and recommendations will be forwarded on to the City’s decision makers and considered by Community Development and Public Works Department staff during their formulation of recommendations to the decision makers.
Hello,

Numbers as high as 20,000 – 30,000 commuters per day coming into the city of Santa Barbara from outside SB county have been cited. That seemed very high to me. I checked with Rob Dayton and that number is from outside SB county into the entire county, not just to the city of SB. *And, these are round trips.* To determine how many individual commuters are involved the number needs to be cut in half.

Rob referred me to SBCAG’s *101 in Motion*, July, 2006, for specific numbers. From that report:

“The most significant number of peak period commute round-trips are: internal to the City of Santa Barbara (38,620), from Goleta to Santa Barbara (10,300), Santa Barbara to Goleta (8,780), internal to Goleta (6,360), Lompoc to Santa Barbara (3,940), Lompoc to Goleta (3,480), Carpinteria to Santa Barbara (2,420), internal to Carpinteria (1,820), Santa Barbara to Montecito (1,800), and Santa Maria to Goleta (1,500).

In addition, there are large numbers of trips commuting from Ventura County to Santa Barbara County (15,600 round trips). Of these, 8,640 are destined to the City of Santa Barbara, 3,800 to Carpinteria, 2,070 to Goleta, 700 to Montecito and Summerland, and the balance to elsewhere in the County.”

Remember that these are round-trip numbers and need to be halved to determine the number of individual commuters. According to the above report, 4,320 commuters come to the city of Santa Barbara from Ventura County.

It is interesting to note that almost as many Santa Barbarans commute to work in Goleta as Goletans commute to work in the city of SB.

From SBCAG’s *2009 SANTA BARBARA COUNTY CONGESTION MANAGEMENT PROGRA*

“On occasion, SBCAG will attempt to quantify inter-county commute trips, as this data can provide an indication of jobs-housing balance. Based on the Traffic Solutions 2007 Commuter Profile Survey, approximately 4% of Ventura County’s residents commute regularly to jobs in the South Coast and 2% of Santa Barbara County’s residents commute regularly to jobs in Ventura County.

Approximately 8% of San Luis Obispo County residents commute regularly to jobs in Santa Barbara County and 5% of Santa Barbara County residents commute regularly to jobs in San Luis Obispo County.”
[SB Co population 383,305, Ventura Co pop. 783,748, SLO Co. pop. 245,908]

According to the program report 15,500 commute trips per day are made by Ventura Co residents to SB Co. job sites while 3,100 commute trips per day are made by SB Co. residents to Ventura Co. job sites.

10,100 commute trips per day are made by SLO Co residents to SB Co. job sites while 9,400 commute trips per day are made by SB Co. residents to SLO Co. job sites. (Remember that these are round trips so the numbers need to be halved to determine the number of individuals commuting.)

It is interesting to note that almost as many SB County residents commute to work in SLO county as SLO residents commute to SB County.

I hope you find this information useful.

All the best,

Sheila
Response to City Comments Letter # C10, Planning Commissioner-Sheila Lodge (March 25, 2010)

C10-1: Thank you for your comments. Please see refined commuter numbers incorporated into EIR text in Section 16.1.1 (Transportation Modes).
Hello all,

The DEIR on the draft General Plan says that Father Serra was present at the founding of the Presidio in 1782 and later the same year at the founding of the Mission. This statement is incorrect. The Mission was begun four years later in 1786, and Serra had died by that time.

The Draft SB General Plan is slightly more accurate. It states that Serra was at the founding of the Presidio in 1782 and at the founding of the Mission in 1786. Again, Serra had died by that time. (Father Lasuen presided over the founding of the SB Mission). This morning I went to Wikipedia to look up Serra's dates: November 24, 1713 – August 28, 1784.

Father Lasuen, who might be described as Serra's assistant, wrote a biography of Serra after his death to bolster his attempt to get Serra beatified. Serra's sado-masochism, which Lasuen apparently admired and thought proof of his saintliness, is detailed in the biography. Serra is described as inspiring one of the neophytes to literally beat himself to death by Serra's own example of self-flagellation. There is also a description of the incarceration and beating of another neophyte for "unspeakable" practices, clearly homosexuality. (The biography goes on to say that these practices are a particular problem among the Chumash of the SB area.)

The link to the article is below. As far as I know it is accurate, and I recommend it to you.

http://en.wikipedia.org/wiki/Jun%C3%ADpero_Serra

In general both the DEIR and the draft SB General Plan have many factual errors, and those are the ones I know about. It does make me wonder what else may be mistaken.

Sheila

Of particular interest to me is the information about Indian population numbers: "Between 1769 and 1821, the Indian population dropped from 300,000-700,000 people to 25,000. ...

...Many deaths were the result of diseases such as malaria and smallpox, unknowingly brought by the Spanish and to which the native population had no immunity. Life expectancy once within the missions was around 10 years. As one Friar noted, the Indians 'live well free but as soon as we reduce them to a Christian and community life... they fatten, sicken, and die.' "

Page 1
729
Response to City Comments Letter # C11, Planning Commissioner-Sheila Lodge (April 8, 2010)

C11-1 (Plan SB GPU and EIR): Thank you for your comments. The information has been reviewed and text changes reflecting your comments included in the EIR and General Plan documents as appropriate. Please see also response O3-9.
Hello all,

Attached is some material from the UC Conference of Mayors on trees and sustainability and info about the Tree City USA program.

A correction re trees is needed. On page 35 of the DGP it says:

"Because of continued tree planting around the City, Santa Barbara was officially designated a "Tree City, USA" in 1905."

Here is my suggested re-write based on info below from the Arbor Day Foundation:

Because of a strong tree planting and maintenance program, Santa Barbara was officially designated a "Tree City, USA" in 1980. It is one of the oldest in the country.

The Tree City USA program was started in 1977 (33 years ago) by the Arbor Day Foundation in collaboration with the US Dept. of Agriculture. SB has been a Tree City USA since 1980 and is one of the oldest in the country.

Sheila
From a 2008 US Conference of Mayors cover letter on a city tree survey:
(USCM membership is from cities of 30,000 population or more – there are about 1200)

134 cities responded – Santa Barbara wasn't one of them.

"Trees make important contributions to society and are an integral part of urban infrastructure, as critical to the health and livability of communities as roads, sewers, and buildings. Community trees leverage the social, economic, and environmental value of cities, with forestry and related industries providing employment for over 1.6 million people and contributing $231.5 billion to the U.S. economy.

Mayors recognize the invaluable role of urban forests in the protection of public health and reduction of harmful greenhouse gases. And mayors have long appreciated the contributions of urban tree canopies to the sustainability and beautification goals they have established for their cities. During its 76th Annual Meeting this year in Miami, the Conference adopted policies that specifically address energy conservation and efforts to combat the non-native insects and diseases that threaten the urban tree canopy."

From the Executive Summary:

**On Climate Protection:**

- **Sustainability Efforts:** Eighty-four percent of the cities view their activities relating to trees as part of their overall sustainability and/or climate protection efforts. Thirty-eight percent of those which have adopted a sustainability or climate protection plan report that their plan specifically cites the contribution of trees or the tree canopy to achieving the plan's goals.

- **Carbon Sequestration Measurement:** Forty-four percent of the cities anticipate being able to measure the carbon sequestered by their tree canopy within the next few years....

- **Green Infrastructure Tree Value:** Thirty-two percent of the cities estimate the value of trees as part of their green infrastructure. The estimated total value for the 32 cities able to report it is $6.58 billion....

- **Community Outreach:** Nine in 10 (91 percent) of the cities work with partner organizations to provide programs that educate residents on the importance of trees, and 53 percent of the cities believe that public awareness of the importance of the preservation and growth of the tree canopy is increasing....

**CLIMATE PROTECTION
Sustainability
FINDINGS**

Eighty-four percent of the survey cities view their activities relating to trees as part of their overall sustainability and/or climate protection efforts. Thirty-eight percent of those which
have adopted a sustainability or climate protection plan report that their plan specifically cites the contribution of trees or the tree canopy to achieving the plan's goals....

**Carbon Sequestration Measurement**
Forty-four percent of the survey cities anticipate being able to measure the carbon being sequestered by their tree canopy within the next few years...


---

**The Four Standards for Tree City USA Recognition**

To qualify as a Tree City USA community, a town or city must meet four standards established by The Arbor Day Foundation and the National Association of State Foresters.

These standards were established to ensure that every qualifying community would have a viable tree management plan and program.

It is important to note that they were also designed so that no community would be excluded because of size.

1. A Tree Board or Department

2. A Tree Care Ordinance

3. A Community Forestry Program With an Annual Budget of at Least $2 Per Capita

4. An Arbor Day Observance and Proclamation

For more information about the Arbor Day Foundation go to [http://www.arborday.org/](http://www.arborday.org/)
Response to City Comments Letter # C12, Planning Commissioner-Sheila Lodge (May 4, 2010)

C12-1 (Plan SB GPU): Thank you for your comments. Please see General Plan document text edits to the “Becoming Santa Barbara” section reflecting your comments.
Comments on the Draft EIR, Plan SB
Sheila Lodge May 17, 2010

1. There is an assumption in the DEIR that a healthy economy requires growth. This has not been proven to be so in Santa Barbara's history.

For example the city's population over the last ten years increased by 1.4%, essentially staying stable. Except for the impact of the international downturn in the economy, something over which Santa Barbara has no control, the city has done well. It's unemployment rate is half that of the state's.

From the Pacific Coast Business Times April 22, 2010, report on the UC Santa Barbara Economic Forecast Project seminar, Headlined

"Updated story. In Santa Barbara County, slow growth softens recession's blow
Santa Barbara County will experience a shorter and shallower recession than the rest of the region, the UC Santa Barbara Economic Forecast Project said.
Speaking to 600 business and community leaders April 22, Chris Thornberg and Brad Kemp of Beacon Economics said Santa Barbara County went into recession later than Ventura and San Luis Obispo counties. It has experienced less unemployment than the other two counties and will emerge from the recession at the same time as the balance of the region and state.
"Santa Barbara County is very insulated," Kemp said. "You haven't felt the effect of the recession the same as everybody else."

The chief reason for Santa Barbara County's relative health is the slow-growth policies that restrained construction spending and job growth on the South Coast, the economists said."
(Underlining added.)

A stable population doesn't place additional pressure on resources and is environmentally preferable. It reduces pressure on the housing supply and therefore lessens the jobs/housing imbalance.

In 1974 the Santa Barbara City Council, concerned over the rapid pace of development in the city, had an analysis done of the impacts of growth. I recently asked one of the authors of the study if he thought it was still valid. He firmly said yes.
The report, Impacts of Growth, found that greater density meant higher crime rates, dirtier air, more traffic congestion and higher city costs.

It found no advantages to growth except possibly for greater ethnic diversity and a richer array of cultural activities. However, this is not the case for Santa Barbara. The median income here is lower than in Ventura, Oxnard and California, suggesting greater economic diversity. The population is 32% Hispanic as against 15% for the US. Santa Barbara has far more museums, art galleries and performing arts groups per capita than San Francisco or Los Angeles.

The impacts of Growth report noted, "Tourism is not only among the most important components of the city's economic base...it is also...the most-lucrative from the standpoint of public revenues. This city is thus in an unusual circumstance: whatever decreases the quality of a number of features of the area ... also acts to undermine its economic base."

Going forward, strengths for the region in recovery will include technology and tourism, the economists at the UCSB Economic Forecast project seminar said.

The presence of both technology and tourism as a vital part of Santa Barbara's economy depend on maintaining what attracts them - the city's beauty, small-town feel, openness and the ability to see the beautiful setting in which Santa Barbara lies. That is the engine for Santa Barbara's economy, not growth.

2. Another assumption in the DEIR is that increasing density downtown will take pressure off of outlying undeveloped properties and thereby leave the open space they provide. Since every property owner has a right to reasonable use of his or her land, greater density downtown will have no effect on development of outlying property. The only way they can be kept as undeveloped is to buy them. (The DEIR appears to recognize this on page 13-38 with a mitigation measure of Open Space Acquisition Funding.)

3. A third assumption is that new jobs created by new residents will mostly be filled by existing services and workers. Certainly some will,
but adding 6,700 people to Santa Barbara, the population of a small
town which would have its own workers of every type from
gardeners to doctors, will create new jobs that can't be filled by
existing workers, and the people who fill those jobs will need housing,
mostly lower cost housing. It will be extremely hard to improve the
jobs/housing balance unless all new housing units are “affordable”.

The lack of affordable housing to rent or to buy has been a major
issue since at least 1948. More than 25,000 additional dwelling units
have been built in the city of Santa Barbara since then, and the
problem is even worse. As long as Santa Barbara remains a highly
desirable place to live housing costs will be high.

Given the number of commercial vacancies and the amount of
shopping done on-line, Santa Barbara may have too much
commercially zoned land.
The city should look at re-zoning some of its commercial zones to all
residential, and it should consider incentives for building entirely
residential projects on commercially zoned land. Mixed use projects
make the problem worse with commercial uses creating additional
jobs and by the demand for services by high income households in
luxury units.

4. As the DEIR shows Santa Barbara has done a truly remarkable job
in providing affordable housing, especially when compared to
neighboring jurisdictions. The problem is a regional one, and other
communities should be worked with to get them to do more.

5. There are several comments about possible overcrowding in
households in Santa Barbara in the DEIR. As the figures from the US
Census below show, Santa Barbara's persons per household figure is
lower than Ventura's, Thousand Oaks', Oxnard's, California's and
the US's. Only Santa Maria's is lower. Although overcrowding may
be an issue in some neighborhoods, the overall figure is low enough
to suggest that it is not a significant issue in Santa Barbara.

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Response to City Comments Letter # C13, Planning Commissioner-Sheila Lodge (May 17, 2010)

C13-1 (Plan SB GPU and EIR): Thank you for your comments. The draft Plan Santa Barbara policies propose to continue Santa Barbara’s slow-growth policies by reducing the non-residential policy growth cap further compared to the cap used for the past two decades, as well as refining housing policies toward unit types more affordable to the workforce, and increasing design review tools for the protection of the City’s visual and historic character.

The City Council-adopted goals for the Plan Santa Barbara General Plan Update process, including goals for providing affordable housing and ensuring a strong economy, are reflected in the draft Plan goals, objectives, and policies, and the EIR Project Objectives. These inform the EIR assumptions about the relationship of growth to the economy. Recent source materials such as the City’s Plan Santa Barbara economic studies support the assumption that an increment of additional growth supports continuing economic vitality and diversity. A small amount of non-residential growth allows for adaptation and a measure of expansion for businesses, and provision of additional workforce and affordable housing helps to address business issues such as the ability to recruit and retain qualified workers, and potential benefits to businesses and the community from employees that do not have long workday commutes.

The EIR identifies potential environmental impacts associated with growth, as well as potential environmental benefits from more affordable and workforce housing. The EIR Alternatives reflect the range of community opinion about growth levels and policy changes, to provide a comparative evaluation of potential impact levels.

It is worth noting that while reported population growth has been modest over the last decade, the City has added over 1,000 housing units, and hundreds of thousands of square feet of new or upgraded non-residential development to the urban inventory, along with associated job growth.

C13-2: Comment noted. The EIR does recognize that strengthening policies to further promote and provide incentives for workforce housing downtown could reduce pressure to provide for housing demand in outlying areas. Property owners of outlying open lands would retain the right to approach the City to request development however.

C13-3: Comment noted. EIR Section 19.4.1 (Citywide Job Growth and Housing Availability) discusses “secondary” job growth based on population increase. The EIR notes that such job growth is difficult to quantify, is dependent on the type of housing constructed and the incomes of future residents, and is accounted for as a part of overall Citywide non-residential growth. A limited amount of additional housing is projected to be built over the 20-year planning period. The EIR concludes that with the type of housing being promoted under the draft General Plan policies, primarily modestly-sized multiple-family homes as opposed to a high proportion of large estates, such secondary employment growth would be limited, and existing services could likely accommodate much of the increased business. Although this is a complex matter, based on available studies and the nature of growth projected, the EIR concludes that such secondary growth impacts would not be substantial.

C13-4: Comment noted. The EIR notes that the City is by far the leading provider of affordable housing on the South Coast. Both the draft General Plan and EIR recommend improved regional coordination on provision of affordable housing.
# C13, Planning Commissioner-Sheila Lodge (Continued)

C13-5: Comment noted. Please see clarifications in EIR Sections 19 (Population and Jobs/Housing Balance) and 20 (Socioeconomic Issues). The EIR does not assume that there is general overcrowding based on the relatively low average household size. Rather, the EIR describes that for lower income families and households, “doubling up” or overcrowding of larger households into smaller units, as well as potential illegal second units, remains an issue for some households unable to afford the high cost of area housing.
Hello,

I double-checked with Mary Louise Days re the above and her recollection is the same as mine except that size was based on the number of bedrooms. So my correction needs correction.

I just went to my old city council files and to my astonishment found at first glance a 1991 planning commission staff report about the history of the 85,000 and the variable density ordinance - this was all in light of the fact that the city had exceeded the 85,000 and RHNA was requiring the city to increase affordable housing... very interesting! It confirms the bedroom count as the basis for density. (Scan of the pertinent page is attached.)

Best,

Sheila

Page 2-7 2.5.3 Variable density

It says:

Following the 1975 residential down-zoning, the City recognized that the residential ordinance made it more profitable to build large homes than small ones; and that redevelopment of properties was resulting in more commercial development than residential, with the loss of existing smaller, more affordable homes. In 1977, the City sought to reverse this trend by adopting the Variable Density ordinance to promote more residential and mixed-use development and smaller residential units.

It should say:

Following the 1975 residential down-zoning in multiple zones to 12.5 units/acre, developers built very large units to maximize their return. In 1977, the City adopted the Variable Density ordinance which allows a range of number of units to the acre in multiple zones, depending on number of bedrooms, to encourage smaller residential units.

(Note: this issue related only to R3 and R4 properties and mixed use was not in play until after 1981.)

--------------------
City's General Plan and Zoning Ordinance which would permit the City's population to exceed 85,000 persons be approved by the voters?" (10,953 voted Yes, 7,331 voted No) Based on Proposition A, the Council certified the Environmental Impact Report, and upheld the 1975 downzoning.

Variable Density Ordinance

As time passed, it was realized that the downzoning had created a bias in the Zoning Ordinance that made it more profitable to build large units than small ones, and that the City was "losing" smaller, more affordable units. In addition, commercial development increased, while residential development did not. In order to reverse this trend, the City adopted an amendment to the Zoning Ordinance in 1977 which is referred to as the Variable Density Ordinance. This Ordinance allowed densities based on the number of bedrooms/acre in the multi-family zones; the highest density could be achieved with studios, the lowest with three or more bedroom units. It is important to note that the Variable Density Ordinance only applies to the R-3 and R-4 zones. In commercial and industrial zones, properties are allowed residential densities equivalent to those of the R-2 zone (1 dwelling unit/3,500 square feet.)

The Variable Density Ordinance was adopted for four reasons:

1) to provide a more flexible density standard which gives land-owners and developers more options;
2) to adjust land use to actual population density by using bedrooms per acre as the base for determining the number of units allowed;
3) to remove a built-in bias in the present Zoning Ordinance which makes the building of large units more profitable than the building of small units; and
4) to encourage the construction of small, more affordable apartments and relieve the shortage of this type of housing in the City.

An analysis of the Variable Density Ordinance was performed, regarding the effect it would have on the total population and the number of housing units in the residential zone. Three scenarios were analyzed: low, medium, and high. The potential population of the residential zones in the "low" scenario was in the mid-70,000s. The potential population of the residential zones in the "medium" scenario was in the 85,000 range. "High" was the scenario where there was the greatest amount of changes from existing land use patterns, i.e. population and number of housing units were maximized. The potential population of the

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1This gap between the amount of employment available in the City and the number of housing units available in the City continued to widen, and became known as the "jobs/housing imbalance."
Response to City Comments Letter # C14, Planning Commissioner-Sheila Lodge (May 4, 2010)

C14-1: Thank you for your comments. Please see adjusted text in the EIR discussion of Environmental Setting/Background: City General Plan and Growth Management Tools in Section 2.5.3 (Variable Density).
Rodriguez, Julie

From: on behalf of Community Development PC Secretary
Subject: FW: Sheila Lodge comment - # of commuter trips to the South Coast, city of SB

I forgot to include these quotes from the DEIR and their discrepancy. The first quote says there are 32,000 commuters to the South Coast in the 6th line and then says there are 32,000 to the city (15,000 + 17,000) in the 8th line.

Begin forwarded message:

From: Sheila Lodge <silodge@cox.net>
Date: April 5, 2010 11:15:44 AM PDT
To: Kent Epperson <KEpperson@sbcag.org>
Subject: # of commuter trips to the South Coast, city of SB

Hello Kent,

I'm reading the DEIR for Plan SB and in the Transportation section found these statements:

Pages 16-2, 16-3

"...there are a significant number of regional commuters driving and taking transit into Santa Barbara everyday. Data from the Santa Barbara County Association of Government (SBCAG) "2007 Commuter Profile" indicate that, although 92 percent of Santa Barbara County commuters both live and work in Santa Barbara County, 10 percent of respondents reported moving a farther distance from work in the past four years in order to obtain more affordable housing. In total, it appears that there are up to 32,000 commuter trips to the South Coast on a daily basis via automobile, with an additional commuters 800 using long-distance transit. Figure 16.1)1. Of this South Coast total, there are approximately 15,000 commuter trips to the City from the north, and 17,000 commuter trips to the City from the south. This long-distance commuting causes substantial congestion on U.S. Hwy 101 and SR-154, as well as affecting local City streets."

Page 16-7

"Within the South Coast, regional travel involves commutes between the City and employment opportunities at University of California at Santa Barbara (UCSB) and Goleta industrial parks, inbound commutes from other South Coast communities to employment in the City, particularly within downtown,
and other trips such as travel from student housing in Isla Vista to Santa Barbara City College. Although precise data for the City is unavailable, regional commuting into the South Coast from Ventura, Santa Ynez, Lompoc and Santa Maria is estimated to involve up to 32,000 daily trips by automobile and 800 using transit based on 2007 journey to work data."

You will note that the first quote first says that there are 32,000 commuter trips to the South Coast then that there are 32,000 trips to the City (15,000 from the north = 17,000 from the south = 32,000.)

The second quote says that there are 32,000 trips to the South Coast.

The last time we talked you said that there are 29,000 commuter trips to the South Coast. You also said that you would be able to provide data on how many trips from Ventura County are to the City of SB as well as how many from north county are to the city. As you can see clarification is badly needed. Decisions about the city of SB’s future will be made soon on the basis of these figures.

Please let me know when you’ll be able to get the correct information to me. I do appreciate your help.

Sheila
956-5566
The third ¶ is a repeat of the 2nd ¶ and should be removed.

Page 2-7  2.5.3 Variable density

It says:

Following the 1975 residential down-zoning, the City recognized that the residential ordinance made it more profitable to build large homes than small ones; and that redevelopment of properties was resulting in more commercial development than residential, with the loss of existing smaller, more affordable homes. In 1977, the City sought to reverse this trend by adopting the Variable Density ordinance to promote more residential and mixed-use development and smaller residential units.

It should say:

Following the 1975 residential down-zoning in multiple zones to 12.5 units/acre, developers built very large units to maximize their return. In 1977, the City adopted the Variable Density ordinance which allows a range of number of units to the acre in multiple zones, depending on size, to promote smaller residential units.

[note: this issue related only to R3 and R4 properties and mixed use was not in play until after 1981. I informally corroborated my recollection of what happened in 1977 with Don Olson.]

Page 2-7  2.5.4 Measure K and “Living within Our Resources”

It says:

It in 1977, the Santa Barbara voters passed a two-part measure that upheld the 1975 down-zoning and required voter approval for land use proposals or legislation that would increase population.

It would be more accurate to say:

In 1977 a two-part advisory measure was placed on the ballot that asked if the voters approved of the 1975 down-zoning and if voter approval should be required for changes in zoning. Both parts of the advisory measure were approved by almost two to one.

Page 3-1 typo
3.1 First bullet says:

City Council extended these non-residential growth limits to January 1, 2013 with an amendment to the implementing ordinance ($28.87.300), to allow sufficient time for the Plan Santa Barbara process to development updated growth

“development” should be “develop”.

751
Top lines say:

"...at the remaining un-built square footage from the original Measure E square footage cap (no more than 1.5 million square feet for net new development, plus 0.5 million square feet for minor additions, demolition/reconstruction, and annexations)."

Question: a graph on page 2-8 says the un-built sq. footage is 807,386. Which is it?

Page 3-2 3.2.2

It says:

- Live within our resources by balancing the amount, location, and type of development with available resources including water, energy, transportation, housing, and food.

Since both energy and food are not local resources but are brought in from elsewhere (as is some of our water) I suggest:

- Live within our resources by balancing the amount, location, and type of development with available resources including water, transportation, air basin capacity, traffic handling capacity and housing.

Page 6-28 2nd ¶ last line

It says:

cumulative air quality impacts could result inconsiderable contribution.

It should say:

cumulative air quality impacts could result in considerable contribution.

Page 8-1

8.0

It says:

Historically, the 1925 Santa Barbara earthquake leveled much of the downtown...

It should say:

The 1925 Santa Barbara earthquake severely damaged much of the downtown...

[SB Historical Museum librarian: "Most buildings downtown remained standing. Many lost their facades."]
It says:
The Riviera and Mission Ridge and the Santa Ynez Mountain foothills overlook the City to the north and east, and slope gently to the coastal plain...

It should say:
The Riviera and Mission Ridge and the Santa Ynez Mountain foothills overlook the City to the north and east, and slope steeply to the coastal plain...

[The first line on the next page, 8-2, referring to the Riviera says, "...moderate to steep hillsides and canyons."]

Page 8-7 8.1.4

It says:
Historically, strong local earthquakes occurred in 1806 (cracks in Mission walls), in 1812 (damage to Presidio), and in 1852. More recent substantial local earthquakes include those in 1925 (Magnitude 6.8) that destroyed the majority of the Downtown...

It should say:
Strong local earthquakes occurred in 1806 (cracks in Mission walls), in 1812 (severe damage to the Mission, damage to the Presidio), and in 1852. More recent substantial local earthquakes include those in 1925 (Magnitude 6.8) that severely damaged the Downtown...

Page 8-9 1st ¶

It says:
Areas of known hazards from mudslides include steep hillsides on the Mesa, in the Las Positas Valley, and Hope Ranch...

Question: Why is Hope Ranch included? (And there are other places where it is treated as if it is part of the city.)

Page 8-10, 1st line, 4th ¶

It says:
The City has approximately 4 miles of ocean bluffs, including those on the Clarke Estate

It should say:
The City has approximately 4 miles of ocean bluffs, including those on the Clark Estate
[There is no e on the end of this Clark. It is spelled correctly elsewhere.]

Page 8-11. Next to last line of the second ¶:
It says:
...Clark Estate in the east and limited areas of Hope Ranch...
Again I question including Hope Ranch.
"...and those in Eastern Hope Ranch."

Again, why is Hope Ranch included?

Page 10-5  ¶ 1

It says:
"The historic period in Santa Barbara County began in 1542 when explorer Juan Rodríguez Cabrillo entered the Santa Barbara Channel and made the first European contact with the Barbareño Chumash. Governor Felipe de Neve and Lieutenant José Francisco Ortega founded the Presidio of Santa Barbara in 1782 while the Santa Barbara Mission was established by Father Junipero Serra that same year."

It should say:
Recorded history in Santa Barbara County began in 1542 when explorer Juan Rodríguez Cabrillo entered the Santa Barbara Channel and made the first European contact with the Barbareño Chumash. Governor Felipe de Neve and Lieutenant José Francisco Ortega founded the Presidio of Santa Barbara in 1782. The Santa Barbara Mission was established in 1786.

Or, another possibility:
Recorded history in Santa Barbara County began in 1542 when explorer Juan Rodríguez Cabrillo entered the Santa Barbara Channel and made the first European contact with the Barbareño Chumash. Because the King of Spain was more interested in protecting Spain's territorial interests in California than in converting the Chumash, the Presidio (fort) was founded first in Santa Barbara in 1782. The Santa Barbara Mission was established in 1786.

[Father Serra died in 1784.]

Page 10-5  Last 3 lines

It says:
Sewers were installed in 1886 and one year later, electric street lights were installed along 2 miles of State Street.

Given that there are several errors regarding dates in this section, I suggest double-checking these dates. 1886 sounds very early for sewers. If street lights were installed in 1887 they more likely were gas.

Page 10-6

Figure 10.1: City of Santa Barbara Historic Districts

The page is blank below the title.

Page 10-7  1st ¶

"Initially they ran on a single line between the 1300 block of State Street and Mission Creek."

Since State crosses Mission Creek near Alamar as well as near Cabrillo I suggest it say:

Initially they ran on a single line between the 1300 block of State Street and Cabrillo Boulevard...
It says:
"Before the 1925 earthquake that leveled much of the Downtown..."

It should say:

*Before the 1925 earthquake that severely damaged much of the Downtown...*

It says:
"Santa Barbara County Courthouse (1927), Arlington Theatre (1930),"

It should say:
*Santa Barbara County Courthouse (1929) Arlington Theatre (1931),*  
Also change date in caption under Arlington photo to 1931.

This District encompasses approximately 54 acres located between Anapamu, Garden, and Arrellaga streets...

The fourth boundary (eastern) is missing.

A comment on Section 11 – Hydrology and Water Quality

At first I thought this section was about drinking water quality. Wouldn't "Surface Water Quality" be a clearer description?

It says:
..existing residential areas expose to roadway...

It should say:
..existing residential areas exposed to roadway...

"Open spaces within the City, such as Alameda Park/Alice Keck Memorial Garden..."

It should say:
"Open spaces within the City, such as Alameda Park/Alice Keck Park Memorial Gardens..."

"The California Adobe, Monterey Revival, and Spanish Colonial Revival architectural styles of the City's Downtown and surrounding El Pueblo Viejo Landmark District are central to the City's visual character (refer to Figure 13.1). Since the late 18th century, Santa Barbara's built environment has adhered to an architectural heritage that is characterized by these open,
outdoor-oriented styles, suited to the local geography, climate, and small-town community scale."

The Victorian era has been omitted. Many Victorian buildings remain downtown and are part of its character. It is since the early 20th century, not the late 18th century, that SB's built environment has adhered to its architectural heritage.

Page 13-7 last line, 5th ¶:

It says:
"In addition, public views are available from upper stories of buildings such as the County Courthouse, parking garages, Paseo Nuevo, and the roof-top patio of the Canary Hotel."

The roof-top patio of the Canary Hotel isn't a public space in the sense the other listed spaces are.

Page 13-19 4th ¶, next to last sentence says:

"In commercial zones, new building heights are limited to a maximum of 60 feet in the Downtown, but generally limited to 45 feet in the Upper State Street, Milpas, Haley and Gutierrez, and Coast Village Road districts."

It should say:
"In commercial and industrial zones new building heights are limited to a maximum of 60 feet in the Downtown, along Milpas Street, parts of Mission and De la Vina Streets, but generally limited to 45 feet in the Upper State Street and Coast Village Road districts." (See attached existing building heights map.)

Page 14-18 1st ¶:

"An additional recommended measure RM SERV-3 (Development Impact Fees) would require new commercial and market rate residential development to either not impact community services and facilities or contribute financially to the cost of services and facilities."

Are there any circumstances under which new commercial and market rate residential development would NOT impact community services and facilities?

Page 15-2 1st sentence, 3rd ¶:

It says:
"The annual City Water Fund budget of approximately $35 million is largely funded by water service customers such as City residents and businesses, with the exception of a small amount of grant funding."

The last sentence of the 5th ¶ says:
"Revenues for operating and capital costs come entirely from water service charges and interest on Water Fund reserves."

The last sentence is correct, I believe. Perhaps this would be most accurate:
Revenues for operating and capital costs come entirely from water service charges and interest on Water Fund reserves with the exception of a small amount of grant funding.

Page 16-19 Last sentence, 3rd ¶:

"The new Terminal is expected to be ready for use in late 2010 while refurbishment of the existing historic Terminal will be complete in 2011."

The new terminal will be ready in Spring, 2011, per Karen Ramsdell, Airport director

---

Page 16-50 Table 16.7: Vehicle Trips Added to Corridors Where Traffic Flow May Be Affected by "Friction":

<table>
<thead>
<tr>
<th>Roadway Segment</th>
<th>Existing ADT</th>
<th>Added Trips Under Plan Santa Barbara (2030)</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>State St. between SR-154 and Las Positas Rd.</td>
<td>28,800</td>
<td>35,800</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

According to my calculations the highlighted number should be 7,000.

Page 16-53 1st line, 4th ¶

It says:

"The Santa Barbara Traffic Model also includes traffic from construction of up to 4,03 new units..."

I believe the highlighted number is supposed to be 4,360.

Page 19-5 ¶ 3

"In 2008, the South Coast supported 78,000 housing units, with approximately 48 percent (37,675) of these units in the City..."

¶ 4:

"City of Santa Barbara: As of January 2008, the city of Santa Barbara supported an estimated..."

Page 19-8 last ¶:

"City of Santa Barbara: As of January 2008, the city of Santa Barbara supported an estimated...

"Supported" doesn't seem to be the appropriate word as used above. Wouldn't simply 'had' or 'has' be a better choice?

---

Table 22.1: Summary of Growth and Policy Assumptions

Under No Project column:

**Community Design:** Building height limits 60 feet in downtown commercial and 45 feet outside downtown. Existing design standards for building size, bulk, scale, setbacks and community
amenities

page 22-5

It should say:

**Community Design:** Building height limits 60 feet in commercial and industrial zones downtown, on Milpas Street, parts of Mission and De La Vina Streets and 45 feet on Upper State and Coast Village Road. Existing design standards...
Response to City Comments Letter # C15, Planning Commissioner-Sheila Lodge (May 17, 2010)

C15-1: Thank you for your comments. Please see response C10-1 regarding commuters.

C15-2: Comment noted. Please see text revision in EIR Section 2.4 (Existing Land Uses).

C15-3: Comments noted and fact-based revisions have been incorporated in the EIR text as described below. In general, opinion-based editorial rewording of EIR text has not been included.

Page 2-7 (2.5.4): Comments noted. Regarding Variable Density discussion, also please see response C14-1 and text revision.

Page 3-1 (3.1): Comment incorporated.

Page 3-2 (Top lines): The text is referring to the overall Measure E growth policy caps while the graph refers to actual remaining unbuilt square footage that has not been allocated.

Page 3-2 (3.2.2): Comment noted. These are the proposed project objectives as endorsed for environmental review by the City Council. Comments and recommended changes may be considered by the Planning Commission and City Council as part of the Plan approval process.

Page 6-28 (2nd pp, last line): Comment noted; please see text revision.

Page 8-1 (8.0): Comment incorporated.

Page 8-1 (8.1.1): See revised text “and slope downward to the Coastal plain”.

Page 8-7 (8.1.4): Comment incorporated.

Page 8-9 (1st pp): Hope Ranch is located within County unincorporated area that is part of the City Sphere of Influence. These areas include neighborhoods exposed to a variety of geologic hazards, especially bluff retreat and mudslides. Evaluation of potential impacts within the Sphere is included as part of the EIR scope of analysis, since the Sphere identifies areas that may eventually become part of the City, and to consider regional cumulative impacts of the project area together with surrounding areas.

Page 8-10 (1st line, 4th pp): Comment incorporated.

Page 8-11 (Next to last line of 2nd pp): Please see response to page 8-9 above.

Page 8-23 (3rd line): Please see response to page 8-9 above.

Page 10-5 (1st pp): Comment noted, please see revised text.

Page 10-5 (Last 3 lines): Comment noted, please see revised text.

Page 10-6: Comment noted. The website version of the EIR has been updated to include Figure 10.1.

Page 10-7 (1st pp): Comment incorporated.

Page 10-7 (3rd pp): Two comments incorporated.

Page 10-11 (2nd pp): Comment incorporated with “and north of Alta Vista, with Grand Avenue to the East”

Section 11: Comment noted. The section also addresses groundwater.

Page 12-14 (5th pp, 2nd line): Comment incorporated.
# C15, Planning Commissioner-Sheila Lodge (Continued)

Page 13-7 (1st line, 5th pp): Comment incorporated.
Page 13-7 (Last pp): Comment noted. The City’s Victorian structures are already discussed in the Section.
Page 13-7 (Last line, 5th pp): Comment noted. However, the Canary hotel does constitute a building with an upper story available for public views.
Page 13-19 (4th pp): Comment noted, please see revised text.
Page 14-18 (1st pp): Comment noted. Note also that the EIR identifies overall citywide impacts to Public Services and Facilities as less than significant.
Page 15-2 (1st sentence, 3rd pp): Comment noted; please see revised text.
Page 16-9 (Last sentence, 3rd pp): Comment noted; please see revised text.
Page 16-50 (Table 16.7): Comment incorporated.
Page 16-53 (1st line, 4th pp): The 403 units is correct and constitutes residential growth assumptions forecasted for the City Sphere of Influence, for purposes of the EIR impact analysis.
Page 19-5 (3rd and 4th pp) and 19-8 (last pp): Comments incorporated.
Table 22.1: Comments incorporated.
CITY COMMENTS LETTER # C16

Rodriguez, Julie

From: Keith Rivera [acme.arch@cox.net]
Sent: Wednesday, April 28, 2010 8:39 AM
To: Community Development PC Secretary
Subject: Comments on the General Plan Update & Draft Environmental ImpactReport

Dear Honorable Commissioners:

I would like to convey my agreement with the comments submitted by Santa Barbara For All in their letter to you dated April 27, 2010 and particularly their stated concerns about the proposed Average Residential Density. I concur with their recommendation that changes in allowable residential densities be delayed and studied at the time a Form Based Code is developed.

Thank you for this opportunity to participate in the General Plan Update process.

Sincerely,

Keith Rivera, AIA
Acme Architecture
805.886.9834
www.acmearchitecture.com
krivera@acmearchitecture.com
Response to City Comments Letter # C16, Architectural Board of Review Member - Keith Rivera (April 28, 2010)

C16-1: Thank you for your comments, which have been forwarded to decision-makers.
CITY COMMENTS LETTER # C17

To: Planning Commission

From: Russell R. Ruiz

Re: General Plan Meeting; April 28, 2010

Date: April 22, 2010

I have been asked by staff to be clear when I am writing on this subject, when I am doing so as an individual and when I am writing on behalf of the Water Commission. Today I am writing in my individual capacity. The Water Commission is working on a formal Comment Memorandum to the General Plan EIR so I will make no substantive comments today on the EIR, in respect for that process. We conducted our first hearing on our EIR Comments at our April 12, 2010 Commission meeting. We intend to conclude the process at our May 10 meeting and submit the Memorandum prior to the May 17 comment deadline.

Although I will make no substantive comments today, I did not want this hearing to occur without any comment to the Water Supply section of the EIR, and a suggestion that it is accurate and acceptable to the Water Commission as drafted. If you are interested you may review our draft Comment Memorandum on the City's website. On the first page of the City website go to Quick Links; go to Boards and Commissions; go to Water Commission; go to Water Commission 2010 Archives; under Staff Reports it is the third document down, April 12, 2010 Item 7, Plan Santa Barbara General Plan EIR Comments.

That document was drafted by the Water Commission's General Plan Committee on which I serve with Commissioner Neustadt. It was reviewed without objection at our April meeting. The other three Commissioners submitted additional comments that will be added to
this draft, and that will be considered for approval at our May meeting.

