#### RESOLUTION NO. 23-007

# A RESOLUTION OF THE COUNCIL OF THE CITY OF SANTA BARBARA AMENDING AND UPDATING THE CITY'S WATER EFFICIENT LANDSCAPE 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 Water Efficient Landscape Standards for Water Conservation (2023 Update) attached hereto as Exhibit A are hereby adopted.

SECTION 2. Resolution Number 08-083 is repealed.

EXHIBIT A



City of Santa Barbara

# WATER EFFICIENT LANDSCAPE STANDARDS FOR WATER CONSERVATION

2023 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 requires the adoption of the Water Efficient Landscape Standards for Water Conservation ("Water Efficient Landscape Standards.") These Water Efficient Landscape Standards are intended to promote water conservation while allowing the maximum possible flexibility in designing attractive and cost effective water-wise landscapes. The Water Efficient Landscape Standards were adopted by the Council of the City of Santa Barbara on June 27, 1989 as Resolution No. 89-077, updated on August 12, 2008 as Resolution No. 08-083, and updated on February, 2023 as Resolution No. 23-007.

#### II. Applicability

Compliance with these Water Efficient Landscape Standards shall apply whenever a landscaping or irrigation plan is required by any Chapter or Section of the Santa Barbara Municipal Code or whenever a landscape plan or irrigation plan is required by any City design review or land use review body, including but not limited to, the Architectural Board of Review, Historic Landmarks Commission, Single Family Design Board, Staff Hearing Officer, or the Planning Commission. Compliance is also required for parcels located outside of the City's jurisdictional limits as a condition of water service, per Santa Barbara Municipal Code Section 14.23.005.

The Water Efficient Landscape Standards do not apply to:

A. Ecological restoration projects that do not require a permanent irrigation system.

- B. Single-unit residential landscape projects with less than 500 square feet of new/revised landscaped area.
- C. Nonresidential, multi-unit, and mixed-use landscape projects with less than 500 square feet of new/revised landscaped area are exempt from the irrigation requirements if hosebibs are installed and irrigation occurs through handwatering rather than use of automatic irrigation. This exception does not apply to parking area landscaping where an irrigation plan is required pursuant to Section 30.175.080, Parking Area Landscape and Fence Standards.
- D. Residential, community and non-income generating garden areas permanently 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.

### III. Definitions

- A. 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.
- 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 area.
- C. 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.
- 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. High Water Use Plants: 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, aside from existing non-irrigated areas designated for non-development, open spaces or existing non-irrigated native vegetation.
- G. Landscape Compliance Statement: A City of Santa Barbara issued checklist completed and signed by the Landscape Plan preparer.
- H. Landscape Plan: Design plans that include a planting plan, an irrigation plan, (if applicable) or both, and a completed Landscape Compliance Statement.
- I. 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.
- J. 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 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 MWELO
- 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 areas designed or permitted to be used for any nonresidential purpose, including public and semipublic uses, commercial uses, and industrial/manufacturing uses.
- 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 Director's staff designee.
- P. Rain Sensor: an irrigation system component which automatically shuts off and suspends the irrigation system when it rains.
- Q. Recreational Areas: Areas designated for active play, recreation or public assembly in parks, schools, sports fields, or golf course active play areas, but excluding private single-unit residential recreational 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. Residential: New or revised landscapes surrounding areas designed or permitted to be used as single-unit or multi-unit residential development, or mixed-use projects.
- 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. 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.
- W. Water Wise Plants: 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/</p>
- X. Weather Based Irrigation Controller: An irrigation controller that automatically adjusts the irrigation schedule based on changes in the weather.

#### IV. Landscape 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 Required:

Applicants shall submit a landscape plan, and irrigation plan (if required), depicting all of the required information listed in the Plan Submittals Section VI.

- B. Use of Turfgrass and Water Wise Plants:
  - The landscaped area of applicable, nonresidential projects shall be designed without the use of turfgrass and with 100% water wise plants. Alternatively, applicants can submit a Water Efficient Landscape Worksheet based on an average of 0.37 ETAF.
  - 2. The landscaped area of applicable, residential projects shall be designed with at least 80% of the landscaped area with water-wise plants. Alternatively, applicants can submit a Water Efficient Landscape Worksheet based on an average of 0.5 ETAF.
  - 3. High water use plants are 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. Selection of local native plants is encouraged. The use of invasive plant species is strongly discouraged, and may be prohibited by the City of Santa Barbara Fire Department's High Fire Hazard Area Landscape Requirements.

