

## COUNTY OF SANTA CRUZ

#### PLANNING DEPARTMENT

701 OCEAN STREET - 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060 (831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123

#### KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR

January 9, 2013

AGENDA DATE: January 23, 2013

AGENDA ITEM: 8
TIME: After 9:00 am

Planning Commission County of Santa Cruz 701 Ocean Street Santa Cruz, CA 95060

Subject: Public Hearing to consider adding Chapter 13.13, a Water Efficient Landscape Ordinance, to the County Code to establish water efficiency standards for new and existing landscapes.

California law (CGC §65591-§65599) mandates that each city and county adopt a Water Efficient Landscape Ordinance (WELO) to conserve water resources. The State Water Conservation in Landscaping Act requires local jurisdictions to adopt either the State model ordinance or an ordinance that is at least as effective as the State model. State law also allows water districts to promulgate water efficiency standards. The Soquel Creek Water District and City of Santa Cruz have adopted WELOs. The proposed County ordinance (Exhibit B) not only meets the State standard but reflects the goal that the County WELO be as similar as possible to other local WELOs. A table comparing the proposed County ordinance, the State model and the ordinances of the Soquel Creek Water District and the City of Santa Cruz is attached (Exhibit D), along with a map of the water service areas of City of Santa Cruz Water Department and Soquel Creek Water District (Exhibit E).

The County Water Advisory Commission, on December 20, 2012, recommended adoption of the proposed WELO by the Board of Supervisors. Two focus groups, representing water agencies and the landscape and irrigation industries, respectively, provided improvements.

#### **Proposed Water Efficient Landscape Ordinance**

The proposed ordinance applies to new or rehabilitated landscapes in commercial, public and residential projects that require a building, grading or discretionary permit within the unincorporated area. Residential remodels are exempt, as are landscapes proposed with residential projects on parcels less than 10,000 square feet or where the proposed landscape area is less than 2,500 square feet. The proposed WELO exempts edible gardens, landscapes irrigated only during plant establishment, and specified plant cultivation activities for which landscape restrictions are inappropriate. Within the service areas of water purveyors that have adopted WELOs, the applicability, exemption and landscape water conservation standards within those ordinances would apply instead of the applicability, exemption and landscape water conservation standards addressed by sections 13.13.030 and 13.13.60 of the proposed County ordinance. This is in order to avoid subjecting landscapes to two sets of water conservation standards.

The proposed ordinance limits landscape watering to about 20 inches per year on the coast and 28 inches per year in foothill and ridge areas. Most landscape plants thrive with moderate irrigation in the County's marine-influenced climate, where only a few moisture-loving plant varieties, such as alder and birch, require high levels of irrigation. Turf, high water-use plants and water features such as swimming pools are limited to a combined 25% of landscape area, but turf grass requiring only moderate irrigation is exempt from turf limits. Turf for sports facilities is allowed 40% more water than other landscapes. In addition, existing landscapes greater than one acre that are irrigated at high rates could be required to limit annual water use to about 23 inches on the coast and 32 inches inland.

The proposed WELO establishes standards for efficient irrigation equipment and design. For example, most subject irrigation systems would include self-adjusting controllers to prevent irrigation during rain. Overhead sprinklers are discouraged near hard surfaces, and sprinklers in high traffic areas are required to have swing joints. The Director is empowered to restrict or prohibit invasive plants within any landscape subject to the WELO.

Permit applications involving non-residential landscapes would be required to include a landscape plan, but residential projects would require only a signed checklist. To verify compliance, any landscape installed pursuant to the WELO would require final inspection by County staff or by an independent certified irrigation designer, certified landscape irrigation auditor, licensed civil engineer or licensed architect.

#### **Environmental Review**

A Notice of Exemption (Exhibit C) has been completed for the proposed ordinance. The draft ordinance was reviewed by the County Environmental Coordinator in compliance with CEQA and the County of Santa Cruz environmental guidelines, and found to be exempt from the California Environmental Quality Act pursuant to §15307, "Actions by Regulatory Agencies for Protection of Natural Resources."

#### Conclusion and Recommendation

The proposed WELO contains the required elements for efficient use of water in landscapes, and reflects recommendations from the Water Advisory Commission, water agencies and industry representatives. The ordinance strengthens and simplifies the State model in a manner that addresses the needs of a mostly rural area served by public water agencies, private water purveyors and private wells.

The attached resolution (Exhibit A) recognizes the importance of both landscaping and water conservation. Staff recommends that your Commission take the following actions:

- 1. Hold a public hearing to consider the proposed Water Efficient Landscape Ordinance, and
- 2. Approve the attached resolution (Exhibit A) recommending that the Board of Supervisors adopt the proposed Water Efficient Landscape Ordinance and Notice of Exemption.

Sincerely.

Jerry Busch, Planner III

Paia Levine. Principle Planner

#### Exhibits:

- A. Proposed Resolution Recommending Adoption of a Water Efficient Landscape Ordinance
- B. Proposed Water Efficient Landscape Ordinance
- C. Proposed Notice of Exemption
- D. WELO Comparison Chart
- E. Water Service Areas of City of Santa Cruz Water Department and Soquel Creek Water District

## BEFORE THE PLANNING COMMISSION OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA

RESOL	.UTION	NO.	