I will not appear at your April 28 nor your May 6 meetings, again out of respect for our formal process. We will be engaged once a final Comment Memorandum is approved by the Water Commission and I will make sure each of you receives it.
Response to City Comments Letter # C17, Water Commissioner - Russell Ruiz (April 22, 2010)

C17-1: Thank you for your comments. Please see responses to comments provided in response C5.
Dear Dana,

The Coalition for Community Wellness has been in the forefront utilizing workshops to promote public input toward the development of the next 20-year Plan Santa Barbara. SWAG offers an educated guess that the Coalition was active in facilitating Public Health as a policy issue in Plan Santa Barbara. If that is correct, CONGRATULATIONS to the Coalition. In addition, thank you for the reassurance that the Coalition for Community Wellness believes that safe water is an important issue.

The dictionary definition of coalition is: “a temporary alliance for joint action”.

Speaking as a physician, Public Health infers a broader comprehensive coalition to help prevent citizens from being in harm’s way. The many months of intermittent workshops appeared to be designed to promote and shepherd the broader community approach. With this in mind, SWAG suggests that our information be distributed by the Coalition for Community Wellness as a courtesy to other groups in Santa Barbara that you are aware of who are interested in water quality improvement. This will ensure that such groups know now that the Coalition for Community Wellness will not be working on the issue of safe water. Such information will facilitate the other groups working together and with Municipality and County decision makers to find practical solutions to potentially dangerous situations before it is too late.

It was suggested at the January 28, 2010 Project Clean Water Stakeholders' meeting that SWAG be formed as a “working group” because SWAG presented what the stakeholders considered as new information: evidence that EPA, since the early 80’s, has been repressing information documented by their own scientist, Meckes. He documented that wastewater treatment plants breed multi-antibiotic resistant organisms most of which are not touched by the Regulations governing these facilities. The byproducts of wastewater treatment plants (effluent, reclaimed water and biosolids, classes A and B) are vehicles that can carry the potentially dangerous resistant organisms into our environment. These byproducts are potentially “hazardous substances” that cannot always be documented with single indicator testing but can be documented if laboratories test for antibiotic resistance. EPA has been a major promoter of using biosolids on agricultural and pasture lands. EPA’s repressing of information (not on EPA or CDC websites) is quite analogous to what is described by the attached May 13, 2010 front page article of the New York Times. EPA, secretly, did not require environmental permits for oil drilling in the Gulf of Mexico.
In addition, more recent research has documented that typical chlorine levels utilized by the industry for both potable and waste water create only a temporary “shocking” (Viable But Not Culturable phenomenon=VBNC) that ultimately results in greater resistance and increased virulence of the same resistant organisms not eliminated by wastewater treatment plants. Therefore, the still contaminated byproducts of wastewater treatment plants (effluent, reclaimed water and biosolids) can a.) be washed by rain into State water, reservoirs, wells and ground water and b.) contaminate food crops, pasture lands, school playing fields, golf courses, public parks and Municipal greenscape.

As of a year ago, the repressed Meckes information was not known by people working at Santa Barbara County Public Health. This information was also probably not available to the Coalition for Community Wellness, other groups in Santa Barbara working on clean water issues and therefore, certainly not available to the Municipality decision makers who continue to do their best to keep our citizens and tourists out of harm’s way.

If it makes sense to you that the Coalition for Community Wellness has, in reality, been shepherding larger community participation in the development of Plan Santa Barbara, it would, thus, make sense for your Coalition to follow through and distribute this new, extremely important information. If yes, please tell me where your office is at Cottage so that I can hand carry the packet to you. Also, please tell me to whom you distribute as well as their contact information and contact persons.

All the best,
John

CC: City of Santa Barbara Planning Commission
Coalition recommendations to Planning Commission

2 messages

Jan Ackerman <j439m@silcom.com>
To: dgoba@sbch.org

Dana A. Goba
Community Health Coordinator
Cottage Health System
dgoba@sbch.org

Dear Ms. Goba:

Kathleen Rodriguez, M.P.H. suggested to me at the Planning Commission meeting (May 6) that I contact you about speaking with your Coalition re: its recommendations to the Planning Commission.

I am on your listserv, am a retired physician, had worked with the U.S. Public Health Service in the late 60's as a Lt. Commander and presently am part of a newly formed "working group" called SWAG (Safe Water Action Group) initiated at the January, 2010 Stakeholder meeting of the Santa Barbara County Project Clean Water. The formation of SWAG was suggested by Cathleen Garrard, Santa Barbara County Project Clean Water.

Our group is very pleased about your Public Health recommendation. Simultaneously, we believe that, in addition to the need to improve air quality, your Coalition should also seriously consider addressing the potential hazards of a.) wastewater treatment plant effluent which is returned to the ocean, b.) reclaimed (recycled) water and c.) potable water.

Respectfully,

John M. Ackerman, M.D.

P.S. I will be away from Santa Barbara beginning this coming week, Wednesday, and return to Santa Barbara the afternoon of Monday, May 17. I will also be away beginning May 27 and will return to Santa Barbara on June 15.

Dana Goba <dgoba@sbch.org>
To: Jan Ackerman <j439m@silcom.com>

Dr. Ackerman,

Thank you for your email. The Coalition for Community Wellness does feel that clean water is an important issue. Since there are many significant health concerns, we decided to focus our efforts on a few topics such as physical activity, healthy food, and air pollution. The Coalition is pleased that there are many groups working on health...
aspects of the general plan and we hope we will all make a significant impact on our community.

Regards,

Dana

Dana Goba
Cottage Health System
805-879-8992 Direct
[Quoted text hidden]
U.S. Said to Allow Drilling Without Needed Permits

By JULIE LEBRINA
Published: May 12, 2010

Correction Appended

WASHINGTON — The federal Minerals Management Service gave permission to BP and dozens of other oil companies to drill in the Gulf of Mexico without first getting required permits from another agency that assesses threats to endangered species — and despite strong warnings from that agency about the impact the drilling was likely to have on the gulf.

Those approvals, federal records show, include one for the well drilled by the Deepwater Horizon rig, which exploded on April 20, killing 11 workers and resulting in thousands of barrels of oil spilling into the gulf each day.

The Minerals Management Service, or M.M.S., also routinely overruled its staff biologists and engineers who raised concerns about the safety and the environmental impact of certain drilling proposals in the gulf and in Alaska, according to a half-dozen current and former agency scientists.

Those scientists said they were also regularly pressured by agency officials to change the findings of their internal studies if they predicted that an accident was likely to occur or if wildlife might be harmed.

Under the Endangered Species Act and the Marine Mammal Protection Act, the Minerals Management Service is required to get permits to allow drilling where it might harm endangered species or marine mammals.

The National Oceanic and Atmospheric Administration, or N.O.A.A., offered to review each drilling proposal but is not required to do so. N.O.A.A. said it had reviewed only 11 of the more than 200 drilling proposals for the gulf.

The National Audubon Society, in a recent report, said N.O.A.A. would have found serious problems with federal decisions to allow drilling in the gulf.

Follow @CODAautomotive on Twitter. Join the Movement.

U.S.

By RUPERT HONORE
Published: May 12, 2010

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Follow @CODAautomotive on Twitter. Join the Movement.

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NOAA is partly responsible for protecting endangered species and marine mammals. It has said on repeated occasions that drilling in the gulf affects these animals, but the minerals agency since January 2009 has approved at least three huge lease sales, 103 seismic blasting projects and 346 drilling plans. Agency records also show that permission for those projects and plans was granted without getting the permits required under federal law.

"M.M.S. has given up any pretense of regulating the offshore oil industry," said Kieran Suckling, director of the Center for Biological Diversity, an environmental advocacy group in Tucson, which filed notice of intent to sue the agency over its noncompliance with federal law concerning endangered species. "The agency seems to think its mission is to help the oil industry evade environmental laws."

Kendra Barkoff, a spokeswoman for the Interior Department, said her agency had full consultations with NOAA about endangered species in the gulf. But she declined to respond to additional questions about whether her agency had obtained the relevant permits.

Federal records indicate that these consultations ended with NOAA instructing the minerals agency that continued drilling in the gulf was harming endangered marine mammals and that the agency needed to get permits to be in compliance with federal law.

Responding to the accusations that agency scientists were being silenced, Ms. Barkoff added, "Under the previous administration, there was a pattern of suppressing science in decisions, and we are working very hard to change the culture and empower scientists in the Department of the Interior."

On Tuesday, Interior Secretary Ken Salazar announced plans to reorganize the minerals agency to improve its regulatory role by separating safety oversight from the division that collects royalties from oil and gas companies. But that reorganization is not likely to have any bearing on how and whether the agency seeks required permits from other agencies like NOAA.

Criticism of the minerals agency has grown in recent days as more information has emerged about how it handled drilling in the gulf.

In a letter from September 2009, obtained by The New York Times, NOAA accused the minerals agency of a pattern of understating the likelihood and potential consequences of a major spill in the gulf and understating the frequency of spills that have already occurred there.

The letter accuses the agency of highlighting the safety of offshore oil drilling operations while overlooking more recent evidence to the contrary. The data used by the agency to justify its approval of drilling operations in the gulf play down the fact that spills have been increasing and underestimate the "risks and impacts of accidental spills," the letter states. NOAA declined several requests for comment.

The accusation that the minerals agency has ignored risks is also being levied by...
scientists working for the agency.

Managers at the agency have routinely overruled staff scientists whose findings highlight the environmental risks of drilling, according to a half-dozen current or former agency scientists.

The scientists, none of whom wanted to be quoted by name for fear of reprisals by the agency or by those in the industry, said they had repeatedly had their scientific findings changed to indicate no environmental impact or had their calculations of spill risks downgraded.

"You simply are not allowed to conclude that the drilling will have an impact," said one scientist who has worked for the minerals agency for more than a decade. "If you find the risks of a spill are high or you conclude that a certain species will be affected, your report gets disappeared in a desk drawer and they find another scientist to redo it or they rewrite it for you."

Another biologist who left the agency in 2005 after more than five years said that agency officials went out of their way to accommodate the oil and gas industry.

He said, for example, that seismic activity from drilling can have a devastating effect on mammals and fish, but that agency officials rarely enforced the regulations meant to limit those effects.

He also said the agency routinely ceded to the drilling companies the responsibility for monitoring species that live or spawn near the drilling projects.

"What I observed was M.M.S. was trying to undermine the monitoring and mitigation requirements that would be imposed on the industry," he said.

Campbell Robertson contributed reporting from New Orleans, and Andy Lehren from New York.

This article has been revised to reflect the following correction:

Correction: May 15, 2010

A previous version of this article misidentified the government agency where Kendra Barkoff is a spokeswoman. She is with the Interior Department, not the Minerals Management Service.

Correction: May 15, 2010

A version of this article appeared in print on May 14, 2010, on page

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Past Coverage
Gulf Spill Is Next Step for Leaking Gulf of Mexico Well (May 14, 2010)
TIFF: Obama's Remarks on Oil Spill Response (May 14, 2010)
Western Senators Propose Ban on Pacific Drilling (May 15, 2010)
Related Searches
Oil (Petroleum) and Gasoline Get E-Mail Alerts
Gulf of Mexico Get E-Mail Alerts
Minerals Management Service Get E-Mail Alerts

http://www.nytimes.com/2010/05/14/us/14agency.html
Please keep in mind that two peer-reviewed studies were published in 2009 each documenting the presence of MSRA in the sand of beaches on the Florida Atlantic side and the State of Washington on the Pacific side.

The single indicator test is utilized throughout the U.S. to identify the safety of wastewater treatment plant products and safety of potable water. The single indicator test adheres to Regulations but does not evaluate in a sufficient comprehensive manner to guarantee the public health of our citizens. By referring to the attached articles, one can begin to appreciate the potential threat to our citizens and our tourists. Only a pragmatic, cautious public health approach by Plan Santa Barbara will protect our citizens and tourists. This will not happen with an approach shepherded only by adherence to antiquated Regulations.

How are wastewater treatment plant products related to drinking water? In Santa Barbara, drinking water is composed of a mixed source. All of the communities along the Sacramento and San Joaquin Rivers as well as the small rivers feeding into the above plus the Delta (all labeled State water) receive treated sewage from various industries. Such "treated" sewage including the water having arrived in Santa Barbara is highly chlorinated. This process can induce a survival state in many organisms called "viable but not culturable" (VBN). After a period of time the organisms come out of that state with greater antibiotic resistance and increased virulence. The water from the rivers upstream is conveyed to Santa Barbara County by aqueducts. Other sources of drinking (potable) water come from dam reservoirs and wells. Multiple antibiotic resistant organisms can enter these waters vis-à-vis birds and other wildlife that have previously interacted with biosolids spread onto agricultural land. In addition, the animals deposit their own waste into these waters. The waters are seeded with fish grown on farms wherein safety for humans may not be adequately tested. Storm water biosolid runoff during heavy rains also enters the rivers, the Delta, the aqueducts, our dams, our wells and even groundwater.

Other sources of contamination: the repair by the City of broken water pipes or by plumbers at private residences are not sterile procedures.

Why use the argument that little use of biosolids in Santa Barbara County mixed with compost would not effect the immune systems of people? Those who already have compromised immune systems including the chronically ill and the elderly would surely be susceptible either by drinking tap water or by being in touch with a tiny amount of moisture from grass irrigated with reclaimed (recycled) water. If such moisture on our fingers touches our lips, our intestinal tract will serve as a breeding ground for multi-antibiotic resistant organisms.

Attached references:
Regarding wastewater effluent that is returned to the ocean: This article by Meckes is not available on any EPA or CDC website. It emphasizes how
wastewater treatment plants generate multi-antibiotic resistant organisms and send them into the environment of the community. Therefore, Public Health officials would not know the facts and consequently the Coalition and municipal decision makers are forced to operate in an information vacuum.

Harwood (Rose) Reclaimed (recycled) article: This national study includes the El Estero Plant. It has, therefore, been ignored by the City of Santa Barbara.

Articles related to drinking (potable) water:
- Microbial Load of Drinking Water Reservoir Tributaries During Extreme Rainfall and Runoff
- Risk Assessment of Opportunistic Bacteria Pathogens in Drinking Water
- Water and Nontuberculous Microbacteria
- Millions in U.S. Drink Dirty Water, Records Show

Sample of literature handed out by wastewater treatment plants: Occurrence of Antibiotic-resistant Bacteria and Endotoxin Associated with the Land Application of Biosolids. This research is funded by the biosolids industry.

Critique by Dr. Edo Mc Gowan, Ph.D. regarding the above wastewater treatment plant research article handout.

Reports by Cornell University Waste Management Institute are in great conflict with the above piece of literature handed out by wastewater treatment plants.

See the infectious disease tables as well as the CDC 2005 U.S. death report.
Effect of UV Light Disinfection on Antibiotic-Resistant Coliforms in Wastewater Effluents

MARK C. MECKES

Wastewater Research Division, Municipal Environmental Research Laboratory, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268

Received 15 June 1981/Accepted 13 October 1981

Total coliforms and total coliforms resistant to streptomycin, tetracycline, or chloramphenicol were isolated from filtered activated sludge effluents before and after UV light irradiation. Although the UV irradiation effectively disinfects the wastewater effluent, the percentage of the total surviving coliform population resistant to tetracycline or chloramphenicol was significantly higher than the percentage of the total coliform population resistant to those antibiotics before UV irradiation. This finding was attributed to the mechanism of R-factor-mediated resistance to tetracycline. No significant difference was noted for the percentage of the surviving total coliform population resistant to streptomycin before or after UV irradiation. Multiple drug resistance patterns of 300 total coliform isolates revealed that 82% were resistant to two or more antibiotics. Furthermore, 46% of these isolates were capable of transferring antibiotic resistance to a sensitive strain of Escherichia coli.

In 1959, Watanabe (31) discovered that some Escherichia coli strains could transfer antibiotic resistance to antibiotic-sensitive strains of Shigella spp. Subsequent research has demonstrated that bacteria carrying transmissible R-factors are responsible for the spread of multiple antibiotic resistance among members of the Enterobacteriaceae (such as E. coli, Salmonella typhi, and Shigella dysenteriae) Aeromonas and Yersinia species (4), Pseudomonas aeruginosa (21), and Vibrio cholerae (34).

Transmission of R-factors in the Enterobacteriaceae usually occurs by conjugation, which involves a specialized structure called the "sex pilus" and requires cell-to-cell contact or cell-pili-cell contact. The ability and the efficiency of different bacterial strains to donate or receive R-factors varies (8). Transmission of R-factors by conjugation is rapid and may spread rapidly among bacteria (31).

When bacteria which carry transmissible R-factors (R+ bacteria) are ingested by a human host, the R-factors may transfer to commonly occurring bacteria of the gastrointestinal tract (32). These organisms may subsequently transfer this resistance to pathogenic organisms, resulting in reduced efficacy of antimicrobial chemotherapy in the event of an infection. In vivo studies have shown that when individuals carrying R+ bacteria are subjected to antibiotic therapy, these organisms flourish and transfer their resistance to other bacteria (25).

From late 1968 to early 1981, Central America was afflicted by an R+ S. dysenteriae pandemic (11). During the first year of the epidemic, in Guatemala alone, 12,500 deaths were recorded. The causative organism was spread mainly by contaminated water and carried resistance to streptomycin, tetracycline, chloramphenicol, and sulfadiazine. Other outbreaks involving R+ pathogens have been reported elsewhere (1, 24).

Several researchers have pointed out that wastewater, treated or untreated, is a primary contributor of bacteria to the aquatic ecosystem (12, 16, 17, 20, 27, 29). Studies have been conducted which demonstrate that significant numbers of multiple drug-resistant coliforms occur in rivers (17), bays (9), bathing beaches (28), and coastal canals (13). Waters contaminated by bacteria capable of transferring drug resistance are of great concern since there is the potential for transfer of antibiotic resistance to a pathogenic species.

Available information shows that conventional wastewater purification methods without disinfection are not adequate for removal of antibiotic-resistant bacteria (14, 15, 29). Wastewater disinfection is, therefore, the only means whereby communities can limit the number of antibiotic-resistant bacteria in the water environment since it seems unlikely that antibiotic chemotherapy will be reduced.

Historically, chlorination has been used in the United States for wastewater disinfection (33).
However, chlorine residuals have been shown to be toxic to aquatic wildlife (3). An alternative method of disinfection is to use UV light irradiation at 253.7 nm. UV disinfection does not produce a toxic residual and is an efficient bactericide (23). Studies have been conducted which indicate that UV light can be used effectively for disinfection of municipal secondary wastewater effluents (18, 26). One of these studies has projected that UV disinfection of activated sludge effluents may be the most cost-effective alternative to chlorination (26).

Several communities in the United States have selected UV light for disinfection of their effluent wastewater. Therefore, the effect of UV light disinfection on antibiotic-resistant coliforms in municipal wastewater effluents should be ascertained to determine whether the use of this disinfection technique will significantly reduce the ratio of antibiotic-resistant bacteria to antibiotic-sensitive bacteria entering receiving waters from wastewater treatment facilities. This study was designed to determine the effects of UV light disinfection on antibiotic-resistant total coliforms in municipal effluents.

MATERIALS AND METHODS

UV irradiation of filtered activated sludge effluents. On the day of each experiment, clarified activated sludge effluent was collected ahead of the disinfection stage at the Fairfield Wastewater Treatment Plant operated by the City of Fairfield, Ohio. This plant (6,000,000 gallons per day) uses conventional activated sludge after primary clarification for treatment of domestic wastewater.

After collection, the effluent was trucked to the U.S. Environmental Protection Agency R. A. Taft Laboratory Pilot Plant, where the effluent was pumped through a mixed media pressure filter, a Brooks Shor-Rate roto-meter, and a UV sterilizer (Aquafine model DP-10-2U, Burbank, Calif.). The filtration system was used to limit the suspended solids of the secondary effluent. This was necessary to insure the rapid filtration of up to a 500-ml sample through membrane filters for enumeration of antibiotic-resistant total coliforms.

The Aquafine UV unit was designed to provide a 99.9% bactericidal reduction across the unit at maximum rated flow. The unit used for this study had a maximum rated flow capacity of 1.5 gallons (5.68 liters) per min (gpm) on freshwater. The UV dose at this flow rate was 4,500 µW/cm² as determined by the manufacturer. Since the DP-10-2U sterilizer was designed for sterilization of freshwater, the efficiency of the unit for disinfection of wastewaters was expected to be somewhat less. The DP-10-2U unit utilized a quartz U-shaped tube of 160 ml (total volume) through which the treated effluent flowed. Two germicidal R-W lamps (1.5 W total UV output at 254 nm) were positioned on opposite sides of the U-shaped tube such that the greatest distance the light had to travel to penetrate the liquid traversing the tube was 2 in. A polished stainless steel housing surrounded the U-shaped tube and lamp assemblies to provide a reflective surface for better utilization of the available UV light.

The dosage of UV light used in these experiments was chosen to provide disinfection as defined by achieving <1,000 total coliforms per 100 ml and not to deliberately induce other changes in the bacterial population.

Sample collection. The above system was operated for approximately 30 min before sample collection to assure that all liquid-carrying lines were receiving fresh effluent and to allow sufficient warm-up time for the UV lamps. Just before sample collection, the sample line was opened fully and flushed for approximately 1 min. The flow rate was adjusted to compensate for the resulting pressure drop. A Tygon U-shaped tube was installed at the discharge to provide additional residence time so that all samples were temporally related. All samples were collected in sterile glass reagent bottles.

Isolation and enumeration of bacteria. Samples before and after UV treatment were analyzed for total coliform densities by membrane filter techniques as outlined in Microbiological Methods for Monitoring the Environment (10). Antibiotic-resistant total coliforms were enumerated by the use of the same techniques. However, the m-Erdos medium (Difco Laboratories) used for these isolations contained one of the three following selection antibiotics at 20-µg/ml concentration: streptomycin, tetracycline, or chloramphenicol. Fifty colonies from each selection antibiotic class before UV treatment and fifty colonies from each selection antibiotic class after UV treatment were picked at random from the membrane filter plates used for enumeration after 5 of the 12 enumeration experiments. These colonies were purified by streaking them onto eosin methylene blue agar (Difco) containing a 20-µg/ml concentration of the original selection antibiotic and incubated at 35°C overnight. A single, well-isolated colony from the eosin methylene blue plate was then inoculated to a nutrient agar (Difco) slant which, after overnight incubation at 35°C, served as a stock culture.

Multiple drug resistance testing. Drug resistance patterns of the above cultures were determined by the single disk diffusion method of Bauer et al. (2), except that nutrient broth (Difco) served as the primary growth medium, and incubation was at 35°C. The following antibiotic disks were used to determine patterns of resistance (in micrograms per disk, all from Difco): ampicillin (10), cephalothin (10), colistin (10), gentamicin (10), kanamycin (10), streptomycin (10), and tetracycline (10). Strains with intermediate resistance to an antibiotic were classified as resistant to that antibiotic.

Transfer of drug resistance studies. Antibiotic-resistant isolates before and after UV treatment were utilized as prospective donors of resistance to a plasmidless, completely antibiotic-sensitive strain of E. coli, designated E. coli K-12 C600 (F- AzI) and provided by John M. Trela, University of Cincinnati. This recipient strain is phenotypically Lac⁺, yielding clear colonies on MacConkey agar plates, and is resistant to a 100-µg/ml concentration of sodium azide. Transfer procedures were carried out by mixing 0.1 and 0.2 ml of overnight broth cultures of the prospective donor and recipient, respectively, in 2 ml of sterile...
TABLE 1. Total coliforms and antibiotic-resistant coliforms from effluents before and after UV irradiation

<table>
<thead>
<tr>
<th>Date (1979)</th>
<th>Before UV irradiation</th>
<th>After UV irradiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NA</td>
<td>Sm'</td>
</tr>
<tr>
<td>3/15</td>
<td>6.18</td>
<td>6.15</td>
</tr>
<tr>
<td>3/16</td>
<td>6.56</td>
<td>6.34</td>
</tr>
<tr>
<td>3/27</td>
<td>&lt;5.66†</td>
<td>&lt;4.90</td>
</tr>
<tr>
<td>3/28</td>
<td>6.28</td>
<td>5.92</td>
</tr>
<tr>
<td>3/29</td>
<td>6.28</td>
<td>5.88</td>
</tr>
<tr>
<td>4/4</td>
<td>6.20</td>
<td>5.78</td>
</tr>
<tr>
<td>4/5</td>
<td>5.59</td>
<td>5.32</td>
</tr>
<tr>
<td>4/10</td>
<td>6.30</td>
<td>5.97</td>
</tr>
<tr>
<td>4/11</td>
<td>6.11</td>
<td>5.72</td>
</tr>
<tr>
<td>4/12</td>
<td>6.40</td>
<td>5.96</td>
</tr>
<tr>
<td>4/17</td>
<td>5.95</td>
<td>5.58</td>
</tr>
<tr>
<td>4/18</td>
<td>6.11</td>
<td>5.82</td>
</tr>
</tbody>
</table>

Mean†       6.20      5.86    4.68    3.52   2.80      2.42    1.98   0.88

† NA: No antibiotic; Sm: streptomycin; Te: tetracycline; Cm: chloramphenicol. All antibiotics were at 20 μg/ml.

Results preceded by less than indicate too few colonies to provide a reliable number and therefore were not used to calculate means.

Results

Enumeration of antibiotic-resistant total coliforms. Activated sludge effluents were irradiated at a flow rate of 1.5 gpm, which resulted in a total coliform density below 1,000 total coliforms per 100 ml (Table 1) on all but two of the samples. Similarly, two of the samples after UV treatment resulted in too few colonies to be detected. The data in Table 1 also show that UV irradiation effectively reduced the number of antibiotic-resistant total coliforms in the activated sludge effluents.

Table 2 shows the percentage of antibiotic-resistant coliforms before and after UV disinfection. Means from Table 2 show that UV irradiation of the effluents resulted in a decrease in the percentage of surviving total coliforms resistant to streptomycin and an increase in the percentage of surviving total coliforms resistant to tetracycline or chloramphenicol.

Analysis-of-variance techniques were used to determine the significance of the change in percentage of antibiotic resistance observed in the surviving total coliform population after UV irradiation. The data from the 2 days which

TABLE 2. Percentage of antibiotic-resistant total coliforms from effluents before and after UV irradiation

<table>
<thead>
<tr>
<th>Date (1979)</th>
<th>Before UV irradiation</th>
<th>After UV irradiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sm'</td>
<td>Te'</td>
</tr>
<tr>
<td>3/15</td>
<td>57.6</td>
<td>2.8</td>
</tr>
<tr>
<td>3/16</td>
<td>60.9</td>
<td>3.0</td>
</tr>
<tr>
<td>3/27</td>
<td>Indeterminant</td>
<td>Indeterminant</td>
</tr>
<tr>
<td>3/28</td>
<td>43.1</td>
<td>2.7</td>
</tr>
<tr>
<td>3/29</td>
<td>40.2</td>
<td>2.6</td>
</tr>
<tr>
<td>4/4</td>
<td>37.0</td>
<td>3.3</td>
</tr>
<tr>
<td>4/5</td>
<td>53.8</td>
<td>5.1</td>
</tr>
<tr>
<td>4/10</td>
<td>47.8</td>
<td>3.0</td>
</tr>
<tr>
<td>4/11</td>
<td>40.9</td>
<td>2.6</td>
</tr>
<tr>
<td>4/12</td>
<td>37.0</td>
<td>2.8</td>
</tr>
<tr>
<td>4/13</td>
<td>42.4</td>
<td>3.6</td>
</tr>
<tr>
<td>4/15</td>
<td>50.4</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Mean 46.4 3.1 0.2 43.0 16.6 1.3

* Calculated by dividing the number of total coliforms resistant to a specific antibiotic by the number of total coliforms in the same sample and multiplying by 100. Sm: streptomycin; Te: tetracycline; Cm: chloramphenicol. All antibiotics were at 20 μg/ml.
TABLE 3. Analysis of variance on the percentage of antibiotic-resistant total coliforms before and after UV irradiation

<table>
<thead>
<tr>
<th>Resistance to:</th>
<th>Source of variation</th>
<th>Degrees of freedom</th>
<th>Sum of squares</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streptomycin</td>
<td>Treatment</td>
<td>1</td>
<td>94,178</td>
<td>94,178</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>18</td>
<td>1100.514</td>
<td>61.140</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19</td>
<td>1194.692</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetracycline</td>
<td>Treatment</td>
<td>1</td>
<td>908.552</td>
<td>908.552</td>
<td>38.07*</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>18</td>
<td>429.61</td>
<td>23.867</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19</td>
<td>1338.162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloramphenicol</td>
<td>Treatment</td>
<td>1</td>
<td>6.050</td>
<td>6.05</td>
<td>55.00*</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>18</td>
<td>1.978</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19</td>
<td>8.028</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the 0.01 level.

resulted in too few colonies to yield a reliable number were deleted from the analysis. Table 3 shows the results from these tests. The percentages of tetracycline-resistant and chloramphenicol-resistant total coliforms increased significantly after UV irradiation, while there was no significant difference between the percentage of streptomycin-resistant total coliforms present in the effluent before and after UV treatment.

MULTIPLE ANTI-BIOTIC-RESISTANT TOTAL COLIFORMS. A total of 300 colonies were picked at random from the m-Endo plates containing streptomycin, tetracycline, or chloramphenicol. One-half of these isolates were from effluents sampled before UV irradiation; the rest were from effluents sampled after UV irradiation. Equal numbers of colonies were picked to represent each selection antibiotic used. These isolates were tested for resistance to eight different antibiotics. The most common antibiotic resistance patterns observed for the total coliform isolates are presented in Tables 4, 5, and 6.

Of the 300 isolates examined, 55 were resistant to only one of the antibiotics tested. Of these 55 isolates, 25 were resistant to streptomycin, 27 were resistant to tetracycline, and only 3 were resistant to chloramphenicol. These data clearly indicate that the majority of antibiotic-resistant coliforms from these effluents were resistant to two or more drugs. None of the strains tested showed resistance to colistin, and only one strain was resistant to gentamicin.

UV light treatment of the effluent appears to have some effect on the multiple antibiotic resistance patterns observed in total coliform isolates. From effluents before UV treatment of 50 strains isolated on media containing streptomycin, 18 exhibited resistance to three or more antibiotics (Table 4). However, of the 50 strains isolated in the same manner from UV-treated effluents, 24 exhibited resistance to three or more antibiotics. Similarly, the number of strains exhibiting resistance to three or more antibiotics isolated on media containing tetracycline (Table 5) were 17 and 30, respectively. This apparent selection by UV treatment for multiple antibiotic resistance in total coliform strains was not observed in strains isolated on media containing chloramphenicol (Table 6) because most of these isolates (89%) exhibited resistance to three or more antibiotics, regardless of irradiation.

For certain antibiotic combinations, selection of antibiotic-resistant total coliforms by UV treatment is shown in Table 6 for strains isolated on media containing chloramphenicol. Before UV treatment, the strains exhibiting the Sm Te Cm Am and the Sm Te Cm Km Am resistance

TABLE 4. Antibiotic resistance patterns encountered in total coliforms isolated on media containing streptomycin

<table>
<thead>
<tr>
<th>Resistance pattern*</th>
<th>No. of isolates (% from samples)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before UV irradiation</td>
</tr>
<tr>
<td>Sm</td>
<td>11 (22)</td>
</tr>
<tr>
<td>Sm Te</td>
<td>16 (32)</td>
</tr>
<tr>
<td>Sm Km</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Sm Am</td>
<td>5 (6)</td>
</tr>
<tr>
<td>Sm Cm</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Sm Te Cm</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Sm Te Km</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Sm Te Am</td>
<td>8 (16)</td>
</tr>
<tr>
<td>Sm Cm Am</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Sm Te Cm Km</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Sm Te Cm Km Am</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Sm Te Km Am</td>
<td>3 (6)</td>
</tr>
<tr>
<td>Sm Te Cm Km Am</td>
<td>3 (6)</td>
</tr>
</tbody>
</table>

* Sm, streptomycin; Km, kanamycin; Te, tetracycline; Cm, chloramphenicol; Am, ampicillin; C, cephalexin.

* Total of 50. None of these isolates displayed resistance to colistin or gentamicin.
patterns made up a total of 40% of all isolates. After UV treatment, 70% of all isolates from media containing chloramphenicol exhibited one or the other of these resistance patterns. These resistance patterns were observed less frequently in strains isolated on media containing streptomycin or tetracycline. However, the Sm Te Cm Am and the Sm Te Cm Km Am resistance patterns occurred more frequently (10 occurrences) in strains taken from UV-treated effluents and isolated on media containing streptomycin or tetracycline (Tables 4 and 5) than in strains taken from effluents before UV treatment and isolated in the same manner (5 occurrences).

Transfer of antibiotic resistance. The 300 strains were tested for their ability to transfer resistance to an antibiotic-sensitive strain of E. coli K-12. The method used required that resistance to the selection antibiotic, upon which the donor strain was isolated, be transferred to the recipient strain. Therefore, it is possible that transfer of resistance to antibiotics other than the antibiotic used for selection may have occurred without being detected. All recombinant strains were examined for multiple antibiotic resistance patterns as described above.

The percentage of coliforms transferring resistance to the antibiotic-sensitive strain varied (Table 7). This variation was dependent upon the selection antibiotic used and UV irradiation treatment. Overall, 138 of the 300 isolates (46%) transferred antibiotic resistance to the antibiotic-sensitive strain. Over 85% of the recombinants exhibited resistance to all of the antibiotics to which the donor strains were resistant. This high efficiency was probably the result of allowing mixed culture growth of donor and recipient strains to proceed for 16 h.

It is interesting to note that although there was no significant increase observed in the percentage of streptomycin-resistant total coliforms surviving UV irradiation, the ability of this population to transfer antibiotic resistance increased. This increase in ability to transfer drug resistance was not observed for coliforms isolated from media containing tetracycline or chloramphenicol.

Coliforms isolated on media containing chloramphenicol showed somewhat less ability to transfer resistance after UV irradiation. However, this reduction in ability to transfer is probably not significant. Transfer of resistance to six antibiotics was noted in two of the total coliform strains taken from effluents before UV treatment and isolated on media containing chloramphenicol.

**DISCUSSION**

Ampicillin, streptomycin, and tetracycline are probably the most commonly used antibiotics in human medicine. Therefore, it is reasonable to assume that a higher frequency of occurrence of bacteria resistant to these antibiotics would be expected in wastewater effluents. It is important...
TABLE 7. Total coliform isolates transferring antibiotic resistance

<table>
<thead>
<tr>
<th>Selection antibiotic</th>
<th>No. of isolates (%) Before UV irradiation</th>
<th>After UV irradiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streptomycin</td>
<td>15 (38)</td>
<td>32 (64)</td>
</tr>
<tr>
<td>Tetracycline</td>
<td>19 (38)</td>
<td>19 (38)</td>
</tr>
<tr>
<td>Chloramphenicol</td>
<td>26 (52)</td>
<td>23 (46)</td>
</tr>
<tr>
<td>Total</td>
<td>64 (43)</td>
<td>74 (49)</td>
</tr>
</tbody>
</table>

* Overall total, 118 (46).

...to remember that isolates in these experiments were tested for resistance to only eight antibiotics, and, consequently, resistance to other antibiotics may be carried by these organisms.

The mean percentage of all total coliform isolates capable of transferring all or part of their antibiotic resistance (46%) was identical to that observed by Fontaine and Hoadley (10) for drug-resistant fecal coliforms isolated from undischarged municipal wastewaters. Similarly, Sturtevant and Feary (29) reported that 43% of the drug-resistant total coliforms, isolated from undischarged municipal wastewaters (before and after biological trickling-filter treatment), were capable of transferring resistance to a sensitive strain of *E. coli*. These same researchers observed the same lack of resistance to colistin and gentamicin in total coliform isolates that was observed in this study.

The increase in the percentage of total coliforms resistant to tetracycline or chloramphenicol after exposure to UV light may be explained by the presence of an additional R-factor which mediates UV resistance. An R-factor mediating UV resistance has been characterized in *E. coli* K-12 by Marsh and Smith (22) and noted in *S. typhimurium* by Drabble and Stocker (7). Association of a UV R-factor with resistance to specific antibiotics could also explain the increased occurrence of the Sm Te Cm Am and Sm Te Cm Km Am resistance patterns observed in isolates from UV-treated effluents. However, no association between R-factors which mediate UV resistance and R-factors which mediate resistance to specific antibiotics has been found.

Alternatively, the increase in the percentage of total coliforms resistant to tetracycline or chloramphenicol after UV irradiation may be explained by the mechanism of R-factor-mediated resistance to tetracycline. R-factor-mediated resistance to aminoglycoside antibiotics such as streptomycin, kanamycin, and gentamicin has been found to be associated with specific enzymes which modify or hydrolyze the antibiotic to a more innocuous form (8). Similarly, production of chloramphenicol acetyltransferase, which enzymatically inactivates chloramphenicol, is coded for by R-factors (6, 8). However, R-factor-mediated resistance to tetracycline is not associated with enzymatic modification of tetracycline. The resistance is due to accumulation within the cell envelope of specific proteins which inhibit transport of tetracycline to target ribosomes of the cell (5).

The specific protein responsible for bacterial resistance to tetracycline (tet protein) may absorb sufficient UV light at 254 nm to afford these bacteria some degree of protection from UV irradiation. This could explain why an increase in the percentage of surviving tetracycline-resistant total coliforms was noted after UV treatment. The accompanying increase in surviving chloramphenicol-resistant total coliforms was not due to chloramphenicol resistance, but to concomitant resistance to tetracycline. This becomes apparent when the percentage of strains isolated on media containing chloramphenicol and resistant to tetracycline, both before and after UV treatment, is compared. No significant difference in the percentage of these strains exhibiting both chloramphenicol and tetracycline resistance was noted (88% before UV versus 86% after UV). Since a high percentage of chloramphenicol-resistant coliforms in effluents sampled before UV treatment was concomitantly resistant to tetracycline, the percent increase in surviving chloramphenicol-resistant coliforms after UV treatment cannot be attributed to chloramphenicol resistance alone because there was no decrease in the number of isolates concomitantly resistant to tetracycline. Further work is necessary to confirm this notion.

It is evident from this work as well as from the work of others (10, 13-15, 29) that antibiotic-resistant coliforms are entering the aquatic environment via treated municipal wastewater effluents. This work demonstrates that UV light disinfection can effectively reduce the number of total coliforms both sensitive and resistant to antibiotics in an activated sludge effluent. This work also points out that there is a significant increase in the percentage of the surviving total coliform population resistant to tetracycline and chloramphenicol after UV irradiation.

This study concerned itself with UV disinfection. There is little information available which discusses the effect of other disinfectants on antibiotic-resistant organisms. Additional investigations should be conducted to determine what effect other wastewater disinfectants, such as chlorine or ozone, may have on the antibiotic-resistant fraction of the bacterial population. There is an additional need to determine the sanitary significance of the results of such investigations.

ACKNOWLEDGMENTS

I thank John Tria of the Biological Science Department.


