MONTEREY COUNTY PLANNING COMMISSION

Meeting: December 12, 2012 Time: 2:00 p.m.	Agenda Item No.: 9		
Project Description: Conduct a workshop to discuss the proposed Energy and Water Efficiency			
Landscape Ordinance (REF110056) for the unincorporated areas of the County of Monterey to			
reduce energy and water consumption through landscape design and techniques.			
Project Location: County-wide APN: County-wide			
Planning File Number: REF110056 Owner: N/A			
Planning Area: County-wide Flagged and staked: N/A			
Zoning Designation: County-wide			
CEQA Action: Statutorily Exempt per Section 15262			
Department: RMA - Planning Department			

RECOMMENDATION:

Staff recommends that the Planning Commission conduct a workshop to discuss and for staff to receive input and direction on the proposed Energy and Water Efficiency Landscape Ordinance (REF110056) for the unincorporated areas of the County of Monterey to reduce energy and water consumption through landscape design and techniques.

PROJECT OVERVIEW:

The purpose of the workshop is to seek public input and receive direction from the Planning Commission to be incorporated in the preparation of the Energy and Water Efficiency Landscape regulations. In order to promote water conservation and efficiency and prevent the waste of a valuable resource, the State of California passed Assembly Bill 1881 – Water Conservation in Landscaping Act (Exhibit B) requiring local jurisdictions to either adopt the State Model Water Efficient Landscape Ordinance (Exhibit C) or an ordinance that is <u>at least</u> as effective in conserving water as the model ordinance.

Existing County water conservation policies and regulations relative to landscaping are currently in various County governing documents: the 2010 General Plan (Exhibit D), Monterey County Code (Chapters 18.44 and 18.50 – Exhibit E), and the Coastal Implementation Plans (Parts 2 through 5 – Exhibit F). In addition, the Water Resources Agency and the Monterey Peninsula Water Management District provide regulations for water use in landscaping. Thus County staff and the public often have to review policies in several documents to determine what regulations may or may not apply to a specific project.

In order to address AB 1881 requirements along with various County regulations in a comprehensive manner to promote consistency, reduce redundancy and provide for a user friendly presentation of the materials, it is proposed that a new landscape ordinance be developed. This landscape ordinance is proposed to include regulations in a two tiered approached, differentiating between small and large development projects. In addition, the ordinance is proposed to list certain types of developments exempt from the regulations such as: registered local, state or federal historical sites; cemeteries; agricultural production activities; and other small projects that do not typically involve landscaping.

Staff also proposes to create a County Landscaping informational brochure that will explain technical nuances of the ordinance as well as provide suggested plants species and list any resources that may be helpful to the public.

In addition to addressing water conservation, the proposed ordinance would include an energy efficiency component for landscape uses/equipment that require power though an energy source as well as the promotion of the use of native, native compatible, drought tolerant, and fire resistant plants and the eradication of invasive plant species.

This Energy and Water Efficiency Landscape Ordinance is being developed with assistance from the Department of Energy (DOE), Energy Efficiency Conservation Block Grant (EECBG) program awarded to the County.

The concept and approach for the Ordinance was brought before the Alternative Energy & Environment committee (November 8, 2012) and the County Streamlining Task Force (November 2, 2012). Comments were received and noted and both committees generally agreed with the conceptual approach.

A more detailed discussion can be found in **Exhibit A**.

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November 28, 2012

cc: Front Counter Copy; Planning Commission; Fire Protection Districts; Public Works Department; Parks Department; Environmental Health Bureau; Monterey County Water Resources Agency; Alternative Energy & Environment committee (AEE); County Streamlining Task Force c/0 Ernie Mill; California Coastal Commission; Marti Noel, RMA Planning; Jacqueline Onciano, Planning Services Manager; Anna V. Quenga, Project Planner; The Open Monterey Project; LandWatch; Monterey Peninsula Water Management District; Monterey Bay Unified Air Pollution Control District; Monterey County Agricultural Commissioner; Paul Lord, Water Conservation Specialist, Marina Coast Water District; Land Use Advisory Committees (11); Planning File REF110056.

Attachments: Exhibit A Project Discussion

Exhibit B State Law – Assembly Bill 1881 (Chaptered)

Exhibit C State Model Ordinance Exhibit D General Plan Policies

Exhibit E Chapters 18.44 & 18.50 of the Monterey County Code

Exhibit F Coastal Implementation Plan Policies

This report was reviewed by Jacqueline R. Onciano, Planning Services Manager.

EXHIBIT A DISCUSSION

Water conversation is critical to Monterey County and its residents. Landscaping is a key area where this can be achieved by requiring the installation and maintenance of landscaping that uses less water while still creating attractive designs. The proposed ordinance will provide specific requirements and guidance including the type of plant materials, the manner in which plants are grouped, addressing the specific type of soil, installing appropriate irrigation equipment, and capturing storm water all with the aim at using less water.

The proposed Landscape Ordinance to be developed will utilize the State Model Ordinance, while meeting the requirements of AB 1881 and addressing the specific characteristics of Monterey County in terms of climate, soils, and development type. It is important that the ordinance not unnecessarily burden homeowners and/or developers, but rather assist them in creating attractive but water-wise landscapes.

State Law – Assembly Bill 1881 and the State Model Ordinance

The State recognizes landscapes to be essential to the quality of life in California as an "enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection, and replacing ecosystems lost to development." However, water has also been indentified as a limited and valuable resource. Therefore, the basic premise of the Water Conservation in Landscaping Act is that "landscape design, installation, maintenance, and management can *and* should be water efficient."

Through the Water Conservation in Landscaping Act, an updated State Model Water Efficient Landscape Ordinance (State Model Ordinance) was developed by a stakeholder group convened by the California Urban Water Conservation Council. The Act mandates that local governments either adopt the model ordinance or an ordinance *at least* as effective, based on evidence in the record, in conserving water by January 1, 2010. If neither has occurred by that date, the local agency is required to enforce the State Model Ordinance.

Pursuant to Section 65596 of the Government Code, Specific elements were identified to be included within the State Model Ordinance. In order to create reasonable regulations for the County and meets the purpose and obligations of the State Model Ordinance, staff has recommended that the state specified requirements be incorporated within either the proposed ordinance, or an informational brochure. However, it should be noted that there are potential options to staff's recommendations. The state requirements, recommendations, and options are outlined in the **Incorporation Table** below.

STATE REQUIREM	ENT/ORDINANCE INCORPORAT	TON TABLE
State Requirement	Staff Recommendation	Options
Include provisions for appropriate plant groupings that use similar amounts of water.	Include in regulations. Also include suggestive plants/ plantings within a County Landscape brochure.	No options identified at this time.
Include a landscape water budget component to determine the maximum amount of water use ¹ .	Include in regulations.	No options identified at this time.
Promote the benefits of consistent local ordinances in neighboring areas.	Include as part of the purpose statement of the ordinance.	Also include the same statement within a County Landscape brochure.
Encourage the capture and retention of stormwater ² onsite to improve water use efficiency and quality.	Encouraged in regulations, not required. Also refer to Low Impact Development requirements and include bioretention information within a County Landscape brochure.	Require the use of stormwater as part of regulations.
Include provisions for the use of automatic irrigation systems and schedules based on climate, terrain, soil.	Include in regulations.	Also include information within a County Landscape brochure.
Educate water users on water conservation in landscaping.	Include within a County Landscape brochure.	No options identified at this time.
Address regional difference, including fire prevention needs.	Include as regulations (fire resistant plants). Also include suggestive plants/plantings within a County Landscape brochure.	No options identified at this time.
Exempt landscaping that is part of a registered historical site type, and other environmental conditions.	Include as an exemption in the regulations.	No options identified at this time.
Include provisions for onsite soil assessment and soil management plans to promote healthy plant growth and prevent excessive erosion and runoff, and the use of mulches in shrub areas, garden beds, and landscaped areas where appropriate.	Include in regulations. Also include helpful information within a County Landscape brochure.	No options identified at this time.
Provide for the use of recycled water.	Encouraged in regulations but not required. Also include within a County Landscape brochure.	Require in regulations.
Encourage the use of economic incentives to promote efficient use of water.	Include suggestions within a County Landscape brochure. However, none have been identified as of yet.	Include within Ordinance.
Include provisions for landscape maintenance practices (i.e. water audits).	Include in regulations. Also include helpful suggestions within a County Landscape brochure.	No options identified at this time.
Minimize irrigation overspray and runoff.	Include in regulations as part on landscape maintenance section. Also include within a County Landscape brochure.	No options identified at this time.

¹ Existing requirement of the MPWMD.
² Existing requirement of the Federal Clean Water Act.

In addition to the requirements listed above, the State Model Ordinance provides a quantitative list of minimum landscape projects applicable to the ordinance. Special provisions are made for existing landscapes and cemeteries. Registered local, state or federal historical sites; ecological restoration projects that do not require a permanent irrigation system; mined-land reclamation projects that do not require a permanent irrigation system; or plant collections, as part of botanical gardens and arboretums open to the public are found to be exempt. The project applicability list includes:

- New construction³ and rehabilitated landscapes⁴ for **public agency projects and private development projects** with a landscape area equal to or greater than **2,500 square feet** requiring a building or landscape permit, plan check or design review
- New construction and rehabilitated landscapes which are **developer-installed in single-family and multi-family projects** with a landscape area equal to or greater than **2,500 square feet** requiring a building or landscape permit, plan check, or design review
- New construction landscapes which are homeowner-provided and/or homeowner-hired in single-family and multi-family residential projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building or landscape permit, plan check or design review

Existing County Regulations

Since the County has not adopted the State Model Ordinance, the regulations outlined in AB1881 are required to be enforced. However, existing County regulations relative to landscaping can be found in various County documents. Although these regulations are similar, they are tied to certain geographic areas of the County. Fundamentally, the regulations call for the use of drought tolerant plants, native plants, and the use of and low precipitation sprinkler heads, bubblers, drip irrigation system and timing devices as part of the exterior landscape. Furthermore, County policies include the use of native plants, fire resistant plants and the eradication of invasive plant species.

How it All Fits Together

In an effort to simplify the landscape design and review process, staff proposes to combine all similar and identical regulations into the one ordinance. In order to determine what should be included within the proposed landscape ordinance, staff compared the requirements of: State Law and the State Model Ordinance; the 2012 General Plan; the Health and Safety, Public Services, Environment, and Buildings and Construction Sections of the Monterey County Code; the North County Coastal Implementation; the Big Sur Coastal Implementation Plan; the Carmel Area Coastal Implementation Plan; and the Del Monte Forest Coastal Implementation Plan. Regulations required by outside agencies have also been identified. (See Comparison Table below.) The Monterey County Water Resources Ordinance No. 3932, and the Monterey Peninsula Water Management District Rule No. 172 both require submittal and review of water use information relative to landscaping in certain areas of the County. These rules were noted as they are similar in nature to what is required by the State. However, staff does not propose to create the ordinance in such a way where the Planning Department would take ownership over the duties required by the outside agencies. It is included as part of the analysis due to the potential for overlap in regulations (see subsequent paragraph "Comments/Concerns Identified" below).

³ New construction means a new building with a landscape, or other new landscape, such as a park, playground, or greenbelt without an associated building.

⁴ Rehabilitated landscape means any re-landscaping project modifying more than 50% of the landscaped area.

