

Attachment 10 AB 1420 and Water Meter Implementation Compliance

CVWD is compliance with both AB 1420 and CWC Section 529.5. The following pages contain the AB 1420 self certification forms with supporting documentation, and the Water Meter Implementation self certification form.

California State Water Resources Control Board
California Department of Water Resources
California Department of Public Health



**CERTIFICATION FOR
COMPLIANCE WITH WATER METERING REQUIREMENTS
FOR FUNDING APPLICATIONS**

Funding Agency name: Department of Water Resources
Funding Program name: Local Ground Assistance Grant Program
Applicant (Agency name): Crescenta Valley Water District
Project Title (as shown on application form): Crescenta Valley County
Park Stormwater Recharge Facility Study

Please check one of the boxes below and sign and date this form.

As the authorized representative for the applicant agency, I certify under penalty of perjury under the laws of the State of California, that the agency is not an urban water supplier, as that term is understood pursuant to the provisions of section 529.5 of the Water Code.

As the authorized representative for the applicant agency, I certify under penalty of perjury under the laws of the State of California, that the applicant agency has fully complied with the provisions of Division 1, Chapter 8, Article 3.5 of the California Water Code (sections 525 through 529.7 inclusive) and that ordinances, rules, or regulations have been duly adopted and are in effect as of this date.

I understand that the Funding Agency will rely on this signed certification in order to approve funding and that false and/or inaccurate representations in this Certification Statement may result in loss of all funds awarded to the applicant for its project. Additionally, for the aforementioned reasons, the Funding Agency may withhold disbursement of project funds, and/or pursue any other applicable legal remedy.

Dennis Erdman
Name of Authorized Representative
(Please print)


Signature

General Manager
Title

July 11, 2012
Date

AB 1420 Self-Certification Statement Table 1

Note: Table 1 documents Status of Past and Current BMP implementation.

Self-Certification Statement: The Urban Water Supplier and its authorized representative certifies, under penalty of perjury, that all information and claims, stated in this table, regarding compliance and implementation of the BMPs, including alternative conservation approaches, are true and accurate. This signed AB 1420 Self-Certification Statement Table 1, and Table 2 are the basis for granting funds by the Funding Agency. Falsification and/or inaccuracies in AB 1420 Self Certification Statement Table 1, and Table 2 and in any supporting documents substantiating such claims may, at the discretion of the funding agency, result in loss of all State funds to the applicant. Additionally, the Funding Agency, in its sole discretion, may halt disbursement of grant or loan funds, not pay pending invoices, and/or pursue any other applicable legal remedy and refer the matter to the Attorney General's Office.

Name of Signatory Dennis Erdman Title of Signatory _____ Signature of signatory  Date 7/9/12

Application Date: July 13, 2012

Proposal Identification Number:

CUWCC Member? Yes/No Yes No

Has Urban Water Supplier submitted a 2005 Urban Water Management Plan? Yes/No Yes No

Is the UWM Plan Deemed Complete by DWR? Yes/No Yes No

Applicant Name: Crescenta Valley Water District

Project Title: Crescenta Valley County Park - Stormwater Recharge Facility Study

Applicant's Contact Information: Name: David S. Gould Phone: 818-236-4119 E-mail: dsould@cwwd.com

Participants:

<u>Crescenta Valley Water District</u>	<u>Wholesaler (List Below)</u>
<u>Crescenta Valley Water District</u>	

C1	C2	C3	C4	C5	C6	C7	**C8	**C9	**C10	C11	C12	C13	C14	C15	C16	C17	C18
BMPs required for Wholesale Supplier	BMPs required for Retail Supplier	BMPs	BMP Implemented by Retailers and/or Wholesalers / BMP	Compliance Options/Alternative Conservation Approaches (1)			BMP Is Exempt (2)			BMP Implementation Requirements Met							
				BMP Checklist	Flex Track	Gallons Per Capita Per Day GPCD	Not Cost Effective	Lack of Funding	Lack of Legal Authority	CUWCC MOU Requirement Met: Retailer Yes/No	CUWCC MOU Requirement Met: Wholesaler Yes/No	Date of BMP Report Submitted to CUWCC for (2007-2008) (MOU Signatories)	Date BMP Implementation Data Submitted to DWR in CUWCC Format (Non MOU Signatories) (3)	All Supporting Documents have been Submitted Yes/No	Supporting Documents to be submitted by July 31, 2012	Supporting Documents to be submitted by July 31, 2012	Supporting Documents to be submitted by July 31, 2012
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BMP 1 Water Survey for Single/Multi-Family Residential Customers	Yes	No	No			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				Supporting Documents to be submitted by July 31, 2012
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BMP 2 Residential Plumbing Retrofit	Yes	No	No			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				Supporting Documents to be submitted by July 31, 2012
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BMP 3 System Water Audits, Leak Detection	Yes	No	No	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>				Supporting Documents to be submitted by July 31, 2012
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BMP 3 Leak Repairs	Yes	No	No	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>				Supporting Documents to be submitted by July 31, 2012
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BMP 4 Metering with Commodity Rates for All New connections	Yes	No	No	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>				Supporting Documents to be submitted by July 31, 2012