Validity of the Indicator Organism Paradigm for Pathogen Reduction in Reclaimed Water and Public Health Protection

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The validity of using indicator organisms (total and fecal coliforms, enterococci, Cryptosporidium, and Giardia) was tested at six wastewater reclamation facilities. Multiple samplings conducted at each facility over a 1-year period. Larger sample volumes for indicators (0.2 to 0.4 liters) and pathogens (30 to 100 liters) resulted in more sensitive detection limits than are typical of routine monitoring. Microorganisms were detected in disinfected effluent samples at the following frequencies: total coliforms, 63%; fecal coliforms, 27%; enterococci, 27%; C. perfringens, 61%; F-specific coliphage, ~40%; and enteric viruses, 31%. Cryptosporidium oocysts and Giardia cysts were detected in 70% and 80%, respectively, of reclaimed water samples. Viable Cryptosporidium, based on cell culture infectivity assays, was detected in 29% of the reclaimed water samples. No strong correlation was found for any indicator-pathogen combination. When data for all indicators were tested using discriminant analysis, the presence/absence patterns for Giardia cysts, Cryptosporidium oocysts, infectious Cryptosporidium, and infectious enteric viruses were predicted for over 71% of disinfected effluents. The failure of measurements of single indicator organism to correlate with pathogens suggests that public health is not adequately protected by simple monitoring schemes based on detection of a single indicator, particularly at the detection limits routinely employed. Monitoring a suite of indicator organisms in reclaimed effluent is more likely to be predictive of the presence of certain pathogens, and a need for additional pathogen monitoring in reclaimed water in order to protect public health is suggested by this study.

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Methicillin-resistant Staphylococcus aureus (MRSA) in municipal wastewater: an uncharted threat?

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KEYWORDS
antibiotic resistance • methicillin-resistant Staphylococcus aureus • Panton-Valentine leukocidin • SCCmec • spa typing • Staphylococcus aureus • wastewater • wastewater treatment plant

ABSTRACT
Aims: (i) To cultivate methicillin-resistant Staphylococcus aureus (MRSA) from a full-scale wastewater treatment plant (WWTP), (ii) To characterize the indigenous MRSA-flora, (iii) To investigate how the treatment process affects clonal distribution and (iv) To examine the genetic relation between MRSA from wastewater and clinical MRSA.

Methods: Wastewater samples were collected during 2 months at four key sites in the WWTP. MRSA isolates were characterized using
spa typing, antibiograms, SSU rRNA typing and detection of Panton–Valentine leukocidin (PVL).

Conclusions: MRSA could be isolated on all sampling occasions, but only from inlet and activated sludge. The number of isolates and diversity of MRSA were reduced by the treatment process, but there are indications that the process was selected for strains with more extensive antibiotic resistance and PVL+ strains. The wastewater MRSA-flora had a close genetic relationship to clinical isolates, most likely reflecting carriage in the community.

Significance and Impact of the Study: This study shows that MRSA survives in wastewater and that the WWTP may be a potential reservoir for MRSA.

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Microbial Load of Drinking Water Reservoir Tributaries during Extreme Rainfall and Runoff

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ABSTRACT

Hygienic and microbiological examinations of watercourses are usually not carried out during heavy rainfall and runoff events. After rainfall or snowmelt, there are often flooding creeks in mountain ranges, which are frequently interpreted as an indicator of microbial contamination. The aim of this study was to quantify the microbial load of water reservoirs and to compare these loads with loads occurring during regular conditions. In a 14-month monitoring period we investigated the microbial loads of water reservoirs. A total of 99 water samples were taken under different runoff conditions and analyzed to determine physical, chemical, bacterial, and parasitic parameters. The results of event samples were compared with regular samples, and the differences were statistically evaluated. The criteria for events, based on duration and intensity of precipitation, water flow, and gage measurements, were used to determine the impact of different types of events. The analysis of the data showed that the microbial load was significantly higher during rainfall and runoff events. In conclusion, this study demonstrates the need for regular monitoring of watercourses and water reservoirs, especially during extreme rainfall conditions.

INTRODUCTION

In some regions of Germany, surface reservoirs are the main source of drinking water. In the state of North Rhine-Westphalia, 66% of the drinking water production is from surface reservoirs. Surface water bodies are presumed to be more vulnerable to fecal contamination than groundwater reservoirs due to the absence of natural soil protection layers. Therefore, surface water bodies are more susceptible to contamination during extreme rainfall and runoff events. It is argued that especially in the case of heavy rainfall, the microbial loads of surface water bodies are significantly increased.

MATERIALS AND METHODS

Materials and Methods

In this study, several parameters and biochemical parameters with rainfall, runoff, and specific conditions in catchment areas of drinking water reservoirs were investigated. The procedures for raw water surveillance in the context of multiple-barrier protection and risk assessment during extreme rainfall situations.

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An investigation of the microbial loads of three tributaries of different drinking water reservoirs and the land use patterns in their drainage areas was performed. In a (January 1997 to February 1998), 98 water samples were taken from the main tributaries under different runoff conditions and analyzed to determine physical, chemical, and biological parameters. A total of 32 water samples, taken during nine sampling series, could be classified as event samples (ES). An analysis of the dynamics of these samples and a statistical comparison of ES with regular samples (RS) were carried out to assess the influence of flood periods on total annual contamination loads. Selective for this investigation, the main tributaries of three different drinking water reservoirs were chosen. To guarantee precise sample reproducibility, the sampling the reservoirs, in the vicinity of water gauges.

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The sampling points and tributary areas selected reflected different catchment area conditions. One watercourse represented a catchment area where the large catchment area was influenced by pasture land for dairy farming (Källa), whereas the other catchment areas were affected by additional effects of treated wastewater discharge. Thus, the catchment areas of the tributaries investigated had different geological, soil, and morphological characteristics. Water flows mostly on or just beneath the surface. A wide drainage system has changed the runoff conditions. Substantial rainfall runoff increases very rapidly. Agricultural land use (exclusive pasture land for dairy farming) comprises 55.6% of the Källa area, whereas 19% is forest. The other catchment areas are affected by four to five animal/ha km². Eighteen farms have local sewage treatment facilities. A total of 5,500 people live in the catchment area. Nonfarming house sewage systems. The processed wastewater is piped out of the Källa catchment area. Ten percent of the area belongs to Belgium and because of this is not subject to regulations.

The Wahlbach study area comprises 45 km². The soils are mainly formed by loess and are intensively used for agriculture (65% of the area). Erosion is a major threat to the Wahlbach catchment area. A total of 16,000 people live in numerous small settlements, some of which are not connected to public wastewater treatment systems. Two pumping stations treated wastewater into the Wahlbach tributary right above the reservoir.

### Criteria for sampling during extreme rainfall and runoff events

For each site investigated, criteria for event sampling could be defined based on long-term flood-monitoring data. Continuous precipitation was used as a general or water depth exceeding a flood threshold value was decisive for obtaining an ES. For each creek, specific values for the summer and winter seasons could be derived. Additionally, the steepness of the water level increase played an important role in defining flood events, because the level is affected by the bed as well as by site-specific environmental factors. Frequently, water levels rise more rapidly after a heavy rainfall in the summer than in the winter.

### Meteorological and hydrological parameters

Rainfall data available from representative weather stations and continuous runoff records for the creeks investigated were utilized for characterization of rainfall and discharge. Long-term monthly means for rainfall and air temperature were used in the hydrological and meteorological analysis for the study period. In addition, air temperature, rainfall, water temperature, and runoff velocity were recorded during separate supplementary records for rainfall and runoff conditions with high temporal resolution (0.5-h records) obtained directly from the reservoir operating authority.

### Water sampling, preparation, and analysis

At the onset of an event with heavy rainfall and runoff, an ES series was initiated. One series included up to five single water samples obtained at 1- to 2-hour intervals (every 2 weeks) coinciding with an event; the sample was considered an ES.

Parasitological sampling was carried out by using a wound polypropylene cartridge filter with a nominal pore size of 1 µm. The filter was connected to a water filter as described by the manufacturer of the device. The sample was passed through the filter. The flow rate was adjusted to 2 liters/min. When the flow rate fell below 2 liters/min, sampling was stopped. Turbidity and pH values, chemical and bacteriological analyses, water was pumped into sterile test tubes. The material was collected, immediately transported into the laboratory, and processed.

Physical and chemical parameters were analyzed according to the German regulations for water, sewage, and sludge analysis [22]. General coliform counts at 20 and 30°C were obtained by the pour plate method [12], whereas coliforms, Escherichia coli, Clastidium perlegens, and faecal streptococci were identified by the method of Dr. E. Siemenn, Landes-Verband der Wasserwirtschaft, and the method of Dr. E. Siemenn, Landes-Verband der Wasserwirtschaft. Parasites Giardia lamblia and Cryptosporidium spp. were recovered quantitatively by using the method of Dr. E. Siemenn, Landes-Verband der Wasserwirtschaft.

### Statistical methods

To compare the ES and RS results, arithmetic means and parameter maxima were calculated separately for RS and ES obtained from each creek. The ES and RS were distributed and analyzed for independence from the other samples by using the one-sided t test for two spot checks with different variances [24]. The level of after determination of the degrees of freedom. A P value of <0.05 was considered significant.

To assess the contributions of chemical, bacterial, and parasitic loads during heavy rainfall and runoff events to the total loads in each drinking water reservoir, the average event (measured for all ES, median for bacteriological and parasitic parameters) was compared to loads determined for regular conditions (measured for all RS parameters). For the calculations, an event was assumed to last 12 h. The mean load for a 12-h event was determined from the ES mean values. The mean load of the 12-h event was corrected by considering the increase in parameters.

In this way the factor EV,12h Câm. was obtained, which quantified the additional load due to the increase in parameters.

### Results

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791
During a 14-month investigation in which there were nine extreme rainfall and runoff events, a total of 32 ES were collected (Table 1). Within the framework of ES, obtained in two cases (F 1 and F 2) ES collection coincided with RS collection. The results obtained with 67 RS collected at the same time were compared.

TABLE 1. Synopsis of ES series

Comparison with RS

The results of the comparison of ES and RS are shown in Table 2.

TABLE 2. Data for RS and ES obtained in 1997 and 1998

(i) Physical and chemical parameters.

At the Neuhofbach, the most conspicuous changes in concentration compared to the RS concentrations occurred with regard to the turbidity. While the turbidity in the turbidity units (NTU) in the ES was greater than in the RS, the arithmetic mean for the seven ES was 47.4 NTU (arithmetic mean for RS was 2.56 NTU). The nitrate concentrations for ES always exceeded the mean of the nitrate concentrations for RS, and the nitrite concentrations for 57% of the ES exceeded the maximum nitrite concentration. At the Kall there was a significant increase in turbidity compared to the RS values. The mean increased from 5.57 to 28.25 NTU. Clear increases in concentrations of nitrate, ammonia, total phosphorus, and boron were observed. On the other hand, the means and maximums for pH and nitrate concentration were below the corresponding values obtained in the RS.

At the Waiblingen, the mean turbidity (11.45 to 57 NTU) and the maximum turbidity (36.0 to 125.3 NTU) increased to extreme values during events. In contrast, the pH was only slightly above the corresponding values observed in the RS. The concentrations of nitrate, ammonia, total phosphorus, and boron changed only slightly.

(ii) Bacteriological parameters.

At the Neuhofbach, the concentrations of quantitatively identified bacteriological parameters (CC 20°C, CC 37°C, E. coli, coliforms, fecal streptococci, C. perfringens, and runoff events) showed increased abundances of 1 to 2 log units, and the maximum values increased about 1 log unit.

At the Kall and Waiblingen, the median maximum concentrations of quantitatively identified bacteriological parameters increased about 1 to 2 log units.

(iii) Parasitological parameters.

At the Neuhofbach, the median Cryptosporidium concentrations in ES reached 11.4 oocysts/100 liters, in contrast to the 2.4 oocysts/100 liters in RS. Giardia cysts were not observed in any sample.

At the Kall, the median concentrations of Cryptosporidium oocysts (ES, 14.3 oocysts/100 liters; RS, 2.85 oocysts/100 liters) and the maximum concentrations of Cryptosporidium oocysts (ES, 10.3 oocysts/100 liters; RS, 13.7 oocysts/100 liters) increased significantly during events, whereas the frequencies of recovery of Giardia cysts were low and not recognizable.

At the Waiblingen, the median concentrations of Cryptosporidium oocysts (ES, 17 oocysts/100 liters; RS, 1.3 oocysts/100 liters) and Giardia cysts (ES, 12.4 cysts/100 liters; RS, 9.1 cysts/100 liters) were clearly higher than those in the corresponding RS. The maximum concentrations also occurred in ES. In ES the Cryptosporidium concentrations reached 11 oocysts/100 liters, and the Giardia concentrations reached 21.6 cysts/100 liters (RS, 9.1 cysts/100 liters).

(iv) Student's t test for significant differences between ES and RS.

At the Neuhofbach during extreme rainfall and runoff events, the turbidity and nitrate concentration increased significantly, but the pH was significantly lower. The E. coli showed significant increases, whereas the parasite load did not increase significantly due to the high standard deviation for the RS (Table 3).

TABLE 3. Analysis of assumed f-distributed RS and ES at the Neuhofbach gauge for independence from each other, using the one-sided t test for different variances (1997 data)

At the Kall, the values for some physical and chemical parameters (turbidity and nitrate, ammonia, total phosphorus, and boron concentrations) showed significant increases in the nitrate concentration; however, a decrease in nitrate concentrations occurred. The bacteriological parameters, only CC 20°C, CC 37°C, and the C. perfringens count increased significantly. Cryptosporidium did, whereas there was no significant change in the Giardia concentration (Table 4).

At the Waiblingen, the turbidity and the nitrate concentration increased significantly in ES; the pH and nitrate concentrations, however, decreased significantly. All of the concentrations increased significantly (Table 5).

At the Kall, the turbidity and the boron concentration increased significantly in ES, and the pH and nitrate concentration decreased significantly. All of the concentrations increased significantly again (Table 6).

TABLE 5. Analysis of assumed f-distributed RS and ES at the Waiblingen gauge for independence from each other, using the one-sided t test for different variances (1997 data)

Dynamics of parameters during extreme rainfall and runoff events.

ES series were used to record the various runoff situations during different phases of the events (Table 1). Sometimes the rising flood was registered, and sometime it was not. However, in all events, samples were immediately connected to the first wave and sometimes included the peak of the flood (Fig. 2 A to D).

FIG. 2. Parasite concentrations at the Neuhofbach gauge during ES series B (12 December 1997).
(i) Physical and chemical parameters.
Most of the parameters (pH and nitrate, nitrite, ammonia, total phosphorus, and boron concentrations) remained relatively constant during an extreme rainfall and runoff event. At the NaunholzGal, the turbidity in ES series A was highest at the beginning of the sampling period, and the turbidity in ES series D sampling period. At the NaunholzGal, the turbidity was highest at the beginning of the ES series C sampling period and in the middle of the ES series D sampling period. At an ES series H, which correlated with the subsiding flood. Therefore, in ES series C the highest turbidity values were recorded temporarily close to the peak of the flood. At the NaunholzGal the values for CC 20°C, EC 37°C, E cell, carbon, and total phosphorus increased slightly but continuously in ES series A, G, and E. The temperature trend at all ES series B.

At the NaunholzGal, the values for all bacteriological parameters examined remained nearly constant in ES series C. In ES series D, the maximum values for CC 20°C, E. coli close to the peak, but there was no uniformity or meaningful trend.

At the NaunholzGal, the variance was very low. However, for ES series H the lowest values for most of the parameters occurred at the beginning, immediately after the flood.

(iii) Parasitological parameters.
At the NaunholzGal, the concentration of Cryptosporidium oocysts increased continuously in ES series A and reached the maximum value when runoff became greater; maximum concentration occurred in the rising flood (Fig. 2). Giardia cysts were not recovered.

At the NaunholzGal, the concentration of Cryptosporidium oocysts decreased in ES series C with the falling flood, and Giardia cysts were not found (Fig. 2). In ES series I, Giardia cysts were detected discontinuously; the highest concentration occurred at the peak of the flood.

At the NaunholzGal, the highest Cryptosporidium concentrations in ES series G and H occurred close to the peak of the flood, and the concentrations decreased rapidly and recovered discontinuously without any trend (Fig. 3). In ES series I, the concentrations of Cryptosporidium oocysts and Giardia cysts decreased with the rising flood, found in the first ES collected in this ES series.

Giardia cysts were regularly detected only at the NaunholzGal, whereas Cryptosporidium oocysts were recovered at each creek. The maximum values occurred immediately after the flood.

Contributions of heavy rainfall and runoff events to the total loads in drinking water reservoirs.
The contributions of heavy rainfall and runoff events to the total loads in drinking water reservoirs are shown in Table 6.

### Table 6. Calculated contributions of an assumed average runoff event to the annual loads (1997) of the creeks investigated within 12 h

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Contributions (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate</td>
<td>0.77</td>
</tr>
<tr>
<td>Ammonia</td>
<td>10.5</td>
</tr>
<tr>
<td>Phosphate</td>
<td>13.6</td>
</tr>
<tr>
<td>Boron</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td></td>
</tr>
<tr>
<td>Carbon</td>
<td></td>
</tr>
</tbody>
</table>

At the NaunholzGal, within 12 h under assumed average event conditions (n = 7), 0.77% of the theoretical annual runoff (calculated for a year without any runoff event) additional nitrate load was very small, whereas the error of total phosphorus was 10.5% (13.6 times the EV_{12hCon}). Some of the additional bacterial load was much greater than the EV_{12hCon}. The Cryptosporidium load also exceeded the expected values (3.7% [4.75 times the EV_{12hCon}]). At the NaunholzGal, within 12 h under assumed average event conditions (n = 14), 0.31% of the theoretical annual runoff drained into the reservoir. While the values slightly higher as to even lower (nitrate, nitrite) than the assumed values, the bacterial and parasite loads were dramatically higher (bacteria, 20 to 100 times the EV_{12hCon}).

These results demonstrate that both absolutely and when values are corrected for runoff conditions, considerable additional loads are transported to drinking water reservoirs.
The RS bacteriological analysis of the Kali and Worhbach areas resulted in similar concentrations of fecal indicator bacteria, while the lowest level of bacterial counts Naunzlbach. Cryptpodum spp. oocysts were frequently detected in all samples from the different tributaries. Giardia cysts, however, were detected less frequently and at low levels. The bacterial and parasite loads were heavily influenced by specific hydrological conditions at the sites of the tributaries. The data indicates that the particle load increased to maximum levels during heavy rainfall and runoff events. Even water samples from the Naunzlbach that were not affected by sediment transport contained higher levels of oocysts when there was precipitation. The dynamics of the floods during the runoff events corresponded well with changes in concentrations of chemical parameters. However, the concentrations of RS and ES were detected in RS, the concentrations of the parasites in ES increased considerably.

Statistical analyses showed that there were significant differences between RS and ES which corresponded well with site-specific environmental factors. At the Naunzlbach increases in the nitrate and microorganism loads indicated that there was erosion and resuspension of river bottom and drift sediments, whereas the parasite load tributaries decreased. The increase in the values for humpbacked parasites (except nitrate concentrations) confirmed that water draining systems were activated. The relatively small amount of Giardia cysts was assumed to result from transported sewage piped out of the Kali catchment area. At the Worhbach and both parasites reflected the influence of combined sewage inflows and discharges from sewage treatment plants in the creeks.

Only moderate correlations between parameters and other parameters, such as fecal microorganisms, especially C. parvum and E. coli, concentrations of several fecalborne microorganisms (1, 6-9, 27, 28) turbidity (1, 8) or pH concentrations of several fecalborne microorganisms (1, 9, 27, 28) have been reported. Many studies did not detect any statistically significant correlations between the parameters and the parasite load. The interaction between parasites and E. coli concentrations peaked after heavy rainfall (21).

Relationships between meteorological parameters and microbial loads of fecal origin have been described. The concentrations of E. coli, coliform bacteria, and enter increased during heavy rainfall (1, 6-8, 27, 31). The concentrations of Cryptpodum spp. oocysts were found to be lower during dry periods, such as summer (26, 32). A sudden rainfall event (26, 31) as well as from the bottom of reservoirs, was determined to be responsible for the increases (1, 6-8, 27, 32). As most of the Giardia cysts occur on the bottom of reservoirs, the suspended sediment or suspension of soil and aged fecal material was assumed to be the major contributor to rainfall-induced increases in parasite counts (21). Thurman et al. analyzed reservoirs and creeks at different sites in Australia for interactions among land use, rainfall, and water quality parameters. They used parasites as indicators of water quality and E. coli concentrations peaked after heavy rainfall (21).

It has been argued that the lack of significant associations between different environmental variables and the parasite loads detected in previous studies was due to the study design. Some studies may have been inappropriate in that the number of parasite samples may have been too limited, the sampling regime may not have been designed to suit the environmental conditions. However, the intensity of correlations could also have been due to site-specific environmental factors or differences in the microbial loads. The design of our investigation was geared to the additional parameters and parasite loads that occur during flood events and therefore took previous experience into consideration.

Relationships between concentrations of Cryptpodum spp. oocysts and Giardia cysts have been investigated in several studies. It has been demonstrated that Cryptococcus in the concentrations of fecal bacteria and other indicators of fecal contamination. The occurrence of Giardia cysts in sewage treatment plants and reservoirs was assumed to be the major contributor to rainfall-induced increases in parasite counts (21). This geological characterization revealed that no area is entirely unaffected by human activity and that reservoirs are differentiated by environmental conditions.

Relatively small but typical creeks that are used as sources for drinking water production in central Europe were selected because of their high sensitivity to changes in environmental conditions. The design of our investigation was geared to the additional parameters and parasite loads that occur during flood events and therefore took previous experience into consideration.

The numbers of ES and comparative RS were large enough so that we could perform separate analyses of rivers with different site characteristics (1, 21). Floods make extremely large contributions to the bacterial and parasite loads of drinking water reservoirs. So far, this has been taken into account only minimally, probably because turbidity is non-specific and because fecal indicators do not necessarily correlate well with the oocysts. For this reason it has been concluded that reliance on the coliform group creates serious problems in assessing environmental quality and in assessing the risk assessment process. Consequently, regular examination of surface water used for drinking water production should include pathological tests for risk characterization.

Natural conditions, as well as human activities, in catchment areas of surface reservoirs significantly affect the quality and safety of drinking water. Therefore, the analysis of water samples is crucial. Taking into account the geological conditions of the catchment areas, as well as the sensitivity of the environmental conditions of the catchment areas and their role in microbial contamination of surface water, in addition to chemical and microbial parameters of water samples, is important.

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FOOTNOTES
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Risk assessment of opportunistic bacterial pathogens in drinking water.

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Abstract

This study was undertaken to examine quantitatively the risks to human health posed by hospital-acquired plate count (HPC) bacteria found naturally in ambient water. HPC bacteria were isolated from drinking water sources and tested for antibiotic resistance. The isolates were classified into groups based on their resistance patterns. The results showed that the isolates were resistant to at least one antibiotic, and some were resistant to multiple antibiotics. The study also examined the effects of chlorine disinfection on the bacterial populations. The results indicated that the chlorine disinfection process was effective in reducing the bacterial populations. Overall, the study demonstrated the importance of monitoring bacterial populations in drinking water sources and the need for continued research on the effects of disinfection processes on bacterial populations.
Water and nontuberculous mycobacteria

References and further reading may be available for this article. To view references and further reading you must purchase this article.

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Abstract

The atypical mycobacteria or nontuberculous mycobacteria differ from tuberculous mycobacteria (\textit{M. tuberculosis}, \textit{M. bovis}, \textit{M. africanum}) because most of them are ubiquitous and saprophytic. A few are considered potential human pathogens: \textit{M. avium}, \textit{M. intracellulare}, \textit{M. chelonae}, \textit{M. kansasii}, \textit{M. marinum}, \textit{M. fortuitum} and \textit{M. ulcerans}. The immunological status of a person determines the advance of disease: disseminated or localized (lung disease, lymphadenitis, skin or soft tissue involvement). Over the last decades the incidence of mycobacteriosis has increased in account of Sida. \textit{M. avium–M. intracellulare complex} (MAC) are predominant species. In contrast to \textit{M. tuberculosis} person-to-person transmission does not occur with nontuberculous mycobacteria. These bacteria are ubiquitous and may be found in the environment especially in water. It is difficult to isolate mycobacteria from nature thus published results certainly under estimate reality. Several studies indicated that the fluctuation in the occurrence of environmental mycobacteria was in relation to chemical and physical characteristics of the water: pH, ions concentration, temperature, organic matter. Among water species, scotochromogen \textit{M. gordonae} or \textit{M. flavescens} are the most common. Rapidly growing
species *M. fortuitum* or *M. chelonae* are also common water contaminants. On account of their resistance to decontaminating agents they cause abscesses or postsurgical infections. *M. marinum*, isolated from aquariums or swimming pools, is the agent of inflammatory cutaneous nodules. *M. kansasii*, *M. xenopi* are especially found in drinking water distribution water; they are responsible for pulmonary diseases. The majority of human mycobacterioses are due to species of the complex MAC which are isolated more frequently in warm water. Epidemiologic studies suggest that natural or drinking water are the principal source of human contamination. Recently results obtained using molecular biology techniques as pulsed field gel electrophoresis demonstrated a relation between environmental and human species. The eradication of nontuberculous in water is not possible so preventive measure could be a good strategy to limit mycobacteria.

(395).

It has also been suggested that

* M. ulcerans* transmission can

occur via aerosolization (206), as has been shown for members

of the

* M. avium* complex (145, 171, 383, 542). Aerosolized *M. ulcerans*

possibly present in recycled sewage water used to

irrigate a golf course was proposed as the route of infection in

Australia (262). In fact, it was shown that cells of

*M. ulcerans* could be aerosolized from suspensions of tap water (206).


1995.
Persistence of Nontuberculous Mycobacteria in a Drinking Water System after Addition of Filtration Treatment

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There is evidence that drinking water may be a source of infections with pathogenic nontuberculous mycobacteria (NTM) in humans. One method by which NTM are believed to enter drinking water distribution systems is by their intracellular colonization of protozoa. Our goal was to determine whether we could detect a reduction in the prevalence of NTM recovered from an unfiltered surface drinking water system after the addition of ozonation and filtration treatment and to characterize NTM isolates by using molecular methods. We sampled water from two initially unfiltered surface drinking water treatment plants over a 29-month period. One plant received the addition of filtration and ozonation after 6 months of sampling. Sample sites included those at treatment plant effluents, distributed water, and cold water taps (point-of-use [POU] sites) in public or commercial buildings located within each distribution system. NTM were recovered from 27% of the sites. POU sites yielded the majority of NTM.
with >50% recovery despite the addition of ozonation and filtration. Closely related electrophoretic groups of *Mycobacterium avium* were found to persist at POU sites for up to 26 months. Water collected from POU cold water outlets was persistently colonized with NTM despite the addition of ozonation and filtration to a drinking water system. This suggests that cold water POU outlets need to be considered as a potential source of chronic human exposure to NTM.

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Millions in U.S. Drink Dirty Water, Records Show

By CHARLES DUHIGG
Published: December 7, 2009

More than 20 percent of the nation's water treatment systems have violated key provisions of the Safe Drinking Water Act over the last five years, according to a New York Times analysis of federal data.

That law requires communities to deliver safe tap water to local residents. But since 2004, the water provided to more than 49 million people has contained illegal concentrations of chemicals like arsenic or radioactive substances like uranium, as well as dangerous bacteria often found in sewage.

Regulators were informed of each of those violations as they occurred. But regulatory records show that fewer than 6 percent of the water systems that broke the law were ever fined or punished by state or federal officials, including those at the Environmental Protection Agency, which has ultimate responsibility for enforcing standards.

Studies indicate that drinking water contaminants are linked to millions of instances of illness within the United States each year.

In some instances, drinking water violations were one-time events, and probably posed little risk. But for hundreds of other systems, illegal contamination persisted for years, records show.

On Tuesday, the Senate Environment and Public Works committee will question a high-ranking E.P.A. official about the agency's enforcement of drinking-water safety...
laws. The E.P.A. is expected to announce a new policy for
how it polices the nation's 54,700 water systems.

"This administration has made it clear that clean water is a top priority," said an E.P.A.
spokeswoman, Adora Andy, in response to questions regarding the agency's drinking
water enforcement. The E.P.A. administrator, Lisa P. Jackson, this year announced a
wide-ranging overhaul of enforcement of the Clean Water Act, which regulates pollution
into waterways.

"The previous eight years provide a perfect example of what happens when political
leadership fails to act to protect our health and the environment," Ms. Andy added.

Water pollution has become a growing concern for some lawmakers as government
oversight of polluters has waned. Senator Barbara Boxer, Democrat of California, in
2007 asked the E.P.A. for data on Americans' exposure to some contaminants in
drinking water.

The New York Times has compiled and analyzed millions of records from water systems
and regulators around the nation, as part of a series of articles about worsening pollution
in American waters, and regulators' response.

An analysis of E.P.A. data shows that Safe Drinking Water Act violations have occurred
in parts of every state. In the prosperous town of Ramsey, N.J., for instance, drinking
water tests since 2004 have detected illegal concentrations of arsenic, a carcinogen,
and the dry cleaning solvent tetrachloroethylene, which has also been linked to cancer.

In New York state, 205 water systems have broken the law by delivering tap water that
contained illegal amounts of bacteria since 2004.

However, almost none of those systems were ever punished. Ramsey was not fined for
its water violations, for example, though a Ramsey official said that filtration systems
have been installed since then. In New York, only three water systems were penalized for
bacteria violations, according to federal data.

The problem, say current and former government officials, is that enforcing the Safe
Drinking Water Act has not been a federal priority.

"There is significant reluctance within the E.P.A. and Justice Department to bring
actions against municipalities, because there's a view that they are often cash-strapped,
and fines would ultimately be paid by local taxpayers," said David Uhlmann, who headed
the environmental crimes division at the Justice Department until 2007.

"But some systems won't come into compliance unless they are forced to," added Mr.
Uhlmann, who now teaches at the University of Michigan law school. "And sometimes a
court order is the only way to get local governments to spend what is needed."

A half-dozen current and former E.P.A. officials said in interviews that they tried to prod
the agency to enforce the drinking-water law, but found little support.

"I proposed drinking water cases, but they got shut down so fast that I've pretty much
stopped even looking at the violations," said one longtime E.P.A. enforcement official
who, like others, requested anonymity for fear of reprisals. "The top people want big
headlines and million-dollar settlements. That's not drinking-water cases."

The majority of drinking water violations since 2004 have occurred at water systems
serving fewer than 20,000 residents, where resources and managerial expertise are often
in short supply.

It is unclear precisely how many American illnesses are linked to contaminated drinking water. Many of the most dangerous contaminants regulated by the Safe Drinking Water Act have been tied to diseases like cancer that can take years to develop.

Griffin Palmer contributed reporting.
Occurrence of antibiotic-resistant bacteria and endotoxin associated with the land application of biosolids


Abstract: The purpose of this study was to determine the prevalence of antibiotic-resistant bacteria and endotoxin in soil after land application of biosolids. Soil was collected over a 15 month period following land application of biosolids, and antibiotic resistance was assessed using clinically relevant antibiotic concentrations. Ampicillin, cephalothin, ciprofloxacin, and tetracycline resistance were all monitored separately for any changes throughout the 15 month period. Endotoxin soil concentrations were monitored using commercially available endotoxin analysis reagents. Overall, land application of biosolids did not increase the percentage of antibiotic-resistant culturable bacteria above background soil levels. Likewise, land application of biosolids did not significantly increase the concentration of endotoxin in soil. This study determined and established a baseline understanding of the overall effect that land application of biosolids had on the land-applied field with respect to antibiotic-resistant bacterial and endotoxin soil densities.

Key words: biosolids, antibiotic resistance, endotoxin, groundwater, land application.

Résumé : Le but de cette étude était d’examiner la prévalence de bactéries résistantes aux antibiotiques et déterminer la présence d’endotoxines après l’application de solides biologiques à la surface du sol. Le sol a été récolté au cours d’une période de 15 mois après l’application des solides biologiques et la résistance aux antibiotiques a été évaluée dans une gamme de concentrations d’antibiotiques pertinentes d’un point de vue clinique. Les changements de résistance à l’ampicilline, à la céphalosporine, au ciprofloxacine et à la tétracycline ont été évalués séparément pendant toute la période de 15 mois. Les concentrations d’endotoxines du sol ont été mesurées à l’aide de réactifs d’analyse d’endotoxines commerciaux. Globalement, l’application de solides biologiques à la surface des sols n’a pas augmenté le pourcentage de bactéries cultivables résistantes aux antibiotiques par rapport à la ligne de base de sols contrôlés. De la même façon, l’application de solides biologiques à la surface des sols n’a pas augmenté significativement la concentration d’endotoxines du sol. Cette étude a permis de définir une connaissance de base des effets globaux que l’application de solides biologiques peut avoir sur les champs traités en regard de la densité de bactéries résistantes aux antibiotiques et de la présence d’endotoxines dans les sols.

Mots-clés : solides biologiques, résistance aux antibiotiques, endotoxines, eau souterraine, application sur des sols.

[Traduit par la Rédaction]

Introduction

Activated sludge sewage treatment results in the production of large amounts of biosolids, which are typically disposed of or recycled through land application to agricultural land. In the United States, more than half of all biosolids are applied to farmland, and with that comes concern about the potential health and environmental effects of antibiotic-resistant bacteria and endotoxins in land-applied biosolids (National Research Council 2002). The majority of these biosolids are Class B biosolids. Class B biosolids are produced when sewage sludge has been chemically or physically treated to reach an acceptable fecal coliform level of at most $2 \times 10^6$ most probable number (MPN) (g total solid mass)$^{-1}$ (National Research Council 2002). Class B biosolids are known to contain some pathogenic microorganisms, antibiotic-resistant microorganisms, and bacterial by-products such as lipopolysaccharide.

The antibiotic era began after Alexander Fleming's discovery of penicillin nearly 80 years ago. Since the first introduction of antibiotics, overuse has been an issue, as overprescription of first generation antibiotics has led to many resistant bacterial strains (Murray et al. 1998; Monroe and Polk 2000; Lieberman 2003). The presence of antibiotic-resistant bacteria in wastewater has been investigated and thought to be more related to hospital rather than domestic waste (Valdivia et al. 1996); however with regard to biosolids, little research has been conducted. As such, biosolids may be highly influenced by hospital waste and any associated antibiotic-resistant bacterial populations. Human
bacterial pathogens, such as *Salmonella*, *Shigella*, and *Campylobacter*, can all be potentially present in biosolids, and as such may present a cause for concern when antibiotic resistance is involved. In addition to these pathogens, biosolids may harbor additional antibiotic-resistant pathogenic and nonpathogenic microorganisms (Rusin and Gerba 2001). Antibiotic resistance is typically due to the intrinsic resistance inherent to many of these organisms, to resistance selection over time, or to potential horizontal gene transfer, which could include antibiotic resistance (Low 2001; Rusin and Gerba 2001; Rensing et al. 2002; Dzidic and Bedekovic 2003; Marshall et al. 2004; Salyers et al. 2004). Therefore, potentially when soil, water, or food that has been in contact with biosolids is consumed either directly or indirectly, there exists the possibility of exposure to these antibiotic-resistant bacterial strains.

Endotoxin, or the lipopolysaccharide (LPS) molecules associated with the Gram-negative bacterial outer wall, are molecules capable of soliciting large-scale immune reactions when introduced into a susceptible individual. The prevalence of endotoxin in biosolids has not been well studied, although it is assumed that biosolids can potentially contain large amounts of endotoxin because of its high concentration of Gram-negative bacteria (Raetz and Whitfield 2002). Environmental health effects associated with the endotoxin group of molecules is primarily associated with inhalation complications, rather than with consumption; however, little information exists to suggest that consumption is not a concern (Castellan et al. 1987; Smid et al. 1992; Donham et al. 2000; Gereda et al. 2001; Michel et al. 2001; Michel 2003). Very little is known on the overall prevalence of endotoxin following its introduction into the environment; however, it is widely accepted that lipopolysaccharide molecules are ubiquitously present in the environment, and as such they may or may not be influenced greatly by the addition of foreign LPS.

The purpose of this study was to quantify the overall amount of antibiotic-resistant bacteria and endotoxin present in biosolids and in the soils that received biosolids. The primary focus of this study was to determine soil concentrations of these contaminants during pre- and post-biosolids land application periods on an experimental agricultural field. This study established a baseline set of data related to biosolids with respect to potential environmental contamination with antibiotic-resistant microorganisms and endotoxin.

**Materials and methods**

**Experimental site and biosolids application**

An agricultural site within the Tucson, Arizona, area was monitored throughout 15 months following the land application of Class B biosolids. Liquid Class B biosolids from the Ina Road Wastewater Treatment Plant located in Tucson, Arizona, were applied from a Balzer 6250 gallon capacity injector applicator (Balzer Inc; Mountain Lake, Minnesota) with injection occurring approximately 15 cm below the sandy-loam soil surface. Biosolids were applied at a rate of 5452 kg (dry)·ha⁻¹. All biosolids were anaerobically digested and were approximately 6%–8% solid content. Class B biosolids had previously been applied to the experimental site in December of 1995, with the field subsequently utilized for the growth of cotton.

In addition to the experimental field, a set of 5 local agricultural fields, which had no record of biosolids application, were visited as nonapplied control sites. An off-site agricultural field, which annually received anaerobically digested Class B biosolids during the past 20 years, was also visited. All sampled sites were characterized as having sandy-loam soil with approximately 6% moisture content.

**Sample collection**

Soil samples were collected prior to and following biosolids land application at specific time points: Day 1 (pre-application); Days 0, 7, and 14; Months 1, 2, 3, 4, 5, 6, and 13. Land application at the experimental site began on June 10, 2003 (Day 0). Soil samples were also collected from the off-site nonapplied control sites and the continuously applied control site. Composite soil samples were collected from all sites at approximately 15 cm below the surface, using a disinfected (70% ethanol) sampling shovel. All soil samples were sieved through a 2 mm pore size sieve. Soil moisture content measurements were made prior to analysis.

In addition to the soil samples, Class B anaerobically digested biosolids samples were also collected. A composite of the anaerobically digested Class B biosolids, which were applied to the experimental field, was collected to ascertain pre-application levels of biosolids-borne antibiotic-resistant bacteria. A set of 4 randomly selected biosolids samples from the Arizona, California, New Hampshire, and Washington states was also collected to determine antibiotic-resistant bacterial concentrations within Class B anaerobically digested biosolids from other regions of the country. All samples were stored in an ice cooler and transported back to the laboratory for immediate sample processing. Biosolids solid content analysis was performed prior to microbial analysis. Soil and biosolids aliquots to be analyzed for the presence of endotoxin were frozen at -20 °C prior to analysis.

**Antibiotic-resistant bacterial analysis**

To determine antibiotic-resistant bacterial (ARB) concentrations, samples were exposed to 4 separate antibiotics via dilution and plating on media amended with antibiotics. The 4 antibiotics (Sigma Aldrich; St. Louis, Missouri) chosen were ampicillin (32 µg·mL⁻¹), cephalothin (32 µg·mL⁻¹), ciprofloxacin (4 µg·mL⁻¹), and tetracycline (16 µg·mL⁻¹). Each antibiotic represents a major class of antibiotic and susceptibility range: ampicillin (Penicillin class, broad spectrum), cephalothin (Cephalosporin class, narrow spectrum), ciprofloxacin (quinolone class, broad spectrum), and tetracycline (Tetracycline class, broad spectrum). In addition, each one represents a specific method of activity, such as peptidoglycan layer formation inhibition (ampicillin, cephalothin), DNA gyrase inhibition (ciprofloxacin), and protein formation inhibition (tetracycline).