		COMPARISON	TABLE	
State Law Landscape	2012	Monterey	Coastal Regulations	Outside
Requirements	General	County		Agencies
	Plan	Code		
Plant groupings that use	OS-5.6	18.44 & 18.50	20.144.030.B.2.c & B.5 (NC)	WRA Ord 3932
similar amounts of water	000010	20111 00 2010 0	20.144.040.B.9 (NC)	
			20.145.040.B.9 (BS)	
			20.145.050.C.2 (BS)	
			20.146.030.C.1.e (CML)	
			20.146.040.B.1 (CML)	
			20.146.050.E.1.d (CML)	
			20.146.110.A.2 (CML)	
			20.147.040.C.10 (DMF)	
			20.147.110.A.2 (DMF)	
Landscape water budget	PS-3.11			MPWMD Rule
component (maximum				172
amount of water use)		. 1		
Capture and retention of	PS-2.8 &	16.14	20.144.070.E.12 (NC)	WRA Ord
stormwater onsite to	PS-3.11			3932,
improve water use		•		Clean Water
efficiency and quality				Act
Automatic irrigation	PS-3.11	18.44 & 18.50	20.145.050.C.3 (BS)	WRA Ord 3932
systems and schedules		·	20.146.050.E.1.d (CML)	
based on climate, terrain,			20.146.110.A.2 (CML)	
soil type, and other				•
environmental conditions				
Onsite soil assessment	PS-2.8	16.12.090	20.144.070.A.3 (NC)	
and soil management				
plans to promote healthy				
plant growth and prevent				
excessive erosion and				
runoff, and the use of				
mulches in shrub areas,				
garden beds, and				
landscaped areas where				•
appropriate	70.0.10	15 10 15 16	00144.050.73.40.03.03	XX 0 1000
Use of recycled water	PS-3.12	15.12; 15.16	20.144.070.E.12 (NC)	WRA Ord 3932
T 1 1:00	G 4 20	10 10 10 56	20.147.110.A.7 (DMF)	
Regional difference,	S-4.28	18.10, 18.56	20.144.100.C.2.d (NC)	
including fire prevention			20.145.080.C.4(BS)	
needs			20.146.080.C.1 (CML)	
T and a and marintaness	DC 2 11		20.147.060.B.1 (DMF)	MOWA (D. D1-)
Landscape maintenance	PS-3.11			MPWMD Rule
practices (i.e. water				172
audits)	DC 2 11		20 145 050 C 2 (DS)	MDW/MD D1-
Reduce irrigation	PS-3.11		20.145.050.C.3 (BS)	MPWMD Rule
overspray and runoff	•		20.146.050.E.1.d (CML)	172
402 6(E) 1320 of	OS-5.14	10.46	20.146.110.A.2 (CML)	
492.6(F) – use of invasive and/or noxious	US-3.14	10.40	20.147.040.C.10 (DMF)	
plant species is strongly			20.147.060.B.1 (DMF	
discouraged				
disconfaged				

Proposed Approach

Staff recommends that a new section for both the inland and coastal zoning ordinances be created and adopted: Title 21, Section 21.66.070 and Title 20, 20.66.070, "Standards for Landscaping." This will satisfy the requirements outlined in State Law and combine similar regulations found in the 2010 General Plan, the Monterey County Code, and the Coastal Implementation Plans. For consistency, the ordinances will be identical for both inland and coastal. Any requirements or issues specific to a particular Coastal area will continue to be addressed through the update of the Coastal Implementation Plan (CIP) for the area in question. The previous ordinances and regulations will be rescinded as appropriate.

The landscape chapter will include two tiered requirements. The first set of requirements will apply to projects that meet the applicability guidelines of the State Model Ordinance (see page 4). These requirements will contain the minimum regulations required by AB1881. Landscape projects applicable to these requirements will need to submit a landscape package that includes: project information (total landscape area, project type, water supply, etc.), a Water Efficient Landscape Worksheet (hydrozone information table and water budget calculations), a Soils Management report, a landscape design plan, irrigation design plan, and grading design plan.

The other set of requirements will be applicable to smaller projects such as single family dwellings with landscaped areas less than 5,000 square feet and commercial landscaped areas less than 2,500 square feet that require the submittal of a landscape plan per existing County regulations. Requirements for smaller projects will generally be qualitative in nature, with the exception of a square footage limitation on turf. These requirements will include suggested plants, plant groupings, and the installation of water efficient landscape irrigation but will not include the obligation of submitting soils analysis and a water budget, resulting in a process similar to what is exists.

In addition to the proposed landscape ordinance, an informational landscape brochure will be created to assist the public in understanding some of the more complicated requirements of the State (i.e. Water Efficient Landscape Worksheet, plant groupings, irrigation, suggestions for low impact development, etc.). Not only will the brochure educate and assist the public, it will capture some of the elements required by state law that may not be appropriate as language in an ordinance. The brochure shall also include suggested plant lists for native, native compatible, drought resistant, and fire resistant species.

Options

Although staff recommends that the proposed ordinance be incorporated into Title 20 and 21, the Planning Commission has the option of recommending that the landscape ordinance be incorporated within a new chapter within the Monterey County Code, or that the existing Chapter 18.44 or 18.50 be amended to include the ordinance language.

In addition, options exist for the incorporation of the state regulations (see previous **Incorporation Table**).

Comments/Concerns Identified

The concept and approach for the Ordinance was brought before the Alternative Energy & Environment committee (AEE) and the County Streamlining Task Force. The AEE suggested that staff include nurseries on the list of stakeholders, specifically related to the development of the suggested native and native-compatible plant lists. The Streamlining Task Force had

concerns relative to cost implications to developers and landscape requirements in agricultural areas but appreciated the inclusion of the eradication of invasive plants.

Several potential issues need to be carefully addressed; specifically the technical requirements of the State (i.e. water budget component, a Soil Management Report, and water audits). These requirements will necessitate a technical analysis reviewed by staff. Unfortunately, this has the potential to create a financial impact on the County as is will result in the need to hire expert staff in these areas, train existing staff in these areas, or contract with a consultant for landscape review. However, these requirements are applicable to larger projects (landscape areas equal or greater than 2,500 square feet) which in most cases would involve landscape design developed by either a landscape architect or contractor. The County may have an option, similar to our existing landscape plan review, which would put the onus on the professional producing the landscape packet.

Another potential issue or concern is that a cross-over of landscape requirements will remain, specifically in the Coastal areas and with outside agencies. Regulations in the Coastal Implementation Plans would remain intact and landscape requirements by outside agencies will as such.

Next Steps

Input received from the Planning Commission, public and key stakeholders will inform the development of a draft ordinance. Once the ordinance is drafted, environmental review will be conducted and the final draft ordinance brought back to the Planning Commission for a formal recommendation to the Board of Supervisors.

EXHIBIT B ASSEMBLY BILL NO. 1881

CHAPTER 559

FILED WITH SECRETARY OF STATE SEPTEMBER 28, 2006

APPROVED BY GOVERNOR SEPTEMBER 28, 2006

PASSED THE ASSEMBLY AUGUST 30, 2006

PASSED THE SENATE AUGUST 28, 2006

AMENDED IN SENATE AUGUST 23, 2006

AMENDED IN SENATE AUGUST 7, 2006

AMENDED IN SENATE JUNE 12, 2006

AMENDED IN ASSEMBLY MAY 4, 2006

AMENDED IN ASSEMBLY APRIL 6, 2006

INTRODUCED BY Assembly Member Laird

JANUARY 23, 2006

An act to add Section 1353.8 to the Civil Code, to repeal and add Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code, to add Section 25401.9 to the Public Resources Code, and to add Article 4.5 (commencing with Section 535) to Chapter 8 of Division 1 of the Water Code, relating to water conservation.

LEGISLATIVE COUNSEL'S DIGEST

AB 1881, Laird Water conservation.

(1) Existing law, the Davis-Sterling Common Interest Development Act, defines and regulates common interest developments, which include community apartment projects, condominium projects, planned developments, and stock cooperatives.

This bill would provide that the architectural guidelines of a common interest development shall not prohibit or include conditions that have the effect of prohibiting the use of low water-using plants as a group.

(2) The Water Conservation in Landscaping Act requires the Department of Water Resources to appoint an advisory task force to work with the department to draft a model local water efficient landscape ordinance that local agencies may adopt, requires the task force to submit the ordinance to the department on or before May 1, 1991, and requires the task force to cease to exist on the date the department adopts the model ordinance or January 1, 1992, whichever occurs first. The act requires the department, not later than January 1, 1992, to adopt a model local water efficient landscape ordinance which each local agency may adopt. The act makes the model local water efficient landscape ordinance adopted by the department applicable within the jurisdiction of a local agency if that local agency, by January 1, 1993, has not adopted a water efficient landscape ordinance or has not adopted certain findings that the adoption of the ordinance is unnecessary.

This bill would specify that the provision making the model ordinance applicable to a local agency on and after January 1, 1993, does not apply to chartered cities. The bill would require the department, to the extent funds are appropriated, not later than January 1, 2009, by regulation, to update the model ordinance in accordance with specified requirements. The bill would require the department to prepare and submit to the Legislature a prescribed report before the adoption of the updated model ordinance. The bill would require a local agency, not later than January 1, 2010, to

adopt the updated model ordinance or other water efficient landscape ordinance that is at least as effective in conserving water as the updated model ordinance. The bill would make the updated model ordinance applicable within the jurisdiction of a local agency, including a chartered city, if, by January 1, 2010, the local agency has not adopted its own water efficient landscape ordinance or the updated model ordinance. The bill would require each local agency, not later than January 31, 2010, to notify the department as to whether the local agency is subject to the department's updated model ordinance and, if not, to submit to the department a copy of the water efficient landscape ordinance adopted by the local agency, among other documents. The bill would require the department, to the extent funds are appropriated, not later than January 31, 2011, to prepare and submit a report to the Legislature relating to the status of water efficient landscape ordinances adopted by local agencies.

By imposing requirements on local agencies in connection with the adoption of water efficient landscape ordinances, the bill would impose a state-mandated local program.

(3) Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), after one or more public hearings, to take specified action to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy. Existing law requires the Energy Commission, by January 1, 2004, to amend specified regulations to require that residential clothes washers manufactured on or after January 1, 2007, be at least as water efficient as commercial clothes washers, and to take certain other related action.

This bill would require the Energy Commission, in consultation with the department, to adopt, to the extent funds are available, by regulation performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water. The bill would require the Energy Commission to adopt those requirements for landscape irrigation controllers and moisture sensors by January 1, 2010, and, on and after January 1, 2012, would prohibit the sale or installation of an irrigation controller or moisture sensor for landscape use unless the controller or sensor meets those adopted requirements. The bill would require the Energy Commission, on or before January 1, 2010, to prepare and submit to the Legislature a report that sets forth a proposed schedule for adopting performance standards and labeling requirements for emission devices and valves.

(4) Existing law generally requires an urban water supplier to install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

This bill would require a water purveyor as defined, to require as a condition of new retail water service on and after January 1, 2008, the installation of separate water meters to measure the volume of water used exclusively for landscape purposes. The bill would make this requirement applicable to specified service connections.

