

ORDINANCE COMMITTEE AGENDA REPORT

AGENDA DATE: November 01, 2022

TO: Ordinance Committee

FROM: Water Resources Division, Public Works Department

SUBJECT: Proposed Changes to the Water Efficient Landscapes Ordinance

RECOMMENDATION:

That the Ordinance Committee forward to City Council for introduction, an Ordinance of the Council of the City of Santa Barbara Repealing Chapter 22.80 and Amending Sections 14.23.005 and 28.80.150 of the Santa Barbara Municipal Code Relating to Water Conservation and Landscaping Standards.

DISCUSSION:

Staff recommends the removal of Santa Barbara Municipal Code Chapter 22.80, amending Section 14.23.005, and updating a code reference in Section 28.80.150.

The City of Santa Barbara (City) has a long history of promoting water-efficient landscapes and first adopted Landscape Design Standards (LDS) for Water Conservation in 1989. The City's LDS provides long-term community water efficiency through standards on plant water use selection and irrigation technology while allowing flexibility in designing attractive and cost-effective landscapes. The LDS were last updated in 2008 and City Staff has identified areas for improvement as the scope of projects have changed, irrigation technology has improved, and the California State Model Water Efficient Landscape Ordinance (MWELO) was updated in 2015.

The LDS are authorized in two separate places in the City Municipal Code: Section 14.23.005, "Water Efficient Landscapes", and Section 22.80.020, "Landscape Design Standards for Water Conservation." These chapters contain identical language. To increase clarity, City Staff recommends the removal of Santa Barbara Municipal Code Chapter 22.80.020, and retaining Chapter 14.23.005 with the below changes.

The ordinance updates to Section 14.23.005 clarify that all projects subject to design review, building permit applications, and/or water service commitment letters are subject to the LDS. The amended language to Santa Barbara Municipal Code Section 14.23.005 complies with the State MWELO and accurately reflects that the City's land development review process can involve building permits, plan checks for water service commitment letters, and/or design review.



Santa Barbara Municipal Code Section 28.80.150 (A.) relates to landscaping for two-unit residential developments in zoning-coastal areas and includes a reference to Chapter 22.80, Water Conservation. Due to City Staff's recommendation to remove Section 22.80.020, the reference to Chapter 22.80 should be replaced with Chapter 14.23.005.

BUDGET/FINANCIAL INFORMATION:

The proposed action has no financial impact on the City.

SUSTAINABILITY IMPACT:

The California State Legislature has found that the limited supply of state waters are subject to ever-increasing demands; that California's economic prosperity depends on adequate supplies of water; that state policy promotes conservation and the efficient use of water; that landscapes provide recreation areas, clean the air and water, prevent erosion, offer fire protection, and replace ecosystems displaced by development; and that landscape design, installation, and maintenance can and should be water-efficient.

Consistent with the state MWELO, the amendments to Santa Barbara Municipal Code Section 14.23.005 (B.) continue to promote the values and benefits of landscapes while recognizing the need to use water and other resources as efficiently as possible. In addition, water conservation technical analysis modeling efforts have demonstrated that the application of the City Landscape Design standards is one of the most successful and cost-effective programs in curbing long-term water use patterns. All applicable landscape projects subject to the City's land development review process will be subject to designing, installing, and maintaining water-efficient landscapes.

WATER COMMISSION:

This item was presented to the Water Commission at its meeting on October 20, 2022, and the Commission voted X-X in support of staff's recommendations.

ATTACHMENT(S): Ordinance Relating to Water Conservation and Landscape

Standards

PREPARED BY: Joshua Haggmark, P.E., Water Resources Manager/JS/Im

SUBMITTED BY: Clifford M. Maurer, P.E., Public Works Director

APPROVED BY: City Administrator's Office



ORDINANCE NO.

AN ORDINANCE OF THE COUNCIL OF THE CITY OF SANTA BARBARA REPEALING CHAPTER 22.80 AND AMENDING SECTIONS 14.23.005 AND 28.80.150 OF THE SANTA BARBARA MUNICIPAL CODE RELATING TO WATER CONSERVATION AND LANDSCAPING STANDARDS

THE CITY COUNCIL OF THE CITY OF SANTA BARBARA DOES ORDAIN AS FOLLOWS:

SECTION 1. Chapter 22.80 of the Santa Barbara Municipal Code is repealed.