C1	C2	C3	C4	C5			C6			C7			C8			C9			C10			C11			C12			C13			C14			C15			C16			C17			C18
				BMPs required for Wholesale Supplier	BMPs required for Retail Supplier	BMPs	Retailer Yes/No	Wholesaler Yes/No	Regional Yes/No	BMP Checklist	Flex Track	Gallons Per Capita Per Day GPCD	Not Cost Effective	Lack of Funding	Lack of Legal Authority	CUWCC MOU Requirement Met: Retailer Yes/No	CUWCC MOU Requirement Met: Wholesaler Yes/No	Date of BMP Report Submitted to CUWCC for (2007-2008) (MOU Signatories)	Date BMP Implementation Data Submitted to DWR in CUWCC Format (Non MOU Signatories) (3)	All Supporting Documents have been Submitted Yes/No																							
		✓	BMP 4 Retrofit of Existing Connections	Yes	No	No	✓					✓											✓											Supporting Documents to be submitted by July 31, 2012									
		✓	BMP 5 Large Landscape Conservation Programs and Incentives	Yes	No	No			✓														✓										Supporting Documents to be submitted by July 31, 2012										
		✓	BMP 6 High-Efficiency Washing Machine Rebate Programs	Yes	No	No			✓														✓										Supporting Documents to be submitted by July 31, 2012										
	✓		BMP 7 Public Information	Yes	No	No	✓																✓										Supporting Documents to be submitted by July 31, 2012										
	✓		BMP 8 School Education	Yes	No	No	✓																✓										Supporting Documents to be submitted by July 31, 2012										
		✓	BMP 9 Conservation programs for Commercial, Industrial, and Institutional (CII) Accounts	Yes	No	No																	✓										Supporting Documents to be submitted by July 31, 2012										
	✓		BMP 10 Wholesale Agency Assistance Programs	Yes	No	No	✓																✓										Supporting Documents to be submitted by July 31, 2012										
		✓	BMP 11 Conservation Pricing	Yes	No	No	✓																✓										Supporting Documents to be submitted by July 31, 2012										
	✓		BMP 12 Conservation Coordinator	Yes	No	No	✓																✓										Supporting Documents to be submitted by July 31, 2012										
		✓	BMP 13 Water Waste Prohibitions	Yes	No	No	✓																✓										Supporting Documents to be submitted by July 31, 2012										
		✓	BMP 14 Residential ULFT Replacement Programs	Yes	No	No																	✓										Supporting Documents to be submitted by July 31, 2012										

*C6: Wholesaler may also be a retailer (supplying water to end water users)

**C8, **C9, ** and C10: Agencies choosing an alternative conservation approach are responsible for achieving water savings equal or greater than that which they would have achieved using only BMP list.

(1) For details, please see: <http://www.cuwcc.org/mou/exhibit-1-bmp-definitions-schedules-requirements.aspx>.

(2) BMP is exempt based on cost-effectiveness, lack of funding, and lack of legal authority criteria as detailed in the CUWCC MOU

(3) Non MOU signatories must submit to DWR reports and supporting documents in the same format as CUWCC.

CUWCC 2010 Flex Track BMPs	BMPs required for Wholesale Supplier	BMPs required for Retail Supplier	BMPs	BMP Implemented by Retailers and/or Wholesalers			Alternative Conservation Approaches Yes/No	Compliance Options / Alternative Conservation Approaches (1)			BMP is Exempt (2)			Implementation Scheduled to Commence within 1st Year of Agreement						Funds Requested, if Available. (See AB 1420 Compliance Table 3) Yes/No
				Retailer Yes/No	Wholesaler Yes/No	Regional Yes/No		BMP Checklist	Flex Track	Gallons Per Capita Per Day GPCD	Not Cost Effective	Lack of Funding	Lack of Legal Authority	Start Date (MM/YR)	Completion Level (%)	BMP Completion Date (MM/YR)	Budget (Dollars)	Funding Source & Finance Plan to Implement BMPs	Meets CUWCC Coverage Yes/No	
3.40		✓	BMP 14 Residential ULFT Replacement Programs	Yes	No	No	Yes			Yes					\$0	CIWD FY 12/13	Yes			
4.00		✓	BMP 9 Conservation programs for Commercial, Industrial, and Institutional (CII) Accounts	Yes	No	No	Yes			Yes					\$0	CIWD FY 12/13	Yes			
5.00		✓	BMP 5 Large Landscape Conservation Programs and Incentives	Yes	No	No	Yes			Yes					\$0	CIWD FY 12/13	Yes			

*C6: Wholesaler may also be a retailer (supplying water to end water users)
 **C9, ** C10, and **C11: Agencies choosing an alternative conservation approach are responsible for achieving water savings equal or greater than that which they would have achieved using only BMP list.
 (1) For details, please see <http://www.cuwcc.org/mou/exhibit-1-bmp-definitions-schedules-requirements.aspx>.
 (2) BMP is exempt based on cost-effectiveness, lack of funding, or lack of legal authority, as detailed in the CUWCC MOU.



CRESCENTA VALLEY WATER DISTRICT

California Urban Water Conservation Council

Best Management Practices Manual

July 2012

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PART 1

SUMMARY OF FOUNDATIONAL BEST MANAGEMENT PRACTICES

Introduction:

Crescenta Valley Water District (CVWD) adopted Resolution No. 706, which authorized CVWD to apply to the California Urban Water Conservation Council for membership, sign the Memorandum of Understanding (MOU) and execute an agreement with the California Urban Water Conservation Council (CUWCC).

The following is a summary of CUWCC's Foundation Best Management Practices (BMPs) with the requirements from the MOU and CVWD's response or documentation. This document will be used by CVWD as its initial submittal to CUWCC to confirm conformance with the signed MOU.

1.10 Utility Operations Programs

1.11 Conservation Coordinator

Staff and maintain the position of a trained conservation coordinator, or equivalent consulting support, and provide that function with the necessary resources to implement BMPs.

Requirements:

2. Conservation coordinator - Provide the contact information for the conservation coordinator, or consultant assigned, and verification that the position is responsible for implementing the tasks identified in Section A.1.

CVWD has designated CVWD's Program Specialist, Christy J Scott, as Conservation Coordinator per CVWD's Resolution 706, See Appendix A.