(5) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

- SECTION 1. Section 1353.8 is added to the Civil Code, to read: 1353.8. The architectural guidelines of a common interest development shall not prohibit or include conditions that have the effect of prohibiting the use of low water-using plants as a group.
- SEC. 2. Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code is repealed.
- SEC. 3. Article 10.8 (commencing with Section 65591) is added to Chapter 3 of Division 1 of Title 7 of the Government Code, to read:

Article 10.8. Water Conservation in Landscaping

- 65591. This article shall be known and may be cited as the Water Conservation in Landscaping Act.
- 65592. Unless the context requires otherwise, the following definitions govern the construction of this article:
 - (a) "Department" means the Department of Water Resources.
- (b) "Local agency" means any city, county, or city and county, including a charter city or charter county.
- (c) "Water efficient landscape ordinance" means an ordinance or resolution adopted by a local agency, or prepared by the department, to address the efficient use of water in landscaping.
 - 65593. The Legislature finds and declares all of the following:
- (a) The waters of the state are of limited supply and are subject to ever increasing demands.
- (b) The continuation of California's economic prosperity is dependent on adequate supplies of water being available for future uses.
- (c) It is the policy of the state to promote the conservation and efficient use of water and to prevent the waste of this valuable resource.
- (d) 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 replacing ecosystems lost to development.
- (e) Landscape design, installation, maintenance, and management can and should be water efficient.
- (f) Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable use or unreasonable method of use.
- (g) (1) The Legislature, pursuant to Chapter 682 of the Statutes of 2004, requested the California Urban Water Conservation Council to convene a stakeholders work group to develop recommendations for improving the efficiency of water use in urban irrigated landscapes.
- (2) The work group report includes a recommendation to update the model water efficient landscape ordinance adopted by the department pursuant to Chapter 1145 of the Statutes of 1990.
- (3) It is the intent of the Legislature that the department promote the use of this updated model ordinance.
- (h) Notwithstanding Article 13 (commencing with Section 65700), this article addresses a matter that is of statewide concern and is not a municipal affair as that term is used in Section 5 of Article XI of the California Constitution. Accordingly, it is the intent of the Legislature that this article, except as provided in Section 65594, apply to all cities and counties, including charter cities and charter counties.

- 65594. (a) Except as provided in Section 65595, if by January 1, 1993, a local agency did not adopt a water efficient landscape ordinance and did not adopt findings based on climatic, geological, or topographical conditions, or water availability that state that a water efficient landscape ordinance is unnecessary, the model water efficient landscape ordinance adopted by the department pursuant to Chapter 1145 of the Statutes of 1990 shall apply within the jurisdiction of the local agency as of that date, shall be enforced by the local agency, and shall have the same force and effect as if adopted by the local agency.
- (b) Notwithstanding subdivision (b) of Section 65592, subdivision (a) does not apply to chartered cities.
- (c) This section shall apply only until the department updates the model ordinance.
- 65595. (a) (1) To the extent funds are appropriated, not later than January 1, 2009, by regulation, the department shall update the model water efficient landscape ordinance adopted pursuant to Chapter 1145 of the Statutes of 1990, after holding one or more public hearings. The updated model ordinance shall be based on the recommendations set forth in the report prepared pursuant to Chapter 682 of the Statutes of 2004 and shall meet the requirements of Section 65596.
- (2) Before the adoption of the updated model ordinance pursuant to paragraph (1), the department shall prepare and submit to the Legislature a report relating to both of the following:
- (A) The extent to which local agencies have complied with the model water efficient landscape ordinance adopted pursuant to Chapter 1145 of the Statutes of 1990.
- (B) The department's recommendations regarding the landscape water budget component of the updated model ordinance described in subdivision (b) of Section 65596.
- (b) Not later than January 31, 2009, the department shall distribute the updated model ordinance adopted pursuant to subdivision (a) to all local agencies and other interested parties.
- (c) On or before January 1, 2010, a local agency shall adopt one of the following:
- (1) A water efficient landscape ordinance that is, based on evidence in the record, at least as effective in conserving water as the updated model ordinance adopted by the department pursuant to subdivision (a).
 - (2) The updated model ordinance described in paragraph (1).
- (d) If the local agency has not adopted, on or before January 1, 2010, a water efficient landscape ordinance pursuant to subdivision (c), the updated model ordinance adopted by the department pursuant to subdivision (a) shall apply within the jurisdiction of the local agency as of that date, shall be enforced by the local agency, and shall have the same force and effect as if adopted by the local agency.
- (e) Nothing in this article shall be construed to require the local agency's water efficient landscape ordinance to duplicate, or to conflict with, a water efficiency program or measure implemented by a public water system, as defined in Section 116275 of the Health and Safety Code, within the jurisdictional boundaries of the local agency.
- 65596. The updated model ordinance adopted pursuant to Section 65595 shall do all the following in order to reduce water use:
- (a) Include provisions for water conservation and the appropriate use and groupings of plants that are well-adapted to particular sites and to particular climatic, soil, or topographic conditions. The model ordinance shall not prohibit or require specific plant species,

but it may include conditions for the use of plant species or encourage water conserving plants. However, the model ordinance shall not include conditions that have the effect of prohibiting or requiring specific plant species.

- (b) Include a landscape water budget component that establishes the maximum amount of water to be applied through the irrigation system, based on climate, landscape size, irrigation efficiency, and plant needs.
- (c) Promote the benefits of consistent local ordinances in neighboring areas.
- (d) Encourage the capture and retention of stormwater onsite to improve water use efficiency or water quality.
- (e) Include provisions for the use of automatic irrigation systems and irrigation schedules based on climatic conditions, specific terrains and soil types, and other environmental conditions. The model ordinance shall include references to local, state, and federal laws and regulations regarding standards for water-conserving irrigation equipment. The model ordinance may include climate information for irrigation scheduling based on the California Irrigation Management Information System.
- (f) Include provisions for onsite soil assessment and soil management plans that include grading and drainage to promote healthy plant growth and to prevent excessive erosion and runoff, and the use of mulches in shrub areas, garden beds, and landscaped areas where appropriate.
- (g) Promote the use of recycled water consistent with Article 4 (commencing with Section 13520) of Chapter 7 of Division 7 of the Water Code.
- (h) Seek to educate water users on the efficient use of water and the benefits of doing so.
 - (i) Address regional differences, including fire prevention needs.
- (j) Exempt landscaping that is part of a registered historical site.
- (k) Encourage the use of economic incentives to promote the efficient use of water.
- (1) Include provisions for landscape maintenance practices that foster long-term landscape water conservation. Landscape maintenance practices may include, but are not limited to, performing routine irrigation system repair and adjustments, conducting water audits, and prescribing the amount of water applied per landscaped acre.
- (m) Include provisions to minimize landscape irrigation overspray and runoff.
- 65597. Not later than January 31, 2010, each local agency shall notify the department as to whether the local agency is subject to the department's updated model ordinance adopted pursuant to Section 65595, and if not, shall submit to the department a copy of the water efficient landscape ordinance adopted by the local agency, and a copy of the local agency's findings and evidence in the record that its water efficient landscape ordinance is at least as effective in conserving water as the department's updated model ordinance. Not later than January 31, 2011, the department shall, to the extent funds are appropriated, prepare and submit a report to the Legislature summarizing the status of water efficient landscape ordinances adopted by local agencies.
- 65598. Any model ordinance adopted pursuant to this article shall exempt cemeteries from all provisions of the ordinance except those set forth in subdivisions (h), (k), and (l) of Section 65596. In adopting language specific to cemeteries, the department shall recognize the special landscape management needs of cemeteries.
 - 65599. Any actions or proceedings to attach, review, set aside,

void, or annul the act, decision, or findings of a local agency on the ground of noncompliance with this article shall be brought pursuant to Section 1085 of the Code of Civil Procedure.

- SEC. 4. Section 25401.9 is added to the Public Resources Code, to read:
- 25401.9. (a) To the extent that funds are available, the commission, in consultation with the Department of Water Resources, shall adopt by regulation, after holding one or more public hearings, performance standards and labeling requirements for landscape irrigation equipment, including, but not limited to, irrigation controllers, moisture sensors, emission devices, and valves, for the purpose of reducing the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.
- (b) For the purposes of complying with subdivision (a), the commission shall do all of the following:
- (1) Adopt performance standards and labeling requirements for landscape irrigation controllers and moisture sensors on or before January 1, 2010.
- (2) Consider the Irrigation Association's Smart Water Application Technology Program testing protocols when adopting performance standards for landscape irrigation equipment, including, but not limited to, irrigation controllers, moisture sensors, emission devices, and valves.
- (3) Prepare and submit a report to the Legislature, on or before January 1, 2010, that sets forth on a proposed schedule for adopting performance standards and labeling requirements for emission devices and valves.
- (c) On and after January 1, 2012, an irrigation controller or moisture sensor for landscape irrigation uses may not be sold or installed in the state unless the controller or sensor meets the performance standards and labeling requirements established pursuant to this section.
- SEC. 5. Article 4.5 (commencing with Section 535) is added to Chapter 8 of Division 1 of the Water Code, to read:

Article 4.5. Irrigated Landscape

- 535. (a) A water purveyor shall require as a condition of new retail water service on and after January 1, 2008, the installation of separate water meters to measure the volume of water used exclusively for landscape purposes.
 - (b) Subdivision (a) does not apply to either of the following:
 - (1) Single-family residential connections.
- (2) Connections used to supply water for the commercial production of agricultural crops or livestock.
- (c) Subdivision (a) applies only to a service connection for which both of the following apply:
- (1) The connection serves property with more than 5,000 square feet of irrigated landscape.
- (2) The connection is supplied by a water purveyor that serves 15 or more service connections.
- (d) For the purposes of this section, "new retail water service" means the installation of a new water meter where water service has not been previously provided, and does not include applications for new water service submitted before January 1, 2007.
- SEC. 6. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

EXHIBIT C MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (Minus Appendicies)

California Code of Regulations
Title 23. Waters
Division 2. Department of Water Resources
Chapter 2.7. Model Water Efficient Landscape Ordinance

§ 490. Purpose.

- (a) The State Legislature has found:
- (1) that the waters of the state are of limited supply and are subject to ever increasing demands;
- (2) that the continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses;
- (3) that it is the policy of the State to promote the conservation and efficient use of water and to prevent the waste of this valuable resource;
- (4) that 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 replacing ecosystems lost to development; and
- (5) that landscape design, installation, maintenance and management can and should be water efficient; and
- (6) that Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use.
- (b) Consistent with these legislative findings, the purpose of this model ordinance is to:
- (1) promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;
- (2) establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects;
- (3) establish provisions for water management practices and water waste prevention for existing landscapes;
- (4) use water efficiently without waste by setting a Maximum Applied Water Allowance as an upper limit for water use and reduce water use to the lowest practical amount;
- (5) promote the benefits of consistent landscape ordinances with neighboring local and regional agencies;
- (6) encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered-rate structure; and
- (7) encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Model Water Efficient Landscape Ordinance or its local landscape ordinance.

Note: Authority cited: Section 65593, Government Code. Reference: Sections 65591, 65593, 65596, Government Code.

§ 490.1 Applicability

- (a) After January 1, 2010, this ordinance shall apply to all of the following landscape projects:
- (1) new construction and rehabilitated landscapes for public agency projects and private development projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check or design review:
- (2) new construction and rehabilitated landscapes which are developer-installed in single-family and multi-family projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;
- (3) new construction landscapes which are homeowner-provided and/or homeowner-hired in single-family and multi-family residential projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building or landscape permit, plan check or design review;
- (4) existing landscapes limited to Sections 493, 493.1 and 493.2; and
- (5) cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 492.4, 492.11 and 492.12; and existing cemeteries are limited to Sections 493, 493.1 and 493.2.
- (b) This ordinance does not apply to:

registered local, state or federal historical sites;

ecological restoration projects that do not require a permanent irrigation system; mined-land reclamation projects that do not require a permanent irrigation system; or plant collections, as part of botanical gardens and arboretums open to the public.

§ 491. Definitions.

The terms used in this ordinance have the meaning set forth below:

- (a) "applied water" means the portion of water supplied by the irrigation system to the landscape.
- (b) "automatic irrigation controller" means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.
- (c) "backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- (d) "Certificate of Completion" means the document required under Section 492.9.
- (e) "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 US Environmental Protection Agency's WaterSense irrigation designer certification program and Irrigation Association's Certified Irrigation Designer program.
- (f) "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 US Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's Certified Landscape Irrigation Auditor program.
- (g) "check valve" or "anti-drain valve" means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.
- (h) "common interest developments" means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.
- (i) "conversion factor (0.62)" means the number that converts acre-inches per acre per year to gallons per square foot per year
- (j) "drip irrigation" means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
- (k) "ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- (l)"effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth.
- (m) "emitter" means a drip irrigation emission device that delivers water slowly from the system to the soil.
- (n) "established landscape" means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.
- (o) "establishment period of the plants" means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth.
- (p) "Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in Section 492.4.
- (q) "ET adjustment factor" (ETAF) means a factor of 0.7, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.