SECTION 2. Section 14.23.005 of the Santa Barbara Municipal Code is amended to read as follows:

14.23.005 Water Efficient Landscapes.

- A. The California State Legislature has found that the limited supply of state waters are subject to ever increasing demands; that California's economic prosperity depends on adequate supplies of water; that state policy promotes conservation and efficient use of water; that landscapes provide recreation areas, clean the air and water, prevent erosion, offer fire protection, and replace ecosystems displaced by development; and that landscape design, installation, and maintenance can and should be water efficient. Consistent with the legislative findings, the purpose of this section is to promote the values and benefits of landscapes while recognizing the need to use water and other resources as efficiently as possible; to establish a structure for designing, installing, and maintaining water efficient landscapes, and to establish provisions for water management practices and water waste prevention.
- B. Each development proposal or redevelopment project that proposes includes new landscaping or alterations to existing landscaping and that is subject to review by the Architectural Board of Review, the Historic Landmarks Commission, or the Single Family Design Board or requires issuance of a building permit must shall be required to comply with the City's Landscape Design Standards for Water Conservation as adopted by resolution of the City Council.
- C. Compliance with subdivision B of this section is required as a condition of City water service to a parcel. The City will not provide water service or provide evidence of a ability or commitment to provide water service for a parcel located outside of the City's jurisdictional limits unless the owner of the parcel agrees submits an agreement to comply with the requirements of this section in a form satisfactory to the Public Works Director



SECTION 3. Section 28.80.150 of the Santa Barbara Municipal Code is amended to read as follows:

28.80.150 Landscaping.

A complete landscaping and irrigation plan shall be submitted to and approved by the Community Development Department prior to the issuance of building permits for a two-unit residential development. All landscape plans shall comply with the following:

- A. Water conservation standards for landscaping in Chapter 22.80, Water Conservation Section 14.23.005 of this Code.
- B. Defensible space requirements pursuant to Section 8.04.020. R, Section 4907 of the International Fire Code and California Fire Code as amended by Section 8.04.020 R. of this Code, "Defensible Space," when required in the High Fire Hazard Area.
- C. The limitations for vegetation removal in the Hillside Design District, pursuant to Chapter 22.10 of this Code., Vegetation Removal.





CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

Date TBD AGENDA DATE:

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

Amending and Updating the City's Landscape Design Standards for SUBJECT:

Water Conservation [Ordinance Adoption; Resolution]

RECOMMENDATION: That Council:

Α. Introduce and subsequently adopt, by reading of title only, an Ordinance of the Council of the City of Santa Barbara Repealing Chapter 22.80.020 and Amending Sections 14.23.005 and 28.80.150 of the Santa Barbara Municipal Code Relating to Water Conservation and Landscaping Standards.

B. Adopt, by reading of title only, a Resolution of the Council of the City of Santa Barbara Amending and Updating the City's Landscape Design Standards for Water Conservation.

EXECUTIVE SUMMARY:

The City of Santa Barbara (City) first adopted Landscape Design Standards for Water Conservation (LDS) in 1989 and the LDS was last updated in 2008. Staff has identified areas for improvement as irrigation technology has improved and the California State Model Water Efficient Landscape Ordinance (MWELO) was updated in 2015. The proposed updates to the LDS are at least as stringent as MWELO, and continue the City's long history of landscape design polices that promote water efficient and attractive landscapes. The updates include project applicability clarifications and exceptions, expanded definitions, additional irrigation requirements and simplified compliance pathways. At their meeting of [month, day, and year], the Ordinance Committee voted $\frac{x}{x}$ to forward to Council for approval.

DISCUSSION:

Background

The City has a long history of promoting water efficient landscape and first adopted LDS in 1989. The City's LDS provides long term community water efficiency through standards on plant water use selection and irrigation technology while allowing flexibility

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in designing attractive and cost-effective landscapes. The LDS were last updated in 2008 and Staff has identified areas for improvement as the scope of projects have changed and irrigation technology has improved. Additionally, the State MWELO was updated in 2015 and outlines standards for irrigation equipment, submission and compliance requirements.