Documentation:

Contact Person: Christy J. Scott, Program Specialist

Address:

Crescenta Valley Water District
2700 Foothill Blvd
La Crescenta, CA 91214

Office Phone: 818-248-3925

Fax Number: 818-248-1659

E-mail: cjscott@cvwd.com

1.12 Water waste prevention

a) New development:

Enact, enforce, or support legislation, regulations, ordinances, or terms of service that:

- (1) Prohibit water waste such as, but not limited to: single-pass cooling systems; conveyer and in-bay vehicle wash, commercial laundry systems which do not reuse water; and non-re-circulating decorative water fountains.

CVWD's water conservation regulations were updated on July 10, 2012 to include prohibiting conveyer and in-bay vehicle wash and commercial laundry systems which do not re-use water, and addresses other water waste prohibitions, See Appendix B.

- (2) Address irrigation, landscape, industrial, commercial, and other design inefficiencies

CVWD's water conservation regulation was updated on July 10, 2012 to include all landscape must be in accordance with the permitting agency's landscape ordinance and/or Department of Water Resources Model Landscape Ordinance, See Appendix B.

b) Existing users:

Enact, enforce, or support legislation, regulations, ordinances, or terms of service that prohibit water waste such as, but not limited to: landscape and irrigation inefficiencies, commercial or industrial inefficiencies, and other misuses of water.

CVWD's water conservation regulation was updated on July 10, 2012 to clarify that CVWD's water conservation regulations apply to existing and new customers, See Appendix B.

c) Water shortage measures:

Enact, enforce, or support legislation, regulations, ordinances, or terms of service that facilitate implementation of water shortage response measures.

CVWD enacted a "Water Conservation Alert System" that is described in CVWD's water conservation regulation, See Appendix B.

Requirements: Water Agency shall perform one or more of the following:

- a) Enact and enforce an ordinance or establish terms of service that prohibit water waste.

CVWD's water conservation regulation was updated on July 10, 2012 to clarify that CVWD's water conservation regulations apply to existing and new customers, See Appendix B.

- b) Enact and enforce an ordinance or establish terms of service for water efficient design in new development.

CVWD's water conservation regulation was updated on July 10, 2012 to include all landscape must be in accordance with the permitting agency's landscape ordinance and or Department of Water Resources Model Landscape Ordinance, See Appendix B.

- c) Support legislation or regulations that prohibit water waste

The District wrote letters of support to State of California Assembly & Senate for:

- 1) *Assembly Bill 49 - 2009 Retrofit on Resale*
- 2) *Assembly Bill 1561 and Assembly Bill 2496 - Mandate from manufacturers for clothes washers and high-efficiency toilets*

CVWD supports the Department of Water Resources Model Landscape Plan.

- d) Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures.

CVWD enacted a "Water Conservation Alert System" that is described in CVWD's water conservation regulation, See Appendix B.

- e) Support local ordinances that prohibit water waste.

CVWD supported local ordinances on prohibiting water waste from Los Angeles County, City of Glendale and City of La Canada Flintridge.

- f) Support local ordinances that establish permits requirements for water efficient design in new development.

CVWD supported local ordinances on establishing permit requirements for water efficient design from Los Angeles County, City of Glendale and City of La Canada Flintridge,

Documentation:

- a) A description of, or electronic link to, any ordinances or terms of service adopted by water agency to meet the requirements of this BMP.

CVWD's water conservation regulation is attached, See Appendix B.

- b) Provide a description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.

The following is a list of ordinances or requirements adopted by Los Angeles County, City of Glendale, City of La Canada Flintridge and La Canada Irrigation District which are noted below, See Appendix C.

Los Angeles County:

Green Building Program

http://planning.lacounty.gov/view/green_building_program

See Appendix C 1.

La Crescenta-Montrose Community Standards District

http://planning.lacounty.gov/assets/upl/data/ord_la-crescenta-montrose-csd.pdf

See Appendix C 1.

City of Glendale:

No Water Waste Policy - Glendale Municipal Code 13.36.060

http://www.glendalewaterandpower.com/the_environment/current_no_water_waste_policy.aspx

See Appendix C 2.

City of Glendale – General Municipal Code – Section 13.36 Water Conservation

<http://www.ci.glendale.ca.us/gmc/13.36.aspx>

See Appendix C 2.

City of La Canada Flintridge:

Single-Family Residential Design Guidelines

http://www.lacanadaflintridge.com/docfiles/city/pd_na_mis_090313_121657.pdf

See Appendix C 3.

Department of Water Resources

Model Water Efficient Landscape Ordinance - 2009

http://www.ci.glendale.ca.us/planning/pdf_files/LandscapeGuidelines/ModelWaterEfficientLandscapeOrdSept2009.pdf

See Appendix C 4.

Updated Model Water Efficiency Landscape Ordinance DWR

<http://www.ci.glendale.ca.us/planning/images%5CModelWaterEfficiencyOrdinance/MOBrochurefromState.pdf>

See Appendix C 4.

La Canada Irrigation District:

Water Conservation Alert System

<http://lacanadairrigation.org/pdf/info/Conservation%20Alert%20Resolution.pdf>

See Appendix C 5.

Water Shortage Level 2

<http://lacanadairrigation.org/pdf/info/Conservation%20Stage%202%20Resolution.pdf>

See Appendix C 5.

- c) A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement consistent with this BMP.

The District actively participates in a "Quad City" Water Conservation group. This group, founded in 2009, consists of a cooperative membership between the Cities of Glendale, Burbank, Pasadena, and the Crescenta Valley Water District. The group's mission was to promote a uniform message for water conservation, waste of water prohibitions, and designated watering restrictions. This was accomplished by the agreement and adoption by the "Quad City" group on general waste of water restrictions, ie runoff, overspray, hosing of cement, and prohibited water times. In addition, the group established watering days that were enforced through the entire service area during the drought. A uniform message between the four agencies was advertised throughout various media outlets including, ads, bill boards, radio, newspaper articles, and even movie theater and bus stop signage. The collective message was extremely effective in communicating with the public and all of the member agencies saw a drastic reduction in water consumption.