A combined plant mix with a site-wide average of 0.5 is the basis of the plant factor portion of this calculation. For purposes of the ETAF, the average irrigation efficiency is 0.71. Therefore, the ET Adjustment Factor is (0.7)=(0.5/0.71). ETAF for a Special Landscape Area shall not exceed 1.0. ETAF for existing non-rehabilitated landscapes is 0.8.

- (r) "evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.
- (s) "flow rate" means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.
- (t) "hardscapes" means any durable material (pervious and non-pervious).
- (u) "homeowner-provided landscaping" means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this ordinance, is a person who occupies the dwelling he or she owns. This excludes speculative homes, which are not owner-occupied dwellings.
- (v) "hydrozone" means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.
- (w) "infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).
- (x)"invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies

as noxious species. "Noxious weeds" means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

- (y) "irrigation audit" means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule.
- (z) "irrigation efficiency" (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this ordinance is 0.71. Greater irrigation efficiency can be expected from well designed and maintained systems.
- (aa) "irrigation survey" means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.
- (bb) "irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.
- (cc) "landscape architect" means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.
- (dd) "landscape area" means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).
- (ee) "landscape contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
- (ff) "Landscape Documentation Package" means the documents required under Section 492.3.
- (gg) "landscape project" means total area of landscape in a project as defined in "landscape area" for the purposes of this ordinance, meeting requirements under Section 490.1.
- (hh) "lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- (ii) "local agency" means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.
- (jj) "local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.
- (kk) "low volume irrigation" means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
- (ll) "main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet. (mm) "Maximum Applied Water Allowance" (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 492.4. 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. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0.
- (nn) "microclimate" means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.
- (00) "mined-land reclamation projects" means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.
- (pp) "mulch" means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.
- (qq) "new construction" means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.
- (rr) "operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.
- (ss) "overhead sprinkler irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors).
- (tt) "overspray" means the irrigation water which is delivered beyond the target area.
- (uu) "permit" means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.
- (vv) "pervious" means any surface or material that allows the passage of water through the material and into the underlying soil.

- (ww) "plant factor" or "plant water use factor" is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for low water use plants is 0 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the Department of Water Resources 2000 publication "Water Use Classification of Landscape Species".
- (xx) "precipitation rate" means the rate of application of water measured in inches per hour.
- (yy) "project applicant" means the individual or entity submitting a Landscape Documentation Package required under Section 492.3, to request a permit, plan check, or design review from the local agency. A project applicant may be the property owner or his or her designee.
- (zz) "rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains.
- (aaa) "record drawing" or "as-builts" means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.
- (bbb) "recreational area" means areas dedicated to active play such as parks, sports fields, and golf courses where turf provides a playing surface.
- (ccc) "recycled water", "reclaimed water", or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.
- (ddd) "reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Section 495.1, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowance so that regional differences in climate can be accommodated.
- (eee) "rehabilitated landscape" means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are completed within one year.
- (fff) "runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.
- (ggg) "soil moisture sensing device" or "soil moisture sensor" means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.
- (hhh) "soil texture" means the classification of soil based on its percentage of sand, silt, and clay.
- (iii) "Special Landscape Area" (SLA) means an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.
- (iii) "sprinkler head" means a device which delivers water through a nozzle.
- (kkk) "static water pressure" means the pipeline or municipal water supply pressure when water is not flowing.
- (Ill) "station" means an area served by one valve or by a set of valves that operate simultaneously,
- (mmm) "swing joint" means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.
- (nnn) "turf" means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.
- (000) "valve" means a device used to control the flow of water in the irrigation system.
- (ppp) "water conserving plant species" means a plant species identified as having a low plant factor.
- (qqq) "water feature" means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.
- (rrr) "watering window" means the time of day irrigation is allowed.
- (sss) "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.

§ 492. Provisions for New Construction or Rehabilitated Landscapes.

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.1 Compliance with Landscape Documentation Package.

- (a) Prior to construction, the local agency shall:
- (1) provide the project applicant with the ordinance and procedures for permits, plan checks, or design reviews;
- (2) review the Landscape Documentation Package submitted by the project applicant;
- (3) approve or deny the Landscape Documentation Package;
- (4) issue a permit or approve the plan check or design review for the project applicant; and
- (5) upon approval of the Landscape Documentation Package, submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.
- (b) Prior to construction, the project applicant shall:
- (1) submit a Landscape Documentation Package to the local agency.
- (c) Upon approval of the Landscape Documentation Package by the local agency, the project applicant shall:
- (1) receive a permit or approval of the plan check or design review and record the date of the permit in the Certificate of Completion;
- (2) submit a copy of the approved Landscape Documentation Package along with the record drawings, and any other information to the property owner or his/her designee; and
- (3) submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.2 Penalties.

(a) A local agency may establish and administer penalties to the project applicant for non-compliance with the ordinance to the extent permitted by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.3 Elements of the Landscape Documentation Package.

- (a) The Landscape Documentation Package shall include the following six (6) elements:
- (1) project information;
- (A) date
- (B) project applicant
- (C) project address (if available, parcel and/or lot number(s))
- (D) total landscape area (square feet)
- (E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
- (F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
- (G) checklist of all documents in Landscape Documentation Package
- (H) project contacts to include contact information for the project applicant and property owner
- (I) applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".
- (2) Water Efficient Landscape Worksheet;
- (A) hydrozone information table
- (B) water budget calculations
- 1. Maximum Applied Water Allowance (MAWA)
- 2. Estimated Total Water Use (ETWU)
- (3) soil management report;
- (4) landscape design plan;
- (5) irrigation design plan; and
- (6) grading design plan.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.4 Water Efficient Landscape Worksheet.

(a) A project applicant shall complete the Water Efficient Landscape Worksheet which contains two sections (see sample worksheet in Appendix B):

- (1) a hydrozone information table (see Appendix B, Section A) for the landscape project; and
- (2) a water budget calculation (see Appendix B, Section B) for the landscape project. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, a project applicant shall use the ETo values from the Reference Evapotranspiration Table in Appendix A. For geographic areas not covered in Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.
- (b) Water budget calculations shall adhere to the following requirements:
- (1) The plant factor used shall be from WUCOLS. 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.
- (2) All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.
- (3) All Special Landscape Areas shall be identified and their water use calculated as described below.
- (4) ETAF for Special Landscape Areas shall not exceed 1.0.
- (c) Maximum Applied Water Allowance

The Maximum Applied Water Allowance shall be calculated using the equation:

$$MAWA = (ETo) (0.62) [(0.7 \times LA) + (0.3 \times SLA)]$$

The example calculations below are hypothetical to demonstrate proper use of the equations and do not represent an existing and/or planned landscape project. The ETo values used in these calculations are from the Reference Evapotranspiration Table in Appendix A, for planning purposes only. For actual irrigation scheduling, automatic irrigation controllers are required and shall use current reference evapotranspiration data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

(1) Example MAWA calculation: a hypothetical landscape project in Fresno, CA with an irrigated landscape area of 50,000 square feet without any Special Landscape Area (SLA= 0, no edible plants, recreational areas, or use of recycled water). To calculate MAWA, the annual reference evapotranspiration value for Fresno is 51.1 inches as listed in the Reference Evapotranspiration Table in Appendix A.

 $MAWA = (ETo) (0.62) [(0.7 \times LA) + (0.3 \times SLA)]$

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons)

0.7 = ET Adjustment Factor (ETAF)

LA = Landscape Area including SLA (square feet)

0.3 = Additional Water Allowance for SLA

SLA = Special Landscape Area (square feet)

 $MAWA = (51.1 \text{ inches}) (0.62) [(0.7 \times 50,000 \text{ square feet}) + (0.3 \times 0)]$

= 1,108,870 gallons per year

To convert from gallons per year to hundred-cubic-feet per year:

= 1,108,870/748 = 1,482 hundred-cubic-feet per year

(100 cubic feet = 748 gallons)

(2) In this next hypothetical example, the landscape project in Fresno, CA has the same ETo value of 51.1 inches and a total landscape area of 50,000 square feet. Within the 50,000 square foot project, there is now a 2,000 square foot area planted with edible plants. This 2,000 square foot area is considered to be a Special Landscape Area.

 $MAWA = (ETo) (0.62) [(0.7 \times LA) + (0.3 \times SLA)]$

 $MAWA = (51.1 \text{ inches}) (0.62) [(0.7 \times 50,000 \text{ square feet}) + (0.3 \times 2,000 \text{ square feet})]$

- $= 31.68 \times [35,000 + 600]$ gallons per year
- = 31.68 x 35,600 gallons per year
- =1,127,808 gallons per year or 1,508 hundred-cubic-feet per year
- (d) Estimated Total Water Use.

The Estimated Total Water Use shall be calculated using the equation below. The sum of the Estimated Total Water Use calculated for all hydrozones shall not exceed MAWA.

$$ETWU = (ETo)(0.62)\left(\frac{PF \times HA}{IE} + SLA\right)$$
 we

ETWU = Estimated Total Water Use per year (gallons)

ETo = Reference Evapotranspiration (inches)

PF = Plant Factor from WUCOLS (see Section 491)

HA = Hydrozone Area [high, medium, and low water use areas] (square feet)

SLA = Special Landscape Area (square feet)

0.62 = Conversion Factor

IE = Irrigation Efficiency (minimum 0.71)

(1) Example ETWU calculation: landscape area is 50,000 square feet; plant water use type, plant factor, and hydrozone area are shown in the table below. The ETo value is 51.1 inches per year. There are no Special Landscape Areas (recreational area, area permanently and solely dedicated to edible plants, and area irrigated with recycled water) in this example.

rozone	t Water Use	t Factor	rozone (HA) are feet)	HA are feet)
-	ı		þ	þ
			00	þ
	ium		00	0
			p	þ
			00	þ
				00

*Plant Factor WUCOLS

$$ETWU = (51.1)(0.62)\left(\frac{24,700}{0.71} + 0\right)$$

= 1,102,116 gallons per year

Compare ETWU with MAWA: For this example MAWA = $(51.1)(0.62)[(0.7 \times 50,000) + (0.3 \times 0)] = 1,108,870$ gallons per year. The ETWU (1,102,116 gallons per year) is less than MAWA (1,108,870 gallons per year). In this example, the water budget complies with the MAWA.

(2) Example ETWU calculation: total landscape area is 50,000 square feet, 2,000 square feet of which is planted with edible plants. The edible plant area is considered a Special Landscape Area (SLA). The reference evapotranspiration value is 51.1 inches per year. The plant type, plant factor, and hydrozone area are shown in the table below.

rozone	t Water Use	t Factor (PF)*	ozone (HA) are feet)	HA are feet)
			þ	D
			þ	0
	ium		00	0 .
			þ	p
			po	0
				00
			b	D

*Plant from

WUCOLS

$$ETWU = (51.1)(0.62) \left(\frac{23,500}{0.71} + 2,000 \right)$$

= (31.68) (33,099 + 2,000)

= 1,111,936 gallons per year

Compare ETWU with MAWA. For this example: $MAWA = (51.1) (0.62) [(0.7 \times 50,000) + (0.3 \times 2,000)]$

from

Factor

- $= 31.68 \times [35,000 + 600]$
- $= 31.68 \times 35,600$
- =1,127,808 gallons per year

The ETWU (1,111,936 gallons per year) is less than MAWA (1,127,808 gallons per year). For this example, the water budget complies with the MAWA.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.5 Soil Management Report.