On the motion of Commissioner duly seconded by Commissioner the following is adopted:

PLANNING COMMISSION RESOLUTION RECOMMENDING ADOPTION
OF A WATER EFFICIENT LANDSCAPE ORDINANCE
AS CHAPTER 13.13 OF THE SANTA CRUZ COUNTY CODE

WHEREAS, groundwater removal exceeds the sustainable yield of most groundwater basins in Santa Cruz county, reducing water availability and contributing to saltwater intrusion; and

WHEREAS, surface water removal has reduced seasonal flow rates in certain waterways in Santa Cruz County, adversely affecting beneficial uses including domestic, municipal and agricultural supply, fishery resources, riparian and aquatic habitat, and preservation of threatened or endangered species; and

WHEREAS, the County's economic prosperity and the health and well-being of its residents is dependent on the availability of adequate supplies of water; and

WHEREAS, landscapes are essential to the quality of life in California by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection and aesthetic value and providing partial compensation for habitat lost to development; and

WHEREAS, the California Water Conservation in Landscaping Act (California Government Code §65591-§65599) requires County jurisdictions to adopt either the State Model Water Efficient Landscape Ordinance or a local Water Efficient Landscape Ordinance at least as effective as the State model ordinance by January 1, 2010; and

WHEREAS, the State Office of Administrative Law approved the updated Model Water Efficient Landscape Ordinance on September 10, 2009; and

WHEREAS, the Board of Supervisors on October 7, 2008 directed the Water Resources Division Director to take actions to mitigate groundwater overdraft in the Pajaro Groundwater Basin, including development of a Water Efficient Landscape Ordinance when the State completed the State Model Water Efficient Landscape

Ordinance, with the Planning Department sharing responsibility; and

WHEREAS, Program 8.7.b. of the County General Plan addresses the establishment and administration of a Landscape Water Conservation ordinance to provide guidelines for designing, installing and maintaining water-efficient landscapes in new and rehabilitated projects; and

WHEREAS, the County's Draft Climate Action Strategy recommends adoption of a Water Efficient Landscape Ordinance; and

WHEREAS, the County Water Advisory Commission reviewed the draft Water Efficient Landscape Ordinance and recommended its adoption by the Board of Supervisors, and

WHEREAS, the Planning Commission has held a duly noticed public hearing and has considered the proposed ordinance and all testimony and evidence received at the public hearing; and

WHEREAS, the ordinance has been found to be categorically exempt from further review under the California Environmental Quality Act;

NOW, THEREFORE, BE IT RESOLVED AND ORDERED, that the Planning Commission of Santa Cruz County hereby makes the following findings and recommends that the Board of Supervisors adopt the Water Efficient Landscape Ordinance and Notice of Exemption.

- 1. Review by the County Environmental Coordinator determined that the ordinance is categorically exempt from the California Environmental Quality Act pursuant to Section 15307, "Actions by Regulatory Agencies for Protection of Natural Resources."
- 2. The proposed ordinance is consistent with State law, the policies of the County of Santa Cruz General Plan / Local Coastal Program and the County Code.

PASS	SED AND ADOPTED by	the Planning Commissio	<del>-</del>
following vo	of California, this te:	day of	, 2013 by the
AYES:	COMMISSIONERS		
NOES:	COMMISSIONERS		
ABSENT:	COMMISSIONERS		
ABSTAIN:	COMMISSIONERS		
		Chairperson o	f the Planning Commission

APPROVED AS TO FORM:

Office of County Counsel

DISTRIBUTION: Planning Department, County Counsel, Environmental Health Services

ORDINANCE NO.
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# AN ORDINANCE OF THE COUNTY OF SANTA CRUZ ADDING CHAPTER 13.13 TO THE SANTA CRUZ COUNTY CODE RELATING TO WATER EFFICIENT LANDSCAPING

The Board of Supervisors of the County of Santa Cruz ordains as follows:

#### **SECTION I**

Chapter 13.13 of the Santa Cruz County Code is hereby enacted to read as follows:

#### Chapter 13.13

#### WATER CONSERVATION – WATER EFFICIENT LANDSCAPING

Sections:	
13.13.010	Purpose.
13.13.020	Definitions.
13.13.030	Applicability.
13.13.035	Applicability of Water Efficient Landscape Ordinances Adopted by Local Water
	Districts or Cities.
13.13.040	Landscape Plan or Landscape Checklist Required.
13.13.050	Persons Qualified to Prepare Landscape Plans.
13.13.060	Landscape Water Conservation Standards.
13.13.070	Final Inspection / Irrigation Audit.
13.13.080	Landscape and Irrigation System Management and Maintenance.
13.13.090	Existing Landscapes Over One Acre in Size.
13.13.100	Exceptions.
13.13.110	Violations.
13.13.120	Appeals
13.13.130	Limit of County Responsibility / Future Water Shortage Regulations.

Water conservation reduces demand on groundwater and surface water supplies, saves energy, inhibits salt-water intrusion and conserves aquatic resources. Sustainable landscapes benefit ecosystems, enhance scenic resources and reduce greenhouse gas emissions. The purposes of this Chapter are to conserve water and promote sustainability in new landscaping projects, to improve the efficiency of existing landscaping and to implement the 2009 California Model Water Efficient Landscape Ordinance.

#### **13.13.020 Definitions**

Purpose

13.13.010

(A) For the purpose of this Chapter, the following words are defined as set forth below:

- (1) "Certified irrigation designer" means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the U.S. Environmental Protection Agency's WaterSense irrigation designer certification program or the Irrigation Association's Certified Irrigation Designer program.
- (2) "Certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the U.S. Environmental Protection Agency's WaterSense irrigation auditor certification program or Irrigation Association's Certified Landscape Irrigation Auditor program.
- (3) "Commercial project" includes both for-profit and private, not-for-profit development activities.
- (4) "Director" means the Planning Director, Director of Environmental Health Services or their designees.
- (5) "Estimated Total Water Use" means the annual quantity of water that a proposed Landscape Area is predicted to require, based on hydrozone areas, irrigation schedule and a minimum irrigation efficiency of 71%.
- (6) "Establishment period" means the first two years after installing a plant in a landscape.
- (7) "High water use plant" means a plant with a WUCOLS plant factor of 0.7 to 1.0 or that would otherwise require annual irrigation of at least 70% of reference evapotranspiration (ET<sub>o</sub>).
- (8) "Hydrozone" means a portion of the landscaped area having plants with similar water needs. Typical hydrozone designations are low, medium and high.
- (9) "Invasive plant" means any non-native plant that supplants native species, alters ecosystem processes or hybridizes with rare, endemic or locally unique native plants.
- (10) "Irrigation audit" means an in-depth evaluation of the performance of an irrigation system. An irrigation audit includes, but is not limited to: inspection, system tune-up, a recommended irrigation schedule and reporting or correction of any overspray, runoff or other similar condition. An irrigation audit may also include uniformity of distribution or emission.
- (11) "Landscape architect" means a person who holds a license to practice landscape architecture in California pursuant to the California Business and Professions Code, Section 5615.
- (12) "Landscape or landscaping area" means all the planting areas, turf areas, water features and decorative installations in landscapes subject to a Maximum Applied Water Allowance. The landscape area does not include building footprints, driveways, parking lots, decks,

- patios, other pervious or non-pervious hardscapes, non-irrigated areas or areas exempted under 13.13.30(C).
- (13) 'Landscape checklist' means a worksheet provided by the Director and filled out by an applicant to attest that a proposed, subject landscape will comply with this ordinance.
- (14) "Landscape contractor" means a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
- (15) "Landscape, existing" means irrigated landscaping that existed as of [insert effective date of Ordinance].
- (16) "Landscape, new" means landscaping installed in areas where no landscaping previously existed, whether contiguous with an existing landscaped area or not.
- (17) "Landscape Plan, Full" means a detailed landscape design including all of the elements of a Preliminary Landscape Plan plus additional site details, plant species and planting locations, complete irrigation system details, irrigation schedule, soil preparation details, erosion control and stormwater management practices, proposed Maximum Applied Water Allowance, Estimated Total Water Use and any other requirements established by the Director.
- (18) "Landscape Plan, Preliminary" means a general landscape design depicting predominant site features, building footprints, topography, the configuration and square footage of existing and proposed landscape areas, hydrozones, turf areas, water features and walkways, existing and proposed irrigation methods and any other requirements established by the Director.
- (19) "Low volume irrigation" means the application of irrigation water at low pressure, at a rate measured in gallons per hour, through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, bubblers or microspray emitters.
- (20) "Low water use plant" means a plant species whose water needs are compatible with local climate and soil conditions. Species classified as "very low water use" and "low water use" by WUCOLS, having a regionally adjusted plant factor of 0.0 through 0.3, shall be considered low water use plants.
- (21) "Maximum Applied Water Allowance (MAWA)" means the upper limit of annual applied water for a landscape area subject to this Chapter. It is based on a region's reference evapotranspiration, type of plant material and landscape area as specified primarily in Section 13.13.060(A).
- (22) "Model Water Efficient Landscape Ordinance" means the regulations developed by the California Department of Water Resources pursuant to the California Water Conservation in Landscaping Act (California Code of Regulations, Title 23, Division 2, Chapter 2.7).
- (23) "Native plant" means a plant indigenous to Santa Cruz County and suited to the ecology of the present or historic natural community(ies) of the project vicinity.

- (24) "Parcel" for the purpose of this Chapter means a contiguous unit of land which may be lawfully sold as separate real property in conformity with the provisions of Title 14 of this Code.
- (25) "Plant factor" or "plant water use factor" is a factor that, when multiplied by reference evapotranspiration (ET<sub>o</sub>), estimates the amount of water needed by plants. The plant factor used shall be from WUCOLS or other documentation accepted by the Director. The plant factor ranges from 0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.
- (26) "Reference evapotranspiration" or "ET<sub>o</sub>" is the annual water use of a cool season grass irrigated with 100% efficiency and measured in reference to local climate.
- (27) "Rehabilitated landscape" is a landscape area that is refurbished such as through the, replacement, reconfiguration or supplement of plants, turf, water features or irrigation components.
- (28) "Special Landscape Area" means (a) an area of the landscape irrigated with or water feature solely using at least 40 percent nonpotable (recycled, harvested or gray) water from a demonstrated, reliable source, or (b) a recreational area dedicated to active play, such as areas in parks, playgrounds, sports fields and golf courses where turf provides a playing surface. The term, "recreational area," shall not apply to turf areas in landscapes proposed as part of 1-2 unit single family residential developments.
- (29) "Turf" means a ground cover surface of mowed grass that requires regular irrigation during the growing season.
- (30) "Warm-season grass" means a turf variety with a Plant Factor of 0.6 or less, that requires only moderate irrigation, such as Zoysia grass, seashore paspalum, St. Augustine grass or buffalo grass. Cool-season grasses require higher irrigation and include such varieties as annual bluegrass, annual or perennial ryegrass, red fescue or tall fescue.
- (31) "WUCOLS" means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension, the Department of Water Resources and the Bureau of Reclamation, 2000, and any subsequent revisions.

#### 13.13.030 Applicability

- (A) This Chapter shall apply to new, expanded or rehabilitated landscapes in commercial, industrial, public, residential and agricultural service establishment projects that require a building, grading or discretionary permit.
- (B) This Chapter shall apply to existing landscapes as provided in Section 13.13.090.
- (C) Exemptions from this Chapter.