All local permitting agencies are required to adopt, implement, and enforce MWELO or a local water efficient landscape ordinance that is at least as effective as MWELO. The City's LDS is more stringent than the State MWELO in two areas: project applicability and low water using plant requirements. The proposed updates continue to prioritize low water using plants that thrive in Santa Barbara's climate, while also closely aligning with MWELO irrigation and compliance requirements.

City Staff drafted the proposed updates in August, 2022. To gather public feedback, the draft updates were sent out to landscape design professionals, posted publically on the City website and distributed to Community Development's "Construction and Land Development News" subscribers. City Staff held a public meeting on October 6, 2022 to discuss the updates, gather feedback and implement changes.

Summary of Proposed Updates

Ordinance

- The LDS are authorized in two separate places in the City Municipal Code: 14.23.005 "Water Efficient Landscapes" and 22.80.020, "Landscape Design Standards for Water Conservation". To increase clarity, the language from 22.80.020 will be removed and 14.23.005 will be amended.
- Ordinance updates to 14.23.005 clarifies that all projects subject to design review, building permit applications, and/or water service commitment letters are subject to the LDS. This will increase equity for all applicants and more accurately reflect the City land development review process.

Applicability

 Adapted from MWELO § 490.1, several categories of projects are exempt from the LDS: ecological restoration projects, residential landscape projects with less than 500 square feet, non-income generating edible garden areas, nonresidential recreation areas, existing public plant collections, cemeteries, and non-residential projects with less than 500 square feet are exempt from automatic irrigation requirements.

Definitions

• Expanded the definitions and reorganized into alphabetical order. Added several definitions from MWELO, adapted from MWELO §491.

Plant Requirements

 The City's low water using plant requirements remain the same and an option has been added for applicants to submit MWELO calculations if they want to Council Agenda Report

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reach compliance in that way, adapted from MWELO, Appendix A, Sample Water Efficient Landscape Worksheet.

- Residential properties are still required to plant at least 80% low water using plants, or submit MWELO calculations with 0.5 average evapotranspiration adjustment factor (ETAF). This is stricter than the MWELO ETAF of 0.55.
- Non-residential properties are still required to plant 100% low water using plants, or submit MWELO calculations with 0.037 ETAF. This is stricter than the MWELO ETAF of 0.45.

Irrigation Requirements

- This category contains the most additions from MWELO irrigation requirements, adapted from MWELO § 492.7. The additions include:
 - o Irrigation meter or sub-meter requirements,
 - o Drip emitters need to be 2 gallons per hour or less, and
 - Projects greater than 5,000 square feet require main-line pressure regulators, manual shut off valves, explicit hydrozone requirements, flow sensors and master shutoff valves.

Submission Requirements

- Clarified the planting, irrigation and hydrozone details that should be on each plan, adapted from MWELO § 492.6 and § 492.7.
- Clarified that all submittals need to include a completed and signed City Landscape Compliance Statement

Final landscape Inspections

- Projects with < 5,000 square feet of new/revised irrigated area will have a Final Inspection from City Staff
- Projects with > 5,000 square feet or new/revised irrigated area will have a Final Inspection from City Staff and need to comply with MWELO § 492.12 and obtain a 3rd party irrigation audit.

BUDGET/FINANCIAL INFORMATION:

The proposed actions have no financial impact on the City.

SUSTAINABILITY IMPACT:

The California State Legislature has found that the limited supply of state waters are subject to ever increasing demands; that California's economic prosperity depends on adequate supplies of water; that state policy promotes conservation and efficient use of water; that landscapes provide recreation areas, clean the air and water, prevent erosion, offer fire protection, and replace ecosystems displaced by development; and that landscape design, installation, and maintenance can and should be water efficient. Consistent with the State MWELO, the amendments to Santa Barbara Municipal Code

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Amending and Updating the City's Landscape Design Standards for Water Conservation [Ordinance Adoption; Resolution]

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Section 14.23.005 (B.) continue to promote the values and benefits of landscapes while recognizing the need to use water and other resources as efficiently as possible. In addition, water conservation technical analysis modeling efforts have demonstrated that application of the City Landscape Design standards is one of the most successful and cost effective programs in curbing long-term water use patterns. All applicable landscape projects subject to the City of Santa Barbara's lands development review process will be subject to designing, installing, and maintaining water efficient landscapes.