- d) A description of agency support positions with respect to adoption of legislation or regulations consistent with this BMP.

The District wrote letters of support to State of California Assembly & Senate for:

- 1) Assembly Bill 49 - 2009 Retrofit on Resale*
- 2) Assembly Bill 1561 and Assembly Bill 2496 - Mandate from manufacturers for clothes washers and high-efficiency toilets.*

CVWD supports the Department of Water Resources Model Landscape Plan.

1.13 Wholesale Agency Programs

Financial investments and building partnerships - When mutually agreeable and beneficial to a wholesaler and its retail agencies, a wholesaler will provide financial assistance and help build partnerships to accomplish conservation. Wholesale water suppliers will consider avoided capital costs when making financial investments and build regional partnerships to advance water conservation efforts and effectiveness. Where applicable, intermediate wholesale water suppliers that receive conservation-related financial incentives from regional wholesalers will pass through eligible financial incentives to retail agencies operating programs at the retail level.

Requirements:

Financial investments and building partnerships:

- a) List the total monetary amount of financial incentives and equivalent resources provided to retail members to assist with, or to otherwise support, implementation of BMPs, subtotaled by BMP. List regional partnerships developed to encourage resource conservation and maximize economies of scale benefits.

CVWD is not a wholesale water supplier. Foothill Municipal Water District is responsible for this BMP.

- b) **Technical Support** - When requested, wholesale water agencies will provide conservation-related technical support and information to retail agencies they serve. Support and information will include, but will not be limited to: workshops and support advice addressing conservation program planning, design, implementation, and evaluation.

Supply a summary of types of technical support provided to retail agencies.

CVWD is not a wholesale water supplier. Foothill Municipal Water District is responsible for this BMP.

- c) **Program management** - When mutually advantageous, wholesale and retail water agencies will join together to plan, design, implement, manage, and evaluate regional conservation programs. When mutually agreeable and beneficial, the wholesale agency or another lead regional agency will operate all or part of the conservation program; if the wholesale agency or other lead regional agency operates all or part of a program, then it may, by mutual consent with the retail agency, assume responsibility for CUWCC reporting for funded BMPs; under this arrangement, a wholesale agency or other lead regional agency may aggregate all or portions of the reporting and coverage requirements of all retail agencies joining into the mutual consent.

Program management - If the wholesale agency has assumed reporting responsibility, list the programs managed on behalf of its retail agencies.

CVWD is not a wholesale water supplier. Foothill Municipal Water District is responsible for this BMP.

- d) **Water shortage allocations** - Wholesale agencies shall pursue water shortage allocation policies or plans which minimize disincentives to long-term water conservation, and encourage and reward investments in long-term conservation shown to advance regional water supply reliability and sufficiency.

Water shortage allocation - If a water shortage allocation plan or policy has been developed, provide the date of adoption and electronic link to the document or hard copy.

CVWD is not a wholesale water supplier. Foothill Municipal Water District is responsible for this BMP.

- e) **Non-signatory reporting** - To the extent possible, wholesale water agencies will provide reports on BMP implementation within their service area by retail water agencies that are not signatories to the MOU.

Non-signatory reporting - Receipt of reports.

CVWD is not a wholesale water supplier. Foothill Municipal Water District is responsible for this BMP.

- f) **Encourage CUWCC membership** - Wholesale agencies will encourage all of their retail agencies to become MOU signatories, provide information to assist the CUWCC in recruitment targeting, and may assist in paying CUWCC dues for their retail agencies

Encourage CUWCC membership - List of efforts to recruit retailers and amount of dues paid on behalf of retail agencies

CVWD is not a wholesale water supplier. Foothill Municipal Water District is responsible for this BMP.

1.20 Utility Operations: Water Loss Control

1. Standard Water Audit and Water Balance

All agencies shall quantify their current volume of apparent and real water loss. Agencies shall complete the standard water audit and balance using the AWWA Water Loss software to determine their current volume of apparent and real water loss and the cost impact of these losses on utility operations at no less than annual intervals.

Agency shall submit the completed AWWA Standard Water Audit and Water Balance worksheets in the BMP 1.2 report form every reporting period.

Requirements:

- a) Use AWWA Water Audit Software to complete a standard water audit, water balance and to improve accuracy of the quantities for real/apparent water losses.

CVWD has downloaded AWWA Water Audit Software

- b) Agency needs to achieve a Water Audit Data Validity score of 66 or higher using the AWWA Water Audit Software scoring.

CVWD - Water Audit Data Validity score = 77 points for 2011, greater than 66 points required

- c) Agency needs to train personnel in the AWWA water audit method and component analysis process offered by CUWCC or AWWA.

CVWD trained Program Specialist & Assistant Water Conservation Coordinator.

- d) Agency to submit the AWWA Water Audit and Water Balance worksheets as part of the documentation of this BMP.

2011 Water Audit and Water Balance worksheet to be submitted as part of BMP

- e) Agency needs to utilize AWWA "Water Audits and Loss Program" Manual M36 to reduce system losses.

CVWD has purchased the AWWA Water Audits & Loss Program Manual.

Documents:

CVWD - Water Audit Data Validity score for 2011, See Appendix D

2. Validation

Agencies may use up to four years to develop a validated data set for all entries of their water audit and balance. Data validation shall follow the methods suggested by the AWWA Software to improve the accuracy of the quantities for real and apparent losses.

Requirements:

For each reporting period, agency shall keep and make available validation for any data reported.

Program Specialist to be responsible for validation of Water Audit & Balance.

Documents:

CVWD will complete a 4-year validation data set - 2008 – 2011 by July 1, 2013.