- (1) Landscaping for residential projects, including residential land divisions, is exempt if any of the following apply:
  - (a) The gross area of the project parcel or combined area of the parcels in a multi-parcel project is less than 10,000 square feet, or
  - (b) The combined area of proposed new and rehabilitated landscapes is less than 2,500 square feet, or
  - (c) The landscaping is for a remodel (other than reconstruction, per 13.10.700-R), second unit or attached addition only.
- (2) The provisions of this Chapter shall not apply to:
  - (a) Agricultural crops or feedlots.
  - (b) Areas solely dedicated to edible plants within family or community gardens.
  - (c) Ecological restoration projects.
  - (d) Registered historical sites with a period landscape style.
  - (e) Plants cultivated for scientific research or public exhibit in botanical institutions.
  - (f) Landscape areas installed solely for stormwater treatment.
  - (g) Landscape areas irrigated by hand or low-volume irrigation for one establishment period not to exceed two years following final inspection (per 13.13.070), after which time the irrigation system is removed.
  - (h) Paddocks or pastures.

## 13.13.035 Applicability of Water Efficient Landscape Ordinances Adopted by Local Water Districts or Cities

When a water efficient landscape ordinance (WELO) has been adopted for the water service area of a public water district or municipality, the applicability, exemption and landscape water conservation standards within those ordinances shall apply instead of the Applicability, Exemptions and Landscape Water Conservation Standards addressed by sections 13.13.030 and 13.13.60. As of January 2013 the City of Santa Cruz and the Soquel Creek Water District have adopted WELOs, therefore the applicability, exemption and landscape water conservation standards within Chapter 16.16 of the Santa Cruz Municipal Code and within Ordinance No. 10-02 adopted by the Soquel Creek Water District are incorporated by reference, and, as may be amended from time to time, shall be in effect within the service areas affected by those WELOs.

#### 13.13.040 Landscape Plan or Landscape Checklist Required

(A) When a landscape that is subject to this Chapter is proposed with a discretionary permit application, the application shall include a Preliminary Landscape Plan. A Full Landscape Plan may be required by the Director for a subject discretionary permit application that will not entail a subsequent building permit or where otherwise appropriate.

- (B) When a subject landscape is proposed with a building permit application, the application shall include a Full Landscape Plan, except that those proposed with a 1-2 unit residential development shall include either a Landscape Checklist or Full Landscape Plan.
- (C) The Director shall establish application requirements for a Preliminary Landscape Plan, Full Landscape Plan and Landscape Checklist, as needed.
- (D) The Board of Supervisors may establish fees as necessary to implement this Chapter.

#### 13.13.050 Persons Qualified to Prepare Landscape Plans

Landscape plans prepared pursuant to this Chapter shall be prepared by, and bear the signature of, a certified irrigation designer, certified landscape irrigation auditor, licensed landscape architect, licensed landscape contractor, licensed civil engineer or any other person authorized by the State to do this work.

#### 13.13.060 Landscape Water Conservation Standards

All landscapes subject to the provisions of this Chapter shall comply with the following standards.

- (A) Landscape Water Conservation Standards
  - (1) The Maximum Applied Water Allowance for subject landscapes shall not exceed 60 percent of reference evapotranspiration, except in Special Landscape Areas, which are allowed 100 percent of reference evapotranspiration.
  - (2) The Landscape Plan shall include the Estimate of Total Water Use based on hydrozone areas and plant factors. The water use indicated by the irrigation schedule shall not exceed the Estimated Total Water Use.
  - (3) Neither the estimated nor the actual annual water use of the landscape shall exceed the annual Maximum Applied Water Allowance.
- (B) Limits on Turf, High Water Use Plants and Water Features
  - (1) The combined area of turf, high water use plants and water features, including swimming pools, shall be limited to no more than 25 percent of the landscape. The 25 percent limit shall not apply to Special Landscape Areas or to landscape areas using only warm season turf grass varieties with a Plant Factor of 0.6 or lower.
  - (2) Turf shall not be planted in the following conditions:
    - (i) Planting areas less than 8 feet wide;
    - (ii) On slopes greater than 12 percent;
    - (iii) In street medians, traffic islands, planter strips and parking lot islands.

#### (C) Landscape Design

- (1) Plants selected for subject landscapes are strongly encouraged to be compatible with the climate, soil and topographic conditions of the site. Planting of trees and the protection and preservation of existing native species and natural areas are also strongly encouraged.
- (2) Plants shall be grouped together in distinct hydrozones, and where irrigation is required, the distinct hydrozones shall be irrigated with separate valves. Each plant variety in a low, medium or high hydrozone shall have a plant factor not exceeding its hydrozone level, based on WUCOLS or other documentation accepted by the Director. All plants in a Special Landscape Area will be considered to have a plant factor of 100 percent; any lower water-use plants in Special Landscape Areas are encouraged to be on separate valves.
- (3) Water in artificial pools and fountains shall be recirculated.
- (4) Where subject to this ordinance, swimming pools are required to remain covered when not in use, in order to reduce evaporation.
- (5) The use of invasive plants within any subject landscape may be restricted or prohibited by the Director.

#### (D) Irrigation Design

- (1) Irrigation systems shall be designed to avoid runoff, overspray, low-head drainage and other conditions where water may flow onto non-target areas or plants, walks, roadways, structures or adjacent property.
- (2) Irrigation systems shall be designed, maintained and managed to meet or exceed an average landscape irrigation efficiency of 71%.
- (3) Irrigated areas less than eight feet wide shall be irrigated with subsurface or low volume irrigation.
- (4) Overhead spray nozzles shall have a precipitation rate of no more than one inch per hour.
- (5) Overhead sprinkler systems shall not be permitted within 24 inches of any non-permeable surface, including driveways and sidewalks, unless strict compliance with 13.13.060(D)(1) is demonstrated on plans, maintained and confirmed by audit. Only low volume irrigation shall be allowed within the 24-inch setback, if planted.
- (6) Trees shall be watered using separate irrigation circuits.
- (7) Where available and economically feasible, recycled water shall be used to irrigate landscapes. Irrigating with alternative water sources such as graywater or harvested rainwater is encouraged as long as all required permits are obtained.