- (a) In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, as follows:
- (1) Submit soil samples to a laboratory for analysis and recommendations.
- (A) Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.
- (B) The soil analysis may include:
- 1. soil texture:
- 2. infiltration rate determined by laboratory test or soil texture infiltration rate table;
- 3. pH;
- 4. total soluble salts;
- 5. sodium:
- 6. percent organic matter; and
- 7. recommendations.
- (2) The project applicant, or his/her designee, shall comply with one of the following:
- (A) If significant mass grading is not planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or
- (B) If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.
- (3) The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.
- (4) The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.6 Landscape Design Plan.

- (a) For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.
- (1) Plant Material
- (A) Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. To encourage the efficient use of water, the following is highly recommended:
- 1. protection and preservation of native species and natural vegetation;
- 2. selection of water-conserving plant and turf species;
- 3. selection of plants based on disease and pest resistance;
- 4. selection of trees based on applicable local tree ordinances or tree shading guidelines; and
- 5. selection of plants from local and regional landscape program plant lists.
- (B) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D).
- (C) Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended:
- 1. use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
- 2. recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; and
- 3. consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

- (D) Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).
- (E) A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches.
- (F) The use of invasive and/or noxious plant species is strongly discouraged.
- (G) The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.
- (2) Water Features
- (A) Recirculating water systems shall be used for water features.
- (B) Where available, recycled water shall be used as a source for decorative water features.
- (C) Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.
- (D) Pool and spa covers are highly recommended.
- (3) Mulch and Amendments
- (A) A minimum two inch (2") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.
- (B) Stabilizing mulching products shall be used on slopes.
- (C) The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.
- (D) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).
- (b) The landscape design plan, at a minimum, shall:
- (1) delineate and label each hydrozone by number, letter, or other method;
- (2) identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation:
- (3) identify recreational areas;
- (4) identify areas permanently and solely dedicated to edible plants;
- (5) identify areas irrigated with recycled water;
- (6) identify type of mulch and application depth;
- (7) identify soil amendments, type, and quantity;
- (8) identify type and surface area of water features;
- (9) identify hardscapes (pervious and non-pervious);
- (10) identify location and installation details of any applicable stormwater best management practices that encourage onsite retention and infiltration of stormwater. Stormwater best management practices are encouraged in the landscape design plan and examples include, but are not limited to:
- (A) infiltration beds, swales, and basins that allow water to collect and soak into the ground;
- (B) constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and
- (C) pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.
- (11) identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, cisterns, etc.);
- (12) contain the following statement: "I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan"; and
- (13) bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.)

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code and Section 1351, Civil Code.

§ 492.7 Irrigation Design Plan.

- (a) For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.
- (1) System
- (A) Dedicated landscape water meters are highly recommended on landscape areas smaller than 5,000 square feet to facilitate water management.

- (B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling in all irrigation systems.
- (C) The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.
- 1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.
- 2. Static water pressure, dynamic or operating pressure. and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.
- (D) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.
- (E) 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.
- (F) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.
- (G) High flow sensors that detect and report high flow conditions created by system damage or malfunction are recommended.
- (H) 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.
- (I) Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.
- (J) The design of the irrigation system shall conform to the hydrozones of the landscape design plan.
- (K) The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance.
- (L) It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.
- (M) In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
- (N) Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.
- (O) Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.
- (P) Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to high traffic areas.
- (Q) Check valves or anti-drain valves are required for all irrigation systems.
- (R) Narrow or irregularly shaped areas, including turf, less than eight (8) feet in width in any direction shall be irrigated with subsurface irrigation or low volume irrigation system.
- (S) 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, drip line, 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. These restrictions may be modified if:
- 1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or
- 2. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
- 3. the irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section 492.7 (a)(1)(H). Prevention of overspray and runoff must be confirmed during the irrigation audit.
- (T) Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.
- (2) Hydrozone
- (A) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

- (B) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.
- (C) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.
- (D) Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:
- 1. plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
- 2. the plant factor of the higher water using plant is used for calculations.
- (E) Individual hydrozones that mix high and low water use plants shall not be permitted.
- (F) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.
- (b) The irrigation design plan, at a minimum, shall contain:
- (1) location and size of separate water meters for landscape;
- (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 switches, quick couplers, pressure regulators, and backflow prevention devices;
- (3) static water pressure at the point of connection to the public water supply;
- (4) flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
- (5) recycled water irrigation systems as specified in Section 492.14;
- (6) the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and
- (7) the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641.4, 5641.1, 5641.2, 5641.3, 5641.4, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

§ 492.8 Grading Design Plan.

- (a) For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A grading plan shall be submitted as part of the Landscape Documentation Package. A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies this requirement.
- (1) The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:
- (A) height of graded slopes;
- (B) drainage patterns;
- (C) pad elevations;
- (D) finish grade; and
- (E) stormwater retention improvements, if applicable.
- (2) To prevent excessive erosion and runoff, it is highly recommended that project applicants:
- (A) grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;
- (B) avoid disruption of natural drainage patterns and undisturbed soil; and
- (C) avoid soil compaction in landscape areas.
- (3) The grading design plan shall contain the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading design plan" and shall bear the signature of a licensed professional as authorized by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.9 Certificate of Completion.

- (a) The Certificate of Completion (see Appendix C for a sample certificate) shall include the following six (6) elements:
- (1) project information sheet that contains:
- (A) date;
- (B) project name;
- (C) project applicant name, telephone, and mailing address;
- (D) project address and location; and

- (E) property owner name, telephone, and mailing address;
- (2) certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;
- (A) where there have been significant changes made in the field during construction, these "as-built" or record drawings shall be included with the certification:
- (3) irrigation scheduling parameters used to set the controller (see Section 492.10);
- (4) landscape and irrigation maintenance schedule (see Section 492.11);
- (5) irrigation audit report (see Section 492.12); and
- (6) soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section 492.5).
- (b) The project applicant shall:
- (1) submit the signed Certificate of Completion to the local agency for review;
- (2) ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.
- (c) The local agency shall:
- (1) receive the signed Certificate of Completion from the project applicant;
- (2) approve or deny the Certificate of Completion. If the Certificate of Completion is denied, the local agency shall provide information to the project applicant regarding reapplication, appeal, or other assistance.

§ 492.10 Irrigation Scheduling.

For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:

(1) Irrigation scheduling shall be regulated by automatic irrigation controllers.

Overhead irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it. If allowable hours of irrigation differ from the local water purveyor, the stricter of the two shall apply. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.

Parameters used to set the automatic controller shall be developed and submitted for each of the following:

- (A) the plant establishment period;
- (B) the established landscape; and
- (C) temporarily irrigated areas.

Each irrigation schedule shall consider for each station all of the following that apply:

- (A) irrigation interval (days between irrigation);
- (B) irrigation run times (hours or minutes per irrigation event to avoid runoff);
- (C) number of cycle starts required for each irrigation event to avoid runoff;
- (D) amount of applied water scheduled to be applied on a monthly basis;
- (E) application rate setting;
- (F) root depth setting;
- (G) plant type setting;
- (H) soil type;
- (I) slope factor setting;
- (J) shade factor setting; and
- (K) irrigation uniformity or efficiency setting.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.11 Landscape and Irrigation Maintenance Schedule.

- (a) Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.
- (b) A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing and obstruction to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

- (c) Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.
- (d) A project applicant is encouraged to implement sustainable or environmentally-friendly practices for overall landscape maintenance.

§ 492.12 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.

- (a) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.
- (b) For new construction and rehabilitated landscape projects installed after January 1, 2010, as described in Section 490.1:
- (1) the project applicant shall submit an irrigation audit report with the Certificate of Completion to the local agency that may include, but is not limited to: inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule;
- (2) the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.13 Irrigation Efficiency.

(a) For the purpose of determining Maximum Applied Water Allowance, average irrigation efficiency is assumed to be 0.71. Irrigation systems shall be designed, maintained, and managed to meet or exceed an average landscape irrigation efficiency of 0.71.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.14 Recycled Water.

- (a) The installation of recycled water irrigation systems shall allow for the current and future use of recycled water, unless a written exemption has been granted as described in Section 492.14(b).
- (b) Irrigation systems and decorative water features shall use recycled water unless a written exemption has been granted by the local water purveyor stating that recycled water meeting all public health codes and standards is not available and will not be available for the foreseeable future.
- (c) All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.
- (d) Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for Special Landscape Areas shall not exceed 1.0.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.15 Stormwater Management.

- (a) Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site retention and infiltration are encouraged.
- (b) Project applicants shall refer to the local agency or Regional Water Quality Control Board for information on any applicable stormwater ordinances and stormwater management plans.
- (c) Rain gardens, cisterns, and other landscapes features and practices that increase rainwater capture and create opportunities for infiltration and/or onsite storage are recommended.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 492.16 Public Education.

- (a) Publications. Education is a critical component to promote the efficient use of water in landscapes. The use of appropriate principles of design, installation, management and maintenance that save water is encouraged in the community.
- (1) A local agency shall provide information to owners of new, single-family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes.
- (b) Model Homes. All model homes that are landscaped shall use signs and written information to demonstrate the principles of water efficient landscapes described in this ordinance.

- (1) Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme.
- (2) Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes.

§ 492.17 Environmental Review.

(a) The local agency must comply with the California Environmental Quality Act (CEQA), as appropriate.

Note: Authority cited: Section 21082, Public Resources Code. Reference: Sections 21080, 21082, Public Resources Code.

§ 493. Provisions for Existing Landscapes.

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 493.1 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.

- (a) This section, 493.1, shall apply to all existing landscapes that were installed before January 1, 2010 and are over one acre in size.
- (1) For all landscapes in 493.1(a) that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as: MAWA = (0.8) (ETo)(LA)(0.62).
- (2) For all landscapes in 493.1(a), that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.
- (b) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

§ 493.2 Water Waste Prevention.

- (a) Local agencies shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or structures. Penalties for violation of these prohibitions shall be established locally.
- (b) Restrictions regarding overspray and runoff may be modified if:
- (1) the landscape area is adjacent to permeable surfacing and no runoff occurs; or
- (2) the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.

Note: Authority cited: Section 65594, Government Code. Reference: Section 65596, Government Code.

§ 494. Effective Precipitation.

(a) A local agency may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate Maximum Applied Water Allowance:

MAWA= (ETo - Eppt) (0.62) [(0.7 x LA) + (0.3 x SLA)].

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

EXHIBIT D GENERAL PLAN POLICIES

- PS-2.8 The County shall require that all projects be designed to maintain or increase the site's pre-development absorption of rainfall (minimize runoff), and to recharge groundwater where appropriate. Implementation shall include standards that could regulate impervious surfaces, vary by project type, land use, soils and area characteristics, and provide for water impoundments (retention/detention structures), protecting and planting vegetation, use of permeable paving materials, bioswales, water gardens, and cisterns, and other measures to increase runoff retention, protect water quality, and enhance groundwater recharge.
- PS-3.11 In order to maximize urban water conservation measures to improve water use efficiency and reduce overall water demand, the County shall establish an ordinance identifying conservation measures that reduce potable water demand.
- PS-3.12 The County shall maximize the use of recycled water as a potable water offset to manage water demands and meet regulatory requirements for wastewater discharge, by employing strategies including, but not limited to, the following:
 - a. Increase the use of treated water where the quality of recycled water is maintained, meets all applicable regulatory standards, is appropriate for the intended use, and re-use will not significantly impact beneficial uses of other water resources.
 - b. Work with the agricultural community to develop new uses for tertiary recycled water and increase the use of tertiary recycled water for irrigation of lands currently being irrigated by groundwater pumping.
 - c. Work with urban water providers to emphasize use of tertiary recycled water for irrigation of parks, playfields, schools, golf courses, and other landscape areas to reduce potable water demand.
 - d. Work with urban water providers to convert existing potable water customers to tertiary recycled water as infrastructure and water supply become available.
- OS-5.6 Native and native compatible species, especially drought resistant species, shall be utilized in fulfilling landscaping requirements.
- OS-5.14 Policies and procedures that encourage exclusion and control or eradication of invasive exotic plants and pests shall be established. Sale of such items within Monterey County shall be discouraged.
- S-4.28 The County shall provide a list of acceptable fire-resistant plants suited to each of the County's various micro-climates, in accordance with Policy OS-5.14 to avoid invasive species. This list should be developed with the cooperation of the County and fire authorities having jurisdiction, and made available at the Monterey County Planning Department.