ENVIRONMENTAL REVIEW:

This ordinance and resolution are categorically exempt from review under the California Environmental Quality Act (CEQA) under CEQA Guidelines Section 15307 (exempts actions taken to assure the maintenance, restoration, enhancement or protection of a natural resource where the regulatory process involves procedures for protection of the environment) The ordinance and resolution establish water conservation requirements that assure the protection of water resources.

WATER COMMISSION:

This item was presented to the Water Commission at its meeting on October 20, 2022, and the Commission voted X-X in support of staff's recommendations.

ATTACHMENTS: Ordinance Relating to Water Conservation and Landscaping

Standards

Updating the Landscape Design Standards for Water

Conservation Resolution

PREPARED BY: Joshua Haggmark, P.E., Water Resources Manager/JS/lm

SUBMITTED BY: Clifford M. Maurer, P.E., Public Works Director

APPROVED BY: City Administrator's Office

A RESOLUTION OF THE COUNCIL OF THE CITY OF SANTA BARBARA AMENDING AND UPDATING THE CITY'S LANDSCAPE DESIGN STANDARDS FOR WATER CONSERVATION

WHEREAS, on June 27, 1989, the City of Santa Barbara adopted the Landscape Design Standards for Water Conservation, and on August 12, 2008, the City of Santa Barbara updated the Landscape Design Standards for Water Conservation; and

WHEREAS, Adoption of the California State Model Water Efficient Ordinance and advancement in irrigation technologies since 2008 require updating the current City standards.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SANTA BARBARA AS FOLLOWS:

SECTION 1. Pursuant to Santa Barbara Municipal Code Section 14.23.005, the Landscape Design Standards for Water Conservation (2022 Update) attached hereto as Exhibit A are hereby adopted.

SECTION 2. Resolution Number 08-083 is repealed.



City of Santa Barbara

LANDSCAPE DESIGN STANDARDS FOR WATER CONSERVATION

2022 Update

I. Introduction

It is the policy of the City of Santa Barbara to promote water conservation. Santa Barbara Municipal Code Section 14.23.005 22.80 requires the adoption of the Landscape Design Standards for Water Conservation ("Landscape Design Standards.") These Landscape Design Standards are intended to promote water conservation while allowing the maximum possible flexibility in designing attractive and cost effective water-wise landscapes. The Landscape Design Standards were adopted by the Council of the City of Santa Barbara on June 27, 1989 as Resolution No. 89-077, and were updated on August 12, 2008 as Resolution No. 08-083

II. Applicability

These standards apply to development or redevelopment projects that include new landscaping or alterations to existing landscaping and are subject to review by the Architectural Board of Review, the Historic Landmarks Commission, or the Single Family Design Board or require issuance of a building permit. Compliance is also required for parcels located outside of the City's jurisdictional limits as a condition of water service. (See Santa Barbara Municipal Code § 14.23.005.)

The Landscape Design Standards do not apply to:

- A. Ecological restoration projects that do not require a permanent irrigation system.
- B. Residential landscape projects with less than 500 square feet of new/revised landscaped area.
- C. Nonresidential landscape projects with less than 500 square feet of new/revised landscaped area can be exempt from the irrigation requirements if they choose to install hosebibs and handwater rather than use automatic irrigation.
- D. <u>Residential</u>, <u>community and non-income generating garden areas permanently</u> and solely dedicated to edible plants.
- E. Nonresidential recreation areas designated for active play or recreation in parks, schools, sports fields, or golf course active play areas.
- F. Existing plant collections, as part of botanical gardens and arboretums open to the public.
- G. New and revised cemetery turfgrass areas.

- A. Design Review Body: The Architectural Board of Review, Single Family Design Board or the Historic Landmarks Commission.
- A. <u>Drip Irrigation: Utilizing emitters with a flow rate less than or equal to 2 gallons per hour (GPH) when operated at 30 psi designed to dissipate pressure and discharge a small uniform flow or trickle of water at a constant discharge rate.</u>
- B. Estimated Total Water Use (ETWU): the total water used for the landscape.