#### (E) Irrigation Equipment

- (1) A pressure regulator shall be installed if pressure at the water meter exceeds 80 psi.
- (2) Irrigation systems shall have self-adjusting controllers, based on evapotranspiration (weather station data) or soil-moisture, and shall be equipped with rain-sensing devices to prevent irrigation during rainy weather. In 1-2 unit residential development projects utilizing primarily low-water-use plants and little or no turf, the Director may waive the requirement to install a controller.
- (3) Sprinkler heads shall have matched precipitation rates within each control circuit valve and shall be selected for proper coverage and precipitation rate.
- (4) Anti-drain check valves shall be installed to prevent low-head drainage.
- (5) Swing joints or other riser protection components are required on all risers located in high traffic areas.
- (6) The irrigation system shall include a manual shut-off valve to minimize water loss in case of an emergency or routine repair. Where warranted for relatively large systems, which are subject to increased risk of system damage or malfunction, the Director may require a high flow sensor that detects and reports high flow conditions.
- (F) Soil Management, Preparation, and Mulching
  - (1) Soil in non-temporary irrigation areas shall be prepared for planting by ripping and incorporating an organic amendment at the rate of six cubic yards per 1,000 square feet into the top six inches, or amended as indicated by a soil analysis report.
  - (2) All exposed soil surfaces of non-turf areas within the landscape area must be mulched with a minimum three-inch layer of organic material.
  - (3) Stormwater best management practices to control runoff and increase onsite filtration are strongly encouraged.

#### 13.13.070 Final Inspection / Irrigation Audit

Upon installation and completion of the landscape, the County shall make a final inspection – or require inspection by an independent, certified irrigation designer or landscape irrigation auditor, or by a licensed civil engineer or landscape architect – to verify that the landscape improvements were completed in accordance with this Chapter. No subject landscape project shall be deemed to have complied with the provisions of this Chapter until a final inspection of the work has been approved by the Director or designee. The final inspection shall verify at minimum that:

(A) The landscape improvements were installed in accordance with approved Landscape Checklist or Landscape Plan and with this Chapter.

- (B) The installed irrigation system is in a leak-free condition.
- (C) The installed irrigation system is functioning as designed, specified and approved.
- (D) The irrigation system does not cause water waste due to runoff, low head drainage, overspray or other similar condition.
- (E) The person responsible for long-term landscape maintenance and irrigation management at the property has received the recommended irrigation schedule.

#### 13.13.080 Landscape and Irrigation System Management and Maintenance

- (A) Maintenance. Landscapes and irrigation systems approved and installed pursuant to this Chapter shall be maintained in good working condition and properly adjusted to ensure water efficiency. Any broken or malfunctioning equipment, including but not limited to controllers, main and lateral lines, or control valves, shall be repaired promptly with identical or equivalent equipment to maintain the original design integrity.
- (B) Irrigation System Inspections. Irrigation systems shall be inspected by the owner or operator regularly to correct misaligned, clogged or broken heads, missing heads and risers, stuck valves and leaks.
- (C) Watering Schedule. Watering schedules shall be adjusted periodically to reflect seasonal variations in plant water requirements. Whenever possible, irrigation management shall incorporate the use of real-time, ET<sub>o</sub> data from the California Irrigation Management Information System (CIMIS) or similar weather-based irrigation scheduling system.
- (D) Irrigation Operation. To the greatest extent appropriate to the installed landscape, irrigation shall be scheduled between the hours of 8:00 p.m. and 10:00 a.m. to reduce evaporative loss.
- (E) Invasive plants. The Director may require that landscapes approved and inspected pursuant to this Chapter be maintained free of invasive plants.

#### 13.13.090 Existing Landscapes Over One Acre in Size

The Director may assign a Maximum Applied Water Allowance to existing irrigated landscapes over one acre in size, based on 70 percent of reference evapotranspiration, or 100 percent of reference evapotranspiration for Special Landscape Areas. When review of these landscapes indicates that annual water use exceeds the Maximum Applied Water Allowance, the water user may be required to have a certified irrigation auditor perform an irrigation audit and make recommendations as necessary to comply with the Maximum Applied Water Allowance.

#### **13.13.100 Exceptions**

As technology changes and more information is available regarding plant materials, irrigation equipment and techniques, and maintenance techniques that enhance water conservation, the Director may allow the substitution of well-designed conservation alternatives or innovations

which equally reduce water consumption and are consistent with the purposes of this Chapter. The Director may also allow exceptions where necessary to serve a public purpose.

#### **13.13.110** Violations

It is unlawful for any person to install landscaping for a project subject to this Chapter without the review and approval required by this Chapter, and for plant or irrigation components approved and inspected under this Chapter to be replaced with noncompliant components or practices.

#### 13.13.120 Appeals

All appeals of actions taken pursuant to this Chapter shall be made in conformance with the procedures in Chapter 18.10.

#### 13.13.130 Limit of County Responsibility / Future Water Shortage Regulations

Residential, commercial and public uses of water in the unincorporated area may be subject to water restrictions or mandatory rationing during water shortages. Irrigation shall be reduced or eliminated as necessary to comply with any water shortage regulations or restrictions in effect. Compliance with this Chapter does not guarantee the survival of landscape plants or the availability of water for landscape irrigation based on this Chapter.

#### **SECTION II**

Severability. The provisions of this Chapter are hereby declared to be severable and if any sentence, clause, section or part hereof is held to be unconstitutional, it is the intent of the Board of Supervisors that such portion of such Chapter be severable from the remainder, and that the remainder be given full force and effect.

#### **SECTION III**

This Ordinance shall take effect on the 31<sup>st</sup> day following adoption.