EXHIBIT E CHAPTERS 18.44 AND 18.50 OF THE MONTEREY COUNTY CODE

Chapter 18.44 - RESIDENTIAL AND COMMERCIAL WATER CONSERVATION MEASURES

Sections:

18.44.010 - Findings.

18.44.020 - Purpose.

18.44.030 - Definitions.

18.44.040 - Requirements for new construction.

18.44.050 - Existing hotels and motels.

18.44.060 - Requirements upon change of ownership or use.

18.44.070 - Responsibility of transferor and transferee.

18.44.080 - Notice of violation recordation.

18.44.090 - Discretionary exemptions.

18.44.100 - Appeals.

18.44.110 - Penalties.

18.44.120 - Enforcement.

18.44.130 - Civil enforcement against nuisance.

18.44.140 - Cost of enforcement.

18.44.150 - Remedies cumulative.

18.44.160 - Severability.

18.44.170 - Applicability.

18.44.010 - Findings.

- A. Monterey County's share of water under the allotment system established by the Monterey Peninsula Water Management District for the unincorporated areas serviced by the California-American Water Service Company as defined herein, has come perilously close to being exhausted due to unanticipated excessive and expanded water usage.
- B. As a result of such excessive water usage in the areas defined herein, the potential exists that Monterey County's allocation of water will be exhausted so as to pose an immediate threat to the public health, safety, or welfare.
- C. In order to insure the availability of water for domestic, development, and other purposes for present as well as for future use in the areas designated, it is necessary that water conservation measures be effected for existing hotels and motels, for new construction, and for existing buildings whose ownership or use change subsequent to the effective date of this Chapter.

(Ord. 3190, 1986)

18.44.020 - Purpose.

It is the purpose and intent of this Chapter to reduce the excessive use of water within the California American Water Service Company service area by requiring the installation of low water use plumbing fixtures and low water use landscape material as part of new construction, by requiring the installation of low flow shower heads in existing hotels and motels, and by requiring the retrofitting of low water use plumbing fixtures in all existing residential buildings at the time of change of ownership, or, in the case of commercial property, at the time of change of ownership or change of use.

(Ord. 3190, 1986)

18.44.030 - Definitions.

The following definitions are applicable to this Chapter:

- A. "Bubblers" means any landscape irrigation system that disperses water, in a bubbling fashion as opposed to a spray fashion.
- B. "California American Water Service Company service area" means that part of the unincorporated portion of Monterey County within the service area of and actually serviced by the California American Water Service Company as shown on the map attached herein.
- C. "Change of ownership" means a transfer of a present interest in the property, and a transfer of the right to beneficial use thereof, the value of which is substantially equal to the value of the fee interest. Every transfer of property qualified as a "change of ownership," except transfers of title from one spouse to another, shall be so regarded whether the transfer is voluntary, involuntary, by operation of law, by grant, gift, devise, inheritance, trust, contract of sale, addition or deletion of an owner, property settlement, or any other means. Change of ownership effected other than by a contract of sale shall be deemed to occur at the time of actual transfer of file. A change of ownership resulting from a contract of sale or similar instrument shall be so regarded only if escrow is opened or a contract of sale is executed, whichever occurs last, on or after the effective date of this Chapter.
- D. "Change of use" means, in the case of commercial structures, a change in the use to the structure was previously devoted, to another substantially different use expressly permitted or permitted with a use permit under Chapters 20.28, 20.30, 20.32, and 20.34 of the Monterey County Code.
- E. "Commercial structures" means any structures devoted to any of the uses defined in Chapters 20.28, 20.30, 20.32, and 20.34 of the Monterey County Code.
- F. "Drip irrigation system" means any landscape irrigation system that disperses water in a controlled fashion to the extent necessary to provide sufficient water to sustain the growth of specific vegetation.
- G. "Existing residential building" means any structure built and intended for the shelter, housing, or enclosure of any person.
- H. "Existing vacant legal lot" means any lot as defined in Section 20.04.401 of the Monterey County Code and that has no improvements thereon.
- I. "Low precipitation sprinkler heads" means any landscape sprinkler head that disperses less than 0.75 inches of water per hour at any pipe pressure.
- J. "Low water use plumbing fixtures" means any toilet using a maximum of one and one-half gallons per flush and shower heads designed to emit a maximum of two and one-half gallons per minute of water.
- K. "Low water use landscape material" means any California native or other plants that are identified on the plant list provided by Monterey County entitled "A Drought-Tolerant Plant List for the Monterey Peninsula".
- L. "Native plant material" means any plant native to the State of California.
- M. "New construction" means any construction of a previously nonexistent structure requiring a discretionary or ministerial permit issued after the effective date of this Chapter. New construction does not include additions, modifications, or improvements to existing structure physically separated from the structure added or improved upon.

N. "Ultra low flow toilet" means any toilet that uses one and one-half gallons of water per flush, or less.

(Ord. 3190, 1986)

18.44.040 - Requirements for new construction.

- A. All new construction, as defined herein, shall be equipped with ultra low flow toilets with a maximum tank size or flush capacity of one and one-half gallons, and shower heads with a maximum flow capacity of two and one-half gallons per minute.
- B. All new construction, except new senior citizen or second dwelling units, shall include as part of the exterior landscape development, low water use or native plant material and low precipitation sprinkler heads, bubblers, drip irrigation system and timing devices. Before any permit may be issued for such new construction, the applicant shall submit a landscape plan for review and approval by the Director of Building Inspection in conformity with landscape guidelines adopted by the Board of Supervisors. The Department of Building Inspection shall charge appropriate fees for review of such plans.
- C. New senior citizen or second dwelling units constructed shall be equipped with ultra low flow toilets with a maximum tank size or flush capacity of one and one-half gallons, and shower heads with a maximum flow capacity of two and one-half gallons per minute.

(Ord. 3190, 1986)

18.44.050 - Existing hotels and motels.

All existing hotels and motels shall, within six months following the effective date of this ordinance, be retrofitted with shower heads with a maximum flow capacity of two and one-half gallons per minute.

(Ord. 3190, 1986)

18.44.060 - Requirements upon change of ownership or use.

- A. All existing residential structures shall, at the time of change of ownership, be retrofitted, if not already so, with ultra low flow toilets with a maximum tank size or flush capacity of one and one-half gallons, and shower heads with a maximum flow capacity of two and one-half gallons per minute.
- B. All existing commercial structures shall, at the time of change of ownership or change of use, be retrofitted, if not already so, with ultra low flow toilets with a maximum tank size or flush capacity of one and one-half gallons, and shower heads with a maximum flow capacity of two and one-half gallons per minute.
- C. Previously installed toilets with fixtures using a maximum of 3.5 gallons per flush shall be exempted from the provisions of this Section and are not required to be removed for any change of ownership or use which occurs on or before December 31, 1997, provided those toilets are fitted with a toilet water-use reduction device capable of reducing flow by at least 1.0 gallon per flush. Said exemption shall be verified by submission of an appropriately completed Water Conservation Certificate to both County of Monterey and Monterey Peninsula Water Management District. All retrofits upon change of ownership or use following December 31, 1997 shall exclusively use low water-use plumbing fixtures as defined in Section 18.44.030 of this Chapter.

(Ord. 3324, 1988; Ord. 3190, 1986)

18.44.070 - Responsibility of transferor and transferee.

A. Prior to recordation of a deed of sale or other document evidencing transfer of ownership of existing residential and commercial buildings, the transferor and transferee shall certify in writing to the Monterey

County Department of Building Inspection of such transfer of ownership of the property and compliance with this Chapter.

B. Prior to the change of use of any commercial buildings, the owner of record shall certify in writing to the Monterey County Department of Building Inspection about such change of use of the structure and compliance with this Chapter. No change in use of such buildings shall be made prior to submission of such written certification to the Department of Building Inspection.

(Ord. 3190, 1986)

18.44.080 - Notice of violation recordation.

Whenever the Director of Building Inspection determines that there is an existing violation of this Chapter, that ultra low flow toilets and shower heads have not been installed at the time of change of ownership or use, the Director of Building Inspection may record a Notice of Violation with the Office of the County Recorder. The owner(s) of the property, as revealed by the assessment roll, on which the violation is situated and any other person responsible for the violation shall be notified of the recordation, if their address is known to the Director of Building Inspection or is otherwise reasonably available.

(Ord. 3190, 1986)

18.44.090 - Discretionary exemptions.

The Director of Building Services may, in his or her discretion, exempt facilities from the provisions of this Chapter, or impose reasonable conditions in lieu of compliance therewith, if he or she determines that any of the following conditions exist:

- A. The requirements herein would cause an unnecessary and undue hardship upon the owner or purchaser of the facility or the public. Guidelines generally exemplifying such potential exemptions to this ordinance shall be promulgated by the Director of Building Services adopted by the Board of Supervisors.
- B. The requirements herein would create an emergency condition affecting the health, sanitation, fire protection or safety of the facility owner or the public.
- C. The granting of the exemption or imposition of reasonable conditions in lieu of compliance with the requirements herein would not increase the quantity of water consumed by the facility or otherwise adversely affect service to other existing water consumers.

(Ord. 3190, 1986)

(Ord. No. 5135, § 31, 7-7-2009)

18.44.100 - Appeals.

- A. Who May Appeal—Time for Appeal.
 - 1. An appeal may be made to the Board of Supervisors by any public agency or person aggrieved by a decision of the Director of Building Services pursuant to this Chapter, other than those relating to aesthetics and plant selection. Appeals relating to aesthetics and plant selection shall be made to the Planning Commission pursuant to Chapter 20.100 of the Monterey County Code. Such appeal shall be in writing and shall be filed with the Clerk of the Board of Supervisors and with the Department of Building Services within ten (10) days after written notice of the decision has been mailed to the applicant.
 - 2. Written notice of the decision shall be given promptly to the applicant and to those who have requested notice, in writing, at the hearing on the application; and no appeal shall be accepted until

the notice of the decision has been given.