 The ETWU is calculated based on the plants used and irrigation method selected for the landscape design.
- C. <u>ET Adjustment Factor (ETAF): a factor of 0.5 for residential areas and 0.37 for nonresidential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, which are two major influences upon the amount of water that needs to be applied to the landscape.</u>
- D. Flow Sensor: An inline device installed at the point of connection that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller or flow monitor capable of receiving flow signals and operating master valves.
- E. <u>High Water Use Plants</u>: Those plants that are evaluated as needing "high" (>70% ETo) amounts of irrigation water as defined and listed by Water Use Classifications of Landscape Species (WUCOLS) at http://ucanr.edu/sites/WUCOLS
- F. Landscaped Area: All areas where new or altered landscaping is proposed as a part of a development proposal, <u>aside from non-irrigated areas designated for open spaces and/or existing non-irrigated native vegetation</u>.
- G. <u>Landscape Compliance Statement: A City of Santa Barbara issued checklist</u> completed and signed by the Landscape Plan preparer.
- H. Landscape Plan: Design plans that include with a planting plan, an irrigation plan, (if applicable) or both, and a completed Landscape Compliance Statement.
- I. <u>Master Valve: automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed water will not be supplied to the irrigation system.</u>
- J. <u>Maximum Applied Water Allowance (MAWA): the upper limit of annual applied water for the established landscaped area. It is based upon the area's reference evapotranspiration, the ET Adjustment Factor, and the size of the</u>



landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance.

- K. Model Water Efficient Landscape Ordinance (MWELO): As per California Department of Water Resources, new developments and retrofitted landscape water efficiency standards are governed by this ordinance
- L. Moderate to High Water Use Plants: Those plants that are evaluated as needing "moderate" (31-70% ETo or with a PF from 0.31 to 0.69) or "high" (70% or greater ETo or PF of 0.7 to 1.0) amounts of irrigation water as defined and listed by Water Use Classifications of Landscape Species (WUCOLS) at http://ucanr.edu/sites/WUCOLS/
- M. Nonresidential: new or revised landscapes surrounding commercial, institutional, or industrial permit areas.
- N. Plant Factor: a factor, when multiplied by ETo, that estimates the amount of water needed by plants. For purposes of calculations as pertains to this resolution, the recommended plant factor for very low water use plants is 0.1, the plant factor for low water use plants is 0.3, the plant factor for moderate water use plants is 0.6, and the plant factor for high water use is plants 0.8. Plant factors are derived from the publication "Water Use Classification of Landscape Species" (WUCOLS) or the Santa Barbara WUCOLS Addendum. Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).
- O. Public Works Director: The Director of the Public Works Department or his or her designee.
- P. Rain Sensor: an irrigation system component which automatically shuts off and suspends the irrigation system when it rains.
- Q. Recreational areas: excluding private single family residential areas, designated for active play, recreation or public assembly in parks, schools, sports fields, or golf course active play areas.
- R. Reference Evapotranspiration (ETo): The amount of water in inches per year needed to keep cool season grass thriving based on the evapotranspiration which is water transpired by plants and evaporated from soil. Applicants may use an ETo value provided by City staff or Appendix A in MWELO.
- S. <u>Residential: new or revised landscapes surrounding single or multi-family homes, or mixed-use projects.</u>
- T. Special Landscape Areas: areas permanently and solely dedicated to edible plants, such as orchards and vegetable gardens, are subject to the MAWA with

an ETAF not to exceed 1.0 MAWA=(ETo)(0.62)[(ETAF x LA) + ((1-ETAF) * SLA)]

- U. Turfgrass: A groundcover surface of mowed grass, with an irrigation water need of >30% ETo.
- V. <u>Water Efficient Landscape Worksheet: calculations of MAWU and ETWU using specific landscape hydrozone areas, plant factors in accordance with WUCOLS, irrigation efficiencies, ETAFs, and regional evapotranspiration rate.</u>
- W. <u>Water Wise Plants</u>: Those plants that are evaluated as needing "low" (10-30% ETo) or "very low" (<10% ETo) amounts of irrigation water as defined and listed by Water Use Classifications of Landscape Species (WUCOLS) at http://ucanr.edu/sites/WUCOLS/ or other sources of water-wise plant water use classifications as verified by a licensed landscape architect.
- X. Weather Based Irrigation Controller: An irrigation controller that automatically adjusts the irrigation schedule based on changes in the weather.