		•	of Supervisors of the, 2013, by the	County of Santa Cruz following vote:
AYES: NOES: ABSENT: ABSTAIN:	SUPERVISORS SUPERVISORS SUPERVISORS SUPERVISORS			
		CHAIRPERS	ON, BOARD OF SU	PERVISORS

ATTEST:			
	Clerk of the	Board	4
APPROVED	AS TO FORM:	County Cou	

Planning Department, Public Works, Environmental Health Services, County Counsel Copies to:

## CALIFORNIA ENVIRONMENTAL QUALITY ACT NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

of CEQA for the reason(s) which have been specified in this document.
Project Location: Countywide.
Project Description: Adoption of an ordinance to establish water efficiency standards for landscapes approved with new permits and to regulate existing irrigated landscapes greater than one acre.
Person or Agency Proposing Project: County of Santa Cruz.
Contact Phone Number: 831-454-3234
<ul> <li>A The proposed activity is not a project under CEQA Guidelines Section 15378.</li> <li>B The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).</li> <li>C Ministerial Project involving only the use of fixed standards or objective measurements without personal judgment.</li> <li>D Statutory Exemption other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).</li> </ul>
Specify type:
E. X Categorical Exemption
Specify type: Class 7, Section 15307, "Actions by Regulatory Agencies for Protection of Natural Resources."
F. Reasons why the project is exempt:
Water conservation in landscapes will conserve water resources, supporting beneficial uses of ground and surface waters that depend on adequate water supplies.
None of the conditions described in Section 15300.2 apply to this project.  Date: /- /-/- 2013
Jerry Busch, Project Planner

Comp	arison of State Model Ordinan	Comparison of State Model Ordinance with WELOs of Local Jurisdictions	ctions
State Model Ordinance	Soquel Creek WD	City of Santa Cruz	Co. of Santa Cruz Draft
	Appli	Applicability	
Commercial / institutional: New or rehabilitated commercial, industrial and public landscapes of at least 2,500 square feet in projects requiring a building or landscape permit, plan check or design review.	Commercial / institutional: New commercial, industrial and public development projects requesting new water service; existing development requesting new/expanded water service or required to rehabilitate existing landscape.	Commercial / institutional: New or rehabilitated landscapes in commercial, industrial or any other nonresidential development requiring a building permit, land use approval / design review, or new or increased water service.	Commercial / institutional: New, expanded or rehabilitated landscapes in commercial, industrial, public and agricultural service projects that require a building or discretionary permit. Within service area of a water district or city with an adopted WELO, the applicability, exemptions and water conservation standards of that ordinance, not those of the County ordinance draft sections 13.13.030 and 13.13.60, would apply.
Multiple residential: (three or more dwelling units) New or rehabilitated developer-installed landscapes, 2,500 sq.ft. minimum.	Multiple residential: (three or more d.u.) New dev't requesting new water service, no min. area; extg landsc req. new / expanded service; any rehabilitated landsc.	Multiple residential: (three or more dwelling units) New or rehabilitated, developer- installed landscapes, 2,500 sq.ft. minimum.	Multiple residential: New or rehabilitated landscapes of less than 2,500 sq.ft – or on parcels of less than 10,000 sq.ft. – are exempt.
New SFDs: New or rehabilitated developer-installed landscapes, 2,500 sq.ft. minimum; homeowner-installed residential projects, 5,000 square feet minimum.	New SFDs: Residential projects involving 1-2 new dwelling units on parcels less than 10,000 sq.ft. are exempt from landscape plan, irrigation system and controller requirements.	New SFDs: Residential projects of 1-2 new dwelling units on parcels less than 10,000 sq.ft. required to limit turf grass to 25% of landscape and meet overhead spray setbacks.	New SFDs: Residential land-scapes of less than 2,500 sq.ft., or on parcels less than 10,000 sq.ft., are exempt. Subject SFDs require worksheet applic only; irrigation controllers may be waived.
Residential remodels /addns: exempt if rehab landsc < 5,000 sf.	Residential remodels /addns: not exempt if landscape rehabili- tated.	Residential remodels /addns: to existing 1-2-unit homes exempt.	Residential remodels /addns / 2nd du: exempt, except for reconstruction.

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Comp	parison of State Model Ordinan	Comparison of State Model Ordinance with WELOs of Local Jurisdictions	ictions
State Model Ordinance	Soquel Creek WD	City of Santa Cruz	Co. of Santa Cruz Draft
New turf-dependent recreation areas are allowed an extra 30% of applied water. No turf limits.	New turf-dependent recreation areas are required to use moderate-use turf grass, are not allowed extra water and are exempt from turf limits if using recycled water where feasible.	New turf-dependent recreation areas are allowed an extra 30% of applied water and are exempt from turf limits.	New turf-dependent recreation areas are allowed an extra 40% of applied water and are exempt from turf limits.
	Exce	Exceptions	
Historical sites	Historical sites where landscaping establishes an historical style, as determined by a public board or commission.	Historical sites where landscaping establishes an historical landscape style, as determined by a public commission.	Historical sites with a period landscaping style.
Ecological restoration projects that do not require a permanent irrigation system; and mined-land reclamation projects that do not require a permanent irrigation system.	Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system.	Ecological restoration projects that do not require a permanent irrigation system.	Ecological restoration
ielli,		Community gardens	Community and family vegeta- ble gardens
Botanical gardens	Botanical gardens		Botanical gardens
			Landscapes irrigated only for a 2- year establishment period or not at all.