- C. Use of Mulch and Compost:
  - 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 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 Standards:

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

- 1. A dedicated landscape irrigation meter or sub-meter may be required per Santa Barbara Municipal Code 14.08.180. If required, the proposed meter or sub-meter location must be provided 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. 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. 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.
- 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 square feet or larger.
- 8. Master shut-off valves are required on all projects with new or altered landscapes of 5,000 square feet or larger.
- 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.
- 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.
- 11. Areas less than eight feet wide shall be irrigated with drip irrigation, subsurface irrigation or other means that produce no runoff or overspray.
- 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 a 24-inch setback of any non-permeable surface. Allowable irrigation within the 24-inch setback from non-permeable surfaces may include drip irrigation, or other low flow non-spray technology. The 24-inch setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material.
- 14. Slopes greater than 25% shall not be irrigated with an irrigation system with an application rate exceeding 0.75 inches per hour.
- E. Grading Plan Requirements:

1. Grading of a project site shall be designed to minimize soil erosion, runoff, and water waste pursuant to the City's Stormwater Management Program.

2. The City of Santa Barbara may require a grading plan whenever it is required per the California Building Code as adopted and amended in City of Santa Barbara Municipal Code Section 22.04.020.

## V. Exceptions to Water Efficient Landscape Standards

Exceptions to these water efficient landscape design standards may be granted by the Public Works Director, or Director's staff designee, upon a finding that the exception will promote equivalent or greater water conservation than is provided for in the water efficient landscape standards. Requests for exceptions shall be in writing and shall be submitted to City Staff and addressed to the Public Works Director. If the exception request is received before final approval of a landscape plan, the applicable design review body, or discretionary land use decision-maker, may make a recommendation in the hearing minutes to the Public Works Director, or staff designee, for consideration of an exception based on plant selection.

## VI. Plan Submittals

### A. Landscape Plan:

Applicants shall provide the following information on the landscape plan including:

1. Plant pallet with botanical names for each plant species used in the project

- 2. WUCOLS classification for each plant species
- 3. Total area in square feet of new/revised landscaping, including:
  - (a) Total area of water-wise plants and
  - (b) Total area of moderate or high water use plants

4. Areas of existing landscaping to remain unaltered shall be indicated on the landscape plan.

5. and/or A Water Efficient Landscape Worksheet must be reproduced on the landscape plans

6. A completed and signed Landscape Compliance Statement must be reproduced on the landscape plan

- 6. Identify hydrozones and label as low, moderate, or high water use
- 7. Identify type of mulch and application depth
- 8. Identify soil amendments, type, and quantity
- B. Irrigation Plan:

Applicants shall demonstrate on the landscape plan or a separate irrigation plan how the site complies with all the automatic irrigation requirements as outlined in the Irrigation Standards Section D. above. Irrigation plans shall include:

1. Location and size of water meter for landscape

2. Location and size of dedicated irrigation water meter, if applicable

3. 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

4. Static water pressure at the closest fire hydrant, as determined by the City's Water Resources Dispatch Officer.

5. (Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each irrigation station

- C. Landscape Compliance Statement:
- The landscape plan shall include a "Landscape Compliance Statement" reproduced on the plan in a form supplied by the City certifying that the landscape project complies with the mandatory elements of these Water Efficient Landscape Standards. The Landscape Compliance Statement shall be signed by the person who prepared the plans.
- D. Landscape Plans Preparer:
- 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

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 with a new or revised landscaped area 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 Water Efficient Landscape Standards, as applicable, shall be made by City Staff:

- A. During the review of discretionary applications, City Staff shall issue comments on the conceptual landscape plans before an application is determined to be complete.
- B. No building permit or approval that includes a requirement for a landscape plan shall be issued unless all of the information required under Plan Submittals Section VI, above has been included on the final landscape plan.
- C. No building permit or approval that includes a requirement for a landscape plan shall be given a final inspection or issued a certificate of occupancy until a final landscape inspection has been completed as required by Section VII, Determination of Conforming Installation, above.