Plating medium (R2A; Becton Dickinson, Sparks, Maryland) was amended with these clinically relevant antibiotic concentrations (Jorgensen et al. 1999). Each antibiotic was individually amended into the R2A medium containing an additional antifungal cyclohexamide (Sigma Aldrich) (200 µg·mL⁻¹) additive. Soil samples were first suspended in sterile distilled water and subsequently serially diluted.
prior to spread plating 0.1 mL of each dilution onto each antibiotic-amended plate. Plates were incubated for 5 days at 27 °C. Heterotrophic plate count (HPC) bacterial concentrations were determined by plating onto R2A agar containing only the cyclohexamide additive. Antibiotic-resistant percentages were derived by comparison of heterotrophic culturable concentrations and antibiotic-resistant culturable concentrations. All assays were performed in duplicate.

Endotoxin analysis

Samples were assayed via the use of the commercially available Limulus amebocyte lysate assay (Sigma-Aldrich). In the presence of endotoxin, Limulus amebocyte lysate forms a gel, confirming the presence of both bound and unbound endotoxin. All endotoxin assays were performed under depyrogenated conditions. Specifically, glass culture tubes, dilution water, and pipette tips were all depyrogenated either commercially or onsite. Glass culture tubes were depyrogenated by baking the glassware at 180 °C for 3 h.

Prior to analysis, frozen biosolids and soil sample aliquots were thawed in a room temperature water bath, followed by suspension in depyrogenated water (Abbott Laboratories, Chicago, Illinois) at a concentration of 5 mg mL⁻¹. Samples were vortexed for 20 min at high speed and appropriate serial dilutions were made.

A 0.1 mL sample aliquot and 0.1 mL of Limulus reagent were incubated together following vigorous vortexing for 30 s. All samples were assayed in duplicate. In addition to all samples, control tubes containing diluted known amounts of purified endotoxin (Sigma-Aldrich), ranging from 1.0 to 0.03 endotoxin units (EU) mL⁻¹, were prepared in depyrogenated water and assayed to ascertain assay sensitivity. In addition to these controls, sample inhibition, positive, and negative controls were all prepared and assayed in duplicate. Inhibition controls were prepared using sample preparations (soil or biosolids in depyrogenated water) that had been processed for endotoxin and spiked with a known amount of endotoxin equivalent to the positive control or 0.3 EU mL⁻¹. Sample inhibition controls were required to perform as well as the positive controls. Any failed inhibition controls resulted in sample dilution to remove any inhibition. Positive controls were prepared by mixing endotoxin to a concentration of 0.3 EU mL⁻¹ in depyrogenated water, while negative controls were prepared by using depyrogenated water. All samples were incubated at 37 °C in a static water bath immediately following reagent addition and mixing. Following the 1 h incubation, samples demonstrating the formation of a solid gel-like phase were deemed positive. To determine a positive gel phase, samples were carefully inverted once, and a positive sample was noted by the presence of a solid gel phase, which remained in the tube. The concentration of endotoxin present in the sample was determined by using the reciprocal of the final dilution presenting a positive result (i.e., duplicate tubes must form gel phase) and multiplying it by the lowest determined control standard concentration.

Statistics

Statistical analyses were performed using the Minitab statistical program version 13.32 (Minitab Inc; State College, Pennsylvania).

Results

HPC and ARB concentrations — land application site

Total culturable HPC bacterial concentrations throughout the study period were monitored at the land application site. Overall, HPC soil concentrations did not deviate from the pre-application concentrations (P > 0.05) (Fig. 1). Total HPC concentrations averaged approximately 10⁶ CFU g⁻¹ prior to biosolids application and remained similar throughout the 15 months following application (Fig. 1). HPC concentrations from the nonapplied control fields varied from 9.60 × 10⁵ to 1.33 × 10⁶ CFU g⁻¹ (Fig. 2). These levels were found to be statistically similar to that of the experimentally applied field. HPC concentrations from the continuously applied field were approximately 2.55 × 10⁶ CFU g⁻¹.

ARB soil concentrations in the monitored site were also relatively constant throughout the study period (Fig. 1). Likewise, antibiotic-resistant rates among total bacterial concentrations did not differ throughout the entire study period (Table 1). Amoxicillin-, cephalothin-, ciprofloxacin-, and tetracycline-resistant bacterial concentrations in the biosolids-applied field did not statistically differ (P > 0.05) throughout the study period, in fashion similar to that of the HPC soil concentrations.

Soil samples collected from the nonapplied control sites contained varying concentrations of antibiotic-resistant bacteria ranging from 2.53 × 10⁶ to 1.06 × 10⁷ CFU g⁻¹ (Fig. 2). Statistical analysis revealed no difference between ARB concentrations from the nonapplied control sites and the experimentally applied sites. Likewise antibiotic-resistant rates were found to be statistically similar (Table 2). Samples collected from the continuously applied field were found to contain ARB concentrations from 7.9 × 10⁶ to 3.08 × 10⁷ CFU g⁻¹.

In addition to field measurements, a composite sample of the anaerobically digested Class B biosolids, which were applied to the field, were analyzed for the presence of biosolids origin antibiotic-resistant and HPC bacteria (Fig. 2).
Fig. 2. Heterotrophic plate count (HPC) and antibiotic-resistant bacterial concentrations (vertical bars indicate standard deviation) detected in Class B biosolids (Biosolids) collected from other regions of the USA, in Class B biosolids used in the experimental application field (Biosolids-App), nonapplied field controls (Field Non-App), and biosolids from continuously applied (Cont. App.) sites. Antibiotics used were as follows: Amp, ampicillin (32 μg·mL⁻¹); Cep, cephalothin (32 μg·mL⁻¹); Cipro, ciprofloxacin (4 μg·mL⁻¹); and Tet, tetracycline (16 μg·mL⁻¹). Biosolids-App and Cont. App. used in this study were represented by only one composite sample each.

Table 1. Percentage of total culturable heterotrophic plate count (HPC) bacterial concentrations exhibiting antibiotic resistance from soil collected at the experimental land application site throughout the 15 month study period.

<table>
<thead>
<tr>
<th>Time (days)</th>
<th>Ampicillin</th>
<th>Cephalothin</th>
<th>Ciprofloxacin</th>
<th>Tetracycline</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>12.1</td>
<td>12.4</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>7</td>
<td>11.5</td>
<td>11.5</td>
<td>2.8</td>
<td>2.0</td>
</tr>
<tr>
<td>30</td>
<td>14.6</td>
<td>13.6</td>
<td>4.8</td>
<td>3.1</td>
</tr>
<tr>
<td>60</td>
<td>8.7</td>
<td>10.7</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>90</td>
<td>8.2</td>
<td>8.4</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>120</td>
<td>8.4</td>
<td>11.0</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>150</td>
<td>9.1</td>
<td>11.1</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td>180</td>
<td>5.3</td>
<td>6.6</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>450</td>
<td>6.7</td>
<td>10.5</td>
<td>3.3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Note: Field antibiotic resistance percentage was calculated by dividing the antibiotic-resistant bacterial concentration by the HPC bacterial concentration. Antibiotics and the concentrations used are as follows: ampicillin (32 μg·mL⁻¹), cephalothin (32 μg·mL⁻¹), ciprofloxacin (4 μg·mL⁻¹), and tetracycline (16 μg·mL⁻¹).

HPC bacterial concentrations were approximately 7.02 × 10⁸ CFU·g⁻¹, while ARB concentrations varied from 6.78 × 10⁸ to 4.46 × 10⁸ CFU·g⁻¹. Similarly, ARB and HPC concentrations from other regional Class B biosolids samples were found to contain similar bacterial concentrations in all regards (Fig. 2).

Endotoxin concentration — land application site

Overall, endotoxin concentrations demonstrated similar trends to that of the ARB concentrations (Fig. 3). Following land application of biosolids, endotoxin concentrations from the applied soil did not differ significantly from pre-application concentrations (P > 0.05). Concentrations did increase by approximately 0.5 log₁₀ 1 month after application; however, levels were not statistically significant when compared with pre-application levels. Likewise, endotoxin concentrations from the nonapplied control fields were 7.96 × 10⁶ EU·g⁻¹, which were not statistically different from that of the experimentally applied field (Fig. 4). Endotoxin concentrations from the continuously applied field were determined to be upwards of 2.11 × 10⁶ EU·g⁻¹. These levels were approximately one-half a log₁₀ greater than that of the nonapplied control sites.

A composite sample of Class B biosolids, prior to land application, was assayed to determine levels of endotoxin present in the biosolids. This sample yielded pre-application biosolids endotoxin concentrations at approximately 8.83 × 10⁶ EU·g⁻¹ (Fig. 4). Likewise, endotoxin concentrations from the randomly selected Class B biosolids samples collected from 3 of the 4 US states were determined to be approximately 6.12 × 10⁶ EU·g⁻¹, while one sample was found to be approximately 5.71 × 10⁶ EU·g⁻¹ (Fig. 4).

Discussion

Both HPC and ARB concentrations in soil collected
Table 2. Percentage of total culturable heterotrophic plate counts (HPC) bacterial concentrations exhibiting antibiotic resistance in Class B biosolids (Biosolids) collected from other regions of the USA, in Class B biosolids used in the experimental application field (Biosolids-App), in nonapplied field controls (Field Non-App), and in biosolids from continuously applied (Cont. App.) sites.

<table>
<thead>
<tr>
<th>Antibiotic resistance (%)</th>
<th>Ampicillin</th>
<th>Cephalothin</th>
<th>Ciprofloxacin</th>
<th>Tetracycline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biosolids</td>
<td>4.4</td>
<td>21.2</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Biosolids-App</td>
<td>3.6</td>
<td>63.6</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Field Non-App</td>
<td>8.1</td>
<td>10.1</td>
<td>3.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Cont. App.</td>
<td>7.9</td>
<td>11.0</td>
<td>9.2</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Note: Field antibiotic resistance percentage was calculated by dividing the antibiotic-resistant bacterial concentration by the HPC bacterial concentration. Antibiotics and the concentrations used are as follows: ampicillin (32 μg·mL⁻¹), cephalothin (32 μg·mL⁻¹), ciprofloxacin (4 μg·mL⁻¹), tetracycline (16 μg·mL⁻¹).

Fig. 4. Endotoxin concentrations (vertical lines indicate standard deviation) detected in Class B biosolids (Biosolids) collected from other regions of the USA, in Class B biosolids used in the experimental application field (Biosolids-App), in nonapplied field controls (Field Non-App), and in biosolids from continuously applied (Cont. App.) sites. Biosolids-App, and Cont. App. used in this study were represented by only one composite sample each.

from the application site remained statistically similar to pre-application concentrations throughout the study. Unexpectedly, the soil concentrations (post-application) remained consistent with and even decreased below pre-application levels with regard to ARB concentrations. Any numerical anomalies noted throughout the study period for both ampicillin- and cephalothin-resistant concentrations may have been due to either a deviation in soil sampling precision or cyclical differences in field bacterial population dominance (Smit et al. 2001). Ciprofloxacin- and tetracycline-resistant bacterial concentrations remained constant throughout the study period, in a fashion similar to that of ampicillin- and cephalothin-resistant concentrations. It is possible that following biosolids land application, the lack of selective pressures for antibiotic resistance may cause the loss of the plasmid carrying the resistant genes and, hence, may lead to lower overall antibiotic-resistant bacterial recovery (Smith and Bidochka 1998). Furthermore, the overall loss of bacterial viability following biosolids land application may have contributed to any noted decreases (Pepper et al. 1993; Zaleski et al. 2005); however, all differences were statistically irrelevant. No increase in ARB concentrations or percentages was noted throughout the study period, particularly, during the first 14 days following application, suggesting that an immediate dilution effect of any biosolids-borne antibiotic-resistant organisms may be the cause. This was true, despite some ARB concentrations in the biosolids to be approximately 1 log₁₀ above that of the pre-application soil concentrations. Soil ARB rates were well below 20% for all measured antibiotics before and after biosolids application. In contrast, dairy soil, farm water, and surface water have all been found to contain ARB rates in upwards of 70% of the culturable total bacteria when constantly exposed to the contamination source (Estiobu et al. 2002). Of course this effect may be more pronounced because of more constant selective pressures on these environments, whereas in the present study, a one-time application of biosolids was the only noted selective pressure. Interestingly, a continuously biosolids applied field within the sampling area was also investigated for this study and found to contain similar ARB concentrations to that of the experimental field, despite Class B biosolids application occurring on an annual basis for the past 20 years. It is important to note, that only one continuously
applied field was investigated for this study, and thus, no statistical analysis was conducted using this particular field, therefore, these numbers hold no statistical relevance. However, 5 other nonbiosolids applied fields were also investigated and found to be statistically similar to the experimental field, with regard to ARB concentrations.

Endotoxin concentrations in the monitored field changed little following biosolids land application. The biosolids used in this study were found to contain endotoxin concentrations similar to that of other Class B biosolids sampled from other regions of the USA. These concentrations were approximately 2 log_{10} orders of magnitude greater than the pre-application soil levels and were noted to have affected the soil endotoxin levels following biosolids application. A 0.5 log_{10} increase in endotoxin concentration 1 month following biosolids land application was noted; however, this level was found to be statistically identical to pre-application levels. This small increase may have been due to Gram-negative bacterial decay in the field, since Class B biosolids contain approximately 10^6 CFU total coliforms (g dry mass)^{-1}, not to mention the other dominant Gram-negative microorganisms, and each of these cells can potentially contain approximately 10^6 lipid A residues (Raetz and Whitfield 2002). Endotoxin, of which lipid A is a key component, can be liberated during Gram-negative decay as well as growth (Bradley 1979), and as such, an increase in overall endotoxin concentration was expected.

Endotoxin generally causes ailments after inhalation of airborne endotoxin, and as such, any potential increase of soil endotoxin concentrations could then lead to increases in potentially aerosolized endotoxin (Brooks et al. 2006). Data from this study suggest that pre-application endotoxin levels in soil were statistically similar to those of post-application levels, and as such, it is likely that aerosols generated by land application operations are likely to contain endotoxin regardless of the presence or absence of biosolids, as demonstrated by a recent study (Brooks et al. 2006).

Overall biosolids did little to alter the overall concentrations of antibiotic-resistant bacteria in a biosolids land-applied field, which was monitored for 15 months, despite expectations of the contrary. It is important to note that this study demonstrated overall antibiotic resistance to only one antibiotic at a time and to only 4 antibiotics. Clinically relevant concentrations of each antibiotic were studied; however, further work must be done to characterize specific isolates with regard to specific resistance and the presence of multiple antibiotic resistance. It is important to note that even resistance to one antibiotic can demonstrate the presence of resistance to other antibiotics, and though 4 antibiotics were investigated, more research is warranted on other antibiotics. This study exhibited that the overall intrinsic levels of antibiotic- (ampicillin, cephalothin, ciprofloxacin, and tetracycline) resistant bacteria already present in the field were unaffected by the land application of Class B biosolids. However, this study did not investigate dominant field ARB isolates, which may have been shifted due to the land application event, and as such, this point should not be overlooked in future studies. It is also important to note that this study does not represent the total viable bacterial community, and that all antibiotic-resistant viable but not culturable bacteria were not represented in this study.

This study can be used as a baseline understanding of the overall amounts of antibiotic-resistant bacteria and lipopolysaccharide (endotoxin) that contributed to a single experimental field following biosolids application. Class B biosolids land application did little to alter the intrinsic concentrations of either antibiotic-resistant bacteria or lipopolysaccharide present in the soil. However, it is important to understand that biosolids from only one municipality was used and only one experimental field was investigated. Research in other environments is needed, as specific climate and soil characteristics will alter some results. While this study determined quantitative effects of biosolids land application, it is important to note that further research must be conducted to ascertain any qualitative characteristic shifts, such as changes in microbial population, that can lead to shifts in ARB populations and lipopolysaccharide (endotoxin) types.

Acknowledgements

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References


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Land Application and Composting of Biosolids

What are biosolids?
Every day, wastewater treatment facilities across the country treat billions of gallons of wastewater generated by homes and businesses. The treatment process produces liquid effluent that is discharged to water bodies or reused as well as a byproduct of solid residues (sewage sludge) that must be managed in an environmentally responsible manner. Although the terms “biosolids” and “sewage sludge” are often used interchangeably, they are not the same. With further treatment, sewage sludge can yield biosolids, which is defined by the U.S. Environmental Protection Agency (EPA) as “nutrient-rich organic materials resulting from the treatment of domestic sewage in a treatment facility... that can be recycled and applied as fertilizer to improve and maintain productive soils and stimulate plant growth.”

What are the various options to manage solid residuals?
Approximately 7.100.000 dry tons of solid residuals are generated each year from the treatment process at the more than 16,000 municipal wastewater treatment facilities in the U.S. Since most U.S. wastewater treatment facilities are publicly owned and operated, management options are decided by local professionals. Behind the scenes, they must balance the needs of their communities for sanitation and public health protection with environmentally sound and sustainable methods of residuals management. Approximately 55% of the total residuals generated each year are further treated and land applied as biosolids. Other management options include incineration/processing for energy recovery or landfill disposal.

Are biosolids treated before they are land applied?
Biosolids that are land applied have been treated to minimize odors and to reduce or eliminate pathogens. There are two classes of biosolids that are land applied, referred to as Class B and Class A. Class B biosolids are treated to achieve significant (i.e., 99%) pathogen reduction and subject to site use and access restrictions, and Class A biosolids are disinfected to a level that inactivates pathogens and are subject to fewer site-specific controls. If, in addition, heavy metal concentrations are sufficiently low, Class A biosolids can be bagged and distributed for home garden use without further regulation—referred to as Class A, EQ (exceptional quality) biosolids. Composted biosolids generally achieve Class A, EQ status.

What are some of the benefits of biosolids land application?
The benefits of biosolids for both soil and vegetation are numerous and well recognized. Biosolids provide primary nutrients (nitrogen and phosphorous) and secondary nutrients such as calcium, iron, magnesium and zinc. Also, the use of biosolids increases crop yields and maintains nutrients in the root zone and unlike chemical fertilizers, biosolids provide nitrogen that is released slowly over the growing season as the nutrient is mineralized and made available for plant uptake. Land application of biosolids can also offer net greenhouse gas benefits by recycling carbon to the soil and fertilizing vegetation for further carbon dioxide capture.

What is the federal regulation that governs the management of biosolids and how was it developed?
The federal regulation governing the management of biosolids is 40 CFR Part 503 and is based on the 1987 Clean Water Act amendments that directed EPA to research and promulgate regulations for use and disposal of sewage sludge. EPA undertook a comprehensive process to study land application and other biosolids management practices. Based on the results of its risk assessment, EPA identified and set numeric limits for the nine trace elements (heavy metals), which have high enough potential risk to require monitoring. EPA also mandated that treatment facilities use at least one of several alternative technologies to significantly decrease or eliminate levels of pathogens in biosolids.

Do states implement their own land application programs?
Land application is widely practiced in the U.S. In fact after EPA issued the Part 503 rule in 1993, most states implemented complementary land application programs to strengthen oversight and safety of the practice. Only nine states have no biosolids specific regulations and rely exclusively on Part 503.
What is the scientific basis for biosolids land application?

The broad weight of scientific evidence and opinion supports recycling biosolids to land as an environmentally responsible method of reuse when managed utilizing best practices and in compliance with the Part 503 rule. Federal policies supporting and promoting the beneficial recycling of biosolids are based upon science demonstrating the safety and benefits of such recycling. These policies are not driven by economics, and the choice to recycle biosolids remains a state or local decision.

Has EPA requested any independent studies to determine if the science supports biosolids land application?

Since the implementation of Part 503 rule, two reports of the National Research Council (NRC) of the National Academy of Sciences have considered whether land application of biosolids is safe and beneficial. In 1996, the NRC published Use of Reclaimed Water and Sewage Sludge in Food Crop Production, which concluded that the application of biosolids to farmland—when practiced in accordance with existing federal guidelines and regulations—presents negligible risk to the consumer, to crop production, and to the environment. The report concluded that current technology to remove pollutants from wastewater, coupled with existing regulations and guidelines governing the use of reclaimed wastewater and sludge in crop production, are adequate to protect human health and the environment. In 2000, EPA asked the NRC to review the science and methods supporting Part 503 to address concerns regarding human health impacts of land application of biosolids. As a result of its search for evidence on human health effects related to biosolids, the NRC's 2002 report concluded that there is no documented scientific evidence that the Part 503 rule has failed to protect public health; "[a] causal association between biosolids exposures and adverse health outcomes has not been documented"; and "there are no scientifically documented outbreaks or excess illnesses that have occurred from microorganisms in treated biosolids." The NRC also observed that "persistent uncertainties" regarding the safety of land application necessitate more scientific research, but it did not call for any specific changes to Part 503. EPA continues to reevaluate the adequacy of the Part 503 regulations and has not found a need to establish more stringent requirements or regulate additional pollutants.

Did EPA assess trace metals and chemicals in biosolids?

After reviewing over 200 specific compounds and elements from an initial candidate list of thousands, EPA targeted at least 22 constituents for a formal risk assessment to examine the quantities of the metals and chemicals in biosolids, their toxicity, routes of potential exposure to humans and the environment, and many other factors. The risk assessment ultimately determined that limits were advisable for nine trace elements (arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc), primarily to protect against toxic effects to plants and entry into the food chain. A four-year study by the U.S. Geological Survey (USGS) of Denver Metro Wastewater Reclamation District land application sites measured the effects of the application of Class B biosolids on the nutrient and metal content of soils, groundwater, and surface waters and found that "soil data indicated that biosolids have no measurable effect on the concentrations of constituents monitored." Further, the study did not establish any adverse biosolids-related effects on soils, crops, or groundwater on or near the biosolids application site.

How do biosolids programs and regulations reduce or mitigate the risk of these trace metals and chemicals?

Current biosolids programs mitigate the risk of chemicals and trace metals in several ways. Federal guidelines limit the amount of biosolids that may be applied to the land, which ensures that metal concentrations on biosolids-amended soils do not exceed safe levels. Trace chemicals that have been identified in biosolids have not been found in environmentally or toxicologically significant amounts; and, the trace amounts of these substances that may be present typically bind to soil constituents, limiting human exposure. Industrial pretreatment programs required under the Clean Water Act also reduce or eliminate many hazardous chemicals entering the treatment facility.

What does the scientific literature state about the potential risk of these contaminants?

A 2005 literature review on the issue of trace contaminants concluded that, "because of the capacity of land-based systems to buffer the potential toxic effects of waste-associated organic contaminants and to contribute to their assimilation into the soil, the majority of studies conclude that they pose little or no risk to the environment when applied appropriately."
How are pathogens in biosolids regulated?

As established by the Part 503 rule, treatment of biosolids to Class B or Class A standards eliminates 99% or more of the pathogens that may exist in sewage sludge. Ongoing research has continued to validate a technology-driven approach to reducing or eliminating pathogens in biosolids and shows low risk for the transmission of pathogens from land application sites to surrounding residents. No scientific studies have demonstrated any link between the existence of human pathogens in biosolids and illnesses in nearby residents. The conclusion that application of biosolids utilizing best management practices poses negligible health risks from pathogens is based on scientific understanding about pathogen survivability in the environment. Many pathogens do not survive passage through the collection and treatment system and through the additional treatment processes that further disinfect solids and effluent. Further, pathogens are enteric organisms that prefer and need the conditions inside the human body to thrive.

What does the scientific literature conclude about pathogens in biosolids?

A recent review of biosolids pathogen research literature stated that “the overall conclusion we have reached based on all of our land-application studies over the past two decades and an in-depth review of other relevant land application studies is that land application of Class B biosolids is sustainable. Specifically, the risks to human health posed by many microbiological entities within biosolids have been shown to be low if current EPA regulatory guidelines are followed. In addition, risks from indirect exposures such as aerosolized pathogens or contaminated groundwaters appear to be particularly low.” This conclusion is consistent with the practical experience in the wastewater treatment sector where exposure to biosolids has not been associated with illness. Microbial risk assessment and control remains a priority for the scientific community, however, and pathogen-related issues continue to be closely monitored.

What is the potential for contamination of water resources from biosolids land application?

Like any nutrient-rich fertilizer, biosolids should be applied in ways that minimize risk of leaching of nutrients or other constituents to groundwater or runoff to nearby surface waters. Current land application programs have been successful in minimizing these risks through regulation and best management practices. For example, the amount of biosolids applied to a field is limited to the amount needed to meet the nitrogen requirement of the crop grown (referred to as the agronomic rate); biosolids may not be applied within a 10 meter setback from waterbodies; state regulations typically require site specific data on proposed land application sites so that sites with shallow water tables or inappropriate soils will be precluded; and additional state requirements include limits on maximum slopes, prohibition on application during significant precipitation, and bans on biosolids application on standing water or wetlands.

Have there been long-term studies on groundwater safety where biosolids have been land-applied?

Studies have concluded that there are no impacts on groundwater quality at properly managed biosolids application sites. For example, a 1999 study reported that after 20 years of land application, tests of deep wells at an agricultural research site demonstrated no evidence of nitrate leaching and negligible fecal coliform concentrations. Also, a 2008 literature survey concluded that “groundwater contamination from land application of biosolids does not appear to be likely.”

Can odors from biosolids land-applied sites cause health problems?

No data has shown that odors from biosolids cause toxicological effects on individuals. Most odors in biosolids are caused by sulfur compounds that only cause toxic effects in concentrations vastly greater than that which triggers a smell. Further, gases with a possible toxic effect are not present in biosolids in concentrations that would endanger nearby residents. Although there has not been any observed health risks, site and process-specific stabilization or vector attraction reduction criteria are essential. Accordingly, local agencies invest significant resources for odor control.

What is being done to address complaints of alleged health impacts from individuals living near land-application sites?

The Water Environment Research Foundation (WERF) has produced a draft investigative protocol entitled, Epidemiologic Surveillance and Investigation of Illness Reported by Neighbors of Biosolids Land Application. The protocol was developed for medical providers and public health officials to use when citizens report health symptoms that they attribute to the application of soil amendments such as fertilizer, biosolids, animal manures, and food residuals. The goal is to provide a practical, objective, and reliable protocol that will be broadly implemented.
How do biosolids differ from other fertilizers?

Biosolids offer a sound alternative to chemical and manure-based fertilizers, which are often untreated or minimally treated before field application. Pathogen concentrations are magnitudes higher in untreated manures than in biosolids and, unlike biosolids, pathogen concentrations in manures are not strictly regulated. Since they are unregulated, manure-based fertilizers may pose a greater risk of transmitting pathogens or trace organic constituents such as antibiotics to soil or humans. Many chemical fertilizers are petroleum-based products, which increase the costs to farmers and contribute to the release of greenhouse gas emissions in the production cycle.

Are there federal and state regulations for other fertilizers?

Federal and state requirements for biosolids are significantly more stringent than the controls over the use of chemical fertilizers and manures. In many cases, untreated manure and chemical fertilizers may legally be applied in the setback areas where biosolids land application is prohibited.

Why compost biosolids?

According to the EPA, composting is a viable, beneficial option in biosolids management. It is a proven method for pathogen reduction and results in a product that is easy to handle, store, and use. The end product is usually a Class A, humus-like material without detectable levels of pathogens that can be applied as a soil conditioner and fertilizer to gardens, food and feed crops, and rangelands. This compost provides large quantities of organic matter and nutrients (such as nitrogen and phosphorus) to the soil, improves soil texture, and elevates soil exchange capacity, all characteristics of good organic fertilizer. Biosolids compost is safe to use and generally has a high degree of acceptability by the public, making it a good alternative to other bulk and bagged products available to homeowners, landscapers, farmers, and ranchers.

How is biosolids compost regulated and is it safe?

Composting of biosolids is an approved "Process to Further Reduce Pathogens (PRP)" under EPA's Part 503 biosolids regulations. Applying compost in accordance with Part 503 poses little risk to the environment or public health. In fact the use of biosolids compost can have a positive impact on the environment. In addition to soil improvements, reduced dependence on inorganic fertilizers can significantly decrease nitrate contamination of ground and surface waters often associated with use of inorganic fertilizers.

Are pathogens present in biosolids compost?

Composting is not a sterilization process and a properly composted product maintains an active population of beneficial microorganisms that compete against the pathogenic members. Composting biosolids reduces bacterial and viral pathogens to non-detectable levels if the temperature of the compost is maintained at greater than 55°C for three days or more.

Do odors from biosolids compost pose a health risk?

Odors from a composting operation can be a nuisance and a potential irritant but there is no documented link to health risks. In fact, offensive odors from composting sites are the primary source of public opposition to the practice. Although research shows that biosolids odors do not pose a health threat, many experts in the field of biosolids recycling believe that biosolids generating and processing facilities have an ethical responsibility to control odors and protect nearby residents from exposure to such nuisances. Recently, a better understanding of the generation of compost odors has allowed engineers to develop means of capturing and treating these odors so that emissions from composting facilities do not create offsite odor nuisance conditions.

Are there any initiatives to develop and implement best management practices for biosolids recycling?

Wastewater treatment professionals are committed to promoting environmental stewardship and best management practices by utilities for their biosolids management programs. The Water Environment Federation (WEF) publishes technical books, peer reviewed journal articles, and technical practice bulletins on issues relating to biosolids. WEF also sponsors annual conferences on biosolids management practices. Wastewater professionals also strongly support research to further understanding of sound biosolids management practices to ensure that these remain protective of public health and the environment. The Water Environment Research Foundation conducts ongoing scientific research on biosolids management questions. In addition to these efforts, WEF, the National Association of Clean Water Agencies and the EPA founded the National Biosolids Partnership (NBP) to promote biosolids best management practices. The Partnership has over 100 municipal members and has created a certified environmental management system (EMS) for biosolids that exemplifies the steps being taken at the local level to ensure biosolids safety and public participation in biosolids management decisions. Congress has supported this effort since 1999.
References


2 2004 U.S. EPA data


4 40 C.F.R. § 503.10(g) (2008).

5 Ibid.

6 Eliot Epstein, Land Application of Sewage Sludge and Biosolids 143-158 (2003).


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18 Raina M. Maier et al., Environmental Microbiology 512-13 (2000).

20 Studies demonstrate that workers at wastewater treatment facilities, highly exposed to untreated sewage and biosolids, do not have significantly higher rates of illness than similar unexposed workers. California State Water Resources Control Board, Statewide Program Environmental Impact Review (EIR) covering General Waste Discharge Requirements for Biosolids Land Application (2004), (“Studies of the incidence of disease among wastewater personnel have indicated that they have no greater incidence of disease than the population in general.”). Similarly, no differences have been found in the health of farm families from farms using biosolids compared to the health of families on farms not using biosolids. Id.

21 For example, Water Environment Research Foundation is studying pathogen reactivation and regrowth.

22 The extent to which biosolids affect groundwater or surface water quality depends upon “a wide range of factors, including climate, topography, land use, soil characteristics, and the chemical composition and application rate of the biosolids” and therefore requires case-by-case analysis. Kathryn J. Draeger et al., Water Env't Research Found., Watershed Effects of Biosolids Land Application: Literature Review 2-8 (1999). This is true of any fertilizer. Id.

23 See, e.g. Draeger et al., supra, at 3-13 (1999).


25 See Paul Chróstowski & Sarah Foster, Odor Perception and Health Effects, 76th Annual Water Environment Federation Technical Exhibition and Conference Workshop (2003). A 2004 literature review of the health effects of odors from municipal wastewater operations presented five reasons to conclude that odors do not cause illness: (1) odors do not cause signs of illness in healthy individuals; (2) odor acceptability varies with circumstances of exposure and the meaning people associate with the exposure; (3) below toxic levels of exposure, symptoms associated with odors involve no pathology; (4) symptoms are reduced almost immediately when the source of an odor is removed; and (5) nonphysical variables, such as anxiety and stress, seem to mediate symptoms from odors. William S. Cain and J. Enrique Cometto-Muñiz, Water Env’t Research Found., Identifying and Controlling Odor in the Municipal Wastewater Environment 6-1 (2004).


28 U.S. EPA Biosolids Technology Fact Sheet: Use of Composting for Biosolids Management

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Occurrence of antibiotic-resistant bacteria and endotoxin associated with the land application of biosolids


Abstract: The purpose of this study was to determine the prevalence of antibiotic-resistant bacteria and endotoxin in soil after land application of biosolids. Soil was collected over a 15 month period following land application of biosolids, and antibiotic resistance was ascertained using clinically relevant antibiotic concentrations. Ampicillin, cephalothin, ciprofloxacin, and tetracycline resistance were all monitored separately for any changes throughout the 15 month period. Endotoxin soil concentrations were monitored using commercially available endotoxin analysis reagents. Overall, land application of biosolids did not increase the percentage of antibiotic-resistant cultivable bacteria above background soil levels. Likewise, land application of biosolids did not significantly increase the concentration of endotoxin in soil. This study determined and established a baseline understanding of the overall effect that land application of biosolids had on the land-applied field with respect to antibiotic-resistant bacterial and endotoxin soil densities.

Key words: biosolids, antibiotic resistance, endotoxin, groundwater, land application.

Résumé : Le but de cette étude était d’examiner la prévalence de bactéries résistantes aux antibiotiques et déterminer la présence d’endotoxines après l’application de solides biologiques à la surface du sol. Le sol a été récolté au cours d’une période de 15 mois après l’application des solides biologiques et la résistance aux antibiotiques a été évaluée dans une gamme de concentrations d’antibiotiques pertinentes d’un point de vue clinique. Les changements de résistance à l’ampicilline, à la céphalothine, au ciprofloxacine et à la tétracycline ont été évalués séparément pendant toute la période de 15 mois. Les concentrations d’endotoxines du sol ont été mesurées à l’aide de réactifs d’analyse d’endotoxines commerciaux. Globalement, l’application de solides biologiques à la surface des sols n’a pas augmenté le pourcentage de bactéries cultivables résistantes aux antibiotiques par rapport à la ligne de base de sols contrôles. De la même façon, l’application de solides biologiques à la surface des sols n’a pas augmenté significativement la concentration d’endotoxines du sol. Cette étude a permis de définir une connaissance de base des effets globaux que l’application de solides biologiques peut avoir sur les champs traités en regard de la densité de bactéries résistantes aux antibiotiques et de la présence d’endotoxines dans les sols.

Mots-clés : solides biologiques, résistance aux antibiotiques, endotoxines, eau souterraine, application sur des sols.

[Traduit par la Rédaction]

Introduction

Activated sludge sewage treatment results in the production of large amounts of biosolids, which are typically disposed of or recycled through land application to agricultural land. In the United States, more than half of all biosolids are applied to farmland, and with that comes concern about the potential health and environmental effects of antibiotic-resistant bacteria and endotoxins in land-applied biosolids (National Research Council 2002). The majority of these biosolids are Class B biosolids. Class B biosolids are produced when sewage sludge has been chemically or physically treated to reach an acceptable fecal coliform level of at most $2 \times 10^6$ most probable number (MPN) (g total solid mass)$^{-1}$ (National Research Council 2002). Class B biosolids are known to contain some pathogenic microorganisms, antibiotic-resistant microorganisms, and bacterial by-products such as lipopolysaccharide.

The antibiotic era began after Alexander Fleming’s discovery of penicillin nearly 80 years ago. Since the first introduction of antibiotics, overuse has been an issue, as over-prescription of first generation antibiotics has led to many resistant bacterial strains (Murray et al. 1998; Monroe and Poll 2000; Lieberman 2003). The presence of antibiotic-resistant bacteria in wastewater has been investigated and thought to be more related to hospital rather than domestic waste (Valdivia et al. 1996); however with regard to biosolids, little research has been conducted. As such, biosolids may be highly influenced by hospital waste and any associated antibiotic-resistant bacterial populations. Human
bacterial pathogens, such as *Salmonella*, *Shigella*, and *Campylobacter*, can all be potentially present in biosolids, and as such may present a cause for concern when antibiotic resistance is involved. In addition to these pathogens, biosolids may harbor additional antibiotic-resistant pathogenic and nonpathogenic microorganisms (Rusin and Gerba 2001). Antibiotic resistance is typically due to the intrinsic resistance inherent to many of these organisms, to resistance selection over time, or to potential horizontal gene transfer, which could include antibiotic resistance (Low 2001; Rusin and Gerba 2001; Rensing et al. 2002; Dzidic and Bedekovic 2003; Marshall et al. 2004; Salyers et al. 2004). Therefore, potentially when soil water, or food that has been in contact with biosolids is consumed either directly or indirectly, there exists the possibility of exposure to these antibiotic-resistant bacterial strains.

Endotoxin, or the lipopolysaccharide (LPS) molecules associated with the Gram-negative bacterial outer wall, are molecules capable of soliciting large-scale immune reactions when introduced into a susceptible individual. The prevalence of endotoxin in biosolids has not been well studied, although it is assumed that biosolids can potentially contain large amounts of endotoxin because of its high concentration of Gram-negative bacteria (Raetz and Whittingfield 2002). Environmental health effects associated with the endotoxin group of molecules is primarily associated with inhalation complications, rather than with consumption; however, little information exists to suggest that consumption is not a concern (Castelein et al. 1987; Smid et al. 1992; Donham et al. 2000; Gereda et al. 2001; Michel et al. 2001; Michel 2003). Very little is known on the overall prevalence of endotoxin following its introduction into the environment; however, it is widely accepted that lipopolysaccharide molecules are ubiquitously present in the environment, and as such they may or may not be influenced greatly by the addition of foreign LPS.

The purpose of this study was to quantify the overall amount of antibiotic-resistant bacteria and endotoxin present in biosolids and in the soils that received biosolids. The primary focus of this study was to determine soil concentrations of these contaminants during pre- and post-biosolids land application periods on an experimental agricultural field. This study established a baseline set of data related to biosolids with respect to potential environmental contamination with antibiotic-resistant microorganisms and endotoxin.

### Materials and methods

#### Experimental site and biosolids application
An agricultural site within the Tucson, Arizona, area was monitored throughout 15 months following the land application of Class B biosolids. Liquid Class B biosolids from the Ina Road Wastewater Treatment Plant located in Tucson, Arizona, were applied from a Balzer 6250 gallon capacity injector applicator (Balzer Inc., Mountain Lake, Minnesota) with injection occurring approximately 15 cm below the sandy-loam soil surface. Biosolids were applied at a rate of 5452 kg (dry)-ha⁻¹. All biosolids were anaerobically digested and were approximately 6%–8% solid content. Class B biosolids had previously been applied to the experimental site in December of 1995, with the field subsequently utilized for the growth of cotton.

In addition to the experimental field, a set of 5 local agricultural fields, which had no record of biosolids application, were visited as nonapplied control sites. An off-site agricultural field, which annually received anaerobically digested Class B biosolids during the past 20 years, was also visited. All sampled sites were characterized as having sandy-loam soil with approximately 6% moisture content.

#### Sample collection
Soil samples were collected prior to and following biosolids land application at specific time points: Day 1 (pre-application); Days 0, 7, and 14; Months 1, 2, 3, 4, 5, 6, and 15. Land application at the experimental site began on 10 June 2003 (Day 0). Soil samples were also collected from the off-site nonapplied control sites and the continuously applied control site. Composite soil samples were collected from all sites at approximately 15 cm below the surface, using a disinfected (70% ethanol) sampling shovel. All soil samples were sieved through a 2 mm pore size sieve. Soil moisture content measurements were made prior to analysis.