3. Economic Values

For purposes of this BMP, the economic value of real loss recovery is based upon the agency's avoided cost of water as calculated by the Council's adopted Avoided Cost Model or other agency model consistent with the Council's Avoided Cost Model.

Requirements:

Agency shall maintain in-house records of audit results, methodologies, and worksheets for each completed audit period.

Program Specialist to be responsible for maintaining in-house records of Water Audit & Balance

Documents:

The District is preparing the CUWCC Avoided Costs Model which will be submitted prior to July 1, 2013.

4. Component Analysis

A component analysis is required at least once every four years and is defined as a means to analyze apparent and real losses and their causes by quantity and type. The goal is to identify volumes of water loss, the cause of the water loss and the value of the water loss for each component. The component analysis model then provides information needed to support the economic analysis and selection of intervention tools.

Requirements:

Agency keeps records of each component analysis performed, and incorporates results into future annual standard water balances.

Documents:

1) CVWD is preparing an initial Breaks and Background Estimates Model (BABE) which segregates leakage into three components: background losses, reported leaks and unreported leaks which will be completed by July 1, 2013.

2) The District is preparing the CUWCC Breaks and Background Estimates Model (BABE) which will be submitted prior to July 1, 2013.

5. Interventions

Agencies shall reduce real losses to the extent cost-effective. Agencies are encouraged to refer to the AWWA's 3rd Edition M36 Publication, Water Audits and Loss Control Programs (2009) for specific methods to reduce system losses.

Requirements:

Agency, for the purpose of setting the Benchmark:

- a) Maintains records of intervention(s) performed, including standardized reports on leak repairs, the economic value assigned to apparent losses and to real losses, miles of system surveyed for leaks, pressure reduction undertaken for loss reduction, infrastructure rehabilitation and renewal, volumes of water saved, and costs of intervention(s); and
- b) Prepares a yearly summary of this information for submission to the Council, during years two through five of implementation, unless extended by the Council.

Documents:

- 1) CVWD to update its pipeline leak repair reports to include estimate loss of water by July 1, 2013.
- 2) CVWD to create a report that assigns an economic value to apparent losses and to real losses by July 1, 2013.
- 3) CVWD to create a report that will assess the miles of pipeline in the system surveyed for leaks per year by July 1, 2013.
- 4) CVWD to create a report that will assess pressure reduction in a pressure zone undertaken for loss reduction by July 1, 2013.
- 5) CVWD will update its "Water Main Replacement Program" by July 1, 2013.
- 6) CVWD to create a report on volumes of water saved per year by July 1, 2013.
- 7) CVWD to create a report to chart to costs of interventions by July 1, 2013.

6. Customer Leaks

Agencies shall advise customers whenever it appears possible that leaks exist on the customer's side of the meter.

Requirements:

Agencies shall advise customers whenever it appears possible that leaks exist on the customer's side of the meter.

Documents:

The following is CVWD's procedure for advising customers of leaks:

During scheduled bi-monthly meter reads, the billing system, Springbrook, will flag an account if the read from the previous period is twice as high as the current read. For example, if a customer used 26,000 gallons of water in June and July of 2011, the billing system would flag the account when if it uses more than 52,000 gallons for the same period in 2012.

The first step following a flag by the system is to verify that the read was accurate. If the read is accurate, then the field technician will do a leak check. If there is a leak recorded, the customer is notified immediately and the account is noted. If the customer does not respond, a door hanger or follow-up letter will be issued.

If the leak is severe, the service is turned off and a door hanger is left for the customer to contact the District.

Timeframe for the corrections of leaks are outlined in "Appendix G" of the District's rules and regulations. See Appendix B.

1.30 Utility Operations: Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections

1. Require meters for all new service connections.

a) Confirmation that all new service connections are metered and are being billed by volume of use and provide:

1) Number of metered accounts

CVWD has 8,155 metered accounts

2) Number of metered accounts read

CVWD reads 8,155 meter accounts on a bi-monthly basis

3) Number of metered accounts billed by volume of use

CVWD has 8,058 metered accounts billed by volume use

a) Frequency of billing (i.e. six or twelve times per year) by type of metered customer (e.g. single-family residential, multiple-family residential, commercial, industrial, and landscape irrigation); and

CVWD bills all its accounts on a bi-monthly basis or 6 times per year

b) Number of estimated bills per year by type of metered customer (e.g. single-family residential, multiple-family residential, commercial, industrial, and landscape irrigation) vs. actual meter readings.

CVWD estimates about a total of 50 bills during the year due to access to meter box (i.e. blocked by parked cars)

Requirements:

See above:

Documents:

Not Applicable

2. Establish a program for retrofitting existing unmetered service connections

Number of unmetered accounts in the service area. For the purposes of evaluation, this shall be defined as the baseline meter retrofit target, and shall be used to calculate the agency's minimum annual retrofit requirement

Requirements:

a) Number of unmetered service connections retrofitted during the reporting period

b) Agency with existing unmetered service connections has completed a meter retrofit plan by the end of Year Two following the date implementation was to commence

Documents:

CVWD does not have any accounts that are unmetered.

3. Read meters and bill customers by volume of use.

a) Establish and maintain billing intervals that are no greater than bi-monthly (every two months) for all customers.

CVWD bills all its accounts on a bi-monthly basis or 6 times per year.