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Comparison of State Model Ordinance with Soquel Creek WD  Turf Area  I other Turf, high water use plants and ming pools) limited to combined ming pools) limited to combined in the total landscape area. No turf is ter budg using State toe is Not on slopes > 12%.  Turf on Slopes  Fettion Slopes  Turf on Slopes	WELOs of Local Jurisdictions	City of Santa Cruz Draft		Turf, high water use plants, and water features (including swim-ming pools) limited to 25% of the total developed landscape area. No turf limits if the landscape water budget is based on hydrozones using State worksheets.		Not on slopes > 5%. Not on slopes > 12%.		Not in areas <8 ft. wide in any direction or in street or parking lot islands.		All turf varieties shall be Cool-season turf limited to no water-conserving species, such as more than 25% of total landscape tall and hard fescues.
Soquel Creek WD  Turf, high water use plants and water features (including swimming pools) limited to combined 25% of the total landscape area.  Turf on Not on slopes > 12%.  Not in areas <8 ft. wide in any direction or in street or parking lot islands.  Turf Sp  Turf Sp  All turf varieties shall be water-conserving species with a plant factor of less than or equal to 0.6.	VELOs of Local Jurisdictions							L.		
romparison of Stance Soque ance.  Turf, high was water feature ming pools) I 25% of the to 25% of the to 25% of the to 25% of the to 35% of the 15% o	nte Model Ordinance with V		Turf Area		Turf on Slopes		Turf Location		Turf Species	ý.
	Comparison of Sta	State Model Ordinance Soqu		No restrictions on turf area other than general compliance with Max-water feature imum Applied Water Allowance. 25% of the to		Not on slopes > 25% where toe is adjacent to impermeable surface.		reas 1 or i		No restriction; water- conserving All turf varieti turf is highly recommended. conserving space of less

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Comp	varison of State Model Ordinan	Comparison of State Model Ordinance with WELOs of Local Jurisdictions	ictions
State Model Ordinance	Soquel Creek WD	City of Santa Cruz	Co. of Santa Cruz Draft
	Dedicated Lands	Dedicated Landscape Water Meters	
Required for subject landscape plans.	Separate water service meter required for all multi-family, commercial, industrial and public development, but not SFDs.	Separate water service meter required for all multi-family, commercial, industrial and public development landscapes greater than 5,000 sq.ft. in area.	Separate water service meters or controller flow meters not required.
Private irrigation submeter recommended for landscape areas of less than 5,000 square feet to facilitate water management.	Private irrigation submeter recommended for single family development to facilitate water management.	Private irrigation submeters required for non-residential landscapes that are not required to have a separate irrigation water service meter.	Private irrigation submeters not required. Flow meters or submeters informally recommended as a way to minimize use.
	Maximum Applied Wa	Maximum Applied Water Allowance (MAWA)	
Maximum Applied Water Allowance based on 70 percent of reference evapotranspiration (ETo). Estimated Total Water Usage (ETWU) based on hydrozone calculations.	Maximum Applied Water Allowance based on 60 percent of reference evapotranspiration. Estimated Total Water Usage based on hydrozone calculations required for all projects except 1-2 dwelling units.	Water budget based on 70 percent of ETo. Estimated annual water use calculated by adding the amount of water recommended in the irrigation schedule, or by another method approved by city.	Maximum Applied Water Allowance based on 60 percent of reference evapotranspiration. MAWA and Estimated Total Water Usage provided by web-based calculators.
<b>Estimated water use</b> shall not exceed MAWA.	<b>Estimated water use</b> shall not exceed MAWA.	Estimated water use shall not exceed landscape water budget.	<b>Estimated water use</b> shall not exceed MAWA.

Comp	Comparison of State Model Ordinan	f State Model Ordinance with WELOs of Local Jurisdictions	ictions
State Model Ordinance	Soquel Creek WD	City of Santa Cruz	Co. of Santa Cruz Draft
	Existing Lands	Existing Landscapes > 1 Acre	
Applies to landscapes >1 acre that existed as of Jan. 1, 2010.	Applies to landscapes >1 acre that existed as of effective date of WELO.	Applies to landscapes >1 acre that are "pre-existing."	Applies to landscapes >1 acre that existed as of effective date of WE-LO.
meter, the local agency may use irrigation audits to evaluate water use and provide recommendations to reduce water usage to a level that does not exceed MAWA based on 80% Reference Evapotranspiration (ETo).	Will assign a water budget based on 70% ETo, or 100% of ETo for recreation areas.	Will assign a water budget based on 70% ETo, or 100% of ETo for recreation areas.	Director may assign a water budget based on 70% ETo, or 100% of ETo for recreation areas.
For all landscapes that do not have a meter, the local agency shall administer programs that may include irrigation surveys and audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.	When evaluation of an existing property shows that annual water use exceeds the landscape water budget, the customer will be required to have a certified irrigation auditor perform a water audit and make recommendations as necessary to reduce water consumption consistent with the landscape water budget.	When evaluation of an existing property shows that annual water use exceeds the landscape water budget, the customer is required to have a certified irrigation auditor perform a water audit and make recommendations as necessary to reduce water consumption consistent with the landscape water budget.	When review of an existing property indicates that annual water use exceeds the landscape water budget, the water user may be required to have a certified irrigation auditor perform a water audit and make recommendations as necessary to reduce water consumption consistent with the MA-WA.
	Invasive	Invasive Species	
The use of invasive and/or noxious plant species is strongly discouraged.	<b>1</b>	1	Invasive species may be restricted or prohibited, including plants capable of adversely hybridizing with endemic native plants.