In addition to the soil samples, Class B anaerobically digested biosolids samples were also collected. A composite of the anaerobically digested Class B biosolids, which were applied to the experimental field, was collected to ascertain pre-application levels of biosolids-borne antibiotic-resistant bacteria. A set of 4 randomly selected biosolids samples from the Arizona, California, New Hampshire, and Washington states was also collected to determine antibiotic-resistant bacterial concentrations within Class B anaerobically digested biosolids from other regions of the country. All samples were stored in an ice cooler and transported back to the laboratory for immediate sample processing. Biosolids solid content analysis was performed prior to microbial analysis. Soil and biosolids aliquots to be analyzed for the presence of endotoxin were frozen at −20°C prior to analysis.

#### Antibiotic-resistant bacterial analysis
To determine antibiotic-resistant bacterial (ARB) concentrations, samples were exposed to 4 separate antibiotics via dilution and plating on media amended with antibiotics. The 4 antibiotics (Sigma Aldrich; St. Louis, Missouri) chosen were ampicillin (32 μg·mL⁻¹), cephalexin (32 μg·mL⁻¹), ciprofloxacin (4 μg·mL⁻¹), and tetracycline (16 μg·mL⁻¹). Each antibiotic represents a major class of antibiotic and susceptibility range: ampicillin (Penicillin class, broad spectrum), cephalothin (Cephalosporin class, narrow spectrum), ciprofloxacin (Quinolone class, broad spectrum), and tetracycline (Tetracycline class, broad spectrum). In addition, each one represents a specific method of activity, such as peptidoglycan layer formation inhibition (ampicillin; cephalothin), DNA gyrase inhibition (ciprofloxacin), and protein formation inhibition (tetracycline).

Plating medium (R2A; Becton Dickinson, Sparks, Maryland) was amended with these clinically relevant antibiotic concentrations (Jorgensen et al. 1999). Each antibiotic was individually amended into the R2A medium containing an additional antifungal cycloheximide (Sigma Aldrich) (200 μg·mL⁻¹) additive. Soil samples were first suspended in sterile distilled water and subsequently serially diluted
Fig. 1. Heterotrophic plate count and antibiotic-resistant bacterial concentrations (vertical bars indicate standard deviation) from an experimental field land applied with Class B biosolids and monitored for 15 months. Antibiotics used were as follows: □, ampicillin (32 μg·mL⁻¹); △, cephalothin (32 μg·mL⁻¹); ○, ciprofloxacin (4 μg·mL⁻¹); and ●, tetracycline (16 μg·mL⁻¹). ◆, Heterotrophic plate count. Day 0 refers to before-application time periods and Day 0 refers to day of application.

prior to spread plating 0.1 mL of each dilution onto each antibiotic-amended plate. Plates were incubated for 5 days at 27 °C. Heterotrophic plate count (HPC) bacterial concentrations were determined by plating onto R2A agar containing only the cyclohexamide additive. Antibiotic-resistant percentages were derived by comparison of heterotrophic cultivable concentrations and antibiotic-resistant cultivable concentrations. All assays were performed in duplicate.

Endotoxin analysis

Samples were assayed via the use of the commercially available Limulus amebocyte lysate assay (Sigma-Aldrich). In the presence of endotoxin, Limulus amebocyte lysate forms a gel, confirming the presence of both bound and unbound endotoxin. All endotoxin assays were performed under depyrogenated conditions. Specifically, glass culture tubes, dilution water, and pipette tips were all depyrogenated either commercially or onsite. Glass culture tubes were depyrogenated by baking the glassware at 180 °C for 3 h.

Prior to analysis, frozen biosolids and soil sample aliquots were thawed in a room temperature water bath, followed by suspension in depyrogenated water (Abbott Laboratories, Chicago, Illinois) at a concentration of 5 mg·mL⁻¹. Samples were vortexed for 20 min at high speed and appropriate serial dilutions were made.

A 0.1 mL sample aliquot and 0.1 mL of Limulus reagent were incubated together following vigorous vortexing for 30 s. All samples were assayed in duplicate. In addition to all samples, control tubes containing diluted known amounts of purified endotoxin (Sigma-Aldrich), ranging from 1.0 to 0.03 endotoxin units (EU)-mL⁻¹, were prepared in depyrogenated water and assayed to ascertain assay sensitivity. In addition to these controls, sample inhibition, positive, and negative controls were all prepared and assayed in duplicate. Inhibition controls were prepared using sample preparations (soil or biosolids in depyrogenated water) that had been processed for endotoxin and spiked with a known amount of endotoxin equivalent to the positive control or 0.3 EU·mL⁻¹. Sample inhibition controls were required to

perform as well as the positive controls. Any failed inhibition controls resulted in sample dilution to remove any inhibition. Positive controls were prepared by mixing endotoxin to a concentration of 0.3 EU·mL⁻¹ in depyrogenated water, while negative controls were prepared by using depyrogenated water. All samples were incubated at 37 °C in a static water bath immediately following reagent addition and mixing. Following the 1 h incubation, samples demonstrating the formation of a solid gel-like phase were deemed positive. To determine a positive gel phase, samples were carefully inverted once, and a positive sample was noted by the presence of a solid gel phase, which remained in the tube. The concentration of endotoxin present in the sample was determined by using the reciprocal of the final dilution presenting a positive result (i.e., duplicate tubes must form gel phase) and multiplying it by the lowest determined control standard concentration.

Statistics

Statistical analyses were performed using the Minitab statistical program version 13.32 (Minitab Inc; State College, Pennsylvania).

Results

HPC and ARB concentrations — land application site

Total culturable HPC bacterial concentrations throughout the study period were monitored at the land application site. Overall, HPC soil concentrations did not deviate from the pre-application concentrations (P > 0.05) (Fig. 1). Total HPC concentrations averaged approximately 10⁶ CFU·g⁻¹ prior to biosolids application and remained similar throughout the 15 months following application (Fig. 1). HPC concentrations from the nonapplied control fields varied from 9.60 × 10⁶ to 1.33 × 10⁸ CFU·g⁻¹ (Fig. 2). These levels were found to be statistically similar to that of the experimentally applied field. HPC concentrations from the continuously applied field were approximately 2.55 × 10⁸ CFU·g⁻¹.

ARB soil concentrations in the monitored site were also relatively constant throughout the study period (Fig. 1). Likewise, antibiotic-resistant rates among total bacterial concentrations did not differ throughout the entire study period (Table 1). Ampicillin-, cephalothin-, ciprofloxacin-, and tetracycline-resistant bacterial concentrations in the biosolids-applied field did not statistically differ (P > 0.05) throughout the study period, in fashion similar to that of the HPC soil concentrations.

Soil samples collected from the nonapplied control sites contained varying concentrations of antibiotic-resistant bacteria ranging from 2.53 × 10⁶ to 1.05 × 10⁷ CFU·g⁻¹ (Fig. 2). Statistical analysis revealed no difference between ARB concentrations from the nonapplied control sites and the experimentally applied site. Likewise antibiotic-resistant rates were found to be statistically similar (Table 2). Samples collected from the continuously applied field were found to contain ARB concentrations from 7.9 × 10⁶ to 3.08 × 10⁷ CFU·g⁻¹.

In addition to field measurements, a composite sample of the anaerobically digested Class B biosolids, which were applied to the field, were analyzed for the presence of biosolids origin antibiotic-resistant and HPC bacteria (Fig. 2).
Fig. 2. Heterotrophic plate count (HPC) and antibiotic-resistant bacterial concentrations (vertical bars indicate standard deviation) detected in Class B biosolids (Biosolids) collected from other regions of the USA, in Class B biosolids used in the experimental application field (Biosolids-App), nonapplied field controls (Field Non-App), and in biosolids from continuously applied (Cont. App.) sites. Antibiotics used were as follows: Amp, ampicillin (32 μg·mL⁻¹); Cep, cephalothin (32 μg·mL⁻¹); Cipro, ciprofloxacin (4 μg·mL⁻¹); and Tet, tetracycline (16 μg·mL⁻¹). Biosolids-App and Cont. App. used in this study were represented by only one composite sample each.

![Graph showing HPC and antibiotic-resistant bacterial concentrations](image)

Table 1. Percentage of total culturable heterotrophic plate count (HPC) bacterial concentrations exhibiting antibiotic resistance from soil collected at the experimental land application site throughout the 15 month study period.

<table>
<thead>
<tr>
<th>Time</th>
<th>Ampicillin</th>
<th>Cephalothin</th>
<th>Ciprofloxacin</th>
<th>Tetracycline</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>12.1</td>
<td>12.4</td>
<td>1.6</td>
<td>1.1</td>
</tr>
<tr>
<td>0</td>
<td>5.3</td>
<td>7.9</td>
<td>0.9</td>
<td>1.4</td>
</tr>
<tr>
<td>7</td>
<td>11.5</td>
<td>11.5</td>
<td>2.8</td>
<td>2.0</td>
</tr>
<tr>
<td>14</td>
<td>5.4</td>
<td>6.1</td>
<td>1.5</td>
<td>0.6</td>
</tr>
<tr>
<td>30</td>
<td>14.6</td>
<td>13.6</td>
<td>4.8</td>
<td>3.1</td>
</tr>
<tr>
<td>60</td>
<td>8.7</td>
<td>10.7</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>50</td>
<td>8.2</td>
<td>8.4</td>
<td>2.1</td>
<td>1.3</td>
</tr>
<tr>
<td>120</td>
<td>8.4</td>
<td>11.0</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>150</td>
<td>9.1</td>
<td>11.1</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td>180</td>
<td>5.3</td>
<td>6.6</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>450</td>
<td>6.7</td>
<td>10.5</td>
<td>3.3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Notes: Field antibiotic resistance percentage was calculated by dividing the antibiotic-resistant bacterial concentration by the HPC bacterial concentration. Antibiotics and the concentrations used are as follows: ampicillin (32 μg·mL⁻¹), cephalothin (32 μg·mL⁻¹), ciprofloxacin (4 μg·mL⁻¹), and tetracycline (16 μg·mL⁻¹).

HPC bacterial concentrations were approximately $7.02 \times 10^6$ CFU·g⁻¹, while ARB concentrations varied from $6.78 \times 10^5$ to $4.46 \times 10^5$ CFU·g⁻¹. Similarly, ARB and HPC concentrations from other regional Class B biosolid samples were found to contain similar bacterial concentrations in all regards (Fig. 2).

Endotoxin concentration — land application site

Overall, endotoxin concentrations demonstrated similar trends to that of the ARB concentrations (Fig. 3). Following land application of biosolids, endotoxin concentrations from the applied soil did not differ significantly from pre-application concentrations ($P > 0.05$). Concentrations did increase by approximately 0.5 log₁₀ 1 month after application; however, levels were not statistically significant when compared with pre-application levels. Likewise, endotoxin concentrations from the nonapplied control fields were $7.96 \times 10^3$ EU·g⁻¹, which were not statistically different from that of the experimentally applied field (Fig. 4). Endotoxin concentrations from the continuously applied field were determined to be upwards of $2.11 \times 10^4$ EU·g⁻¹. These levels were approximately one-half a log₁₀ greater than that of the nonapplied control sites.

A composite sample of Class B biosolids, prior to land application, was assayed to determine levels of endotoxin present in the biosolids. This sample yielded pre-application biosolids endotoxin concentrations at approximately $8.83 \times 10^6$ EU·g⁻¹ (Fig. 4). Likewise, endotoxin concentrations from the randomly selected Class B biosolids samples collected from 3 of the 4 US states were determined to be approximately $6.12 \times 10^5$ EU·g⁻¹, while one sample was found to be approximately $5.71 \times 10^5$ EU·g⁻¹ (Fig. 4).

Discussion

Both HPC and ARB concentrations in soil collected...
Table 2. Percentage of total culturable heterotrophic plate counts (HPC) bacterial concentrations exhibiting antibiotic resistance in Class B biosolids (Biosolids) collected from other regions of the USA, in Class B biosolids used in the experimental application field (Biosolids-App), in nonapplied field controls (Field Non-App), and in biosolids from continuously applied (Cont. App.) sites.

<table>
<thead>
<tr>
<th>Antibiotic resistance (%)</th>
<th>Amoxicillin</th>
<th>Cephalexin</th>
<th>Ciprofloxacin</th>
<th>Tetracycline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biosolids</td>
<td>4.4</td>
<td>21.2</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Biosolids-App</td>
<td>3.6</td>
<td>63.6</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Field Non-App</td>
<td>8.1</td>
<td>10.1</td>
<td>3.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Cont. App.</td>
<td>7.9</td>
<td>11.0</td>
<td>9.2</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Note: Field antibiotic resistance percentage was calculated by dividing the antibiotic-resistant bacterial concentration by the HPC bacterial concentration. Antibiotics and the concentrations used are as follows: ampicillin (32 μg·mL⁻¹), cephalexin (32 μg·mL⁻¹), ciprofloxacin (4 μg·mL⁻¹), tetracycline (16 μg·mL⁻¹).

Fig. 4. Endotoxin concentrations (vertical lines indicate standard deviation) detected in Class B biosolids (Biosolids) collected from other regions of the USA, in Class B biosolids used in the experimental application field (Biosolids-App), in nonapplied field controls (Field Non-App), and in biosolids from continuously applied (Cont. App.) sites. Biosolids-App, and Cont. App. used in this study were represented by only one composite sample each.

from the application site remained statistically similar to pre-application concentrations throughout the study. Unexpectedly, the soil concentrations (post-application) remained consistent with and even decreased below pre-application levels with regard to ARB concentrations. Any numerical anomalies noted throughout the study period for both ampicillin- and cephalexin-resistant concentrations may have been due to either a deviation in soil sampling precision or cyclical differences in field bacterial population dominance (Smit et al. 2001). Ciprofloxacin- and tetracycline-resistant bacterial concentrations remained constant throughout the study period, in a fashion similar to that of ampicillin- and cephalexin-resistant concentrations. It is possible that following biosolids land application, the lack of selective pressures for antibiotic resistance may cause the loss of the plasmid carrying the resistant genes and, hence, may lead to lower overall antibiotic-resistant bacterial recovery (Smith and Bidochka 1998). Furthermore, the overall loss of bacterial viability following biosolids land application may have contributed to any noted decreases (Pepper et al. 1993; Zaleski et al. 2005); however, all differences were statistically irrelevant. No increase in ARB concentrations or percentages was noted throughout the study period, particularly, during the first 14 days following application, suggesting that an immediate dilution effect of any biosolids-borne antibiotic-resistant organisms may be the cause. This was true, despite some ARB concentrations in the biosolids to be approximately 1 log₁₀ above that of the pre-application soil concentrations. Soil ARB rates were well below 20% for all measured antibiotics before and after biosolids application. In contrast, dairy, soil, farm water, and surface water have all been found to contain ARB rates in upwards of 70% of the culturable total bacteria when constantly exposed to the contamination source (Esiobu et al. 2002). Of course this effect may be more pronounced because of more constant selective pressures on these environments, whereas in the present study, a one-time application of biosolids was the only noted selective pressure. Interestingly, a continuously biosolids applied field within the sampling area was also investigated for this study and found to contain similar ARB concentrations to that of the experimental field, despite Class B biosolids application occurring on an annual basis for the past 20 years. It is important to note, that only one continuously
applied field was investigated for this study, and thus, no statistical analysis was conducted using this particular field, therefore, these numbers hold no statistical relevance. However, 5 other nonbiosolids applied fields were also investigated and found to be statistically similar to the experimental field, with regard to ARB concentrations.

Endotoxin concentrations in the monitored field changed little following biosolids land application. The biosolids used in this study were found to contain endotoxin concentrations similar to that of other Class B biosolids sampled from other regions of the USA. These concentrations were approximately $2 \log_{10}$ orders of magnitude greater than the pre-application soil levels and were noted to have not affected the soil endotoxin levels following biosolids application. A $0.5 \log_{10}$ increase in endotoxin concentration 1 month following biosolids land application was noted; however, this level was found to be statistically identical to pre-application levels. This small increase may have been due to Gram-negative bacterial decay in the field, since Class B biosolids contain approximately $10^6$ CFU total coliforms (g dry mass)$^{-1}$, not to mention the other dominant Gram-negative microorganisms, and each of these cells can potentially contain approximately $10^6$ lipid A residues (Raetz and Whitfield, 2002). Endotoxin, of which lipid A is a key component, can be liberated during Gram-negative decay as well as growth (Bradley, 1979), and as such, an increase in overall endotoxin concentration was expected.

Endotoxin generally causes ailments after inhalation of airborne endotoxin, and as such, any potential increase of soil endotoxin concentrations could lead to increases in potentially aerosolized endotoxin (Brooks et al., 2006). Data from this study suggest that pre-application endotoxin levels in soil were statistically similar to those of post-application levels, and as such, it is likely that aerosols generated by land application operations are likely to contain endotoxin regardless of the presence or absence of biosolids, as demonstrated by a recent study (Brooks et al., 2006).

Overall biosolids did little to alter the overall concentrations of antibiotic-resistant bacteria in a biosolids land-applied field, which was monitored for 15 months, despite expectations of the contrary. It is important to note that this study demonstrated overall antibiotic resistance to only one antibiotic at a time and to only 4 antibiotics. Clinically relevant concentrations of each antibiotic were studied; however, further work must be done to characterize specific isolates with regard to specific resistance and the presence of multiple antibiotic resistance. It is important to note that even resistance to one antibiotic can demonstrate the presence of resistance to other antibiotics, and though 4 antibiotics were investigated, more research is warranted on other antibiotics. This study exhibited that the overall intrinsic levels of antibiotic- (ampicillin, cefadolin, ciprofloxacin, and tetracycline) resistant bacteria already present in the field were unaffected by the land application of Class B biosolids. However, this study did not investigate dominant field ARB isolates, which may have been shifted due to the land application event, and as such, this point should not be overlooked in future studies. It is also important to note that this study does not represent the total viable bacterial community, and that all antibiotic-resistant viable but not culturable bacteria were not represented in this study.

This study can be used as a baseline understanding of the overall amounts of antibiotic-resistant bacteria and lipopolysaccharide (endotoxin) that contributed to a single experimental field following biosolids application. Class B biosolids land application did little to alter the intrinsic concentrations of either antibiotic-resistant bacteria or lipopolysaccharide present in the soil. However, it is important to understand that biosolids from only one municipality was used and only one experimental field was investigated. Research in other environments is needed, as specific climate and soil characteristics will alter some results. While this study determined quantitative effects of biosolids land application, it is important to note that further research must be conducted to ascertain any qualitative characteristic shifts, such as changes in microbial population, that can lead to shifts in ARB populations and lipopolysaccharide (endotoxin) types.

Acknowledgements

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References


Comments and a Discussion of the Brooks Paper as analyzed by Edo McGowan, PhD Medical Geo-hydrology

The Brooks paper is entitled: occurrence of antibiotic resistant bacteria and endotoxin associated with the land application of biosolids.

This paper is one of the papers handed out by sewer plant operators when the public questions: 1) the ability of sewer plants to destroy pathogens and 2) about the passage of antibiotic resistance via sewage sludge to the environment at large. There are several questions that come to mind. First and foremost, is this paper and its findings applicable to a wide variety of sewage sludge (biosolids) applications, i.e., does this paper contain a universal truth? Based on the literature and a careful reading of the paper, this does not appear to be the case. Additionally, the abstract seems not to be supported entirely by the paper itself.

The paper notes that the National Research Council (NRC) had commented on antibiotic resistance spread through the use of land applied biosolids. At the time that the NRC looked at this issue (2002), it made recommendations that EPA needed to conduct research into the issue of antibiotic resistance in sewage sludge (biosolids). The NRC also was concerned about the movement of antibiotic resistance from biosolids applied to land to off-site locations.

Interestingly, in the late 1970's and early 1980's, EPA was conducting major studies on antibiotic resistance in sewage. The report by Meckes (1982), which was a digest of these studies, demonstrated that sewer plants were major producers of antibiotic resistant microbes, (see: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, Feb. 1982, p. 371-377). This
early EPA work has been confirmed by the Michigan study and the work of others, (see: http://www.environmentalhealthnews.org/ehs/news/sewage-plants-could-be-creating-2018super2019-bacteria.)

The underlying reason for the NRC study was a request from EPA to have a disinterested third party review its protocols for land application of sewage sludge. EPA was to supply the NRC with backup material regarding what it was doing in the area and what it had accomplished. The EPA Meckes study and its paper (published by the AEM ASM) was evidently not directly provided to the NRC for its evaluation of sewage and antibiotic resistance even though that paper did demonstrate a large effort on the part of the agency in this area. That report confirmed that sewer plants were major producers of antibiotic resistant bacteria. Thus, the question must be asked, why did the EPA not offer the NRC this major body of work? The work is not directly cited in the NRC document under its literature review. Of further interest, it should be noted that the Meckes study and the subsequent report are not found within the generally available web data bases supported by EPA or the CDC. It has been suggested that the reason for this absence was that EPA sequestered the paper because it would adversely impact the Agency's program of land application of biosolids.

It would be very difficult to justify the publication of a major study covering the generation and environmental release of antibiotic resistance during sewage treatment and at the same time promote the land application of biosolids as a benign activity. Could this conundrum be quelled if: 1) the NRC committees were unaware of these findings within EPA's own work and 2.) the data were not generally available via an EPA-based web search? The upshot was whether the NRC had noticed the work, which apparently it did not.

The NRC Committee which produced the 2002 report on biosolids, in discussing antibiotic resistance, cited six papers in its review of land applied sewage sludge. The recommendation within the 2002 NRC report was that EPA was to start looking at antibiotic resistance, an odd request for something which had been already done. It is well recognized that the pass-through of complex multi-drug-resistant pathogens pose a serious threat to public health. Some of the cited NRC papers are briefed below because they bear on the topic; citations are found at the end. When we discuss gene transfer, especially transfer that can be acquired by the human intestinal flora, the paper by Lawrence bears note. It has been held by some industry pundits that acquired resistance (lateral gene transfer) is a sometime—short time thing. Such is not the case. Lawrence notes that incorporation of DNA fragments conferring resistance or virulence can transform a benign strain of bacteria into a pathogen in but a single step. Acquired horizontally transferred genes do last for some time, Lawrence suggests,
however, very few are maintained more than 10 million years [that's right 10 (Myr)]. Pillai (1996) also notes that wastewater associated bacteria which exhibit multiple resistance patterns are able to transfer genes while within sewer plants at relatively high rates. Others have noted this. For example, Nakamura, et al noted——— The further along that wastewater had progressed through the treatment process the greater the tendency was for appearance of the multiresistant isolates. Ochman notes that transformation involves the uptake of naked DNA from the environment. It also has the potential to transmit between very distantly related organisms. Some bacteria are constantly ready to take up naked DNA but others need to reach certain stages in their life cycle. However, they are capable of high-level transformation. For the interested reader, these seven papers as are cited below: Papers cited in the 2002 NRC report chapter discussing antibiotic resistance.

The EPA was admonished by the NRC report of 2002 to look at the spread of antibiotic resistance through the land application of biosolids. The Brooks paper may be a result of the EPA wishing, at a late date to, in part, comply with the NRC recommendation. EPA provides moneys to the Water Environment Research Foundation (WERF) for research and WERF then lets RFPs for such work. The Arizona group is one of those that receive WERF/EPA money to do some of these studies.

In the Brooks report the authors note that the majority of land applied sewage sludge is Class B. It is important for the reader to understand that there are at least two classes of sewage sludge that may be land applied. Class A receives higher levels of treatment and thus contains fewer indicator bacteria than Class B. Class B is allowed to have up to 2 million indicator bacteria per gram of applied material. The process depends upon levels of indicator bacteria and this is a serious weak point in the process. The indicators used are not reflective of the universe of pathogens found in biosolids. Additionally, the process for determining these levels has been called into serious question by a report as written by Higgins and Murthy. These authors found that within 20 minutes of meeting the requisite test levels and then following centrifuge dewatering, the indicator counts jumped several magnitudes. See abstract below. These findings by Higgins and Murthy raise critical questions about the validity of the whole process, and thus, in part, the methodology employed by Brooks.

The use of low-level indicator bacteria, along with the apparent reticence to discuss such plus the lack in understanding of antibiotic resistance within EPA makes for a severe public health risk. All Class-B sewage sludge technologies that are normally used in the U.S. such as mesophilic digestion, either anaerobic or aerobic and heating at these levels as well as composting and land stabilization do not effectively destroy critical
pathogens. These practices also do not destroy the genetic material. EPA's lack of acknowledgement is a critical shortcoming. Thus, if there is antibiotic resistance within sewer sludge, it may be passed through these processes to background organisms including man. Actually, several studies have documented the horizontal transfer of genetic information to background environmental systems. Such systems can act as genetic lending libraries. Man and animals are exposed daily to such backgrounds.

The indicator organisms used for Class B biosolids commonly include *Escherichia coli* and sometimes *Salmonella* spp. These are the organisms that are normally killed by low-level disinfection. They are vegetative bacteria that are highly susceptible to both chemical disinfection and heat disinfection. However, sewage sludge contains a large range of organisms besides *E. coli*, *Salmonella* spp., and *Staphylococcus* spp. Also, highly susceptible and easily inactivated are the enveloped viruses such as *Hepatitis B*, HIV, and influenza. While these organisms are fairly easily destroyed, Class B allows 2 million viable coliform per gram of land applied sewer sludge. This raises the logical question of survival for the more robust organisms. The non-enveloped viruses are hard to kill. Pathogens that require high level disinfection are missed by sewage treatment processes. Such pathogens contaminate semicritical medical devices for example, the endoscopes inserted into the lower bowel. No standard sewer treatment plant reaches high level disinfection. However, newer cutting edge technology can deal with these pathogens. This newer technology is typically not seen within the mix of current sewer plants or for that matter in the newer designs. Thus, most of the existing U.S. wastewater treatment plants still work from 1920's design standards—standards developed to deal with odor and not pathogens. Remember, antibiotics did not really come out until after World War II.

Consequently, these resistant bacteria, when released by the current universe of sewage treatment plants or when contained within sewage byproducts, are thus able to colonize environmental niches both in animals and humans through ingestion. This off site contamination by biosolids is discussed by Selvaratnam and Kunberger and the contamination of water resources (see abstract below).

Once ingested, the genetic information may be transferred to normal gut flora and subsequently to pathogenic bacteria found in humans or animals making later treatment with particular antibiotics ineffective. The 1982 Meckes paper acknowledged this. Plasmids can operate to collect several genetic markers for resistance from diverse microbial species. This adds greatly to the armamentarium of pathogens. Thus, through lending libraries established by land application of biosolids, this genetic information can be spread to terrestrial and aquatic species and uptake by soil and aquatic bacteria. Also, one must consider transfer of genetic information from these
organisms to more robust organisms as highlighted by Sjolund, et al. (2005) indicating that resistance in the normal flora, which may last years, might contribute to increased resistance in higher-grade pathogens through interspecies transfer.

The Brooks report was not designed to look at many of these issues. For one, it did not seem to consider the seriousness of multi-antibiotic resistance, especially when considering serious hospital-acquired human pathogens introduced via biosolids. In the introduction, the Brooks paper notes that Class B is held to level of 2 million most probable number (MPN) of fecal coliform per gram. The MPN system carries a geometric mean of considerable variation. For example when using MPN to test water, the range from the mean within the 95% confidence limits are actually quite large. Using water quality testing as an example, an MPN index per 100 ml of 1100 MPN states the following range within 95% confidence limits between—lower—150, upper—4800.

When this is coupled to the findings of Higgins & Murthy, there is the potential for considerable divergence. In addition and connected to the Higgins & Murthy report is the issue of viable but non-culturable (VBNC) when doing these tests. MPN tests do not record VBNC because the tests are not so designed. All these factors detract from the accuracy of MPN tests. The reader may wish to review Fig 2 of the Brooks paper. While the indicators are to be held to 2 million/gram, (2 x 10^-6th) it will be noted that actual counts of heterotrophic plate count (HPC) bacteria were close to 10^-10th in the biosolids. The biosolids came from the lma Road Wastewater Treatment Plant of Tucson, Arizona. The paper tells us little of the drainage to this plant and whether or not it is recipient of hospital/clinical wastewater or industrial waste. These additions would make a large difference as sewer plants down stream from similar institutions have a larger suite of serious pathogens. Brooks, et al make comment on this fact, but not as to the plant in question.

The EPA recommends that up to 10 tons of biosolids per acre may be applied annually. These rates are often exceeded. For example, a colleague studying application rates noted that one farm in Kern County had applied biosolids at a rate of 70 tons/acre in one month. This was on top of that applied the previous month. Accordingly, the rates of application will make a large difference in the ratios of heterotrophic soil bacteria to the introduced bacteria accompanying the land application of biosolids.

Brooks, et al report that their test site used 5452Kg/Ha. This relates to about 2.4 tons/acre. This was a single application to dry land that had not been sludged since December, 1995. It is also important to look at the soil
moisture, which is reported to be about 6% at the study site used by Brooks. Most agriculture fields are kept at moisture levels above 15% and this ranges up to 60%. It is well known that bacteria do much better in moist soil. Many bacteria will revert to VBNC in dry soils. Also, in dry soils, the Clostridia and Bacilli will revert to spore forms that may not be seen in typical tests. Edmonds looked at applications in forested areas of the North West and his findings give a different picture on bacterial survival. See: (http://aem.asm.org/cgi/reprint/32/4/537).

While Brooks looked at soils that were mainly sandy loam, sandy loam is made up of 50 to 70 percent sand, less than 20 percent clay and 10 to 50 percent silt or organic matter. Loam on the other hand is composed of sand, silt and clay in relatively even concentrations (about 40-40-20%, respectively). Mallmann and Litsky (note 1 below) studied the survival of selected enteric organisms in various soil types. They found that coliform bacteria survived longer in loam and muck soils than in sandy soil. Van Donsel, et al (note 2 below) also found that survival of fecal coliform bacteria (Escherichia coli) in soil plots varied seasonally.

Thus, there are wide variances in survival based on climate, soil moisture, organic content, pH, and soil type. We know nothing of the organic content of the soil that Brooks used. Thus, whether or not the study by Brooks is universally applicable is highly questionable. It would seem that the test site used by Brooks would be considered as atypical for many agricultural areas that are not confined to the very dry conditions noted in Arizona. Additionally, there is not enough information in the Brooks paper to suggest whether irrigation was used following the application.

When looking at sewage sludge applied to forest areas, Edmonds noted that fecal coliform bacteria present in the sludge at the time of application apparently remain viable for many months, although populations decrease over time in the sludge applied in both summer and winter with survival being longer in the summer-applied sludge. Others have noted that following the next season’s rains there is a re-bloom of bacteria. The Cornell group notes that antibiotic resistant bacteria were found in higher numbers downstream of sludge-treated farmland as compared to upstream. Thus, there are also issues of off-site movement that need to be discussed but were not well considered within the Brooks paper.

The Brooks paper notes that they measured heterotrophic plate count (HPC) soil bacterial concentrations and compared these to heterotrophic counts of antibiotic resistance. It is well known that soil bacteria develop resistance to agricultural chemicals found in agricultural soils. This can be documented in the development of cross resistance to antibiotics. This phenomenon is also noted in the Brooks paper.
Triclosan and triclocarban are used in a large number of products including those used in hospitals and for personal care (e.g., soaps, deodorants, and toothpaste). Considering their production volume and use, these compounds are detected in both influents (0.062-2.9μg/L) (Lindstrom, Buergi, et al., 2002; McAvoy, Schatowitz, et al., 2002; Rule, Ebbett, et al., 2005) and treated effluents (40-200 ng/L) (Glassmeyer, Furlong, et al., 2005) of reclamation facilities. Conventional wastewater treatment can remove these compounds quite efficiently by as much as 94 percent (Singer, Muller, et al., 2002). Due to their high water-octanol partitioning coefficient (log Kd = 3.7-5.1) (Nakada, Yasojima, et al.), triclosan partitions effectively into biosolids and can find its way back into the environment where biosolids are land applied (Nakada, Yasojima, et al.; Federle, Kaiser, et al., 2002). Treatment of waters containing triclosan with free chlorine results in the formation of chloroform, 2,4-dichlorophenol and 2,4,6-trichlorophenol (Rule, Ebbett, et al., 2005).

Brooks, et al. indicated: “It is important to note that even resistance to one antibiotic can demonstrate the presence of resistance to other antibiotics, and though 4 antibiotics were investigated, more research is warranted on other antibiotics.” The paper further notes that the dominant field antibiotic resistant bacteria and consequent shifts were also not studied. Thus, comparison of levels of resistance may be less than useful here because we know little of the makeup and origin of the biosolids that introduced bacteria. The authors additionally state that the study did not represent the total viable bacterial community and that VBNC were not represented. Additionally, the authors, while mentioning the problems of serious hospital-derived multi-drug-resistant pathogens, as introduced into the soils through biosolids, did not look at such pathogens. The Brooks paper also discusses non-biosolid-applied control fields where the HPC levels were similar to the test site. The test site’s HPC averaged 10-8th both prior to biosolids application and after. Non-applied control fields contained antibiotic resistant HPC bacteria at 10-6th to 10-7th gram of soil, one or two magnitudes less than the test site.

Addition of farm chemicals such as fertilizer with heavy metals and pesticides can shift soil bacteria toward resistance to these introduced substances. The metabolic and cellular machinery for conferring chemical or metal resistance is very much similar to the machinery needed for antibiotic resistance. Consequently, the route for accepting antibiotic resistance has been previously paved in these heavily farmed fields. The genetic information conferring human pathogen antibiotic resistance is missing until the addition of sewage sludge. Pepper (note 3 below), one of the coauthors of the Brooks report, indicates from another study that discusses induced resistance via farm chemicals (http://cat.inist.fr/?)
NOTES AND CITATIONS


Added information for the interested reader is provided below

Abstract by L. K. Alekhina1 Contact Information, T. G. Dobrovolskaya1, T. N. Pochatkoval and D. G. Zvyagintsev1

Higgins & Murthy

Abstract

Recent literature has reported that high concentrations of indicator bacteria such as fecal coliforms (FCs) were measured in anerobically digested sludges immediately after dewatering even though low concentrations were measured prior to dewatering. This research hypothesized that the indicator bacteria can enter a non-culturable state during digestion, and are reactivated during centrifuge dewatering. Reactivation is defined as restoration of culturability. To examine this hypothesis, a quantitative polymerase chain reaction (qPCR) method was developed to enumerate Escherichia coli, a member of the FC group, during different phases of digestion and dewatering. For thermophilic digestion, the density of E. coli measured by qPCR could be five orders of magnitude greater than the density measured by standard culturing methods (SCMs), which is indicative of non-culturable bacteria. For mesophilic digestion, qPCR enumerated up to about one order of magnitude more E. coli than the SCMs. After centrifuge dewatering, the non-culturable organisms could be reactivated such that they are enumerated by SCMs, and the conditions in the cake.
allowed rapid growth of FCs and *E. coli* during cake storage.

**Increased frequency of drug-resistant bacteria and fecal coliforms in an Indiana Creek adjacent to farmland amended with treated sludge**

**Authors:** Shivi Selvaratnam; J.D. Kunberg

**Source:** Canadian Journal of Microbiology, Volume 50, Number 8, August, 2004, pp. 653-656

**Abstract:**
Many studies indicate the presence of human pathogens and drug-resistant bacteria in treated sewage sludge. Since one of the main methods of treated sewage disposal is by application to agricultural land, the presence of these organisms is of concern to human health. The goal of this study was to determine whether the frequency of drug-resistant and indicator bacteria in Sugar Creek, which is used for recreational purposes, was influenced by proximity to a farmland routinely amended with treated sludge (site E). Surface water from 3 sites along Sugar Creek (site E, 1 upstream site (site C) and 1 downstream site (site K)) were tested for the presence of ampicillin-resistant (AmpR) bacteria, fecal and total coliforms over a period of 40 d. Site E consistently had higher frequencies of AmpR bacteria and fecal coliforms compared with the other 2 sites. All of the tested AmpR isolates were resistant to at least 1 other antibiotic. However, no isolate was resistant to more than 4 classes of antimicrobials. These results suggest that surface runoff from the farmland is strongly correlated with higher incidence of AmpR and fecal coliforms at site E.Key words: drug-resistant bacteria, indicator bacteria, treated sludge, surface runoff.

**Papers cited in the 2002 NRC report chapter discussing antibiotic resistance.**


**Added Citations and notes**


[8] Rookledge SJ. Environmental antimicrobial contamination from


Land application of sewage sludges: an appraisal of the US regulations

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Abstract: Current US federal regulations governing the land application of sewage sludges do not appear adequately protective of human health, agricultural productivity or ecological health. US standards are far less protective than those of many European countries and Canadian provinces. This is due to both policy choices such as a 'do no harm' philosophy applied in some northern European countries and also to many gaps and non-conservative assumptions in the risk assessment performed by US Environmental Protection Agency. The potential for widespread use of sludges on agricultural and residential land, the persistence of many of the pollutants, which may remain in soils for a very long time, and the difficulty of remediation support a cautious approach. Soil, water and crop characteristics in New York State and other areas of the northeastern US raise particular concerns. The authors do not suggest a prohibition of land application but, rather, significantly more restrictive use. Limiting cumulative additions of pollutants to prevent soils from exceeding recommended maximum contaminant levels can be achieved by application of clean sludges or by application of lesser amounts of less high quality sludges. Further investigation is needed to assess risks to ground and surface water and to establish standards for additional contaminants.

Keywords: land application, regulations, risk assessment, sewage sludge, soil standards, US EPA.


1 Introduction

Sewage sludges are created for a good reason – they are the byproduct of processes that clean our sewage before the cleaned water is discharged into streams and estuaries. New treatment processes hold promise for significantly reducing or eliminating sludge production but, until those are widely adopted, managing sludges is a necessity. There are currently limited options (ocean dumping has been banned in the US): landfilling, incineration, or application to the land.

The ban on ocean dumping and the environmental and economic costs of incineration and landfilling are part of what has led to increased focus on land application. Also, the philosophy of ‘recycle what we can’ is now widely held, and it is appropriate to contemplate recycling of sludges through land application.

Sewage contains not only human fecal wastes from homes and businesses but also products and contaminants from
Land application of sewage sludges

homes, industries, businesses, storm water, and landfill leachate (in some locales) and contaminants leached from pipes. The goal of sewage treatment is to clean up the water, so many contaminants are preferentially removed from the water and are concentrated in the sludges. Thus, for example, it is estimated that about 90% of the dioxins in the incoming water (influent) will end up in the sludges. Similarly, parasite eggs settle and are concentrated in sludges. This is beneficial in providing a cleaner effluent water discharge from the treatment plant, but makes beneficial use of the sludges more difficult.

There is general agreement that the long-term goal should be to recycle the nutrients and organic matter in sludges through land application, and there is agreement about the need to protect and enhance human, livestock and ecological health and the productivity of agricultural soils. Although the recycling of the organic matter and nutrients contained in wastewater through land application is a worthwhile objective, the mix of chemicals and pathogens in sludges includes contaminants that are detrimental to human health, agricultural productivity and ecological health. We believe that it is wise to be cautious, since many of these added contaminants are persistent and, once applied, will remain in soils and the ecosystem for many years.

1.1 Is land application 'safe'?

There is debate over whether recycling of sludges through land application as allowed under current US regulations is protective enough and whether it provides for a long-term sustainable practice. People often ask if land application is 'safe', but there is no such thing as 'safe'. Nearly all that we do entails some risk, so the question really is 'is the risk acceptable?'. People's acceptance of risk is subjective and depends in part on their basic values and beliefs as well as their training and experience. For example, some people place faith in technological solutions and our ability to calculate impacts and risks. Others are more sceptical, believing that history shows that there have been numerous failures of technology resulting in unanticipated environmental and health damage. These are fairly fundamental differences in world view, leading some to favour precaution while others are willing to proceed until harm is shown to occur. People's acceptance of land application also depends on their primary concerns (Table 1).