- b) For each metered connection, perform at least five actual meter readings (including remotely sensed) per twelve month period
 - 1) Agency bills metered customers at least as often as bi-monthly within four years.
CVWD bills all its accounts on a bi-monthly basis or 6 times per year
 - 2) Agency reads meters and bills metered customers using volumetric rates.
CVWD bills all its accounts on a bi-monthly basis or 6 times per year

Requirements:

See above:

Documents:

See above:

4. Prepare a written plan, policy or program that includes:

- a) A census of all meters, by size, type, year installed, customer class served and manufacturer's warranty accuracy when new;
CVWD is updating report and will be completed by July 1, 2013
- b) A currently approved schedule of meter testing and repair, by size, type and customer class;
CVWD is updating report and will be completed by July 1, 2013
- c) A currently approved schedule of meter replacement, by size, type, and customer class;
 - 1) Agency has completed a written plan, policy or program to test, repair and replace meters.
CVWD is updating report and will be completed by July 1, 2013
 - 2) A schedule of meter testing and repair, by size, type, and customer class
CVWD is working on an aggressive schedule to replace the ¾" water meters that are beyond AWWA recommendation for replacement of 20 years and 1" meters to be replaced every 15 years with new water meters with AMI ready equipment.
CVWD's objective would be to replace all ¾" meters installed before 1996 & 1" meters installed before 2001 between FY 2012-13 - FY 2015 -16 (4 years).
Additionally the District will be bench testing 10% of the old meters to determine what if any inaccuracies exist that could be contributing to the District's unaccounted for water measurement.

Requirements:

See above:

Documents:

See above:

- 5. **Identifying intra- and inter-agency disincentives or barriers to retrofitting mixed use - commercial accounts with dedicated landscape meters, and conducting a feasibility study(s) to assess the merits of a program to provide incentives to switch mixed use accounts to dedicated landscape meters.**

- a) Estimated number of CII accounts with mixed-use meters.

CVWD will be performing a feasibility study that will be completed by July 1, 2013 which will examine incentive programs to move landscape water uses on mixed-use meters to dedicated landscape meters that will include:

- 1) *Identifying the number of commercial, industrial, and institutional accounts with mixed-use meters*
 - 2) *Determine the costs and logistics to install meters to retrofit commercial industrial, and institutional accounts with dedicated irrigation meters*
- b) Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.

CVWD will be performing a feasibility study that will be completed by July 1, 2013 which will examine incentive programs to move landscape water uses on mixed-use meters to dedicated landscape meters that will include:

- a. *Identifying the number of commercial, industrial, and institutional accounts with mixed-use meters*
 - b. *Determine the costs and logistics to install meters to retrofit commercial industrial, and institutional accounts with dedicated irrigation meters*
- c) Agency has completed a feasibility study examining incentive programs to move landscape water uses on mixed-use meters to dedicated landscape meters by the end of Year Two following the date implementation was to commence.

Requirements:

See above:

Documents:

See above:

2.1 Education

1. Public Information Programs

Requirements:

- 1) The program should include, when possible, but is not limited to, providing speakers to employees, community groups and the media; using paid and public service advertising; using bill inserts; providing information on customers' bills showing use for the last billing period compared to the same period the year before; providing public information to promote water conservation measures; and coordinating with other government agencies, industry groups, public interest groups, and the media.

Documents:

CVWD provides water conservation literature, brochures, posters, landscape advice and tips, home water conservation devices etc., directly to the public and its customers. These materials are available at CVWD's Main Office and during special events. CVWD also maintains a library of water resource education conservation films and videos for loan to local organizations. Metropolitan Water District of Southern California (MWD) through FMWD also provides speakers to various groups upon request.

The District's newsletter 'The Pipeline' is direct mailed to all CVWD customers four times per year.

CVWD also participates in various local events throughout the Community (see Table below)

	Event	Date	Costs
1	Arbor Day	April, 2012	\$400
2	Home Town Fair	April, 2012	\$3,000
3	National Night Out	August, 2012	\$500
4	Pancake Breakfast	October, 2012	\$500
5	Montrose Christmas Parade	December, 2012	\$2,000

The District hosts at least five (5) gardening classes throughout the year that promote the District's turf rebate program, native landscaping and water efficient design. On the District's website there is a link to a water efficient landscape website for information on all types of native landscaping, plants, design, and examples of how to convert to water efficient landscape.

The District uses a portion of its bi-monthly bill to add a message box that provides reminders to customers to update their irrigation sprinkler timer throughout the year. Also available on the District's bills and at a customer's online account is a detailed water use graph detailing water use for the previous bill and previous time period.

Press releases and paid advertisements are used throughout the year to promote the District's Water Conservation Program including rebate programs, classes, events, and a reminder for customers to maintain water wise practices.

- 2) The program should include, when possible, social marketing elements which are designed to change attitudes to influence behavior. This includes seeking input from the public to shape the water conservation message; training stakeholders outside the utility staff in water conservation priorities and techniques; and developing partnerships with stakeholders who carry the conservation message to their target markets.

Requirements:

- 1) Does your agency have a water conservation “brand,” “theme” or mascot: If so briefly describe:

CVWD has a standard themed message that is included with each public outreach event or communication such as advertisements or flyers.

- 2) Have you sponsored or participated in market research to refine your message? If so topic: _____ Message of above brand? Mission Statement?

In April 2012, CVWD performed an informal survey to get input from the public. CVWD is planning to perform a market research program with an outside firm by July 2013 to further define its water conservation program.

CVWD’s Mission Statement: “CVWD to provide dependable water service and wastewater collection to our constituents in La Crescenta, Montrose, and portions of Glendale and La Canada Flintridge”.

Do you have a community conservation committee? If yes, its focus is on:

- a. Conservation in general;
- b. Landscape;
- c. Education;
- d. Commercial/industrial/institutional;
- e. Other: _____

CVWD has a Community Relations/Water Conservation Committee that includes Board Members and staff. Meetings are open to the public for their input. The Committee meets to discuss activities and District presence in the community to promote water conservation. The Committee’s focus is on general water conservation practices, education, and community involvement.

- 3) Training for stakeholders who help support programs or educate others about conservation:
- 1) Professional landscapers: number of sessions/classes; number of attendees: on irrigation equipment; other
 - 2) Plumbers: number of sessions/classes; number of attendees
 - 3) Homeowners: number of sessions/classes; number of attendees: on irrigation equipment; other
 - 4) Additional program(s) supported by agency but not mentioned above.