IV. Compliance Requirements

Applicants proposing new or altered landscaping shall comply with each of the following requirements in the design, installation, and maintenance of the landscaped area, unless an exception is granted pursuant to Section V.

A. Landscape Plan:

Applicants shall submit a landscape plan depicting the landscaped area and all existing landscaping to remain on the lot as determined by the Community Development Department.

Applicants shall submit a landscape plan depicting the new and/or revised landscaped area and all existing landscaping to remain in the project area. The plan shall include plant pallet with WUCOLS plant factor definitions; total square feet of new/revised landscaped area with (a) total area of water wise plants and (b) total area of non-water wise plants, if applicable; irrigation details as defined below; and a completed and signed Landscape Compliance Statement.

B. Turfgrass and Water Wise Plants:

- 1. The landscaped area of <u>applicable</u>, <u>nonresidential</u> projects proposing exclusively commercial uses shall be designed without the use of turfgrass and with 100% water wise plants. <u>Alternatively</u>, <u>applicants can submit a</u> Water Efficient Landscape Worksheet based on an average of 0.37 ETAF.
- 2. The landscaped area of <u>applicable</u>, <u>residential</u> single family residential, <u>multi-family residential</u>, <u>mixed-use</u>, and <u>institutional type</u> projects shall be

designed with <u>at least 80%</u> no more than 20% of the landscaped area planted in turf or plants that are not with water-wise <u>plants</u>. <u>Alternatively, applicants can submit a Water Efficient Landscape Worksheet based on an average of 0.5 ETAF.</u>

- 3. Turf <u>High water use plants are</u> is not permitted in parkways, medians or other areas within the landscaped area with any dimension of less than eight feet. Turfgrass shall not be used on slopes of 20% or greater within the landscaped area.
- 4. Notwithstanding requirements 1 and 2 above, additional turf areas may be recommended by the design review body to the Public Works Director for approval for areas designed and used for outdoor sporting and recreational activities.

C. Mulch and Compost:

- 1. The landscaped area, except those portions of the landscaped area planted with turfgrass, groundcover, succulents or other low lying shrubs, shall be covered with mulch material to an average thickness of at least three inches throughout, except in the immediate vicinity of woody trunks or stems. Additional mulch material shall be added from time to time annually as necessary in order to maintain the required depth of mulch.
- Organic mulch materials made from recycled or post-consumer products shall take precedence over inorganic materials or virgin forest products unless the recycled post-consumer organic products are not locally available. Organic mulches are not required if prohibited by the City of Santa Barbara Fire Department's High Fire Hazard Area Landscape Requirements.
- 3. For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil. Soils with greater than 6% organic matter in the top 6 inches of soil are exempt from adding compost and tilling.

D. Irrigation:

All new or altered <u>automatic</u> irrigation systems proposed as part of a development proposal shall incorporate the following requirements in their design, installation, and maintenance. <u>If an existing-to-remain irrigation system will serve newly planted areas, it must be shown to comply or remodeled to comply substantially <u>with the following:</u></u>

1. A dedicated landscape irrigation meter or sub-meter may be required per Santa Barbara Municipal Code 14.08.180. If required, clearly show proposed meter or sub-meter location on plans.



- 2. A weather based irrigation controller with a rain shutoff sensor (either internal or auxiliary) shall be required for the entire irrigation system.
- 3. 43. Drip irrigation shall be provided on at least 25% of the landscaped area. Drip irrigation emitters shall be rated at two GPH or less.
- 4. An irrigation main-line pressure regulator and in-line pressure regulators at each valve or as part of a control valve kit, or other devices as needed, shall be installed to ensure the water pressure at each emission device is within the manufacturer's recommended operating pressure range for optimal performance.
- 5. Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.
- 6. <u>Backflow prevention assemblies shall be required to protect the domestic water supply from contamination by the irrigation system per Santa Barbara Municipal Code Section 14.21.</u>
- 7. Flow sensors that detect high flow conditions created by system damage or malfunction are required for all new or altered landscapes of 5,000 sq. ft. or larger.
- 8. <u>Master shut-off valves are required on all projects with new or altered landscapes of 5,000 sq. ft. or larger.</u>
- 9. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures. 1. Irrigation systems shall be designed and installed to avoid overspray and runoff. Valves shall be separated for individual hydrozones based on plant water needs and sun/shade requirements.
- 10. Valves shall be separated for individual hydrozones based on plant water needs. Individual hydrozones that mix water wise with moderate or high water use plants are not permitted, unless the higher water using plant is used for the plant factor calculations. On the landscape plan, Hydrozones shall be clearly designated and areas irrigated by each valve shall be designated to show which valve serve which hydrozone.