- 3. At the time of the filing of the appeal the appellant shall pay the required filing fee as established from time to time by the Board of Supervisors to the Clerk of the Board of Supervisors.
- B. Requirements for Contents of Appeal. The appellant must specifically state in the notice of appeal:
 - 1. The identity of the appellant and his or her interest in the decision;
 - 2. The identity of the decision appealed from and the conditions appealed from;
 - 3. A clear, complete, but brief, statement of the reasons why, in the opinion of the appellant, the decision or the conditions imposed were unjustified or inappropriate;
 - 4. The specific reasons the appellant disagrees with the findings of the Director of Building Services;
 - 5. The specific facts of the matter in sufficient detail to notify interested persons of the nature of the proceedings, to place the interested persons upon notice as to how any proposed action may affect their interest so that they may formulate their defense or opposition without being subjected to surprise. The Board will not accept an appeal stated in generalities, legal or otherwise.
- C. Form. A form for giving notice of appeal shall be provided. The form need not be used if the contents of the notice of appeal is complete.
- D. Acceptance of Appeal. An appeal shall not be accepted by the Board of Supervisors unless it is complete and complies with all requirements. The Clerk of the Board shall not accept a notice of appeal if it is obvious on the face of the notice that it is incomplete.
- E. Notice. The appellant shall furnish the Director of Building Services stamped envelopes addressed to those on the departments list to receive notice of the hearing appealed from, if any, and the list of those who have requested to receive notice of appeal.
- F. Action by the Board of Supervisors on Appeal.
 - 1. Upon receipt of the notice of appeal, the Board shall within fifteen (15) days following the filing of the appeal, set a date for public hearing thereon, giving notice thereof to the appellant, to those in the departments list, if any, and to those who have requested notice of the appeal, in writing, during the consideration of the matter by the Director of Building Services. The evidence presented to the Board of Supervisors on appeal shall be limited to that evidence which was presented to the Director of Building Services; provided, however, that when relevant new evidence is available at the time of appeal, the application may be returned to the Director of Building Services for reconsideration.
 - 2. If the basis of the appeal is the adequacy or weight of the evidence to support the findings, conditions or decision of the Director of Building Services, the Board shall affirm if there is substantial evidence to affirm despite the evidence to the contrary.
 - 3. If a request for continuance is granted, the person who asks for the continuance shall notify the interested public in the same manner and to the same extent that notice was given to the public regarding the hearing on the appeal. The notice shall state the date to which the hearing upon the appeal is continued. If notice is not given, the appeal may not be heard on a date for which inadequate notice is given. Failure to give notice may be grounds for denial of an appeal.
 - 4. The Board of Supervisors may reverse or affirm, wholly or in part, or modify the order, requirement, condition, findings or decision appealed from, and may make such order, requirement, condition, finding or decision as should be made, and such action shall be final.

(Ord. 3190, 1986)

(Ord. No. 5135, § 32, 7-7-2009)

18.44.110 - Penalties.

Repealed.

(Ord. 3659 § 8, 1993)

18.44.120 - Enforcement.

The Director of Building Services shall be the officer primarily charged with enforcement of this Chapter. All departments, officials, and public employees of the County of Monterey who are vested with the duty or authority to issue permits or licenses, shall conform to the provisions of this Chapter, and shall issue no such permits or licenses for uses, buildings, or purposes where the same would be in conflict with the provisions of this Chapter, and any such permits, licenses, or uses, if issued in conflict with the provisions of this Chapter, shall be null and void.

(Ord. No. 5135, § 33, 7-7-2009)

18.44.130 - Civil enforcement against nuisance.

- A. Any building or structure set up, erected, constructed, altered, enlarged, converted, moved, maintained, sold, or the use of which is changed, contrary to the provisions of this Chapter, and/or any use of any land, building, or premises, established, conducted, operated, or maintained contrary to the provisions of the chapter, shall be, and the same is hereby declared to be a violation of this Chapter and a public nuisance.
- B. The County may summarily abate the public nuisance and the County Counsel or District Attorney, upon order of the Board of Supervisors, may bring civil suit or other action, to enjoin or abate the nuisance.
- C. Each day any violation of this Chapter continues shall be regarded as a new and separate offense. The remedies provided in this Chapter shall be cumulative and not exclusive.
- D. Should any person, firm, or corporation violate the terms of this Chapter and any action is authorized either by the Board of Supervisors, County Counsel, or District Attorney, or is in fact commenced by said agencies for said violation, no other action shall be taken on any application filed by or on behalf of said person, firm, or corporation until the action has been concluded or resolved.

(Ord. 3190, 1986)

18.44.140 - Cost of enforcement.

Repealed.

(Ord. 3659 § 8, 1993)

18.44.150 - Remedies cumulative.

Repealed.

(Ord. 3659 § 8, 1993)

18.44.160 - Severability.

Repealed.

18.44.170 - Applicability.

The regulations set forth in this Chapter shall apply to the unincorporated portion of Monterey County within the service area of and actually serviced by the California American Water Service Company, and if any of the regulations specified herein differ from any other regulations, the provisions of this Chapter shall govern. Nothing in this Chapter is intended to apply in any way to the use of water not provided by the California American Water Service Company.

(Ord. 3205 § 1, 1986; Ord. 3190, 1986)

Chapter 18.50 - RESIDENTIAL, COMMERCIAL AND INDUSTRIAL WATER CONSERVATION MEASURES

Sections:

18.50.010 - Findings.

18.50.020 - Purpose.

18.50.030 - Applicability.

18.50.040 - Definitions.

18.50.050 - Requirements for new construction.

18.50.060 - Notice of violation recordation.

18.50.070 - Discretionary exemptions.

18.50.080 - Appeals.

18.50.090 - Penalties.

18.50.100 - Enforcement.

18.50.110 - Civil enforcement against nuisance.

18.50.120 - Water credit transfers.

18.50.130 - Remedies cumulative.

18.50.140 - Severability.

18.50.150 - Review.

18.50.010 - Findings.

- A. Monterey County is experiencing severe water supply problems in the Greater Salinas, Toro, Greater Monterey Peninsula, and a portion of the North County Planning Areas, including the Coastal Zone.
- B. Water supply problems have existed historically in these areas. The 1987-89 drought has exacerbated these problems.
- C. Areas such as the Zone 2 and 2A within the Monterey County Flood Control and Water Conservation District have as a goal a ten (10) percent reduction in water use by all users in order to reduce impacts to aquifers.
- D. Monterey County has established ordinances requiring water conserving plumbing features for areas within the Monterey Peninsula Water Management District (#3190) and Regulations to Control Intensification of Water Consumption in the Cal-Am Water Service Area (#3310).
- E. As a result of expanding water use for residential, commercial and industrial development in the areas defined herein, the potential exists that Monterey County may experience a threat to public health, safety and welfare due to a dwindling available water supply to meet expanding development.
- F. In order to insure the availability of water for domestic, development, and other purposes, for present as well as for future use in the areas designated, it is necessary that uniform regulations be adopted to control intensification of water consumption in the areas defined herein.
- G. In view of the expanded water usage in the areas defined herein, and the known water supply

problems there exists a current and immediate threat to the public health, safety, welfare, and adoption of the regulations herein is necessary in order to forestall said threat to public health, safety, and welfare.

(Ord. 3438, 1989)

18.50.020 - Purpose.

It is the purpose and intent of this Chapter to reduce the excessive use of water within the Greater Salinas, Toro, Greater Monterey Peninsula, and a portion of North County and Coast Planning areas by requiring the installation of low water use plumbing fixtures and low water use landscape material as part of new construction and prohibiting certain excessive use of water.

(Ord. 3438, 1989)

18.50.030 - Applicability.

The regulations set forth in this Chapter shall apply to the unincorporated portion of Monterey County within the Greater Salinas Planning Area, Toro Planning Area, Greater Monterey Peninsula Planning Area, a portion of the North County Planning Area including the Coastal Zone, as shown in the map attached hereto. This ordinance provides minimum standards pending the adoption of a District-wide Water Conservation Ordinance. This ordinance does not supersede other ordinances pertaining to water conservation previously approved by the Board of Supervisors.

(Ord. 3438, 1989)

18.50.040 - Definitions.

The following definitions are applicable to this Chapter:

- A. "Bubblers" means any landscape irrigation system that disperses water, in a bubbling fashion as opposed to a spray fashion.
- B. "Commercial structures" means any structures devoted to any of the uses defined in Chapters 20.28, 20.30, 20.32, 20.34, 20.124, 20.126 of the Monterey County Code.
- C. "Drip irrigation system" means any landscape irrigation system that disperses water in a controlled fashion to the extent necessary to provide sufficient water to sustain the growth of specific vegetation.
- D. "Existing vacant legal lot" means any lot as defined in Section 20.04.401 of the Monterey County Code and that has no improvements thereon.
- E. "Industrial structures" means any structures devoted to any of the uses defined in Chapters 20.36, 20.38, 20.129, 20.130 and 20.132 of the Monterey County Code.
- F. "Low precipitation sprinkler heads" means any landscape sprinkler head that disperses less than 0.75 inches of water per hour at any pipe pressure.
- G. "Low water use plumbing fixtures" means any toilet using a maximum of 1.6 gallons per flush and shower heads designed to emit a maximum of 2.5 gallons per minute of water.
- H. "Low water use landscape material" means any California native or other plants that are identified on the plant list provided by Monterey County entitled "A Drought-Tolerant Plant List for the Monterey Peninsula."
- I. "Native plant material" means any plant native to the State of California.
- J. "New construction" means any construction of a previously nonexistent structure requiring a

discretionary or ministerial permit issued after the effective date of this Chapter.

K. "Ultra low flow toilet" means any toilet that uses 1.6 gallons of water per flush, or less.

(Ord. 3438, 1989)

18.50.050 - Requirements for new construction.

- A. All new construction, as defined herein, shall be equipped with ultra low flow toilets with a maximum tank size or flush capacity of 1.6 gallons, and shower heads with a maximum flow capacity of 2.5 gallons per minute.
- B. All new construction shall include as part of the exterior landscape development, low water use or native drought-resistant plant material and low precipitation sprinkler heads, bubblers, drip irrigation system and timing devices. Before any permit may be issued for such new construction, the applicant shall submit a landscape plan for review and approval by the Director of Building Services in conformity with landscape guidelines adopted by the Board of Supervisors. The Department of Building Services shall charge appropriate fees for review of such plans.

(Ord. 3438, 1989)

(Ord. No. 5135, § 36, 7-7-2009)

18.50.060 - Notice of violation recordation.

Whenever the Director of Building Services determines that there is an existing violation of this Chapter, that ultra low flow toilets and shower heads have not been installed consistent with this ordinance, the Director of Building Services may record a Notice of Violation with the Office of the County Recorder. The owner(s) of the property, as revealed by the assessment roll, on which the violation is situated and any other person responsible for the violation shall be notified of the recordation, if their address is known to the Director of Building Services or is otherwise reasonably available.

(Ord. 3438, 1989)

(Ord. No. 5135, § 37, 7-7-2009)

18.50.070 - Discretionary exemptions.

The Director of Building Services may exempt facilities from the provisions of this Chapter, or impose reasonable conditions in lieu of compliance therewith, if he or she determines that any of the following conditions exist:

- A. The requirements herein would cause an unnecessary and undue hardship upon the owner or purchaser of the facility or the public.
- B. The requirements herein would create an emergency condition affecting the health, sanitation, fire protection or safety of the facility owner or the public.
- C. The granting of the exemption or imposition of reasonable conditions in lieu of compliance with the requirements herein would not increase the quantity of water consumed by the facility or otherwise adversely affect service to other existing water consumers.

(Ord. 3438, 1989)

(Ord. No. 5135, § 38, 7-7-2009)

18.50.080 - Appeals.

- A. Who May Appeal—Time for Appeal.
 - 1. An appeal, other than those relating to aesthetics and plant selection, may be made to the Board of Supervisors by any public agency or person aggrieved by a decision of the Director of Building Services pursuant to this Chapter. Such appeal shall be in writing and shall be filed with the Clerk of the Board of Supervisors and with the Department of Building Services within ten (10) days after written notice of the decision has been mailed to the applicant.

Appeals relating to aesthetics and plant selection shall be made to the Planning Commission pursuant to Chapter 20.100 of the Monterey County Code.