CVWD has held at least 4 classes a year that are open to landscape contractors, plumbers and homeowners.

The majority of attendees are homeowners and the classes cover such topics as type of plants, irrigation systems, composting and other landscaping topics. The attendance at classes averages 40-50 people each class.

- 4) Total reporting period budget expenditure for social marketing programs averages at \$30,000 per FY (include all agency costs)

CVWD has budgeted at least \$40,000 per FY for water conservation programs such as classes, booths at local events or other community events.

2.2 Education

1. School Education Programs - School education programs have been implemented to reach the youngest water users at an early age and enforce the need to engage in water conservation as a life-long behavior. This section provides specifics on how school education programs are to be implemented.

- 1) Implement a school education program to promote water conservation and water conservation-related benefits.

CVWD developed a curriculum that provides water conservation tools to local schools (grades K-6) and youth groups.

- 2) Programs shall include working with school districts and private schools in the water supplier's service area to provide instructional assistance, educational materials, and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed. Educational materials shall meet the state education framework requirements and grade-appropriate materials shall be distributed.

CVWD provides classroom presentations with children's water conservation tools, and offers field trips to CVWD facilities

- 3) When mutually agreeable and beneficial, the wholesale agency or another lead regional agency will operate all or part of the education program; if the wholesale agency operates all or part of the retail agency's school education program, then it may, by mutual consent with the retail agency, assume responsibility for CUWCC reporting of this BMP; under this arrangement, a wholesale agency may aggregate all or portions of the reporting and coverage requirements of the retail agencies joining into the mutual consent.

It is not beneficial for FMWD (wholesaler) or MWD (lead regional agency) to perform the education program since CVWD is the local agency responsible for local water conservation

Requirements:

- 1) Classroom presentations: number of presentations, number of attendees, topics covered: conservation, recycled water, water sources, pollution prevention, etc.

a. CVWD had 2 presentations in 2012; 3 presentations in 2011, and 3 presentations in 2010

b. Minimum of 35 children

- 2) Topics covered include: *Water Cycle and Water Conservation Tips*

See Appendix E, Water Conservation Education Presentation

- 3) Large group assemblies: number of presentations, number of attendees

CVWD is not planning to make a presentation to a large group assembly as it is currently not included in the local school district's programs.

- 4) Children's water festivals or other events: number of presentations, number of attendees

CVWD is not planning to make a presentation at a children's water festival since these type of events are not planned for the local community.

- 5) Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up: number of presentations, number of attendees.

CVWD has not participated with local School District on existing science/water education. CVWD is planning to be involved in the upcoming 2012/13 school year.

- 6) Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits); Description_____ ; number distributed
CVWD has provided water conservation education kits to the local schools and will continue providing this information.
- 7) Staffing children's booths at events & festivals: number of booths, number of attendees
CVWD is not planning to staff a booth at a children's water festival since these types of events are not planned for the local community.
- 8) Water conservation contests such as poster and photo; Description_____ ; number of participants
CVWD had a water conservation poster contest in 2008. There were 12 children that participated and the art posters were used in the 2008 Annual Water Quality Report.
- 9) Offer monetary awards/funding or scholarships to students: number offered; total funding
CVWD has not offered a monetary award/ funding or scholarships to students and will not be planning this task in the future.
- 10) Teacher training workshops: number of presentations, number of attendees
CVWD has not offered teacher training workshops and is not planning this task in the future.
- 11) Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.: number of tours or field trips, number of participants.
CVWD has not funded and/or staffed a student field trip and is not planning this task in the future.
- 12) College internships in water conservation offered: number of internships; total funding
CVWD had a college intern program in 2007 and 2008 to assist with the Water Conservation Program for the summer. The total funding was about \$15,000 per year.
- 13) Career fairs/workshops: number of presentations, number of attendees
CVWD has not attended Career fairs/workshops and is not planning for this task in the future.
- 14) Additional program(s) supported by agency but not mentioned above. Description: _____ ; number of events (if applicable); number of participants.
CVWD has provided field tours of CVWD facilities to local schools and pre-schools. There have been between 30 – 50 participants at each field trip.
- 15) Total reporting period budget expenditures for school education programs (include all agency costs)
CVWD is planning to provide \$5,000 in FY 12/13 Budget for books and education kits to the local school district.

Documents:

PART 2

SUMMARY OF PROGRAMMATIC BEST MANAGEMENT PRACTICES

Introduction:

The following is a summary of CUWCC's Programmatic Best Management Practices (BMPs) with the requirements from the MOU and CVWD's response or documentation. This document will be used by CVWD as its initial submittal to CUWCC to confirm conformance with the signed MOU.

The CUWCC MOU indicates that a signatory can implement three (3) options for Programmatic BMPs as listed below:

- 1) BMPs for each residential, commercial, industrial, institutional and landscape account, OR;
- 2) Flex Track Option OR:
- 3) Gallons per Capita per Day (GPCD) Compliance Option.