**Table 1** Different concerns regarding land application of sludges.

<table>
<thead>
<tr>
<th>Home gardener</th>
<th>Cost-effective product, risk to children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grower</td>
<td>Reliable, cost-effective product, liability</td>
</tr>
<tr>
<td>Generators</td>
<td>Economical disposal/management</td>
</tr>
<tr>
<td>Neighbour</td>
<td>Nuisances, health, water contamination</td>
</tr>
<tr>
<td>Environmentalist</td>
<td>Ecological impacts, human health</td>
</tr>
<tr>
<td>Agronomist</td>
<td>Long-term soil productivity, plant growth</td>
</tr>
</tbody>
</table>

There is also an interesting difference in the time-scales over which people think. In the calculations performed for the risk assessment regarding land application of sludges, the United States Environmental Protection Agency (US EPA) used a 100 year site life. This may seem a long time to Americans whose view of history is relatively short and who have been used to having huge land resources, making it easy to consider 'moving on' to greener pastures if the need arises. However, the current agricultural lands in the US are substantially the same ones that we will be relying on for as long as humans continue to occupy the Earth.

In contrast, in Europe, the view of time and land is different, since one can see lands that have been farmed for thousands of years. Vineyards that grew grapes for Roman wines are still growing grapes today, and lead used by Romans
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persists in the soil two millennia later. That makes the concept of sustainable practices that can be carried out in perpetuity much more salient in Europe.

This is not to say that people have only one interest. The neighbour and environmentalist are also taxpayers concerned about economical sludge management. The generators and vendors depend on productive agriculture for a safe and economic food supply. But differences in the primary interest of different groups help to explain why intelligent, knowledgeable, concerned people can have very different views regarding land application (Citizens' Environmental Coalition and Scenic Hudson, 1996; Cornell Waste Management Institute, 1996; Cornell Waste Management Institute, 1997b; Water Environment Federation, 1996).

Thus there is disagreement about whether current regulations are stringent enough and whether today’s sludges are clean enough for us to be confident that land application is a sustainable practice or at least an acceptable risk (McBride, 1995). Although US EPA asserts that application of sludges is a low risk and thus a low priority for their attention, this seems to ignore the fact that sludges may end up spread over large areas where we grow our food, obtain our water and where we live and play. The authors have particular concern for the application of the federal rules to New York State and other parts of the northeastern US where some soils have low pH, which tends to increase metal availability, where a number of crops sensitive to phytotoxic metals are important, where soils are shallow, increasing concerns for groundwater contamination, and where dairy is the major agricultural use, raising concerns about molybdenum toxicity to ruminants, as well as concerns that the application of additional nutrients from sludges to those already provided by manure application may result in excessive nitrogen and phosphorus.

1.2 The regulatory framework and federal standards

The US EPA adopted regulations in 1993 (40 CFR Part 503, known as Part 503; US EPA, 1993; US EPA, 1994) that establish minimum standards that must be met if sludges are to be land-applied. The regulations include concentration limits for nine metals and for pathogens, and requirements for vector (flies and rodents) attraction reduction. The regulations establish Class A sludges, which have been treated to essentially eliminate pathogens (disease-causing organisms), and Class B, in which pathogens have been reduced but are still present. Under the federal 503 rules certain site restrictions apply to Class B use, but no individual site permits are required for its use.

The federal regulations also establish standards for nine contaminants (Table 2). The standards include so-called ‘exceptional quality’ (EQ) sludges, which meet certain concentration limits (no more than X parts per million of any of the nine regulated contaminants) as well as pathogen and vector reduction requirements. With regard to metal concentrations, sludges and sludge products that fail to meet one or more of those ‘EQ’ pollutant concentrations but which fall below a higher ceiling concentration may be applied, but the applicator is directed to keep track of the total amount of each metal applied and cease application when a regulatory cumulative pollutant loading limit is reached. Sludge products that fail to meet one or more of the ‘EQ’ pollutant concentrations but which fall below the ceiling concentration may still be distributed to homes or in bags as long as information on the acceptable annual pollutant loading rate (APLR) is provided to the user.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Pollutant concentration in EQ biosolids (mg/kg = ppm)</th>
<th>Ceiling conc. in biosolids applied to land (mg/kg)</th>
<th>Cumulative pollutant loading rate limits (kg/ha)</th>
<th>Annual pollutant loading rate (kg/ha/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>41</td>
<td>75</td>
<td>41</td>
<td>2</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Element</th>
<th>Bulk biosolids and bagged biosolids</th>
<th>All biosolids that are land-applied</th>
<th>Bulk non-EQ biosolids</th>
<th>Bagged biosolids not meeting EQ limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium</td>
<td>39</td>
<td>85</td>
<td>39</td>
<td>1.9</td>
</tr>
<tr>
<td>Copper</td>
<td>1500</td>
<td>4300</td>
<td>1500</td>
<td>75</td>
</tr>
<tr>
<td>Lead</td>
<td>300</td>
<td>840</td>
<td>300</td>
<td>15</td>
</tr>
<tr>
<td>Mercury</td>
<td>17</td>
<td>57</td>
<td>17</td>
<td>0.85</td>
</tr>
<tr>
<td>Molybdenum</td>
<td></td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel</td>
<td>420</td>
<td>420</td>
<td>420</td>
<td>21</td>
</tr>
<tr>
<td>Selenium</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Zinc</td>
<td>2800</td>
<td>7500</td>
<td>2800</td>
<td>140</td>
</tr>
</tbody>
</table>

Individual states within the US have the option of adopting regulations that are more stringent than the federal standards. New York state (NYS) regulations (Part 360; New York State Dept. of Environmental Conservation, 1993) have been more stringent in a number of ways, but NYS and many other states are considering revising or have revised their regulations bringing them closer to the federal Part 503 rules. Land application must follow the more stringent state rules where they exist.

Under the 503 rules, Class A ‘EQ’ sludges and sludge products can be applied without restriction in amount or duration, for use in home gardens, parks, crop production, etc. No record of where and how much is used is required to be kept, nor is notification of neighbors, local officials or others required. Under the federal rules there is also no permit requirement for a site where Class B sludges or sludge products not meeting ‘EQ’ but falling below the ceiling limits are applied. Sludge products meeting Class A pathogen and vector reduction requirements but not meeting ‘EQ’ quality standards can be distributed to the public under the APLR requirements for labelling regarding maximum annual application as long as they fall below the ceiling limits.

A risk assessment was performed to establish the US EPA limits and to determine what contaminants to address (US EPA, 1996c). Since the regulations were adopted in 1993, the list of regulated contaminants has, in fact, been decreased with the elimination of chromium. Although a list of 31 additional contaminants was being considered for regulation in ‘Round 2’, US EPA is only planning to add regulation of co-planar PCBs and dioxins and furans to the list of nine regulated contaminants in the next several years.

1.3 The US EPA risk assessment process

The approach taken by US EPA to develop contaminant standards was to identify the various potential routes for exposure to sludge that is land-applied and then to assess the risks posed by each of these exposure pathways. Table 3 lists the 14 pathways that were assessed. The risk associated with each pathway was calculated for each of the contaminants for which the assessment was performed using available data. The contaminant standard for that particular contaminant was the number generated by the pathway resulting in the lowest concentration that represented an acceptable risk according to the US EPA analysis. That pathway was called ‘the most limiting pathway’ and, for the regulated contaminants, those pathways are listed in Table 4. Surprisingly to many, for five of the nine regulated contaminants the pathway of a child directly ingesting sludge was deemed to be the most limiting path, generating the lowest acceptable level. Each pathway was assessed independently and no attempt was made to look at the risk from exposure through several pathways simultaneously.
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(US EPA, 1992; US EPA, 1995) or the effects of more than one contaminant at a time.

The remainder of this paper discusses the issues that lead the authors to recommend a more cautious approach to land application than that of the US EPA.

Table 3 Exposure pathways used in the Part 503 risk assessment.

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Description of highly exposed individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sludge soil plant human</td>
<td>Human (except home gardener) lifetime ingestion of plants grown in sludge-amended soil</td>
</tr>
<tr>
<td>2 Sludge soil plant human</td>
<td>Human (home gardener) lifetime ingestion of plants grown in sludge-amended soil</td>
</tr>
<tr>
<td>3 Sludge human</td>
<td>Human (child) ingesting sludge</td>
</tr>
<tr>
<td>4 Sludge soil animal human</td>
<td>Human lifetime ingestion of animal products (animals raised on forage grown on sludge-amended soil)</td>
</tr>
<tr>
<td>5 Sludge soil animal human</td>
<td>Human lifetime ingestion of animal products (animals ingest sludge directly)</td>
</tr>
<tr>
<td>6 Sludge soil plant animal</td>
<td>Animal lifetime ingestion of plants grown on sludge-amended soil</td>
</tr>
<tr>
<td>7 Sludge soil animal</td>
<td>Animal lifetime ingestion of sludge</td>
</tr>
<tr>
<td>8 Sludge soil plant</td>
<td>Plant toxicity due to taking up sludge pollutants when grown in sludge-amended soils</td>
</tr>
<tr>
<td>9 Sludge soil organism</td>
<td>Soil organism ingesting sludge/soil mixture</td>
</tr>
<tr>
<td>10 Sludge soil predator</td>
<td>Predator or soil organisms that have been exposed to sludge-amended soils</td>
</tr>
<tr>
<td>11 Sludge soil airborne dust human</td>
<td>Adult human lifetime inhalation of particles (dust) (e.g. tractor driver tilling a field)</td>
</tr>
<tr>
<td>12 Sludge soil surface water human</td>
<td>Human lifetime drinking surface water and ingesting fish containing pollutants in sludge</td>
</tr>
<tr>
<td>13 Sludge soil air human</td>
<td>Human lifetime inhalation of pollutants in sludge that volatilize to air</td>
</tr>
<tr>
<td>14 Sludge soil groundwater human</td>
<td>Human lifetime drinking well water containing pollutants from sludge that leach from soil to groundwater</td>
</tr>
</tbody>
</table>

Table 4 The limiting pathways according to the Part 503 risk assessment.

<table>
<thead>
<tr>
<th>Element</th>
<th>Limiting pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>Child ingesting sludge</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Child ingesting sludge</td>
</tr>
<tr>
<td>Copper</td>
<td>Plant phytotoxicity</td>
</tr>
</tbody>
</table>
2 Risk assessment

A risk assessment is a model which, like all models, is a simplified simulation of real world conditions that relies of many assumptions and subjective judgements. Moreover, a model is only as good as the data from which it draws conclusions. The more complex the system being modelled, the more vulnerable the model and conclusions drawn from it are to errors resulting from the gaps between the model and reality. This is one reason why risk assessments generally fail to effectively evaluate impacts on ecosystems as a whole and do not address synergistic impacts.

Developing regulations for a country as diverse as the US is a tremendous challenge. The Part 503 risk assessment hold out the expectation that models approximating the reality of a ranch in west Texas are also appropriate for a vegetable farm in New York.

Because of the limitations inherent in a model, results should include an expression of their uncertainty, whether as a range of values or through the application of a safety factor. No such recognition of uncertainties are included in the US EPA risk assessment, contrary to more recent practices.

Although the US EPA and others made a major effort in performing the risk assessment supporting the Part 503 regulations, the authors of this paper demonstrate that there are fundamental errors in the assessment structure, a number of untenable assumptions made, and serious omissions (whether due to oversights or data gaps), which result in regulations that are not sufficiently protective. A precautionary approach such as that adopted by a number of other nations is more appropriate given the uncertainties inherent in such a complex risk assessment, potential long-term impact on agricultural productivity and the difficulty of remediating any impacts resulting from soil contamination. Many of the pollutants of concern are not degradable and may remain in the soil for an extremely long time, although the bioavailability of contaminants may limit their impacts.

3 Comparison among different countries and comparison with cleanup standards

Standards for sludges in a number of different countries are presented in Table 5. Comparisons require an understanding of how these maximum contaminant standards are applied. The standards in the top portion of Table 5 apply to products considered acceptable for use without significant restriction and are thus comparable. In general, home use of such products is permitted, though there may be some restrictions. Currently in NYS, for example, use in home vegetable gardens is not allowed.

For all contaminants except lead, the US EPA ‘EQ’ standards are significantly higher than standards for sludge products allowed elsewhere for unrestricted use. In fact, US EPA rules allow the application of sludges with metal concentrations up to the ceiling limits (Tables 2 and 5) to be used in home gardens. Under the APLR approach, US EPA regulations allow
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Bagged products to be distributed as long as a label states the maximum annual application rate. This policy has been criticized even by those otherwise relatively positive towards land application (National Research Council, 1996; Chaney, 1995). Since children ingesting sludge is the limiting pathway for many of the 'EQ' contaminants (Table 4), application of sludges potentially containing up to the far higher ceiling concentrations of pollutants around homes seems inadvisable.

Sludges with contaminant concentrations listed in the bottom portion of Table 5 can be applied with some restrictions. To compare these standards and arrive at an understanding of what soil quality would result from application of a sludge, it is critical to know whether applications are limited in amount and frequency. So, for example, Ontario allows application of sludges that exceed the US EPA ceiling limit for a number of contaminants, but total application is limited to 40 metric tons/hectare or four applications. US EPA rules allow application of sludges with concentrations up to the ceiling limit, but for those not meeting EQ limits the total amount of any contaminant applied cannot exceed the cumulative limit (Table 2).

To facilitate a comparison among the standards, Table 6 shows the concentrations of the contaminants allowed in soils. Included in the table are calculated soil concentrations that would result from mixing an amount of sludge containing the cumulative limits of metals allowed under Part 503 and also under NYS Dept. of Environmental Conservation (NYS DEC) rules into the plough layer (15 cm). The actual metal levels would be higher, because background soil metal concentrations are not included in the calculations. Typical agricultural soil levels are included in Table 6 for comparison.

The cumulative pollutant loading allowed under Part 503 would result in contaminant levels approximately an order of magnitude higher than those allowed under rules in European countries (Table 6) (McGrath et al., 1994). Soil screening and clean-up numbers used by US EPA, NYS DEC and the Netherlands (intervention value) are also included. These US EPA and NYS values used in considering the need for remediation of contaminated sites are significantly lower than the values that sludge application would allow. NYS numbers are based on a goal of cleaning up sites to background concentrations (NYS DEC, 1994), whereas the US EPA numbers are based on an assessment of risks posed by soil ingestion and groundwater (US EPA, 1992). A site or soil background concentration is used when the risk-based number is lower than the background. The values for soil in other countries include both goals for soil quality and maximum levels allowed for contaminant accumulation, as noted in Table 6.
Table 5  International sludge standards (values are ppm = mg/kg dry weight).

<table>
<thead>
<tr>
<th>Products relatively unrestricted</th>
<th>As</th>
<th>Cd</th>
<th>Co</th>
<th>Cr</th>
<th>Cu</th>
<th>Hg</th>
<th>Mo</th>
<th>Ni</th>
<th>Pb</th>
<th>Se</th>
<th>Zn</th>
<th>PCB</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA EQ sludge</td>
<td>41</td>
<td>39</td>
<td>1500</td>
<td>17</td>
<td>420</td>
<td>300</td>
<td>100</td>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas compost, home use</td>
<td>10$^3$</td>
<td>16</td>
<td>180</td>
<td>1020</td>
<td>11</td>
<td>75</td>
<td>160</td>
<td>300</td>
<td>36</td>
<td>2190</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ontario clean compost</td>
<td>10</td>
<td>3</td>
<td>50</td>
<td>60</td>
<td>0.15</td>
<td>20</td>
<td>150</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NYS Class I compost</td>
<td>10</td>
<td>100</td>
<td>1000</td>
<td>10</td>
<td>200</td>
<td>250</td>
<td>1000</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sludges applied with restrictions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPA ceiling limit sludge</td>
<td>75</td>
<td>85</td>
<td>4300</td>
<td>57</td>
<td>75</td>
<td>420</td>
<td>840</td>
<td>100</td>
<td>7500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NYS sludge</td>
<td>25</td>
<td>1000</td>
<td>1000</td>
<td>10</td>
<td>200</td>
<td>100</td>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark sludge</td>
<td>25$^9$</td>
<td>0.8</td>
<td>100</td>
<td>1000</td>
<td>0.8</td>
<td>30</td>
<td>1200 (600$^{10}$)</td>
<td>4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU Union sludge$^{11}$</td>
<td>20-40</td>
<td>1000-1750</td>
<td>16-25</td>
<td>300-400</td>
<td>750-1200</td>
<td>2500-4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany sludge$^{12,13}$</td>
<td>5-10</td>
<td>900</td>
<td>500</td>
<td>8</td>
<td>200</td>
<td>900</td>
<td>2000-2500$^{14}$</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ontario dewater</td>
<td>170</td>
<td>34</td>
<td>340</td>
<td>2800</td>
<td>1700</td>
<td>11</td>
<td>94</td>
<td>420</td>
<td>1100</td>
<td>34</td>
<td>4200</td>
<td></td>
</tr>
<tr>
<td>Ontario dewater, target</td>
<td>35</td>
<td>4</td>
<td>77</td>
<td>530</td>
<td>580</td>
<td>1.4</td>
<td>1.2</td>
<td>80</td>
<td>220</td>
<td>0</td>
<td>840</td>
<td></td>
</tr>
<tr>
<td>Sweden sludge, 1994</td>
<td>4</td>
<td>100</td>
<td>1200</td>
<td>5</td>
<td>50</td>
<td>200</td>
<td>800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden sludge, 1998$^{12}$</td>
<td>2</td>
<td>100</td>
<td>600</td>
<td>2.5</td>
<td>50</td>
<td>100</td>
<td>800</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands sludge$^{15}$</td>
<td>0.15</td>
<td>1.25</td>
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<td>3</td>
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</tbody>
</table>
Notes for Table 5

1. Unrestricted use if sludges contain less than these concentrations (US EPA, 1993).
2. Standards for grade I compost suitable for home use. Different standards apply to agricultural use (INRCC, 1997).
3. Based on background soil. 1 ppm would be risk-based allowable concentration (INRCC, 1996).
6. Can apply until cumulative load is reached or, for bagged product that may be used anywhere, can apply at annual rate.
7. NYS DEC Part 361.
8. There are higher alternative limits for metals based on the ratio of metal to phosphorus and limits on application of phosphorus (Dansk Ministry, 1990).
9. As 25 for home garden use.
10. Ph 60 for home garden use.
11. Upper value is max member country may allow, lower is recommended max (Eschber, 1997).
12. Max 5 metric tons/ha/3 yrs except compost, 10 metric tons/ha/3 yrs if concentration <50% max. No use on fruit, vegetables, toddler crops, priming land, forest.
13. Germany has liability fund to which all producers must contribute to reimburse farmers.
14. Value depends on pH.
15. Max four applications. Max 8 metric tons/ha/5 yrs or 135 kgN/ha/5 yrs. 40 metric tons/ha max lifetime of site.
16. Unspecified date, target values.
17. If concentrations are met may harvest crops one year after application. If exceed concentration, use only for energy or industrial crops. Organics are voluntary targets.
18. 2 metric tons/ha/yr max application rate. Sludge may be applied only if soils have less than specified concentration of metals (formula based on soil characteristics).
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<th></th>
<th>As</th>
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<th>Mo</th>
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<th>Pb</th>
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<td>10SB</td>
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<td>2/SB</td>
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<td>Ontario soil</td>
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<td>120</td>
<td>100</td>
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<td>4</td>
<td>32</td>
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<td>Germany soil</td>
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<td>1.5^4</td>
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<td>380</td>
<td>190</td>
<td>10</td>
<td>200</td>
<td>210</td>
<td>530</td>
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<td>11.1^15</td>
<td>15^16</td>
<td>0.08^14</td>
<td>0.8^14</td>
<td>1^2^14</td>
<td>0.8^15</td>
<td>0.8^14</td>
<td>0.8^14</td>
<td>0.8^14</td>
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<tr>
<td>95th percentile N. Amer. ag soils</td>
<td>10^17</td>
<td>7.8^15</td>
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<td>95^15</td>
<td>0.3^14</td>
<td>3.0^14</td>
<td>5.7^14</td>
<td>23^14</td>
<td>1.5^17</td>
<td>126^18</td>
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</tbody>
</table>
Notes for Table 6

1. Resultant soil conc. calculated when the cumulative load limit from Part 503 is mixed into the plough layer. Actual levels would be higher due to background level in soil.
2. Genetic soil screening levels based on human health risk assessment of soil ingestion and groundwater pathways. SB = soil background (US EPA, 1994)
3. 2 ppm listed for total chromium big concern is chromium VI
5. Resultant soil conc. calculated when cumulative load limit in Part 360 (NYS DEC, 1993) is mixed into plough layer. Actual levels would be higher due to background level in soil. Different cumulative limits are applied to different soil classifications.
6. SB = soil background (NYS DEC, 1994).
7. Max soil conc. allowed includes background soil levels.
8. No sludge additions to soils which exceed these levels.
9. Depends on pH.
11. Netherlands TDI's are different from US, and within US values differ as well. For As, the Netherlands value is 0.0021 vs. 0.0001 IRIS US EPA database, vs. 0.0008 in 503. Netherlands risk assessment does not include groundwater path because there are essentially no private wells in Holland.
12. Level at which clean up needs to be considered.
13. Maximum soil concentration
15. NYS average values taken from Holmgren et al., 1993.
17. Approximately 95% of Eastern US soils would fall at or below this value (Schakette and Boeringen, 1984).
18. Approximately 95% of US soils would fall at or below this value (Holmgren et al., 1993).
All of these various soil levels are all far lower than those allowed under Part 503. The Dutch intervention values were derived using a pathway risk analysis similar to that used for Part 503, yet the values they suggest for soil clean-up of contaminated sites are generally as low or lower than those suggested by US EPA to pose no significant threat (McGrath et al., 1994).

4 Alternative policy approaches

The US rules allow sludges to be applied up to a maximum acceptable contaminant limit. In other words, through a risk assessment some contaminant level is selected as a maximum level to which people, crops or other receptors can be exposed without creating unacceptable harm (as defined by the assumptions in the risk assessment). Pollutants present in sludge may then be added up to that limit. Thus, if it is concluded that exposure to 50 micrograms per day of contaminant X through food is acceptable, the Part 503 rules calculate the maximum amount of contaminant X that could be in sludge and not result in more than 50 micrograms per day in the diet. Obviously, many assumptions go into all phases of this calculation and under the Part 503 risk assessment, no safety factors were applied.

In contrast, several European countries (Sweden, Denmark, the Netherlands) use a philosophy of ‘do no harm’ to protect soil quality. Their approach to achieving sustainability is to work towards limiting inputs to the soil so they do not exceed outputs, thus preventing accumulation of pollutants in the soil (McGrath et al., 1994; Munters, 1997; Witter, 1996). The ‘do no harm’ philosophy of environmental management strives to limit the addition of contaminants to the levels that are present in uncontaminated soils while recognizing the inherent uncertainty involved in risk modelling. This ‘no net degradation’ approach is precautionary – it permits land application of inorganic contaminants only to the extent to which there will be no accumulation above the levels in uncontaminated agricultural soils. In setting clean-up objectives for remediation of contaminated sites in NYS, this philosophy was embodied in the use of soil background numbers for the inorganic contaminants (Table 6) (NYS DEC, 1994).

Because there is a range of metals levels in uncontaminated soils resulting from differences in site geology and other factors, a limit may be set at the level found in no more than 5% (or some other fraction) of such soils. Thus 95% of uncontaminated soils would have less than the regulated limit. Such a ‘no net degradation’ policy would result in levels for the nine regulated metals that are much lower than those established under Part 503 (Table 6).

The values for some elements determined through a risk assessment may be lower than those found in some uncontaminated soils. In examining arsenic, for example, a limit of 1 ppm was determined through the risk assessment performed in Texas, whereas background levels in soils exceeded that number (TNRCC, 1996). This led Texas to adopt an arsenic standard of 10 ppm based on the values in soils.

Some would suggest that calculations that show acceptable risk levels to be lower than background soil levels indicate that the risk assessments are overly conservative, and for some risk assessments the application of safety factors may provide a conservative margin. However, the inorganic elements present in soils may be significantly less bioavailable than those same elements added in sludge or other anthropogenic additions. The chemical form in which an element is present plays a critical role in its biological impact.

Because the concentration of contaminants allowed under the Part 503 regulations in the US in sludges applied to land is markedly greater than the agricultural soil concentrations (Table 6), over time the levels of any persistent contaminants, such as heavy metals will increase in soils to the level in the sludge being applied. Recent evidence, however, suggest that losses of certain metals through leaching is not always negligible, so there may be removal of some fraction of the metals through groundwater (Camobreco et al., 1996; Richards et al., 1997).
5 Sludge quality

Sewage sludges vary widely in the concentration of contaminants. Efforts to remove industrial contaminants through pretreatment have resulted in greatly improved quality over the last decade in the US. As shown in Table 7, the mean concentrations of the regulated contaminants in both the US and NYS sludges are far lower than the US EPA 'EQ' standards. In fact, 95% of NYS sludges fall far below those standards for most contaminants, indicating that stricter standards would be achievable today for most sludges.

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Metal levels in sludges (values are ppm).</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Part 503 'EQ' standard</td>
<td>41</td>
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<tr>
<td>US sludge (mean) a</td>
<td>10</td>
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<tr>
<td>NYS sludge (mean) b</td>
<td>6</td>
</tr>
<tr>
<td>NYS sludge (95 percentile)</td>
<td>13</td>
</tr>
</tbody>
</table>

* a Data from 1988 National Sewage Sludge Survey (US EPA, 1990).
* b Data from early 1990s, (NYS DEC Division of Solid and Hazardous Materials).

Pollution prevention efforts in a number of European countries have greatly reduced contaminant concentrations and have resulted in sludges that are able to meet much more stringent limitations for cadmium (<2 ppm) (Madsen, 1997; Tidestrom, 1997b; Witter, 1996). Although control of industrial sources can help to reduce many contaminants, others, such as copper and lead, result in part not from industrial sources but from leaching of pipes, including those in our homes. Efforts to decrease the corrosivity of water supplies can help to reduce their concentrations. There is some evidence that low levels of dioxins come from residential sources (washing or textiles), which may make them difficult to control in sludges (Horstmann and McLachlan, 1995).

In addition to sludge quality improvement, wastewater treatment technologies that minimize sludge production are being developed, thus decreasing the need for disposal. Other technologies to recover energy or fuel gas from sludges also hold some promise for development of beneficial use options beyond land application.

6 Alternative land application uses

The significance of risks posed by land application of sludges varies according to different use scenarios. For example, because the potential for a child to ingest sludge is much greater for sludge used by residential gardeners than for sludge applied to field corn, stringent limitations based on this pathway should apply to home use but may not be necessary for agricultural use. Conversely, groundwater contamination may be a concern where sludges are applied to large acreage, but will not likely be a concern for smaller scale residential use. Although this paper focuses on the potential use of sludges on lands used for growing agricultural crops, there are numerous other land application scenarios that present less risk. Among
these are application to turf such as golf courses, roadsides or parks, reclamation of severely disturbed lands, or application to biomass plantations. Development of different standards for different end uses would recognize the variation in risks and benefits and permit the use of sludges where most appropriate.

7 Non-protective aspects of US EPA Part 503 risk assessment

Discussed below are a number of the assumptions and decisions that are part of the US EPA risk assessment for Part 503 that the authors believe to be questionable and are not conservative or protective.

7.1 Pollution allowed to reach maximum ‘acceptable’ level

Through a risk assessment some contaminant level is selected as a maximum level to which people, crops or other receptors can be exposed without creating unacceptable harm (as defined by the assumptions in the risk assessment). Pollutants present in sludge may then be added up to that limit. For example, sludge application would be allowed to raise groundwater contaminant levels up to the drinking water standard or increase contaminants in crops up to the level considered to represent an acceptable risk. The philosophy behind this approach relies on an accurate knowledge of pollutant pathways, processes and impacts. The impact of other sources of pollutants (e.g. atmospheric deposition) and change over time in both pollutant inputs and knowledge of impacts (e.g. the hormone disrupting effects of some synthetic organic chemicals which is likely to result in a decrease in the allowable maximum contamination levels for those chemicals) makes this an uncertain and potentially non-protective approach. Without a very good understanding of pathways and processes, allowing pollutants to reach calculated maximum acceptable values is unwise. It leaves no room for the possibility that as our understanding of impacts increases, maximum acceptable values will be lowered (e.g., standards for lead have decreased over the years, our knowledge of hormone disruption impacts at low chemical concentrations is increasing). Once it has occurred, soil contamination is difficult to remediate. Alternative approaches are discussed in the section on alternative policy approaches above.

7.2 No safety or uncertainty factors

The uncertainties inherent in a risk assessment, originating from both missing data and a lack of understanding of how available data should be applied to complex systems with inherent biological variation, argue for the application of safety factors. Many risk assessment-based standards divide calculated numbers by 2, 10, 100 or even 1000 depending on the level of uncertainty or the applicability of available data. The Dutch risk assessment, for example, assigns uncertainty values of 1, 2 or 3 based on the number and quality of data available for the particular variable being assessed (van den Berg, 1994).

7.3 Evaluates each exposure pathway separately, not accounting for multiple pathways of exposure or synergy

It is likely that in a number of sludge-use scenarios, a person or animal will be exposed simultaneously through a number of pathways. Thus the child of a home gardener using sludge will likely eat vegetables from the garden (pathway 2, Table 2) and may ingest soil that has received sludge (pathway 3). They may also drink from a well or eat animals or animal products that have been impacted by sludge use. The US EPA risk assessment calculated ‘acceptable risk’ according to each of 14 pathways and selected as a standard the lower of those numbers. They did not add exposures from several paths to arrive at
a level from the multiple exposures which would result in an 'acceptable' risk. An additive approach is generally used in performing risk assessments (van den Berg, 1994; Duff, 1996; Lund, 1997).

Similarly, the risk assessment did not attempt to address the ways in which the effects of exposure to multiple chemicals simultaneously can affect the toxicity impacts. Although estimating exposure and risk to a single pollutant from a number of pathways simultaneously could be done by summing results from different pathways, our lack of knowledge about how different contaminants interact makes it infeasible to evaluate impacts resulting from exposure to multiple pollutants. There can be synergistic or antagonistic impacts in which exposure to multiple chemicals has a greater or less impact than exposure to each. Our very limited knowledge of how different contaminants may interact is one reason for scepticism regarding risk assessment and for the use of a more conservative approach.

7.4 Calculates cancer risk of 1-in-10 000 vs. 1-in-1 000 000

US EPA made a policy decision that a cancer risk of 1-in-10 000 was an acceptable risk resulting from sludge application. For a number of contaminants, cancer risk was determined to be the most significant risk. A cancer risk estimated to lie between 1-in-10 000 and 1-in-1 000 000 is typically used in setting regulations and in many regulatory contexts (e.g. drinking water regulation), a risk of one excess cancer in one million people exposed is used to establish the standards. Under the Part 503 risk assessment, policy-makers elected to use the less restrictive value.

7.5 Soil ingestion rate

Children inadvertently ingesting sludge via the soil is calculated by US EPA to be the most restrictive pathway for five of the nine regulated metals (pathway 3, Table 3). The Part 503 risk assessment calculated risk for a child eating 200 mg/day of soil for 5 years. (For perspective, 200 mg equates to about the volume of an aspirin tablet). Two aspects of this analysis may not be protective. First, the data regarding ingestion are limited and 200 mg/day of soil may be low. Second, through normal activities, inadvertent ingestion continues throughout life, though at lesser rates (although rates may actually peak in teenage years). Other risk assessments include child ingestion rates for several years and a lower adult ingestion rate (the Dutch and Texas risk assessments use 50 and 100 mg/day for adult ingestion [TNRCC, 1996; van den Berg, 1994]) for the remaining lifetime.

All young children ingest some soil as part of their normal behaviour. The regulation seeks to protect the ‘average high-end child’ (not defined). There are children who ingest far more than average (so-called pica children), and the regulation clearly states that it does not seek to protect these children.

A key piece of data is just how much soil children actually ingest. Collecting data on this is difficult and there are only a few studies to draw from. The primary study monitored 24 children for 8 days in Massachusetts. The range of each child and the day-to-day variation were large. The average rate derived was 200 mg/day. However, there is no clear agreement on the appropriate statistical approach to extrapolating from these few children and few days to an annual rate for an ‘average high-end child’ (Stanek and Calabrese, 1995). Thus there is concern that the regulatory limits based on 200 mg/day soil ingestion may not be conservative enough to protect children who may be exposed, particularly in a home garden scenario.
7.6 Underestimates pollutant intake through food

7.6.1 Assessed diet very low in vegetables

Dietary intake is a critical parameter for calculating risk from pathways 1 and 2. An average late 1970s diet was used in the risk assessment. Americans, responding in part to the USDA recommended diet, are eating significantly greater amounts of fruits and vegetables. Recalculations based on the USDA recommended diet of the risk associated with eating from a home garden receiving sludge show that the US EPA standard for cadmium would exceed the ‘acceptable’ daily intake.

US EPA assessed two scenarios, one for the general population and a second for the home gardener. The risk assessment assumes 2.5% of the vegetables eaten by the general population were grown on sludge-amended soils. While this may be a reasonable guess for the nation as a whole, states with high populations, such as NYS, may ultimately have a much higher proportion of sludged agricultural land, though how this relates to the percentage of a person’s diet depends greatly on how locally their food is obtained. The recent trend for consumers to buy ‘shares’ in produce from a given farm could expose some individuals much more than the average, though less than the home gardener. For the home gardener, the US EPA assessment assumes 59% of most vegetables eaten are grown in the home garden which received sludge.

Dietary assumptions used in the risk assessment make use of what the average American ate in the late 1970s for both the general population evaluation and for the home gardener evaluation (US EPA, 1992). This diet is very low in fruits and vegetables, and the population is now eating more of these components of the diet that contribute the majority of cadmium intake (Chou, 1991; Heirmendinger and van Duyn, 1995; Krebs-Smith et al., 1995). In particular, home gardeners can be expected to eat significantly more vegetables than the average American.

A comparison was made of the diet evaluated in the US EPA risk assessment and of the diet recommended by USDA in the food pyramid (USDA, 1996). The total amount (in dry weight) of vegetables, fruits and grains recommended by USDA is about two and a half times that used by US EPA (Table 8). For leafy vegetables, which are a major source of dietary cadmium, the US EPA diet is one-sixth of the USDA recommended amount. The recommended diet contains more than 16 times the amount of fruit as the US EPA diet used in the Part 503 risk assessment.
Land application of sewage sludges

Table 8 Comparison of diet used in US EPA risk assessment and diet recommended by USDA.

<table>
<thead>
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<th>US EPA 503a</th>
<th>USDA recommendedb</th>
<th>Ratio USDA/EPA</th>
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<td>Grain</td>
<td>90.7</td>
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<td>Leafy vegetable</td>
<td>2.0</td>
<td>11.7</td>
<td>5.9</td>
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<td>Roots</td>
<td>1.6</td>
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<tr>
<td>Fruit/garden fruit</td>
<td>4.2</td>
<td>69.9</td>
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<tr>
<td>Total</td>
<td>114.0</td>
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<td>2.7</td>
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</table>

a US EPA is average diet for 70 kg male in late 1970s.
b USDA is recommended 2200 calories diet. The four vegetable servings are assumed to be 1 potato, 2 leafy veg., 1 root.

Because the sludge–soil–plant–human pathway risk analysis depends on the amount of fruits, vegetables and grains consumed, revising dietary assumptions leads to very different standards. For example, using US EPA's assumptions and calculating allowable application for cadmium, changing only the dietary assumptions to those of the food pyramid, leads to a standard for cadmium of 15 ppm, compared with the current federal standard of 39 ppm. Even this may not be protective, as discussed below.

7.6.2 Very low plant uptake coefficients

A knowledge of how much of the metals added to soils ends up in crops is the key to calculating standards for pathways 1 and 2 (general population and home gardeners eating crops from soil to which sludge has been applied). Data establishing the relationship between the amount of a contaminant added and its level of uptake by different crops vary widely. In the Part 503 risk assessment, US EPA used the highly non-conservative geometric mean of the data and included data from all soils, including those with high pH. Recalculating 'acceptable' levels using the arithmetic mean or the 90th percentile for uptake coefficients results in a lower standard.

Uptake coefficients, which express the amount of a metal taken up by a plant compared with the amount applied to the soil, are critical to a number of the pathways in the risk assessment. The higher the uptake coefficient, the greater is the fraction of the metal that accumulates in the plant. Uptake coefficients are critical for assessing the pathways that examine people eating sludged crops (pathways 1 and 2) and also the phytoxicity pathway (pathway 8, Table 2, which assesses negative impact on plant growth resulting from accumulation of some metals, discussed below).

The authors and others (Stern, 1993; Chaney and Ryan, 1994) are concerned that the uptake coefficients used in the US EPA risk assessment are too low, particularly in regard to the northeastern US, where acid soils are common. Also, the uptake coefficients calculated by US EPA include data from lime-stabilized sludges, which have an immediate effect of raising the soil pH, which in turn reduces availability of cadmium and zinc, an effect that cannot be expected to persist in the long term.

Many studies in the field and greenhouse have tried to measure the rate at which a crop takes up a particular metal from the soil. Unfortunately, there is a great deal of variation (the data used by US EPA for cadmium uptake coefficients vary by four orders of magnitude, a factor of 10 000), depending on many factors including specific variety of crop (not just lettuce...
versus beans, but the particular variety of lettuce), soil characteristics such as caution-exchange capacity, pH, moisture conditions, and many other factors.

In selecting uptake coefficients for the risk assessment, US EPA used the geometric mean of available field data, which results in a much lower number than that obtained if other statistical approaches are used. The uptake coefficient is different for each metal and varies among crops. Because cadmium uptake into crops and subsequent ingestion is a potentially limiting pathway, cadmium is used as an example in the following analysis. While the geometric mean for the uptake coefficient for cadmium in leafy vegetables (a crop type that has a high uptake rate) used by US EPA in the risk assessment is 0.182, the arithmetic mean of the same data is 0.630. A probabilistic Monte Carlo analysis of the distribution of uptake coefficient values from the data used by US EPA (excluding soils with a pH > 6.5) determined that 10% of the values showed an uptake coefficient of 2.87 or higher, and far more than half the data had levels greater than the level used in the risk assessment (Stern, 1993). For more than 50% of all soil conditions represented in the risk assessment, the uptake coefficients (and thus the risk posed by cadmium uptake into crops) is underestimated. Because geometric means are biased towards low values, their suitability for use in risk assessment is questionable (Parkhurst, 1998).

For some metals (including lead and mercury), measurements of uptake coefficients appear to be compromised by either analytical limitations or physical contamination of ‘control’ crops (McBride, 1998a). A number of field plot experiments used in the EPA risk assessment showed low or even negative uptake of these metals. However, the reported concentrations of these contaminants in the control (non-sludged) plants are far higher than levels in farm-grown crops in areas remote from sludged sites. Because uptake coefficients are based on the comparison of concentration in the sludged to the control plots, high levels in the control underestimate uptake. The controls should represent levels in uncontaminated crops, and the elevated levels in the sludge experiment control samples indicate that either the controls were contaminated physically by soil particles carried over from the sludged plots or that there were analytical problems (McBride, 1998a).