- 2. In the event that an automatic irrigation system is included in the landscape plan, a weather based irrigation controller with a rain shutoff sensor shall be required for the entire irrigation system.
- 11. Areas less than eight feet wide shall be irrigated with drip irrigation, subsurface irrigation or other means that produce no runoff or overspray. only with bubblers, rotating nozzles on pop-up bodies, sub-surface, or drip irrigation.
 - 13. Drip irrigation shall be provided on at least 25% of the landscaped area.
- 12. All sprinklers shall have matched precipitation rates within each valve and circuit. All irrigation systems shall be designed to include optimum distribution uniformity (0.65 or higher using the protocol defined in the American Society of Agricultural and Biological Engineers/International Code Councils 802-2014, Landscape Irrigation Sprinkler and Emission Standard), head-to-head spacing, and setbacks from walkways and pavement.
- 13. Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip irrigation, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material.
- 14. <u>Slopes greater than 25% shall not be irrigated with an irrigation system with an application rate exceeding 0.75 inches per hour.</u>
- 6. All irrigation systems shall provide check valves at the low end of irrigation lines to prevent unwanted draining of irrigation lines.
- 7. Pressure regulators are required on the irrigation system, unless the Public Works Director determines a pressure regulator is not necessary.

E. Grading:

For the efficient use of water, grading of a project site should be designed to minimize soil erosion, runoff, and water waste. The City of Santa Barbara may require a comprehensive grading plan prepared by a civil engineer per the California Building Code as adopted and amended in City of Santa Barbara Municipal Code Section 22.04.020.

The grading of the landscaped area shall be designed, conducted, and maintained in order to achieve the following goals:

1. The grading shall encourage water retention and infiltration by preserving



- 2. The grading shall mimic natural, pre-development hydrologic flow paths.
- 3. The grading shall maintain and/or increase the width of flow paths in order to decrease flow rates.

V. Exceptions

Exceptions to these landscape design standards may be granted by the Public Works Director, or his or her designee, upon a finding that the exception will promote equivalent or greater water conservation than is provided for in the landscape design standards. Requests for exceptions shall be in writing and shall be submitted to City Staff and addressed to the Public Works Director. at the time the application is submitted to the design review body. The design review body may make a recommendation to the Public Works Director, or his or her designee, for consideration of an exception based on plant selection.

VI. Submittals

- A. Applicants shall provide all relevant information on the landscape plan, including botanical names for plant and turf species, WUCOLS classification for each plant species, percentage square feet calculations of water-wise plants, allowable areas of turf, moderate medium or high water use plants, and specific requests for any exception to the requirements of these Landscape Design Standards. and/or a Water Efficient Landscape Worksheet. Hydrozones need to be delineated and labeled as low, moderate, or high water use. Identify type of mulch and application depth, identify soil amendments, type and quantity. Requests for exceptions must be accompanied by documentation demonstrating that the finding of equivalent or greater water conservation can be made. Areas of existing landscaping to remain unaltered shall be indicated on the landscape plan.
- B. <u>Applicants shall provide all relevant automatic irrigation information as outlined in</u> the Irrigation Section E. above. At a minimum include:
 - (1) Location and size of water meter for landscape or location and size of dedicated irrigation water meter if applicable;
 - (2) Location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain sensors, quick couplers, pressure regulators, and backflow prevention devices;
 - (3) Static water pressure at the closest fire hydrant. Contact Water Resources Dispatch;
 - (4) Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station

- C. The landscape plan shall include a "Statement of Compliance Landscape Compliance Statement" in a form approved supplied by the City certifying that the landscape design complies with the mandatory elements of these Landscape Design Standards. The Statement of Compliance Landscape Compliance Statement shall be signed by the person who prepared the plans.
- D. The landscape plan shall be prepared in accordance with the provisions of the California Business and Professions Code relating to the practice of landscape architecture (Business and Professions Code § 5641 et seq.).