Comp	Comparison of State Model Ordinan	of State Model Ordinance with WELOs of Local Jurisdictions	ctions
State Model Ordinance	Soquel Creek WD	City of Santa Cruz	Co. of Santa Cruz Draft
	Enfor	Enforcement	
The local agency is responsible for enforcement of the ordinance, including but not limited to, approval of a permit and plan check or design review of a project.	It is unlawful to fail to comply or to replace components with non-compliant components or practices. New water service may be withheld until Landscape Plan compliant. If installed system found in violation, District may give of ninety days to correct. If not corrected within ninety days, the District may stop service, fine \$600 or impose 30-day prison sentence.	In addition to any other remedy provided by extg code, any provision may be enforced by administrative order issued pursuant to Title 4 of the Santa Cruz Municipal Code.  The water commission shall serve as the administrative enforcement hearing officer for appeals.	It is unlawful for approved plant or irrigation components approved to be replaced with noncompliant components or practices after final sign-off and for plant or irrigation components approved and inspected under this Chapter to be replaced with noncompliant components or practices. Enforcement per standard sections of County Code.
	Irrigatio	Irrigation Design	
<ul> <li>All irrigation systems shall be designed to prevent runoff, over- spray, low-head drainage and oth- er similar conditions where irriga- tion water flows off-site onto hardscapes, roadways or struc- tures.</li> </ul>	<ul> <li>All irrigation systems shall be designed to prevent runoff, over- spray, low-head drainage and other similar conditions where irrigation water flows off-site onto hardscapes, roadways, or struc- tures.</li> </ul>	All irrigation systems shall be designed to avoid runoff, overspray, low-head drainage and other similar conditions where water flows off site onto adjacent property, non-irrigated area, walks, roadways, or structures.	All irrigation systems shall be designed to avoid runoff, overspray, low-head drainage and other similar conditions where water flows off-site on to nontarget areas, adjacent property, non-irrigated area, walks, roads, etc.
<ul> <li>Irrigation systems shall be designed, maintained and managed to meet or exceed an average landscape irrigation efficiency of 71%.</li> </ul>	<ul> <li>Irrigation systems shall be designed, maintained and managed to meet or exceed an average landscape irrigation efficiency of 71%.</li> </ul>	<ul> <li>Landscape irrigation efficiency of about 70% assumed in water budget standard.</li> </ul>	<ul> <li>Irrigation systems shall be designed, maintained and managed to meet or exceed an average landscape irrigation efficiency of 71%.</li> </ul>

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<ul> <li>Areas less than eight feet wide must be irrigated with subsurface or low vol-ume irrigation.</li> </ul>	<ul> <li>Areas less than eight feet wide must be irrigated with subsurface or low volume irrigation, except SFDs.</li> </ul>	<ul> <li>Areas less than eight feet wide must be irrigated with subsurface or low vol-ume irrigation.</li> <li>Point source irrigation required where mature plant height will affect overhead spray uniformity.</li> </ul>	<ul> <li>Areas less than eight feet wide must be irrigated with subsurface or low volume irrigation.</li> </ul>
of the state of th	<ul> <li>All overhead spray nozzles shall have a precipitation rate of no more than 0.75 in. per hour.</li> </ul>	<ul> <li>All overhead spray nozzles shall have a precipitation rate of no more than one inch per hour.</li> </ul>	All overhead spray nozzles shall have a precipitation rate of no more than one inch per hour.
<ul> <li>Overnead irrigation shall not be permitted within 24 inches of any non-permeable surface, including driveways and sidewalks.</li> </ul>	<ul> <li>Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface, in- cluding driveways and sidewalks.</li> </ul>	<ul> <li>Overhead sprinkler systems shall not be permitted within twen- ty-four inches of any nonpermea- ble surface, including driveways and sidewalks.</li> </ul>	Overnead sprinkler systems shall not be permitted within 24 inches of any non-permeable surface, including driveways and sidewalks, unless sprinkler control is confirmed by audit.
Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low-flow non-spray technology.	<ul> <li>Allowable irrigation within the setback from non-permeable sur- faces may include drip, drip line, or other low-flow non-spray tech- nology.</li> </ul>	<ul> <li>Allowable irrigation within the setback may include drip, sub- surface, or other low volume, non- spray irrigation technology.</li> </ul>	Allowable irrigation within the setback may include drip, subsurface, or other low volume, nonspray irrigation technology.
<ul> <li>Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials</li> </ul>	<ul> <li>Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials</li> </ul>	<ul> <li>Distinct hydrozones shall be irrigated using separate irrigation circuits and valves.</li> </ul>	Distinct hydrozones shall be irrigated with separate valves.

<ul> <li>Where available, recycled water shall be used.</li> </ul>	<ul> <li>Where available, recycled water is strongly encouraged.</li> </ul>	<ul> <li>Where available, recycled wa- ter shall be used.</li> </ul>	<ul> <li>Where available and economically feasible, recycled water shall be used.</li> </ul>
	Irrigation	Irrigation Equipment	
Controller self-adjusting with rain-sensing device.	Controller, where required, is self-adjusting with rain-sensing device.	Controller, where required, is selfadjusting with rain-sensing device.	Controller, where required, is selfadjusting with rain-sensing device.
(SFD landscapes smaller than 5,000 sq.ft exempt.)	(For SFDs on parcels smaller than 10,000 sq.ft., controller recommended only.)	(Residential parcels smaller than 10,000 square feet are exempt.)	(Residential parcels smaller than 10,000 sq.ft. are exempt; landscapes smaller than 2,500 sq. ft. are exempt. Director may waive requirement for controller on 1-2 unit residential landscapes with low turf and primarily low water use plants.

Trees shall be watered using

Trees shall be watered using

Trees shall be watered using

separate irrigation circuits.

separate irrigation circuits where Trees shall be watered using

feasible.

separate irrigation circuits.

 Low volume, non-spray irrigation must be used on all non-turf

areas.

separate irrigation circuits.

Co. of Santa Cruz Draft

City of Santa Cruz

Soquel Creek WD

State Model Ordinance

Comparison of State Model Ordinance with WELOs of Local Jurisdictions