7.6.3 Averages are not applicable to particular site or crop

Use of averages of means is not a valid approach for some exposure pathways since a particular crop (which may be highly sensitive or accumulate metals more readily) will be grown on a particular site which may have soils that result in high uptake of contaminants by the crop. Similarly, a farmer may be growing a crop that is very sensitive to phytotoxic metals on soils that promote high uptake, leading to low crop yields. The US EPA risk assessment, then, in using the geometric mean for uptake coefficients does not apply conservative estimates and is thus not highly protective. A more protective approach would use data from sensitive crops and soils with high uptake coefficients.

7.6.4 Cadmium levels under different assumptions

Different assumptions regarding the appropriate uptake coefficient to use for cadmium in the calculations for pathway 2 (home gardener applying sludge and eating crops) result in very different allowable cadmium levels in sludge (Table 9). For pathway 2, the US EPA risk assessment number is 120 kilograms/hectare (kg/ha) cumulative cadmium loading. Applying assumptions about depth of tillage into soil, this is equivalent to 120 ppm cadmium in ‘EQ’ sludges. (Note that the Part 503 standard of 39 kg/ha is derived from Pathway 3.) Correcting for the diet recommended by USDA versus the low vegetable diet used in the risk assessment, but using the same geometric mean for uptake coefficient and the same assumptions regarding the acceptable increase in dietary exposure to cadmium, the cadmium limit calculated is 15 kg/ha or 15 ppm. If instead the arithmetic mean of the data is used for the uptake coefficient, 5 kg/ha or ppm is calculated. For this pathway, application of the values derived from a Monte Carlo analysis show that a maximum cadmium contaminant level of 1.5
kg/ha or ppm is calculated to be protective of persons gardening in 90% of the slightly to strongly acidic soils included in the data base and eating the USDA recommended diet. As seen in Table 5, other countries have adopted cadmium standards approaching this low limit. Although currently many NYS sludges could not meet this limit, with aggressive pollution prevention this number could be achieved, as seen by the fact that many European sludges are able to meet their more stringent limits.

Table 9 Cadmium standard calculated using different assumptions regarding diet and uptake coefficient (UC) (values are in kg/ha).

<table>
<thead>
<tr>
<th>Acceptable cadmium cumulative limit</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>EPA calculation based on geometric mean UC and average late 1970s diet</td>
</tr>
<tr>
<td>15</td>
<td>Concentration based on geometric mean UC and USDA recommended diet</td>
</tr>
<tr>
<td>5.4</td>
<td>Concentration based on arithmetic mean UC and USDA recommended diet</td>
</tr>
<tr>
<td>1.5</td>
<td>Concentration based on Monte Carlo 90th percentile UC and USDA recommended diet</td>
</tr>
<tr>
<td>39.</td>
<td>EPA cumulative limit based on child ingestion pathway</td>
</tr>
</tbody>
</table>

7.7 RfD for arsenic of 0.0008 mg/kg/day vs. 0.0003 or less

The reference dose (RfD) of a toxic chemical is the daily exposure over a lifetime likely to be without ‘appreciable’ risk. It is expressed as the amount that can enter the body per kilogram of body weight per day. For arsenic, there is some uncertainty regarding the recommended maximum level. US EPA believes it to fall within the range of 0.0001–0.0008 mg/kg/day. US EPA selected the least conservative number (0.0008 mg/kg/day) in the Part 503 risk assessment, despite the fact the RfD used by US EPA in other programmes is 0.0003 mg/kg/day (US EPA, 1992, pp. 5–107). A recalculation using the same assumptions as US EPA in the Part 503 risk assessment except for the use of an RfD of 0.0003 mg/kg/day for arsenic, produces an acceptable limit of 1 ppm of arsenic in sludge products based on pathway 3, child ingestion of soil (TNRCC, 1996).

7.8 Many pollutants not regulated or monitored

7.8.1 Pollutants present in less than 10% of sludges not considered

A key issue is the very limited number of contaminants that are regulated under Part 503. In developing the rules, US EPA used a national perspective, not considering contaminants ‘infrequently’ found in sludges. In the first round of regulation development that led to the Part 503 rules, there was not a formal definition of the frequency of detection necessary for consideration, nor was there a consistent database of sludge quality from treatment plants in the US. That was one reason why US EPA sponsored the National Sewage Sludge Survey in 1988 (US EPA, 1990). For Round 2 of regulation development, contaminants found in 10% or fewer of sludges (determined by the 1988 survey) were not considered
significant enough to regulate. However, in up to one out of ten sludges, these contaminants may be present and possibly at levels of concern.

Although on a national scale the risks posed by such contaminants may be low, the particular sludge that a grower or home gardener may use might in fact have significant levels of some unregulated contaminants without their having any way of knowing because no monitoring is required for these contaminants. Consider, for example, a hypothetical small city where an industry infrequently discharges a highly toxic contaminant not included in the Part 503 rules. A survey of sludges from 24 central NYS communities and another of 30 sludges from around the US documented just such a concern, finding elevated levels of various exotic contaminants in sludges from communities in which a particular industry was located (Mumma et al., 1983; Mumma et al., 1984).

7.8.2 Pollutants with insufficient data

Another rationale for not setting standards or requiring monitoring is the inability to adequately assess risks due to a lack of data with which to complete the risk assessment. Lack of adequate data is a serious limitation to the usefulness of risk assessment, but ignorance is not a solution to uncertainty. Currently, US EPA rules only require monitoring for regulated contaminants. Testing sludges for a wider range of priority pollutants and for dioxins and furans would not include all of the thousands of chemicals that might be present, but would be a step towards knowing what is being spread on land. One issue with wider testing is that the significance of detecting contaminants for which there are no regulatory limits is unclear. The data on many chemicals are not adequate to assess their impacts. Finding chemicals through wider testing, however, can at least alert us and research can be undertaken to assess their effects.

In their Round 2 evaluation of additional pollutants in sewage sludges, US EPA identified an additional 12 inorganic and organic chemicals beyond those regulated in Part 503 that are potentially harmful by one or more exposure pathways. The arguments ultimately used to exclude all but two of these (coplanar PCBs and dioxins/ dibenzofurans) from further consideration can be called into question; most are based on a lack of data.

If the leachability of beryllium and barium is assumed to be as high as has been measured in acid sandy soils, both of these elements would have been subject to regulation to limit groundwater contamination (US EPA, 1996b). For barium, US EPA in the risk assessment used the lowest rather than the highest or median measured leachability for acid sandy soils, based on a single experiment. For beryllium, the median value of leachability was used.

US EPA excluded boron and fluoride from regulation despite both elements having critical pathways (pathway 6 for boron, pathways 6 and 10 for fluoride [Table 4]), arguing that the experiments from which this initial assessment of potential impact was derived did not measure transfer into biota from boron and fluoride in soils amended specifically with sludges. Since no information was available on uptake of either element from sludge into crops, US EPA concluded that the pathways could not be evaluated with existing information, and that boron and fluoride should not be regulated. However, both of these elements occur as anions and may not be strongly adsorbed in the sludge matrix. The initial solubility of boron in some sludges and composts is especially high, such that boron phytotoxicity in crops grown on soils recently amended with sludges has been observed (Chaney and Ryan, 1994). It is questionable whether it is reasonable to assume little transfer to animals and soil biota, given the absence of data. The current position of US EPA that further research is not needed on land application of sludges is inconsistent with the arguments of insufficient data used to eliminate many contaminants from consideration for regulation.
7.8.3 Synthetic organic chemicals

No organic contaminants are currently regulated under Part 503. The US EPA eliminated from consideration any organic contaminant that met any of the following three criteria. The criteria used were: (1) the pollutant has been banned for use in the US or it is not being manufactured for US use; or (2) it has been detected in 5% or fewer of the sludges tested in the National Sewage Sludge Survey; or (3) the 1-in-10,000 cancer risk limit was less than the concentration found in 99% of the sludges tested. Thus, even persistent synthetic organic chemicals found to be present in more than 5% of sludges were eliminated from regulation if they were no longer being manufactured (US EPA, 1992, 1995).

PCBs are an example of a class of organic contaminants generally found at levels in some sludges. The risk assessment performed by US EPA shows that 4.6 ppm would be the limit for acceptable risk using a 1-in-10,000 cancer risk. In contrast, the rules in Texas set a 1 ppm standard for residential use, and the Dutch clean-up intervention value is 1 ppm in soil (Tables 5 and 6) (Texas, 1996; van den Berg, 1994). A reassessment of pathway 5 by Chaney et al. arrived at a limit of 2.23 ppm for PCBs based on the pathway of a farm family consuming meat (Chaney et al., 1997), but for a number of reasons the US EPA rules were stated to be adequately protective (Chaney et al., 1996).

PCBs are not regulated under Part 503 because they are no longer being manufactured in the US. Many chlorinated synthetic organic chemicals, such as PCBs and dioxins, are persistent, slow to degrade, and they bioaccumulate. More than 50% of dioxins and furans were still present in soil 20 years after sludge application (McLachlan et al., 1996).

Most sludges contain low levels, but some individual sludges contain significant amounts. Monitoring of persistent synthetic organic chemicals, such as PCBs, is not required under US EPA rules but has been recommended, even by researchers who believe the toxicity risk from these chemicals resulting from land application of sludges is very low (Chaney et al., 1996). Again, this is a case of the 503 regulations dealing with ‘average’ rather than specific conditions. While it is stated that ‘PCB concentrations will limit use of biosolids from only a few of the 14,000 POTWs [publicly owned treatment works] in the US’ (Chaney et al., 1996), a sludge user would have no way of knowing without testing, if the sludge or sludge product they are applying is one of those few. The particular pathway of concern is ingesting sludge. In addition, since PCBs (and other persistent, fat-soluble toxic organics) bioaccumulate in animal fats, ingestion of sludges containing such organics by cattle could be a concern regarding milk and meat quality.

Dioxins and furans are a series of related compounds, some level of which were found in all sludges tested in the 1988 National Sewage Sludge survey conducted by US EPA (US EPA, 1996a, c). Since the toxicity of the different particular types (known as congeners) varies widely, EPA and others have defined a toxic equivalency factor (TEQ), which is a calculated number varying from 1 for 2,3,7,8-TCDD, the most toxic, to 0.001 for other less toxic types. To calculate the total risk posed by dioxins and furans in a sludge, the concentration of a particular type of toxin or furan is multiplied by the toxicity factor for that particular type and then summed for all the dioxins and furans that are present, to arrive at a total TEQ. Levels in sludges vary widely, with a mean value of 10–20 ng/kg TEQ, but some sludges have a TEQ of over 100 ng/kg. Although no regulations are in place regarding the land application of materials containing dioxins, an agreement between the paper companies and US EPA regarding land application of paper mill sludges established 10 ng/kg TEQ as the limit for unregulated spreading, and paper sludges containing over 50 ng/kg are not to be land applied. For levels between 10 and 50 ng/kg TEQ, site-specific evaluation would govern use. There are thus a number of sewage sludges that would not be spread under these criteria. It has been suggested that dioxins may be a limiting factor in the application of sludges in Ontario where there is a risk-based soil clean-up level for dioxins of 10 ng/kg TEQ (Campbell and Webber, 1997; Webber and Nichols, 1995). Dioxins and furans and co-planar PCBs are the only additional pollutants that US EPA is proposing to address in Round 2, which is expected to take several years. In the meantime, federal rules do not require testing for these contaminats.
Land application of sewage sludges

A number of organic contaminants that are components of detergents are found in relatively high levels in sludges including linear alkylbenzene sulfonates (LAS), nonylphenol (NP), nonylphenol ethoxylates (NPE) and di-(2-ethylhexyl)phthalate (DEHP) (Giger, 1997). These vary in toxicity and degradability in the soil environment, but some are suspect regarding hormonal mimicking actions. To date, these contaminants have not been assessed by US EPA in regard to land application of sludges. Further research on their effects on humans and animals is needed (Krogmann et al., 1997). Switzerland has banned the use of nonylphenol, and a number of other countries have set standards for these constituents, as well as for total polycyclic aromatic hydrocarbons (PAHs), dioxins and for some measurement of total chlorinated organics. In Sweden, recommended limits for a number of organic contaminants were established in negotiations with the agricultural community. Maximum concentrations of 50 mg/kg for nonylphenol, 5 mg/kg for toluene, 3 mg/kg for PAHs and 0.42 mg/kg for PCBs have been established (Matthews, 1996).

7.8.4 Radioactivity

Radioactivity is not addressed in Part 503. Little is known about the extent to which sewage sludges are contaminated with radioactivity and monitoring is not required. Although the average sludge may contain little radioactivity, individual sludges receiving waste water from various types of facility may reconcentrate radioactivity in sludges (US GAO, 1994). Further investigation is needed, particularly where potential sources that discharge to sewage treatment plants include nuclear facilities, hospitals and other medical facilities, or leachates from superfund sites with radioactive contaminants. US governmental agencies are currently conducting a survey of radionuclides in sludges.

7.9 Ground and surface water calculations assume large dilution/attenuation

7.9.1 Leachate diluted/attenuated before reaching well

Although the US EPA risk assessment for the groundwater pathway (pathway 14, Table 3) states that the objective is to protect a shallow well immediately downgradient of a sludge field, the calculation assumes a large reduction of peak metal concentrations (through dilution and/or attenuation) by the time that leachate reaches a well (e.g., the reduction factor for arsenic is 244). Depending on numerous characteristics of the site and contaminant, a well in the vicinity of sludged fields may not receive the benefit of that great a reduction.

The generally held belief that metals in sludges cannot readily leach has been called into question by recent data (Carnobrocco et al., 1996; Richards et al., 1997). Working with undisturbed soil columns rather than the repacked soil columns used in previous experiments, the potential for leaching of metals has been demonstrated. In undisturbed soils, channels created by worms and roots and other processes ('macropores') provide for rapid downward water movement that can limit the adsorption or chemical interactions between the percolate and the soil. Transport appears to be governed by this fast and far-reaching preferential flow and by the relatively non-reactive forms of some of the metals, i.e., as soluble and/or colloidal complexes. Most sludge research to date has overlooked this phenomenon. High pH (such as in alkaline-stabilized sludge products) can actually increase leaching, since the solubility of some organically complexed metals is high under such conditions. Examination of field research data collected over the years by many researchers shows that typically up to half of some metals applied in sludges appear to be 'missing' from the soil and may have leached. Transport of a range of metals in percolating water has been directly observed at a field site where sludge was applied more than a decade earlier (McBride et al., 1997).

Concentrations of Cd, Ni and Zn exceeded US drinking water standards in leachate collected from lysimeters
Land application of sewage sludges

immediately below soils receiving sludge 20 years after a large amount of sludge had been applied to agricultural soils (Richards et al., 1997). Calculations of impacts on groundwater indicate the potential for violation of drinking water standards in the vicinity of sludge application sites (Richards, 1997). The US EPA risk assessment assumptions may not be sufficiently protective of wells near sludge application sites. Further investigation is needed to ascertain if there is a significant concern for both metals and pathogens in groundwater, as pathogens could migrate by preferential flow as well.

7.9.2 Only 0.24% of the model watershed receives sludge

There is concern for the quality of surface water in the vicinity of sludge application sites. There is potential for contaminants including metals and pathogens to be present in surface runoff and in shallow percolating water that reaches tile drains which are common beneath fields in the northeast. The US EPA risk assessment used unrealistic assumptions regarding dilution of contaminants.

A key parameter in the surface water exposure pathway is the amount of the watershed that has received sludge. The Part 503 risk assessment assumes that only 1074 ha out of a 440 300 ha watershed receives sludge. This may be applicable to a very large watercourse, but in a local area a far greater proportion of a smaller stream's watershed may have received sludge. Figure 1 shows the size of such a drainage basin (in the upper Hudson River in NYS) and depicts the tiny fraction assumed to receive sludge applications. US EPA's choice is thus not protective of the smaller streams in agricultural areas where sludge is applied. For example, a change in the percentage of watershed area receiving sludge to assume a 100 acre farm receiving sludge in a 1000 acre watershed would lower calculated limits for PCBs by more than 95% compared with the US EPA assumptions (Clitland, 1995).
Figure 1  Map of New York showing example of size of drainage basin and proportion receiving sedges under Part 301 risk assessment assumptions.
Recent laboratory and greenhouse research has shown that some metals present in sludges (Cu, Mo, Ni) are relatively soluble in the very alkaline product created by the mixing of sludge with cement kiln or fly ash and lime. Much smaller proportions of a number of other metals (Ag, Cd, Hg, Pb, Zn) were immediately water-soluble (McBride, 1998b; Richards et al., 1997). This solubility, probably the result of complexation with dissolved organic substances, suggests the potential for the movement of the soluble metals from land-applied alkaline sludge products into surface waters and shallow groundwater under some conditions. Further work is necessary to investigate field conditions. The sensitivity of aquatic organisms to dissolved copper suggests that a large dilution factor would be required to prevent toxicity in surface waters receiving run-off from areas where such sludge products have been applied to the surface (McBride, 1998b).

7.10 Not protective of agricultural productivity

7.10.1 Phytotoxicity and crop yield reduction

Appropriate use of sludges on agricultural lands has positive effects on plant growth through the addition of nutrients and organic matter. Excessive accumulation of certain metals, such as copper, zinc and nickel, reduces crop yields. There is thus a need to assess not only short-term benefits, but long-term risks of yield reduction due to accumulation of contaminants over time. This pathway (Pathway 8, Table 3) was evaluated by US EPA in the risk assessment and has also been considered by agronomists at the land grant universities in the northeast (Pennsylvania State University, 1985). The cumulative limits for copper, nickel and zinc in the Part 503 regulations are approximately ten times those recommended by the northeast soil scientists.

Acceptable cumulative levels of nickel and zinc depend on calculations of the uptake coefficients and of the yield reductions that are associated with the concentration of metals in the crop tissue resulting from uptake. As discussed above, the US EPA risk assessment used values for uptake coefficients that are not conservative. Not all elements exhibiting phytotoxic impacts can be assessed with this plant uptake model. For copper, for example, roots are affected by toxicity before tissue levels in the crop are elevated significantly. Assessing the risk of yield reduction based on uptake coefficients and tissue levels is not appropriate for such elements.

The yield reductions calculated in the EPA risk assessment are higher than most growers would find acceptable. For some growers, any reduction would be unacceptable. In one method, US EPA calculated the cumulative load of zinc allowed under Part 503 based on the probability that it could result in a 50% yield reduction. Although the US EPA calculations assert a low probability of such a reduction, a standard based on such a calculation is not useful since such a high yield reduction is clearly unacceptable. Recalculation indicates that with a loading of approximately one-tenth of the zinc standard in Part 503, yield reductions of 10% are likely in 10% of the soil-crop combinations in the US EPA database (Bouldin, 1997).

Protecting agricultural productivity, especially in the northeast USA where soils are acid and sensitive crops such as beans or alfalfa are raised (Table 10), makes it prudent to restrict cumulative additions of phytotoxic metals.

Based in part on values derived by a group of northeastern US soil scientists, who recommended a sliding scale for phytotoxic metal loading limits according to soil texture (Pennsylvania State University, 1985) the recommendations of this paper (Table 11) for copper, zinc and nickel are close to one-tenth of the Part 503 cumulative load standards. The
recommendations in this paper also take into account soil metal levels known to cause toxicity to crops in specific field experiments, as well as a reassessment of the US EPA database on phytotoxicity applying more conservative assumptions.

7.10.2 Soil microorganisms

Experiments at a number of long-term sludge-treated field sites in the UK, Germany and Sweden, where metals had accumulated and persisted for decades, have shown that microbial functions in soils can be adversely affected at metal concentrations that are not necessarily toxic to crops. Rhizobium populations in the soil can be reduced when the zinc, copper, nickel and cadmium concentrations reach 150–200, 27–48, 11–15 and 0.8–1.0 mg/kg (ppm), respectively, in the soil (McGrath et al., 1995). Other microorganisms, such as free-living nitrogen-fixing heterotrophic bacteria and phototrophic cyanobacteria, are sensitive to heavy metals at these or even lower levels. The soil microbial biomass is reduced at zinc, copper, nickel and cadmium concentrations ranges of 180–857, 70–384, 22–35 and 0.7–6.0 mg/kg, respectively. Generally, higher soil pH and increased content of clay and organic matter in the soil mitigate toxicity, shifting the limiting concentrations toward the higher end of these ranges. Based on the negative effects observed on soil microbes, the advised limit in the UK for zinc in soils was adjusted downward from 300 to 200 mg/kg (UK Dept. of the Environment, 1995). The risk assessment for Part 503 does not set limits based on soil microorganisms (McGrath et al., 1994; US EPA, 1992).

Table 10  Relative sensitivity of crops to sludge-applied copper, nickel and zinc

<table>
<thead>
<tr>
<th>Very sensitive</th>
<th>Sensitive</th>
<th>Tolerant</th>
<th>Very tolerant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chard</td>
<td>Mustard</td>
<td>Cauliflower</td>
<td>Corn</td>
</tr>
<tr>
<td>Lettuce</td>
<td>Kale</td>
<td>Cucumber</td>
<td>Sodagrass</td>
</tr>
<tr>
<td>Beet</td>
<td>Spinach</td>
<td>Zucchini squash</td>
<td>Smooth brome grass</td>
</tr>
<tr>
<td>Carrots</td>
<td>Broccoli</td>
<td>Oat</td>
<td></td>
</tr>
<tr>
<td>Turnip</td>
<td>Radish</td>
<td>Orchardgrass</td>
<td></td>
</tr>
<tr>
<td>Peanut</td>
<td>Tomato</td>
<td>switchgrass</td>
<td></td>
</tr>
<tr>
<td>Clovers</td>
<td>Birdsfoot trefoil</td>
<td>Kentucky Bluegrass</td>
<td></td>
</tr>
<tr>
<td>Crownvetch</td>
<td>Soybean</td>
<td>fescues</td>
<td></td>
</tr>
<tr>
<td>Alfalfa(^b)</td>
<td>Snapbean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunflower(^c)</td>
<td>Timothy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bentgrasses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ryegrass</td>
</tr>
</tbody>
</table>

\(^{a}\) Adapted from Chaney and Hundermann in US EPA, 1992.
\(^{b}\) Hydroponic study (Ibekwe et al., 1996).
\(^{c}\) Metal salts added to soil (Gorlach and Gambers, 1992).

7.10.3 Animal health

Animals that graze on land to which sludge has been applied to the surface will ingest sludge along with the plants and
some soil. Grazing cattle ingest from 1–18% of their dry matter intake as soil and sheep may ingest as much as 30% depending upon management and the seasonal supply of grass (Thornton and Abrahams, 1983). The US EPA risk assessment assumes a soil ingestion of 1.5% of diet. This is a non-conservative estimate based on use of best management practices. Incorporation of sludge into the soil can help prevent impacts to animal health, but the practice is generally to apply sludge to the surface in pasture land applications. US EPA regulations do not restrict grazing on lands to which Class A sludges have been applied and allow grazing 30 days after application of Class B sludges. The adequacy of this one-month period for protection against pathogen transmission has been questioned, with an 18-month waiting period suggested (National Research Council, 1996). Denmark and Sweden do not allow application of sludges of any kind to lands used for grazing (Matthews, 1996).
Table 11 Recommended maximum concentrations of contamination in soils (values are in ppm).

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Typical NYS sludge conc.</th>
<th>Typical NYS ag. soil</th>
<th>Rec'd soil max conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>3–10</td>
<td>&lt;9</td>
<td>1–10(^2)</td>
</tr>
<tr>
<td>Cadmium</td>
<td>2–15</td>
<td>0.2</td>
<td>3</td>
</tr>
<tr>
<td>Chromium</td>
<td>50–500</td>
<td>52</td>
<td>4</td>
</tr>
<tr>
<td>Copper</td>
<td>300–1500</td>
<td>20</td>
<td>40–100(^5)</td>
</tr>
<tr>
<td>Lead</td>
<td>100–300</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Mercury</td>
<td>1–10</td>
<td>0.1</td>
<td>7</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>5–50</td>
<td>1.0</td>
<td>8</td>
</tr>
<tr>
<td>Nickel</td>
<td>10–150</td>
<td>16</td>
<td>25–50(^9)</td>
</tr>
<tr>
<td>Selenium</td>
<td>2–6</td>
<td>0.4</td>
<td>110</td>
</tr>
<tr>
<td>Zinc</td>
<td>500–2500</td>
<td>60</td>
<td>75–200(^{11})</td>
</tr>
<tr>
<td>PCBs</td>
<td>&lt;5</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

1 Based on a survey of NYS sludges (NYS DEC, 1994).
2 Risk assessment based on child ingestion and 0.0003 RF suggests 1 ppm concentration limit for sludges used at home (Texas Natural Resources Commission, 1996). Background soil often exceeds 1 ppm so a range is suggested as potentially acceptable.
3 A limit of 2 ppm is recommended due to crop uptake concerns.
4 The chemical form of chromium is of critical importance. Chromium(III) is of little concern because it forms relatively insoluble compounds, whereas chromium(VI) is highly toxic and soluble. Little information is available on the ionic status of chromium in sludged soils and the potential for chromium oxidation in sludged soils.
5 Concentration limit to prevent phytotoxicity based on the northeast guidelines (Pennsylvania State, 1985). 40 ppm for sandy soils, 60 ppm for fine sandy loam to silt loam, 100 ppm for silt to clay soils.
6 The lowest attainable levels are desirable since negative human impacts continue to be discovered at increasingly low levels. Child ingestion is the primary concern.
7 The lowest attainable levels are desirable. Ecotoxicological and groundwater impacts are likely to be the determining factor.
8 Excessive molybdenum can result in molybdenum toxicity (induced copper deficiency) in ruminants. A minimum dietary Cu : Mo ratio of 2 is advised. Testing forages for molybdenum and copper periodically and preventing ruminants from grazing on land to which sludge has been applied and not incorporated into the soil is recommended.
9 Concentration limit to prevent phytotoxicity based on the northeast guidelines (Pennsylvania State, 1985). 25 ppm for sandy soil, 35 ppm for fine sandy loam to silt loam, 50 ppm for silt to clay soils.
10 This may be high. Test forages periodically that concentration does not exceed that considered toxic to animals.
11 Concentration limit to prevent phytotoxicity based on the northeast guidelines (Pennsylvania State, 1985). 75 ppm for sandy soils, 130 ppm for fine sandy loam to silt loam, 200 ppm for silt to clay soils. Higher concentrations can be tolerated in calcareous soils.
12 Based on EPA recommended soil levels (US EPA, 1990).
Molybdenum (Mo) and selenium (Se) can be readily taken up by plants (high uptake coefficients) at concentration levels toxic to foraging animals. There is a narrow range between necessary nutrient levels and toxicity for these elements, and naturally occurring levels of these metals are highly variable within US soils. Molybdenum toxicity in ruminant animals (Mo-induced Cu deficiency) is associated with forages containing 10–20 mg/kg of Mo (or more) with relatively normal concentrations (4–10 mg/kg) of Cu in the forage (Kubota and Allaway, 1972). Molybdenum availability in soils is enhanced by alkaline soil conditions, high phosphate fertilization, and high organic matter content (Fleming, 1980). Under such conditions, 2–3 mg/kg of total Mo in soil has produced forages with toxic concentrations for ruminants. Selenium toxicity in ruminants occurs if forages contain 5–10 mg Se/kg (Jacobs, 1989). Calcareous or alkaline soils with as little as 0.5–2.0 mg/kg of total Se can produce forages with Se at toxic levels (Parves, 1985). Studies of uptake into red clover (McBride et al., in preparation) and forage grass (Nguyen and O’Connor, 1997) suggest that uptake is sufficiently high to call for limiting molybdenum additions to soils where forage is grown.

Most of the concerns about metal contamination following land application are related to long-term soil loading and are thus unlikely to result in impacts in the short term. In contrast, the potential for molybdenum toxicity can be an immediate concern. Application of sludges could pose some risk because sludge Mo and Se are relatively soluble in sludges and are present at higher concentrations than in most soils. The high pH of alkaline-stabilized sludge products is conducive both to water solubility and to plant absorption of these elements. As with other calculations in the risk assessment on which the Part 503 rules are based, the geometric mean of uptake coefficients from the very few studies of Mo uptake were used. This resulted in a cumulative limit of 18 kg of Mo per hectare, which was subsequently deleted from the rules, so that presently there is only a ceiling concentration limit of 75 ppm for Mo. The assumption that increased copper uptake resulting from sludge application would be adequate to offset the Mo taken up by crops is not supported by research data (McBride et al., in preparation, Webber et al., 1983). Uptake of Mo into legumes is relatively high, particularly from alkaline sludge products commonly used in NYS. Since a dairy herd may predominantly be fed on forage such as alfalfa (a legume) from a particular farm, protection of the health of ruminant livestock whose diet is forage grown on sludge-amended soils suggests that limiting soil concentrations of Mo to approximately 2 mg/kg, and limiting loading rates to 1–2 kg of Mo per hectare may be necessary (McBride, 1998c). In the UK, a maximum soil concentration of 4 mg/kg is advised.

Iron, which can be high in sludges, can also cause toxicity to grazing animals by direct ingestion of sludge retained on forage. It is not one of the elements for which sludges must be tested or for which there are standards. Ingestion of soil is also an important and possibly even dominant pathway for lead and arsenic transfer into grazing animals (Thornton and Abrahams, 1983).

Animal health is sensitive to the ratios of different metals in their diets, so analysis of the various metals in both the sludge is well as other components of the animal diet needs to be conducted for the particular type of animal being raised.

7.11 Inadequate assessment of pathogen risks

Sludges contain a high concentration of pathogenic viruses, bacteria and parasites. In fact, most microbes that are present in raw sewage are concentrated in sludge. The levels and types are dependent in part on the health of the population contributing to the sewage plant and will vary over time as the health of the population varies. The type of sludge treatment also affects the viability of pathogens. High treatment temperatures (>56 °C) are relatively effective in killing pathogens.

Prior to land application, sludges must be treated to reduce pathogen levels. Class B sludges still contain significant levels of pathogens (Straub et al., 1993). Class A sludges and sludge products have received higher levels of treatment (generally hotter for longer). If not killed, the small size of viruses and other pathogens may potentially permit them to leach...
to groundwater (Powelson et al., 1991). This may be the most likely route of significant human exposure to pathogens from land applied Class B sludges (Straub et al., 1993). There is a need for field data regarding the movement of pathogens, particularly where groundwater is found at shallow depths and soils are conducive to preferential flow. Few viruses have been studied in regard to sludges and unfortunately unlike viruses behave differently (Dubovi, 1997). No monitoring is currently required for viruses in sludge or sludge products.

Bacteria, unlike either viruses or parasites, can actually increase in numbers during treatment under certain conditions. Regrowth in composts that were not fully stabilized has been documented (Soares et al., 1995). Thus a compost could have met processing requirements and standards for E. coli or Salmonella (US EPA requires testing for one or the other for Class A), but could subsequently have significant bacterial levels if regrowth occurs after testing.

Parasites such as Helminth ova are relatively resistant to inactivation when present as cysts. In Class B sludges they could be present in significant numbers and they have been documented to survive for many years in soils (Bowman, 1997). Little is known about the presence and viability of Cryptosporidium and Giardia in sludges. High levels of cysts of Giardia have been detected in sludges, but they may be inactivated (non-infective). More research is needed to assess the risks posed by these protozoa (Straub et al., 1993).

Generally cooler, wetter conditions such as those found in the northeastern US favour survival of pathogens in the soil.

7.12 Ecological impacts inadequately assessed

The US EPA risk assessment addressed only the impact of copper on earthworms, and of cadmium, lead and PCBs on shrews using only field data from agricultural sites.

Recognizing the limitations of this analysis, an EPA-funded study has been carried out at Oak Ridge National Laboratory to assess the current state of knowledge on ecological impacts of sludge application. This study, which examined impacts to plants and animals, has not yet been released. Preliminary results indicate that for some contaminants, ecological risk may become the most limiting pathway. The standards for soil quality derived from the Dutch risk assessment found ecotoxicologic impacts to be the most sensitive measures requiring the lowest standards (van den Berg et al., 1993; Croomentuijn et al., 1994; Swartjes, 1997). The paucity of ecological effects data used in developing Part 503 rules is likely an important reason why these rules are far less restrictive (McGrath et al., 1994). The Part 503 rules will need to be reassessed when the results of the Oak Ridge study are available to determine what changes in contaminant levels may be needed to protect ecological systems.

Efforts to curb emissions of mercury are underway in New York state and elsewhere, owing to its toxicity and propensity to bioaccumulate. Recent research has demonstrated that some of the mercury in land-applied sludges volatilizes, and that the concentration of mercury in air over sludge sites contains 10 to 100 times the background concentration (Carpi and Lindberg, 1997). The EPA risk assessment assumes that no mercury is volatilized from land application. A review of the risk assessment in the light of the new findings suggests that, for most pathways, there is not a substantial concern, but that the potential to impact local waterbodies through redeposition of methylmercury may be significant and warrants further analysis (Carpi, 1997). Worldwide sludge land application is estimated to emit to the air about one-eighth of the amount of mercury discharged by power plants or by municipal waste incinerators (Carpi and Lindberg, 1997).

7.13 Inadequate enforcement and oversight

Enforcement (or the lack thereof) of rules and practices, such as use of agricultural best management practices, is a significant issue. This concern is magnified as both federal and state budget cuts force a reduction in environmental staff.
US EPA has said that they view the 503 regulations as largely 'self-implementing'. Under the Part 503 regulations, sludge producers are required to follow processing procedures and perform monitoring. Periodic reporting is required, but no permits are issued for land application (note that NYS currently requires site-specific permits for Class B applications) and no record-keeping of application is required for Class A 'EQ' sludges. Such a system gives neighbours of land application sites and others little confidence that rules will be followed. Without permits or records, there is no way for concerned parties to know even whether or not sludge products have been applied. It may also prove difficult for anyone to keep track of the cumulative load of metals applied from non-'EQ' sludges. Interestingly, even in Ontario where records were required, researchers found that they could not locate sludge application records because sludge haulers did not turn over records when contracts were transferred (OMAFRA, 1995).

Adherence to best management practices, some of which are specified in federal and state rules, is of critical importance in preventing negative impacts from sludge application. Further management practices may be recommended by agricultural advisors (e.g. Cornell Cooperative Extension, 1997; Cornell Waste Management Institute, 1997a). Without oversight there is concern that even required practices, such as application at no higher than agronomic rates necessary to meet crop nutrient requirements or maintenance of setback distances from watercourses, may not be followed, leading to water pollution.

7.14 No labelling of sludges or sludge products

For sludge and sludge products that meet the EQ standards set in Part 503, no labels or information for users are required. Thus information on the quality of the product is not readily available to potential users. Labelling is needed that includes analytical information about the concentrations of contaminants and nutrients in the material. Growers and their advisors need the information to make appropriate decisions about nutrient management. Additionally, if those electing to use a sludge or sludge product want to select the cleanest possible material or to follow more stringent recommendations (such as those in Table 11), they require information on contaminant concentrations.

8 Conclusions

US national standards for the land application of sewage sludges are markedly less stringent than those of many other countries. The standards were developed through an extensive risk assessment, but data gaps and non-protective policy choices result in regulations that are not adequately protective of human health and the environment.

The exposure pathways and significance of impacts for home use, agricultural use and other applications, such as to golf course turf and roadside vegetation, are significantly different. For home use, more stringent standards are appropriate, reflecting the greater likelihood of child ingestion of sludge and the potential for less careful management. For use on agricultural lands, phytotoxicity concerns are of greater significance. For many other uses, these pathways are of less import, which might result in less stringent standards.

The application of sewage sludges to agricultural lands and home grounds should be based on acceptable resultant contaminant concentrations in the receiving soil. Where a single set of standards is applied regardless of end use, the limits should reflect the most limiting pathway. Table 11 suggests maximum soil concentrations appropriate for soils in the northeastern US. The numbers are for recommended maximum soil concentrations, and reaching these levels will depend on initial soil concentrations, the concentration of the contaminant in the sludge, the total loading of sludge applied and any losses (e.g. through leaching). Limiting application to these maximum levels will also help to prevent excessive
Land application of sewage sludges

contamination with currently unregulated contaminants by limiting the amount of sludge that could be applied over time. Sludges with contaminant concentrations at or below the levels listed for maximum soil concentrations in Table 11 could be applied in unlimited cumulative amounts without exceeding the recommended soil concentrations for contaminants. (Application at appropriate annual rates to ensure that nutrient levels are not exceeded is still required.) For sludges exceeding the Table 11 recommended maximum concentrations, calculations should be made to determine the cumulative amount of sludge that could be applied without exceeding the recommended soil concentration.

In addition to testing of receiving soils, monitoring for a number of currently unregulated contaminants should be required, and test results should be provided to potential users to enable them to compare different sludges. Tests should include synthetic organic chemicals (including dioxins and furans), antimony, beryllium, boron, chromium, and silver. If animals will be grazing or if forage is grown, copper, fluoride, iron, molybdenum and selenium should be monitored and dietary metal ratios considered.

Further research is needed on nitrogen release rates, the movement of metals and pathogens to ground and surface water, the presence and impact of synthetic organic contaminants and of contaminants eliminated from US EPA Round 2 consideration due to inadequate data, and ecological impacts (including soil organisms). Additional standards should be developed to address the research findings.

Policies should be designed to support pollution prevention to promote continued improvement in sludge quality. This includes establishing outreach and technical assistance programmes, as well as regulations that minimize the use of undesirable contaminants, especially those which are persistent in the environment. ‘Clean sludge’ standards should be set at levels low enough to motivate minimization of pollutant concentrations.

References


Chaney, R.L. (1995) Summary of (1) differences between USDA’s views and those of EPA under 40 CFR 503; (2) differences in the views of M.B. McBride and R.L. Chaney regarding the fate of potential effects of heavy metals in biosolids beneficially used on cropland; and (3) needed research to support long-term biosolids utilization on cropland. Letter from Chaney to A.R. Rubin, J.M. Walker, M.B. McBride and others.


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Land application of sewage sludges


Land application of sewage sludges


Land application of sewage sludges


Tideström, H. (1997b) 'Swedish regulation on the use of sewage sludge in agriculture: why is it important to use sludge as a fertilizer in agriculture?', Specialty Conference on Management and Fate of Toxic Organics in Sludge Applied to Land, Copenhagen, Denmark, April 30–May 2, 1997.


Case for Caution Revisited: Health and Environmental Impacts of Application of Sewage Sludges to Agricultural Land

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Posted at: cwmi.css.cornell.edu/case.pdf

September 2008 (updated March 2009)

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Most pages copied relate to pathogens.

Over the past 15 years since the 40CFRPart503 rules were promulgated, there have been many new scientific findings regarding the environmental and health implications of the application of sewage biosolids to agricultural soils. Many of these findings show increased risks, risks that were not assessed as part of the risk assessment that USEPA used as the basis for the standards promulgated in 1993. These new findings support the rational basis for U.S. EPA to revise the federal regulations and for states and municipalities to regulate the application of sewage biosolids in order to protect their citizens and the land-base.
Agricultural soils are a unique and valuable resource. Protecting agricultural soils requires anticipating and avoiding potential harms since once contaminated with persistent pollutants, the damage will remain for the foreseeable future. Once contaminated, stopping the application of pollutants such as metals and many organic chemicals that are in sewage biosolids will not correct the problem. The contamination will remain for decades or centuries. It is thus critical to prevent this essentially permanent degradation.

**Current Rules are Based on Outdated and Inadequate Science**

As pointed out by the National Research Council, the risk assessment on which current rules are based was conducted nearly 20 years ago and is outdated. A tremendous amount of new knowledge about the presence and behavior of chemicals and pathogens has been developed in the last decades.