VII. Determination of Conforming Installation

The person who prepared the landscape plan shall inspect the installation of the plantings and any irrigation system included in the plan and shall certify in writing that the installation substantially conforms to the approved Landscape Plan. To verify that the project was installed according to plan and is in full compliance with these standards, the landscape project must pass a final landscape inspection by City Staff before a final building inspection or the certificate of occupancy is granted. In addition, for projects greater than 5,000 square feet, the applicant shall comply with MWELO section 492.12 and a third party certified landscape irrigation audit is required.

VIII. Compliance Verification

Verification of compliance with the Landscape Design Standards, as applicable, shall be made by the Community Development Department and the design review body in accordance with the following requirements City Staff:

- (A.) No development application shall be scheduled for final review by the design review body unless the landscape plan contains all required information and a statement of compliance in accordance with Section VI above.
- A. <u>During design review, City Staff may issue advisory comments on the conceptual landscape plans before an application is deemed complete.</u>
- B. No building permit shall be issued unless the statement of compliance Landscape Compliance Statement required by Section VI above has been included on the final landscape plan submitted for plan check.
- C. No building permit shall be given a final inspection or issued a certificate of occupancy until the Building Official receives a written determination of conformance as required by Section VII above.









PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION - WATER CONSERVATION

UPDATES TO THE CITY'S LANDSCAPE DESIGN STANDARDS

Water Commission October 20, 2022





Presentation Outline

- Background
- Purpose of Updates
- Update Process
- Summary of Updates
- Questions/Feedback







Background

- The City has promoted water conservation with Landscape Design Standards (LDS) since 1989, last updated in 2008.
- Want to continue to prioritize water efficient landscapes and while also allowing for creative and attractive designs

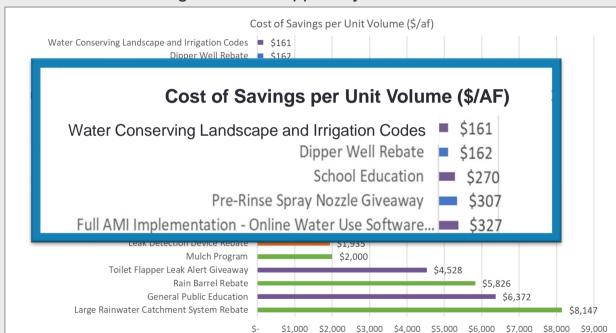


 The City's LDS are cost effective and save water





"Least Cost Planning Decision Support System" DSS Model Results





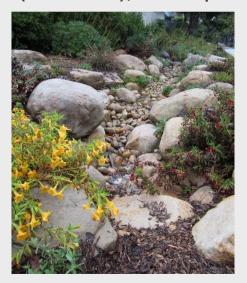






Purpose of Updates

 California's Statewide Model Water Efficient Landscape Ordinance (MWELO), 2010 passed, revised in 2015.



- The State allows permitting agencies to use their own water efficient landscape ordinance, if it is as strict as MWELO
- The City's LDS is stricter in two ways; project applicability thresholds and low water using plant requirements
- It has been 14 years since last update; we need an update to include irrigation technology advances and MWELO specifics





Process

- Staff used MWELO text as a guide for all updates
- Revisions completed in August 2022 and made public to gather feedback
- Virtual Office Hours held October 6th, 2022











Summary of Proposed Updates

- Increase clarify by removing duplicate language in Municipal Code; amending LDS language under Title 14 and removing LDS language under Title 22
- Include limited exemptions such as ecological restoration projects and non-for-profit edible gardens



- Added option to reach plant compliance using the City's Water Efficient Landscape Worksheet (Calculator)
 - Calculator adapted from MWELO with stricter low water using plant requirements
 - Simplifies process for applicants







Summary of Proposed Updates

Added irrigation requirements, per MWELO §492.7



- Wi-Fi enabled irrigation controllers with internal rain sensors
- Manual shut-off valves required for all projects



- Larger projects (>5,000 sf) need flow sensor and master shut off valve
- City Final Inspection is still required before CO; projects
 >5,000 sf also need a 3rd party certified irrigation audit





Feedback and Questions?



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