- 2. Written notice of the decision shall be given promptly to the applicant, and to those who have requested notice, in writing, at the hearing on the application; and no appeal shall be accepted until the notice of the decision has been given.
- 3. At the time of the filing of the appeal the appellant shall pay the required filing fee as established from time to time by the Board of Supervisors to the Clerk of the Board of Supervisors.
- B. Requirements for Contents of Appeal. The appellant must specifically state in the notice of appeal:
 - 1. The identity of the appellant and his or her interest in the decision.
 - 2. The identity of the decision appealed from and the conditions appealed from.
 - 3. A clear, complete, but brief, statement of the reasons why, in the opinion of the appellant, the decision or the conditions imposed were unjustified or inappropriate.
 - 4. The specific reasons the appellant disagrees with the findings of the Director of Building Services.
 - 5. The specific facts of the matter in sufficient detail to notify interested persons of the nature of the proceedings, to place the interested persons upon notice as to how any proposed action may affect their interest so that they may formulate their defense or opposition without being subjected to surprise. The Board will not accept an appeal stated in generalities, legal or otherwise.
- C. Form. A form for giving notice of appeal shall be provided. The form need not be used if the contents of the notice of appeal is complete.
- D. Acceptance of Appeal. An appeal shall not be accepted by the Board of Supervisors unless it is complete and complies with all requirements. The Clerk of the Board shall not accept a notice of appeal if it is obvious on the face of the notice that it is incomplete.
- E. Notice. The appellant shall furnish the Director of Building Services stamped envelopes addressed to those on the department's list to receive notice of the hearing appealed from, if any, and the list of those who have requested to receive notice of appeal.
- F. Action by the Board of Supervisors on Appeal.
 - 1. Upon receipt of the notice of appeal, the Board shall within fifteen (15) days following the filing of the appeal, set a date for public hearing thereon, giving notice thereof to the appellant, to those in the department's list, if any, and to those who have requested notice of the appeal, in writing, during the consideration of the matter by the Director of Building Services. The evidence presented to the Board of Supervisors on appeal shall be limited to that evidence which was presented to the Director of Building Services; provided, however, that when relevant new evidence is available at the time of appeal, the application may be returned to the Director of Building

Services for reconsideration.

- 2. If the basis of the appeal is the adequacy or weight of the evidence to support the findings, conditions or decision of the Director of Building Services, the Board shall affirm if there is substantial evidence to affirm despite the evidence to the contrary.
- 3. If a request for continuance is granted, the person who asks for the continuance shall notify the interested public in the same manner and to the same extent that notice was given to the public regarding the hearing on the appeal. The notice shall state the date to which the hearing upon the appeal is continued. If notice is not given, the appeal may not be heard on a date for which inadequate notice is given. Failure to give notice may be grounds for denial of an appeal.
- 4. The Board of Supervisors may reverse or affirm, wholly or in part, or modify the order, requirement, condition, findings or decision appealed from, and may make such order, requirement, condition, finding or decision as should be made, and such action shall be final.

(Ord. 3438, 1989)

(Ord. No. 5135, § 39, 7-7-2009)

18.50.090 - Penalties.

Repealed.

(Ord. 3659 § 8, 1993)

18.50.100 - Enforcement.

The Director of Building Services shall be the officer primarily charged with enforcement of this Chapter. All departments, officials, and public employees of the County of Monterey who are vested with the duty or authority to issue permits or licenses, shall conform to the provisions of this Chapter, and shall issue no such permits or licenses for uses, buildings, or purposes where the same would be in conflict with the provisions of this Chapter, and any such permits, licenses, or uses, if issued in conflict with the provisions of this Chapter, shall be null and void.

(Ord. 3438, 1989)

(Ord. No. 5135, § 40, 7-7-2009)

18.50.110 - Civil enforcement against nuisance.

- A. Any building or structure set up, erected, constructed, altered, enlarged, converted, moved, maintained, sold, or the use of which is changed, contrary to the provisions of this Chapter, and/or any use of any land, building, or premises, established, conducted, operated, or maintained contrary to the provisions of the chapter, shall be, and the same is hereby declared to be a violation of this Chapter and a public nuisance.
- B. Repealed.
- C. Repealed.
- D. Should any person, firm, or corporation violate the terms of this Chapter and any action is authorized either by the Board of Supervisors, County Counsel, or District Attorney, or is in fact commenced by said agencies for said violation, no other action shall be taken on any application filed by or on behalf of said person, firm, or corporation until the action has been concluded or resolved.

(Ord. 3438, 1989)

18.50.120 - Water credit transfers.

Repealed.

(Ord. 3999, 1998; Ord. 3987, 1998)

18.50.130 - Remedies cumulative.

Repealed.

(Ord. 3659 § 8, 1993)

18.50.140 - Severability.

Repealed.

(Ord. 3659 § 8, 1993)

18.50.150 - Review.

This Chapter may be reviewed by the Board of Supervisors one year after its effective date, or earlier upon staff recommendation, and annually thereafter.

(Ord. 3659 § 16, 1993)

EXHIBIT F COASTAL POLICIES

North County CIP

20.144.030.B.2.c - Landscaping and lighting shall be unobtrusive and blend with the rural setting. Landscaping and incorporate native plants common to the area, as contained in Attachment 3.

20.144.030.B.5 - Landscape screening and restoration shall be required where needed to minimize the visual impact of development, as viewed from a public viewing area. Screening and replanting shall consist of native plants consistent with those found in the area. As conditions of project approval, a landscape plan and performance bond shall be submitted to and approved by the Director of Planning prior to occupancy and the landscaping shall be continuously maintained in a weed-free, litter-free manner. (Ref. Policy 2.2.2.5)

20.144.040.B.9 - The use of native species consistent with and found in the project area shall be required in landscaping required as a condition of project approval. A list of appropriate native plant species is included as Attachment 3. (Ref. Policy 2.3.2.9)

20.144.070.A.3 - If a project involves substantial development, such as a subdivision, or where the soil types or development location in relation to the soil types, cannot be accurately determined by the planner, the applicant shall be required to provide a soils analysis. The analysis shall be required and submitted prior to the application being determined complete. The analysis shall consist of a soils map prepared by a soils engineer which delineates the following information: contours, areas over 25% in slope, soil types, and soils with K-Factors exceeding 0.4. This information shall be used as the basis for the planner's determination of Critical and Non-Critical Erosion Areas.

20.144.070.E.12 - Development shall incorporate water conservation measures, such as recommended in the hydrologic report, in the hydrologic report element of the Agricultural Management Plan (as per Section 20.144.080. C), and by County agencies, as a condition of project approval. Such measures may include (but are not limited to) modifications in siting, location, project density, construction and landscaping, water reclamation, and groundwater recharge if approved by the Director of Environmental Health. (Ref. Policy 2.5.3.A.4 and 4.3.5.7)

20.144.100.C.2.d - Where not superceeded by specific fire hazard policies of the land use plan or development standards of this ordinance, development shall be required as a condition of project approval to conform to the following policies of the Monterey County General Plan: 17.3.1 through 17.3.15, Table 2, 17.4.1 through 17.4.12, and 17.5.1 through 17.5.2.

Big Sur CIP

20.145.040.B.9 - The use of native species consistent with and found in the project area shall be required in landscaping required as a condition of project approval. A list of appropriate native plant species is included as

Attachment 4 (Ref. Policy 3.3.2.9)

20.145.050.C.2 - Where landscaping is required as a condition of project approval, it shall consist of native plants as selected from the plant 'list in Attachment 4 of this ordinance chapter.

The plants must be clearly delineated as to type, size, and quantity in the landscaping plan. The landscaping plan shall be submitted to and approved by the Director of Planning prior to occupancy of the house. (Ref. Policy 3.4.2.5)

20.145.050.C.3 - Where landscaping is required as a condition of project approval, and irrigation of the landscaping is planned, the landscaping shall consist of low precipitation sprinkler heads, bubblers, drip irrigation, and timing devices. If the landscaped area is not to include an irrigation system, this must be stated on the plan. The landscaping plan, including irrigation plans, shall be submitted for the approval of the Director of Planning, prior to occupancy of the residence. (Ref. Policy 3.4.2.5)

20.145.080.C.1.a.4 - New residential and commercial buildings which can not meet the minimum standards of the applicable fire suppression authority with respect to access for f ire-fighting equipment, water supply, hydrant specifications, and other essential fire prevention and control features shall not be approved. The publication Fire Safe Guide for Residential Development in California shall provide the development standard in event of dispute. Exceptions shall be allowed where it is demonstrated that the design of the project will result in an equivalent degree of fire safety with less damage to the natural environment. (Ref. policies 3.7.3.C(2), 3.7.3.C(3), & 3.7.4.3)

Carmel LUP

20.146.030.C.1.e - Carmel CIP be retained to the maximum extent possible both during the construction process and after the development is completed. Landscape screening utilizing native species may be used wherever a moderate extension of native forested and chaparral areas is appropriate. Drought-resistant native species will be the appropriate species to use for this landscaping. All new landscaping must be compatible with the scenic character of the area and shall retain existing shoreline and ocean views. Refer to the County's "a Drought-Tolerant Plant List for the Monterey Peninsula" for appropriate landscape plant species. (Ref. Policy 2.2.4.10). Landscape screening and restoration shall consist of plant and tree species consistent with the surrounding native vegetation. No landscape screening is allowed on open grassy slopes and ridges (Ref. Policy 2.2.3.8).

20.146.040.B.10 - Landscaping with native riparian species is required as a condition of approval for projects adjacent to riparian corridors (Ref. Policy 2.3.4, ; Riparian Corridors and Other Terrestrial Wildlife Habitats (Policy #3).

20.146.050.E.1.d - Water conservation devices shall be required in, conjunction with new development. Drought tolerant landscaping is required where appropriate (Ref. Policy- 2.4.4.A.6 Water Availability).

20.146.080.C.1 - All development shall be sited and designed to minimize risk from geologic, flood, or fire hazards. Areas of a parcel which are subject to hazard shall be considered unsuitable for development. (Ref. Policy 2.7.3.1).

20.146.110.A.2 - New development in the Cal-Am service area is required to employ water conservation techniques in the construction of single-family dwellings and all other construction. This includes use of water-saving fixtures, retention of native vegetation, and use of drought-tolerant landscaping (Ref. Policy 3.2.3.3).

Del Monte Forest CIP

20.147.040.C.10 - The use of plant species native to the Del Monte Forest shall be required in landscape materials used in projects. A limited amount of landscape located immediately around developed areas may include non-native, non-invasive plant species, subject to review and approval of a Landscape Plan by the Planning Department. Said Landscape Plan shall be considered as part of the development application. Invasive plant species shall be prohibited. Removal of non-native and/or invasive plant species is encouraged, and may be exempt from coastal development permit requirements pursuant to Section 20.70.120.

20.147.060.B.1 - Development shall be sited and designed to conform to site topography and to minimize grading and other site preparation activities. Natural features, such as tree cover, should be preserved. Applications shall be reviewed for potential onsite and offsite impacts arising from grading, as well as related geologic and seismic hazards, and mitigation measures may be required to offset such impacts. All areas disturbed by grading shall be revegetated with non-invasive native plant species appropriate to the site in order to recreate as much as possible native plant and animal habitat.

20.147.110.A.2 - New development shall employ water conservation techniques to the greatest possible extent. This shall include, among other things, use of water-saving fixtures, retaining native plants, and installing drought-tolerant landscaping.

20.147.110.A.7 - Recycled wastewater shall be used as much as possible to irrigate all golf courses and landscaping areas, to the extent recycled water is reasonably available for such purpose, in order to conserve and make available additional potable water for domestic use. Development associated with golf courses and/or non-residential landscaping shall incorporate measures designed to ensure that such golf courses and/or landscaped areas are irrigated using such recycled water as much as possible.