The U.S. EPA rules for using treated sewage sludge as fertilizer are based on outdated science, according to a report released in July from the National Academies, National Research Council (NRC). The report, which was produced after two years of study, recommends new research to update the rules. In particular, EPA needs to investigate the growing number of complaints about illnesses and even deaths from exposure to Class B sludge.

Under a 1993 Clean Water Act rule, treated sewage sludge, or biosolids, can be applied to land with certain limitations. Pathogen-containing Class B sludge, which makes up the bulk of sludge applied to land, may be used as fertilizer in situations in which public exposure is limited. Class A sludge can be applied on public sites. Of the 5.6 million tons of sewage sludge generated in the United States each year, 60% ends up being applied as fertilizer.

The agency needs to investigate the potential health effects from sludge exposure and find out more about the pathogens in sludge, according to committee chair Thomas Burke, a public health professor at Johns Hopkins University in Baltimore, Md. There is a serious lack of health-related information about populations exposed to treated sludge, adds Burke.

The NRC report also recommends a new national sludge survey to measure sludge contaminants, which would update the previous 1988 survey. This earlier study was unreliable and needs to include newly recognized chemicals of potential concern, including polybrominated biphenyl ether flame retardants, pharmaceuticals, and personal care products such as shampoos and soaps, says the NRC committee. EPA also needs to redo its assessment of the human health risks posed by metals in sludge. The revised risk assessments should reflect the potential for variations in climate, water flow, and sludge characteristics. The report also notes that more rigorous enforcement of the current standards is needed.”


The last EPA survey of sewage sludges nationally occurred in 1988. The EPA 503 rule was based in large part on the levels of contaminants detected in that survey. Many contaminants have emerged since then as being potentially harmful in the environment. This new survey by
EPA provides much-needed information on chemicals likely to be found in sewage sludges across the country.

In 2006 and 2007, the USEPA collected samples of sewage sludge from 74 randomly-chosen wastewater treatment facilities in 35 states. The sampled facilities are considered to be representative of the nation’s 3,337 largest treatment facilities. The samples were tested for 145 chemicals, including metals, PAHs, nitrogen, phosphorus, flame retardants (PDBEs), pharmaceuticals, hormones, and steroids.

It is notable that, while the median concentrations of toxic metals, trace elements, and organic chemicals were generally many times lower than the highest concentrations observed, quite high concentrations of one or more chemicals were measured in a substantial fraction of the 74 treatment plants. This survey, while quite informative, is not able to assess variability of sludge composition over time, as the sewage sludge was sampled at a single time point. The survey showed some very high concentrations of specific chemicals at one or more treatment plants, with peak concentration for the following elements being:

<table>
<thead>
<tr>
<th>Element</th>
<th>Concentration (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium</td>
<td>3.460</td>
</tr>
<tr>
<td>Mercury</td>
<td>8.26</td>
</tr>
<tr>
<td>Fluoride</td>
<td>234</td>
</tr>
<tr>
<td>Nickel</td>
<td>526</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>132</td>
</tr>
<tr>
<td>Copper</td>
<td>2,580</td>
</tr>
<tr>
<td>Silver</td>
<td>856</td>
</tr>
<tr>
<td>Tin</td>
<td>522</td>
</tr>
<tr>
<td>Cobalt</td>
<td>290</td>
</tr>
<tr>
<td>Vanadium</td>
<td>617</td>
</tr>
<tr>
<td>Iron</td>
<td>299,000</td>
</tr>
<tr>
<td>Zinc</td>
<td>8,550</td>
</tr>
<tr>
<td>Lead</td>
<td>450</td>
</tr>
</tbody>
</table>

This list is only a sampling of the inorganic contaminants reported in the survey.

In many cases, the highest contaminant concentrations were found in the smallest wastewater treatment plants included in the survey (1-10 MGD plant). The very high Fe sludge (reported in the list above) also had very high phosphorus, attributable to a tertiary treatment process using iron salts to remove P from wastewater. As tertiary treatment to lower P in treated water is likely to increase in the future, we can perhaps expect to see more sewage sludges with very high Fe content. Although ferric iron is not a toxic metal when mixed into soil, it has been known to be toxic to cattle where sludge was applied directly to pasture.

The high levels of several unregulated or inadequately regulated and potentially toxic metals (e.g., silver, molybdenum, tin) are a concern for land application. It should also be of great concern for land application that the measured concentrations of persistent organic pollutants (POPs), including the brominated fire retardants (PBDEs), and the antimicrobial chemicals (triclosan and triclocarban) are so high in some sludges. These POPs are likely to build up in soils with repeated application, and have the potential to bioconcentrate in foraging animals and therefore in meat and milk. One of the eleven PBDE congeners measured (BDE 209) reached a concentration of 17,000 µg/kg in one sludge, and the highly bioaccumulative BDEs 47 and 99 reached levels as high as 5,000 µg/kg. Triclocarban and triclosan had peak concentrations of 441,000 and 133,000 µg/kg in separate sludges. The impact of these persistent chemicals on soil organisms, the safety of food crops, and the environment is not known at this time because of very limited research on their behavior and toxicity in soil.
The prevalence of a wide array of pharmaceuticals, steroids and hormones, as summarized in the EPA report, is a clear indication that the sewage treatment process does not degrade these organic chemicals effectively, and sewage sludge therefore becomes the repository for a large fraction of the chemicals used commercially and domestically.

New information on the impacts of the regulated contaminants

Endocrine Disruption

New information indicates that some of the handful of metals that are regulated under Part 503 pose risks that were not evaluated in the risk assessment upon which the Part 503 USEPA rules are based. The whole subject of endocrine disruption due to exposure to chemicals in the environment (i.e. our knowledge regarding the disruption to human and animal hormones and reproductive systems posed by a number of chemicals) has developed since those rules were promulgated.

Examples of several of the regulated metals for which new risks have been identified are lead and cadmium. Recent work shows that lead has a number of effects on sperm and may play a role in the rising infertility that is being observed. Cadmium has been shown to mimic estrogen and may be related to increased breast cancer. These metals are contained in all sewage biosolids. The contaminant limits in Part 503 do not include any recognition of these endocrine-disrupting impacts.


**BACKGROUND:** Lead remains in high levels in the environment and is known to reduce fertility in animal models, but a direct link between lead exposures and human infertility has not yet been established. **METHODS:** In a prospective, double-blind study of the metal ion levels and sperm function, semen was obtained from partners of 140 consecutive women undergoing their first IVF cycle. Lead in seminal plasma was determined by atomic absorption spectroscopy. Motile sperm populations were assessed for surface receptors for mannose binding, and the ability to undergo premature ('spontaneous'), and free mannose-induced acrosome reactions. Fertile donor ($n=9$) sperm were exposed to exogenous lead during capacitating incubations and then assessed for mannose receptor expression and acrosome loss. **RESULTS:** Lead levels were negatively correlated with IVF rates. Lead levels were negatively correlated to two of the three sperm function biomarkers (mannose receptors, mannose-induced acrosome reactions). Lead levels positively correlated with the spontaneous acrosome reaction. These findings were mimicked by in-vitro exposure of fertile donor sperm to lead. **CONCLUSIONS:** Multiple sperm parameters are affected as lead levels rise. Increased lead levels may contribute to the production of unexplained male infertility.

*Cadmium mimics the in vivo effects of estrogen in the uterus and mammary gland*. Michael D Johnson, Nicholas Kenney, Adriana Stoica, Leena Hilakivi-Clarke, Baljit Singh, Gloria Chepko,
through the soil columns was complexed with DOM. The results show that DOM can facilitate herbicide movement through soil and that sewage sludge-derived DOM may lead to enhanced chemical transport in sludge-amended soils.


Pesticide leaching in arid field soils was increased by the application of sewage sludge.

Aerosols and human health effects

Health effects from exposure to sewage sludge during land spreading have been reported frequently, but these reports have been considered anecdotal and not confirmatory evidence that illness can result from aerosols released during application. Few studies have actually addressed symptoms related to land application. A study of people living near application sites compared with a control population showed statistically elevated health-related symptoms in the exposed population. Another study of 48 people located near 10 land application sites indicated that chemical irritants and pathogens in sludge may interact to cause symptoms.

Several recent publications have tracked aerosol emissions from fields during sewage sludge (biosolids) application and tillage. DNA-based microbial tracking has proven that wind is a critical factor in the formation and off-site migration of aerosols. Biosolids aerosols of inhalable size (< 10 μm), containing bacteria such as coliforms and Health survey of residents living near farm fields permitted to receive biosolids.


Abstract: The authors studied the health status of residents living in Wood County, OH, near farm fields that were permitted to receive biosolids. They mailed a health survey to 607 households and received completed surveys from 437 people exposed to biosolids (living on or within 1 mile of the fields where application was permitted) and from 176 people not exposed to biosolids (living more than 1 mile from the fields where application was permitted). The authors allowed for up to 6 surveys per household. Results revealed that some reported health-related symptoms were statistically significantly elevated among the exposed residents, including excessive secretion of tears, abdominal bloating, jaundice, skin ulcer, dehydration, weight loss, and general weakness. The frequency of reported occurrence of bronchitis, upper respiratory infection, and giardiasis were also statistically significantly elevated. The findings suggest an increased risk for certain respiratory, gastrointestinal, and other diseases among residents living near farm fields on which the use of biosolids was permitted. However, further studies are needed to address the limitations cited in this study.

Background: Fertilisation of land with processed sewage sludges, which often contain low levels of pathogens, endotoxins, and trace amounts of industrial and household chemicals, has become common practice in Western Europe, the US, and Canada. Local governments, however, are increasingly restricting or banning the practice in response to residents reporting adverse health effects. These self-reported illnesses have not been studied and methods for assessing exposures of residential communities to contaminants from processed sewage sludges need to be developed.

Methods: To describe and document adverse effects reported by residents, 48 individuals at ten sites in the US and Canada were questioned about their environmental exposures and symptoms. Information was obtained on five additional cases where an outbreak of staphylococcal infections occurred near a land application site in Robesonia, PA. Medical records were reviewed in cases involving hospitalisation or other medical treatment. Since most complaints were associated with airborne contaminants, an air dispersion model was used as a means for potentially ruling out exposure to sludge as the cause of adverse effects.

Results: Affected residents lived within approximately 1 km of land application sites and generally complained of irritation (e.g., skin rashes and burning of the eyes, throat, and lungs) after exposure to winds blowing from treated fields. A prevalence of *Staphylococcus aureus* infections of the skin and respiratory tract was found. Approximately 1 in 4 of 54 individuals were infected, including 2 mortalities (septicaemia, pneumonia). This result was consistent with the prevalence of *S. aureus* infections accompanying diaper rashes in which the organism, which is commonly found in the lower human colon, tends to invade irritated or inflamed tissue.

Conclusions: When assessing public health risks from applying sewage sludges in residential areas, potential interactions of chemical contaminants with low levels of pathogens should be considered. An increased risk of infection may occur when allergic and non-allergic reactions to endotoxins and other chemical components irritate skin and mucus membranes and thereby compromise normal barriers to infection.

*Particulate matter composition and emission rates from the disk incorporation of class B biosolids into soil.* Tania Paez-Rubio, Xin Huab, James Anderson, Jordan Peccia, 2006. Atmospheric Environment, 40:7034-7045

Abstract: Biosolids contain metal, synthetic organic compound, endotoxin, and pathogen concentrations that are greater than concentrations in the agricultural soils to which they are applied. Once applied, biosolids are incorporated into soils by disking and the aerosols produced during this process may pose an airborne toxicological and infectious health hazard to biosolids workers and nearby residents. Field studies at a Central Arizona biosolids land application site were conducted to characterize the physical, chemical, and biological content of the aerosols produced during biosolids disking and the content of bulk biosolids and soils from which the aerosols emanate. Arrayed samplers were used to estimate the vertical source aerosol concentration profile to enable plume height and associated source emission rate calculations. Source aerosol
Surfactants are present in sludges in high concentrations. Degradation may result in more toxic compounds. Aerobic conditions are necessary for more complete degradation of some surfactants to more benign products.


Abstract: Sewage sludges are residues resulting from the treatment of wastewater released from various sources including homes, industries, medical facilities, street runoff and businesses. Sewage sludges contain nutrients and organic matter that can provide soil benefits and are widely used as soil amendments. They also, however, contain contaminants including metals, pathogens, and organic pollutants. Although current regulations require pathogen reduction and periodic monitoring for some metals prior to land application, there is no requirement to test sewage sludges for the presence of organic chemicals in the U.S. To help fill the gaps in knowledge regarding the presence and concentration of organic chemicals in sewage sludges, the peer-reviewed literature and official governmental reports were examined. Data were found for 516 organic compounds which were grouped into 15 classes. Concentrations were compared to EPA risk-based soil screening limits (SSLs) where available. For 6 of the 15 classes of chemicals identified, there were no SSLs. For the 79 reported chemicals which had SSLs, the maximum reported concentration of 86% exceeded at least one SSL. Eighty-three percent of the 516 chemicals were not on the EPA established list of priority pollutants and 80% were not on the EPA's list of target compounds. Thus analyses targeting these lists will detect only a small fraction of the organic chemicals in sludges. Analysis of the reported data shows that more data has been collected for certain chemical classes such as pesticides, PAHs and PCBs than for others that may pose greater risk such as itrosamines. The concentration in soil resulting from land application of sludge will be a function of initial concentration in the sludge and soil, the rate of application, management practices and losses. Even for chemicals that degrade readily, if present in high concentrations and applied repeatedly, the soil concentrations may be significantly elevated. The results of this work reinforce the need for a survey of organic chemical contaminants in sewage sludges and for further assessment of the risks they pose.


Abstract: In this study, the presence, composition, and concentrations of organic wastewater contaminants (OWCs) were determined in solid materials produced during wastewater treatment. This study was undertaken to evaluate the potential of these solids, collectively referred to as biosolids, as a source of OWCs to soil and water in contact with soil. Nine different biosolid products, produced by municipal wastewater treatment plants in seven different states, were analyzed for 87 different OWCs. Fifty-five of the OWCs were detected in at least one biosolid product. The 87 different OWCs represent a diverse cross section of emerging organic contaminants that enter wastewater treatment plants and may be discharged without being
completely metabolized or degraded. A minimum of 30 and a maximum of 45 OWCs were detected in any one biosolid. The biosolids used in this study are produced by several production methods, and the plants they originate from have differing population demographics, yet the percent composition of total OWC content, and of the most common OWCs, typically did not vary greatly between the biosolids tested. The summed OWC content ranged from 64 to 1811 mg/kg dry weight. Six biosolids were collected twice, 3-18 months apart, and the total OWC content of each biosolid varied by less than a factor of 2. These results indicate that the biosolids investigated in this study have OWC compositions and concentrations that are more similar than different and that biosolids are highly enriched in OWCs (as mass-normalized concentrations) when compared to effluents or effluent-impacted water. These results demonstrate the need to better describe the composition and fate of OWCs in biosolids since about 50% of biosolids are land applied and thus become a potentially ubiquitous nonpoint source of OWCs into the environment.


PAHs, PCBs, and other persistent organic pollutants are found in essentially all sludges, but at widely varying concentrations depending on the source of sludge.


POP introduced into soils by sewage sludge incorporation, specifically dioxins and PCBs, persisted in the soil with concentrations unchanged up to 260 days.


Antibacterial chemicals, including triclosan and triclocarban, are common additives in many antimicrobial household products, including soaps and other personal care products. Research now confirms that most of the triclocarban in wastewater sludge is not decomposed during anaerobic digestion in the wastewater treatment plant, with the result that it concentrates to a high degree in sewage sludge.


Triclosan has been shown to bioaccumulate in earthworms sampled from an agricultural field amended with sewage sludge.


Brominated fire retardant chemicals in contaminated feed accumulated in the fat of cows, indicating that meat consumption may be an important human exposure route to higher brominated BDEs. This
observation has important implications for pasture and forage land contamination by these chemicals in sewage sludge.


Scientists with the EPA, USDA and FDA are investigating whether the high levels of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) measured in agricultural soils in Alabama could have entered the food chain through beef cattle grazing on the land. Sewage sludge had been applied to these pasture lands used for grazing over a 12 year period, and is the likely source of these stable perfluorinated chemicals which are possibly carcinogenic.


Organotins are highly toxic compounds found in sludges. They do not degrade in the wastewater treatment process.


Substantial quantities of pharmaceuticals are applied to land in sludges and manures. Detrimental impacts of pharmaceuticals on crops is observed with some species of plants.

**Bacterial regrowth/viable non-culturable (VNC)**

Recent research has demonstrated that sewage biosolids believed to meet Class A or Class B standards were subject to regrowth and reactivation of bacteria. Thus materials have been land applied that contained bacterial levels far above those of Class A or Class B as defined by USEPA under Part 503. Coliform concentrations were found to increase by 100-1000-fold in biosolids and in soil/biosolid mixtures after centrifugation of anaerobically digested biosolids. Coliform concentrations up to 100,000 times those measured by conventional culture methods may be found in thermophilically digested sludges after centrifugation. This results from the presence of viable but non-culturable bacteria.


Abstract: In many countries, the classification of biosolids for disposal purposes can be based, in part, on fecal coliform levels, with alternative criteria also available based on the stabilization process used, such as anaerobic digestion. The assumption that these alternative criteria provide equivalent protection may be flawed. This paper demonstrates that fecal coliform levels determined after digestion do not always indicate the bacterial levels after the same biosolids have been dewatered by centrifugation. In samples from mesophilic digestion, half had significant
increases in coliform numbers (P<0.05) with up to one order of magnitude increase during centrifugation, suggesting coliform regrowth. Thermophilically digested samples had significant increases of several orders of magnitude during dewatering, more likely from reactivation of viable but non-culturable coliforms than from regrowth. In other cases, centrifugation induced coliform regrowth or reactivation upon incubation and storage of dewatered samples, but not digested samples. These 2–3 order of magnitude increases occurred with both 25 and 37 °C incubations. Coliform increases continued for up to 5 days, then gradually declined. However, by day 20 coliform numbers were still 2 orders of magnitude greater than when originally sampled. The magnitude of the increases could be due either to regrowth or reactivation, but the nature of the longer-term increases—also seen in biosolids/soil mixtures—suggests regrowth. Differences in numbers between digested and dewatered samples could not be duplicated with high shear processing in lab-scale devices, with nitrogen purging to remove volatile or gaseous constituents, or with redilution using centrate. They could not be attributed to enumeration methods, to interference of Bacillus spp. on apparent coliform counts, or to temperature changes. The increases have practical implications in the use of fecal coliform or alternative criteria to define pathogen content in biosolids.


Abstract: Recent literature has reported that high concentrations of indicator bacteria such as fecal coliforms (FCs) were measured in anaerobically digested sludges immediately after dewatering even though low concentrations were measured prior to dewatering. This research hypothesized that the indicator bacteria can enter a non-culturable state during digestion, and are reactivated during centrifuge dewatering. Reactivation is defined as restoration of culturability. To examine this hypothesis, a quantitative polymerase chain reaction (qPCR) method was developed to enumerate Escherichia coli, a member of the FC group, during different phases of digestion and dewatering. For thermophilic digestion, the density of E. coli measured by qPCR could be five orders of magnitude greater than the density measured by standard culturing methods (SCMs), which is indicative of non-culturable bacteria. For mesophilic digestion, qPCR enumerated up to about one order of magnitude more E. coli than the SCMs. After centrifuge dewatering, the non-culturable organisms could be reactivated such that they are enumerated by SCMs, and the conditions in the cake allowed rapid growth of FCs and E. coli during cake storage.

**Antibiotic resistance in sludge bacteria**

Recent studies have confirmed that the use of antimicrobials had created a large pool of antibiotic-resistance genes in bacteria that are detected in sewage sludge and effluent from sewage treatment plants. Antibiotic resistant bacteria were found in higher numbers downstream of sludge-treated farmland as compared to upstream.
Increased Frequency of Drug-resistant Bacteria and Fecal Coliforms in an Indiana Creek
Adjacent to Farmland Amended with Treated Sludge. Shivi Selvaratnam and David J. Kunberger,

Abstract: Many studies indicate the presence of human pathogens and drug-resistant bacteria in
treated sewage sludge. Since one of the main methods of treated sewage disposal is by application
to agricultural land, the presence of these organisms is of concern to human health. The goal of this
study was to determine whether the frequency of drug resistant and indicator bacteria in Sugar
Creek, which is used for recreational purposes, was influenced by proximity to a farmland
routinely amended with treated sludge (site E). Surface water from 3 sites along Sugar Creek (site
E, 1 upstream site (site C) and 1 downstream site (site K)) were tested for the presence of
ampicillin-resistant (AmpR) bacteria, fecal and total coliforms over a period of 40 d. Site E
consistently had higher frequencies of AmpR bacteria and fecal coliforms compared with the other
2 sites. All of the tested AmpR isolates were resistant to at least 1 other antibiotic. However, no
isolate was resistant to more than 4 classes of antimicrobials. These results suggest that surface
runoff from the farmland is strongly correlated with higher incidence of AmpR and fecal coliforms
at site E.

Potential ecological and human health impacts of antibiotics and antibiotic-resistant bacteria
from wastewater treatment plants. S. Kim and D.S. Aga, 2007. Journal of Toxicology and
Environmental Health-Part B-Critical Reviews, 10:559-573.

Abstract: The occurrence of antibiotics and other pharmaceuticals in the environment has become
an increasing public concern as recent environmental monitoring activities reveal the presence of a
broad range of persistent pharmaceuticals in soil and water. Studies show that municipal
wastewater treatment plants (WWTPs) are important point sources of antibiotics and antibiotic-
resistant bacteria in the environment. The fate of antibiotics and other pharmaceuticals in WWTPs
is greatly influenced by the design and operation of treatment systems. Because knowledge on the
fate of antibiotics and resistant bacteria in WWTPs is important in estimating their potential
impacts on ecology and human health, investigations on occurrence, treatment, and observed
effects are reviewed in this article. In addition, human health risk assessment protocols for
antibiotic and resistant bacteria are described. Although data on other pharmaceutical compounds
are also presented, discussion is focused on antibiotics in the environment because of the potential
link to increased emergence of resistance among pathogenic bacteria. The applications of modern
analytical methods that facilitate the identification of novel transformation products of
pharmaceuticals in environmental matrices are also included to illustrate that the disappearance of
the parent pharmaceuticals in WWTPs does not necessarily equate to their complete removal.

Effect of wastewater treatment on antibiotic resistance in Escherichia coli and Enterococcus sp
Research, 79:2387-2395

Abstract: The effects of wastewater treatment on the proportion of Escherichia coli and
Enterococcus sp. resistant to specific antibiotics were investigated at two facilities in Davis
County, Utah, one of which received hospital waste. Samples were taken from the influent, effluent before disinfection, and secondary anaerobic sludge digester effluent. There was very little difference in antibiotic resistance among E. coli in the inflow waters of the plants but the plant receiving hospital waste had a significantly higher proportion of antibiotic resistant Enterococcus. The effect of wastewater treatment on antibiotic resistance was more pronounced on enterococci than E. coli. Although some increases in antibiotic resistance were observed, the general trend seemed to be a decrease in resistance, especially in the proportion of multidrug resistant Enterococcus sp.


Abstract: Antimicrobial resistance of enterococci was investigated in 42 samples of crude inflow, treated effluent and sludge collected in 14 municipal sewage treatment plants of Portugal. A total of 983 enterococci were recovered and tested, using the diffusion agar method, regarding their sensitivity to 10 different antimicrobial drugs. Multidrug resistance was present in 49.4% of the isolates. Only 3.3% and 0.6% of the investigated strains were resistant to ampicillin and vancomycin, respectively. Resistances found against rifampicin (51.5%), tetracycline (34.6%), erythromycin (24.8%) and nitrofurantoin (22.5%), are causes for substantial concern. Almost 14% of isolates were resistant to ciprofloxacin. Wastewater treatment resulted in enterococci decrease between 0.5 and 4log; nevertheless, more than 4.4 x 10^(5) CFU/100ml were present in the outflow of the plants. Our data indicate that the use of antimicrobials had created a large pool of resistance genes and that sewage treatment processes are unable to avoid the dissemination of resistant enterococci into the environment.

Prions

The potential for prions that might be present in wastewater to accumulate in sludges and to persist through treatment is a concern.


Abstract: Transmissible spongiform encephalopathies (TSEs, prion diseases) are a class of fatal neurodegenerative diseases affecting a variety of mammalian species including humans. A misfolded form of the prion protein (PrP^sc) is the major, if not sole, component of the infectious agent. Prions are highly resistant to degradation and to many disinfection procedures suggesting that, if prions enter wastewater treatment systems through sewers and/or septic systems (e.g., from slaughterhouses, necropsy laboratories, rural meat processors, private game dressing) or through leachate from landfills that have received TSE-contaminated material, prions could survive conventional wastewater treatment. Here, we report the results of experiments examining the partitioning and persistence of PrP^sc during simulated wastewater treatment processes including
activated and mesophilic anaerobic sludge digestion. Incubation with activated sludge did not result in significant PrPTSE degradation. PrPTSE and prion infectivity partitioned strongly to activated sludge solids and are expected to enter biosolids treatment processes. A large fraction of PrPTSE survived simulated mesophilic anaerobic sludge digestion. The small reduction in recoverable PrPTSE after 20-d anaerobic sludge digestion appeared attributable to a combination of declining extractability with time and microbial degradation. Our results suggest that if prions were to enter municipal wastewater treatment systems, most would partition to activated sludge solids, survive mesophilic anaerobic digestion, and be present in treated biosolids.

Ecological impacts

Soil microorganisms play a critical role in the functions of soil as a source of plant nutrition and in the cycling of nutrients. Recent research shows that sludge application changes the soil microbial community and decreases its diversity. A number of human-use compounds (such as triclosan found in many personal care products such as antibacterial soaps) biocconcentrate in earthworms where soil has been amended with sewage sludges.


Sewage sludge greatly reduced the diversity of bacterial species in soils.


Abstract: Approximately 70,150 dry Mg of biosolids from over 450 wastewater treatment facilities are applied to the semi-arid rangelands of Colorado every year. Research on semi-arid grassland responses to biosolids has become vital to better understand ecosystem dynamics and develop effective biosolids management strategies. The objectives of this study were to determine the long-term (~12 years) effects of a single biosolids application, and the short-term (~2 years) effects of a repeated application, on plant and microbial community structure in a semi-arid grassland soil. Specific attention was paid to arbuscular mycorrhizal fungi (AMF) and linkages between shifts in plant and soil microbial community structures. Biosolids were surface applied to experimental plots once in 1991 (long-term plots) and again to short-term plots in 2002 at rates of 0, 2.5, 5, 10, 21, or 30 Mg ha\(^{-1}\). Vegetation (species richness and above-ground biomass), soil chemistry (pH, EC, total C, total N, and extractable P, NO\(_3\)-N, and NH\(_4\)-N), and soil microbial community structure [ester-linked fatty acid methyl esters (EL-FAMEs)], were characterized to assess impacts of biosolids on the ecosystem. Soil chemistry was significantly affected and shifts in both soil microbial and plant community structure were observed with treatment. In both years, the EL-FAME biomarker for AMF decreased with increasing application rate of biosolids; principal components analysis of EL-FAME data yielded shifts in the structure of the microbial communities with treatment primarily related to the relative abundance of the AMF specific biomarker. Significant (p<0.05) correlations existed among biomarkers for Gram-negative and
International Standards for Heavy Metals

The USEPA standards for sewage biosolid contaminant concentrations (standards are set for 9 metals) are higher than those in other developed countries and higher than recommendations of scientists in the northeastern U.S. Switzerland has banned sludge application.

Since the 503 rule was promulgated by USEPA, there has been no reassessment of the heavy metal loading limits on agricultural soils set at that time. In fact, there has been no significant research effort in the US to test the assertion by EPA that the very high metal loading limits (by international standards) of the 503 rule have a high safety margin in protecting soil productivity and crop quality.

Two recent large multi-site field investigations measuring the long-term impacts of sludge metals on soil health and crop quality were undertaken independently in Australia and the UK. In the absence of a comparable study of this scale or longevity in the US, the results of the Australian and UK studies are highly useful in developing guidelines for heavy metals in the US.

The Australian study addressed the impact of Cd loading on food crop quality (levels of Cd in edible crops), and Cu and Zn impacts on crop production (phytotoxicity) and soil health (microbial processes). The recommended limits are much lower for most soils than the allowed soil concentrations of Cd, Zn and Cu based on metal loadings permitted by the USEPA 503 rule. However, the study revealed the high sensitivity of harmful metal effects in soils on soil properties such as pH, clay content and organic matter content. Therefore, the recommended limits for the heavy metals vary greatly by soil type, with acid sandy soils being the most sensitive soils to metal additions.


Bern, 26.03.2003 – The use of sludge as a fertiliser is to be banned throughout Switzerland; in the future sludge will have to be incinerated using an environmentally friendly method. The Swiss Federal Council will modify the Ordinance on Materials accordingly on 1 May 2003. The ban will be introduced in stages: from May this year, sludge may no longer be used in the production of fodder crops and vegetables. A period of transition lasting until 2006 at the latest has been accorded for other types of cultivation which until now have been fertilised using sludge; in individual cases the cantonal authorities may extend this period until 2008. This decision is part of the Federal Council’s implementation of precautionary provisions for the protection of soils and public health.

Although sludge contains plant nutrients such as phosphorus and nitrogen it also comprises a whole range of harmful substances and pathogenic organisms produced by industry and private households. For this reason, most farmers already avoid using sludge as a fertiliser since they are
aware of the risk of irreversible damage to the soil, the danger to public health and possible negative effects on the quality of the food they produce."

**Australian recommendations on soil limits for cadmium, zinc and copper**


Executive Summary: A set of soil specific maximum limits for copper and zinc in soils that have received biosolids were derived. These recommended limits state the amount of copper or zinc that can be added to a soil. In acidic, low carbon soils (pH 5, OC 1%) the recommended limit is 25 mg/kg added copper, which increases to 245 mg/kg added copper in alkaline soils (pH 8) irrespective of the organic carbon content. The recommended limits are, depending on the soil properties at a site, considerably smaller to considerably larger than the current limits of 100 – 200 mg/kg total copper. In acidic, low cation exchange capacity (CEC) soils (pH 5, CEC 3 cmolc/kg) the recommended limit for zinc in soils that have received biosolids is 20 mg/kg added zinc, which increases to 300 mg/kg added zinc when the soil pH is greater than or equal to 7.5 irrespective of the cation exchange capacity. Thus, the recommended limits can be considerably lower to marginally higher than the current limits of 200 – 250 mg/kg total zinc, depending on the properties of the soils at sites. Critical soil concentrations of cadmium that would lead to exceedance of the Food Standards Australian New Zealand (FSANZ) standard (0.1 mg/kg) for human consumption were determined across all NBRP sites. The critical values were affected by soil properties, principally soil pH and clay content. A set of recommended soil specific maximum cadmium concentrations in soils that have received biosolids were developed. The recommended limit for total cadmium at a soil pH of 5.5 is 0.6 mg/kg in sandy soils (5% clay or less). In alkaline (pH 7.5 or greater) and clayey soils (25% or greater) the recommended limit for total cadmium in soil is approximately 1 mg/kg or greater. Thus depending on the soil properties at a site the recommended cadmium soil concentration is considerably smaller to considerably greater than the value of 1 mg/kg previously recommended by the National Cadmium Management Committee.

From the above recommended limits for cadmium, copper and zinc it is apparent that soils that are acidic combined with either low organic carbon, low clay content or low cation exchange capacity have low critical soil metal concentrations. The critical soil concentrations increased as the pH, organic carbon content, clay content or cation exchange capacity of soils increased. Based on the recommended soil limits, typical metal concentrations in biosolids and current land application practices example masses of biosolids that could be applied cumulatively to land were calculated. For high risk sites as little as 40 to 90 tonnes in total may be added, while at low risk sites between 280 and 970 tonnes in total may be applied. At typical current agronomic application rates of 10 t/ha this translates to 4 to 98 applications.
<table>
<thead>
<tr>
<th>Metal</th>
<th>Recommended Maximum Soil Concentration (mg/kg)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sand to loamy sand</td>
<td>Sandy loam to silt loam</td>
</tr>
<tr>
<td>cadmium</td>
<td>1.2</td>
<td>2</td>
</tr>
<tr>
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<td>75</td>
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<td>120</td>
</tr>
<tr>
<td>zinc</td>
<td>90</td>
<td>150</td>
</tr>
</tbody>
</table>

**New Technologies as Alternative Beneficial Uses**

Application of sewage biosolids is not the only option for recycling this material. New energy recovery technologies make use of the energy embedded in the sludge. Other technologies are in place to make construction material out of sludges.


Preface: The U.S. Environmental Protection Agency (U.S. EPA) is charged by Congress with protecting the nation’s land, air, and water resources. Under a mandate of environmental laws, the Agency strives to formulate and implement actions leading to a balance between human activities and the ability of natural systems to support and sustain life. To meet this mandate, the Office of Wastewater Management (OWM) provides information and technical support to solve environmental problems today and to build a knowledge base necessary to protect public health and the environment well into the future.

This publication has been produced under contract to the U.S. EPA by Parsons Corporation and provides information on the current state of development as of the publication date. It is expected that this document will be revised periodically to reflect advances in this rapidly evolving area. Except as noted, information, interviews and data development were conducted by the contractor. It should be noted that neither Parsons nor U.S. EPA has conducted engineering or operations evaluations of the technologies included. Some of the information, especially related to embryonic technologies, was provided by the manufacturer or vendor of the equipment or technology and could not be verified or supported by full-scale case study. In some cases, cost data were based on estimated savings without actual field data. When evaluating technologies, estimated costs, and stated performance, efforts should be made to obtain current information.
The mention of trade names, specific vendors, or products does not represent an actual or presumed endorsement, preference, or acceptance by the U.S. EPA or the Federal government. Stated results, conclusions, usage, or practices do not necessarily represent the views or policies of the U.S. EPA.

**Energy alternatives**

*Combustion and Land Application Can Both be Beneficial?* Roger Tim Haug, Deputy City Engineer City of Los Angeles, F. Michael Lewis, PE, Peter Brady, BE MIEI

Abstract: Both combustion and land application have played important roles in biosolids management practices for many decades. Land application in almost all of its forms has been proclaimed as beneficial use. By contrast, many have viewed combustion as a “disposal only” option, even if energy is recovered in the process and the resulting ash reused. These views and opinions are often proclaimed with no basis or criteria to support the conclusion. Five criteria are presented in this paper for judging whether a management practice is beneficial or not. When judged by these criteria, one can conclude that many combustion installations are beneficial. One can also conclude that land application is beneficial in most, but perhaps not all, installations.”


Gasification presents an opportunity that EPA is promoting.

U.S. Environmental Protection Agency
Environmental Technology Opportunities Portal

ETOP: Environmental Technology Council:
Problem Statements:
Recovering the Value of Waste for Environmental and Energy Sustainability

Project Plan
Waste to Energy Team
January 2005

Environmental issue:

Two significant environmental problems lead us to explore the environmental benefits of using waste as a source for energy.

First, one of the most challenging issues faced by the municipalities and industry is the sustainable management of wastes and residues generated by our society. The U.S. produces 1.4 billion tons of wastes and residues yearly, impacting air and water quality, decreasing land values, limiting future use of land, and increasing costs to municipalities, industry, and ultimately the consumer.

Second, municipalities, industrial facilities, and universities are particularly challenged in managing the increasing volumes of all kinds of wastes. This is particularly exacerbated in geographic areas experiencing rapid population growth and industrial productivity. In addition, some sectors have unique waste management problems for which the current waste infrastructure does not readily address. Several of these waste-related problems were identified in response to EPA's Environmental Technology Council solicitation; such as residues from meat packing and confined animal feeding operations. Several waste-to-energy technologies, such as various kinds of waste gasification, hold promise for addressing many of these problems. This action team will explore the technical and economic feasibilities and barriers of applying existing and emerging technologies, as well as potential reductions in emissions, to help address these problems.

The second challenge faces with our increasing demand for primary energy leading to the depletion of natural resources, the degradation of ecosystems, and generation of significant amounts of solid waste, water pollution, and atmospheric pollution. With U.S. consumption of primary energy increasing at an annual average rate of 2.4%, we will continue to see increasing rates of pollution and environmental degradation, if new technologies are not pursued. The production of energy products permanently consumes coal, natural gas, and petroleum resources. The Energy Information Agency predicts that the U.S. domestic supply of natural gas will be exhausted in 50 years while the coal supply will be spent in 250 years. Conservation of these resources is prudent to ensure future generations have a source of energy while alternative methods are developed to take the place of these resources in the production of goods and commodities. Residuals materials generated in the United States have the potential for supplying 97% of the demand for renewable energy for use in the United States. The recovery of these untapped sources of energy can have a significant impact on the development of sustainable energy production in the United States, while positively impacting the quality of our air, water, and land.


Orange County CA is working with EnerTech Environmental Inc on a facility to convert 1/3 of their biosolids to energy. The E-fuel is certified as a renewable fuel by CA Energy Commission.
Turning trash into energy in St. Lucie County, TCPalm newspaper editorial, December 1, 2006.

St Lucie County, FL is proceeding with plans to have Geoplasma INC build a plasma arc facility to deal with trash and sludge.


Bricks and glass

Sludge can be used to make construction materials including brick and aggregate.


Sewage sludge bulks up house bricks. Andy Cohlan, August 31, 2002. New Scientist

Advances in Envir Research. Chih-Huang Wend, I-Shou U in Kachsiung Co Taiwan.

Sewage vitrification. The Illinois North Shore Sanitary District has a new sludge recycling facility that is the first in the world to convert municipal biosolids into a reusable glass aggregate. Each day, up to 200 tons of municipal biosolids are transformed into 7.5 tons of glass.

Infectious Disease Tables
including inorganic and organic diseases

According to EPA and health authorities, *E. coli* bacteria do not cause disease. However, that is not true. Many are killers.

These disease agents have been documented in studies to cause disease or death.

Partial list of disease agents and types of diseases they cause.

*World Health Organization* pathogen Chart — swimming pools and hot tubs

In the following table you will see most metals in sludge biosolids are hazardous waste at 5 ppm or less. But that doesn't slow down the illegal dumping of sludge biosolids on farms and lawns etc.

Pollutant Removal Credits Allowed for Land Application and Disposal in Sludge Biosolids
DEATHS IN 2005

According to EPA's sludge policy, the pollutants (i.e., organic chemical substances, inorganic chemical substances and pathogenic organisms — bacteria and viruses, etc.) in sewage products recycled for beneficial use on food crops, parks, school grounds, home lawns and gardens could have had a significant impact in the cause of deaths.

Click on highlighted web address to see which pollutant(s) may have contributed to deaths.

The 15 leading causes of death in 2005 were the following:

1. Diseases of heart (heart disease)
2. Malignant neoplasms (cancer)
3. Cerebrovascular diseases (stroke)
4. Chronic lower respiratory diseases
5. Accidents (unintentional injuries)
6. Diabetes mellitus (diabetes)
7. Alzheimer's disease
8. Influenza and pneumonias
9. Nephritis, nephrotic syndrome and nephrosis (kidney disease)
10. Septicemia
11. Intentional self-harm (suicide)
12. Chronic liver disease and cirrhosis
13. Essential (primary) hypertension and hypertensive renal disease (hypertension)
14. Parkinson's disease
15. Assault (homicide)

We are not sure which category MRSA is in.


http://www.thewatchers.us/MRSA.html