Option 1 would require CVWD to set up programs such as provide site-specific leak detection assistance that may include, but is not limited to, the following: a water conservation survey, water efficiency suggestions, and/or inspection. Perform site-specific landscape water surveys that shall include, but are not limited to, the following: check irrigation system and timers for maintenance and repairs needed; estimate or measure landscaped area; develop customer irrigation schedule based on precipitation rate, local climate, irrigation system performance, and landscape conditions; review the scheduling with customer; provide information packet to customer; and provide customer with evaluation results and water savings recommendations

Option 2 would require CVWD to implement the BMPs for each account and the Flex Track menu which would include being responsible for achieving water savings greater than or equal to that which they would have achieved using only the BMP list items. The Flex Track Menu will be maintained and regularly updated in the MOU Compliance Policies. The Flex Track Menu would include the following:

	Measure	Documentation
1.	Monitor and report on landscape water use	
1a.	Measure landscapes and develop water budgets for customers with dedicated landscape meters. Provide timely water use reports with comparisons of water use to budget (through bills, electronically, by mail or other means) that provide customers the information they need to adjust irrigation schedules.	# number of sites with dedicated meters, number of sites with landscape measurements and water budgets, number of sites to be measured and provided water budgets each of the next 10 years, estimated water savings
1b.	Measure landscapes and develop water budgets for customers with mixed meters. Provide timely water use reports with comparisons of water use to budget (through bills, electronically, by mail or other means) that provide customers the information they need to adjust irrigation schedules.	# number of sites with mixed meters, number of sites with landscape measurements and water budgets, number of sites to be measured and provided water budgets each of the next 10 years, estimated water savings
1c.	Establish agency-wide water budget.	# water budget, amount of water used (AF/acre)
1d.	Establish agency-wide, sector-based irrigation goal to reduce water use, based on seasonality.	# minimum irrigation goal (AF/acre compared seasonally)
2.	Provide technical landscape resources and training	
2a.	Upon customer requests, provide landscape irrigation management and landscape design information and resources: provide assistance, answer customer questions, respond to run-off and high-bill calls.	# number of contacts: calls in person, over the phone, or via e-mail, estimated water savings

	Measure	Documentation
2b.	Perform landscape & irrigation audits: including irrigation scheduling, plant information, and landscape area measurement.	# number of audits conducted per year, measurement of square footage of turf, non-turf areas, estimated water savings
2c.	Sponsor, co-sponsor, promote, or support landscape workshops, training, presentations and other technical educational events for homeowners and professionals: design, installation, maintenance, water management (gardeners, contractors, landscape architects/designers, irrigation specialists, irrigation equipment manufacturers and distributors, nurseries, retailers, homeowners associations, property managers, etc.).	# number of events, number of participants, list title or type of events
2d.	Establish time-of-day irrigation restrictions.	Y/N describe restrictions
3. Provide incentives		
3a.	Establish landscape budget-based rates.	Y/N describe rates
3b.	Provide incentives for conversions from mixed-use meters to dedicated landscape meters.	# number of conversions, estimated water savings
3c.	Provide incentives for installing sub-meters to separate landscape water use.	# number of sub-meters installed, estimated water savings
3d.	Provide incentives for irrigation equipment upgrades that improve distribution uniformity, irrigation efficiency, or scheduling capabilities (i.e. controllers, emitters, soil moisture sensors, pressure regulators, rain shut off devices, etc.).	# number of devices/systems installed, estimated water savings
3e.	Provide incentives for the reduction of water use over an irrigated area, or reduction in the size of the irrigated area due to replacement of turf or other high water-using plants with low water-using plants, artificial turf, or permeable surfaces.	# acreage of turf replaced, reduced acreage of irrigated landscape, estimated water savings
3f.	Provide incentives for conversions from potable to recycled water.	# number of conversions, number of incentives, funds invested, estimated water savings
3g.	Provide incentives for the use of alternative sources of water in the landscape (i.e. gray water, rainwater, cisterns, etc.).	# number of conversions, number of incentives, funds invested, estimated water savings
4. Participate in local and regional planning and regulatory activities		
4a.	Collaborate with planning agencies at the local and regional level, other water suppliers in the area and stakeholders in response to state or federal requirements such as the State Model Water Efficient Landscape Ordinance and AB 1881. Participate in the development, review, implementation, and enforcement of requirements for new developments. Provide water use data to planning agencies.	Y/N, describe involvement
4b.	Establish or participate in a water conservation advisory committee or other community outreach effort to drive market transformation and exchange information about landscape water conservation with developers, community-based organizations, homeowners associations, residential customers, landscape professionals, educators, other water suppliers in region.	Y/N, describe involvement
4c.	Participate in regional efforts: integrated water resource management, watershed management, NPDES permit agencies, etc.	Y/N, describe involvement
5. Develop a holistic approach to landscape water use efficiency		
5a.	Develop and implement a comprehensive landscape water conservation program for all customers. Target marketing efforts to those most likely to result in benefits to both customer and Agency.	
6. Other Measures		

Option 3 would require CVWD to work towards a GPCD target of an 18% reduction by 2018 for the purpose of using the same timeframe as specified in the CUWCC's MOU. The specific compliance method provided by CUWCC is not intended to be a one size fits all solution to the complex issue of GPCD reduction for a water agency. However, as one compliance method among others, it does provide an agency like CVWD an opportunity, if appropriate, to use GPCD Compliance as a simplified reporting mechanism in lieu of the other options discussed above.

This option would require CVWD to establish a Baseline GPCD which shall equal the average annual Potable Water GPCD for the years 1997 through 2006 based on Calendar Year. From this baseline and for purposes of compliance, the 2018 GPCD Target shall equal the Baseline GPCD multiplied by 0.82 or an 18% reduction.

CVWD would be required to submit a bi-annual report that shows that CVWD's GPCD is being reduced each year until 2018.

Documentation:

CVWD reviewed each option with respect to data collection, reporting, manpower and costs. From this, CVWD determined that the best option to comply with Programmatic Best Management Practices would be **Option 3 - GPCD Compliance Option.**

The Potable water GPCD for the baseline period and the 2018 GPC targets for CVWD are attached in Appendix F. As shown, The District 2010 GPCD 109.9 GPCD was already under the 2018 target for the South Coast Region of 149 GPCD. Also CVWD's projected target amount for 2018 is 130.8 GPCD which is also less than the 2018 target for the South Coast Region of 149 GPCD. Therefore CVWD's GPCD can be used as an acceptable compliance method for the programmatic BMP'S.

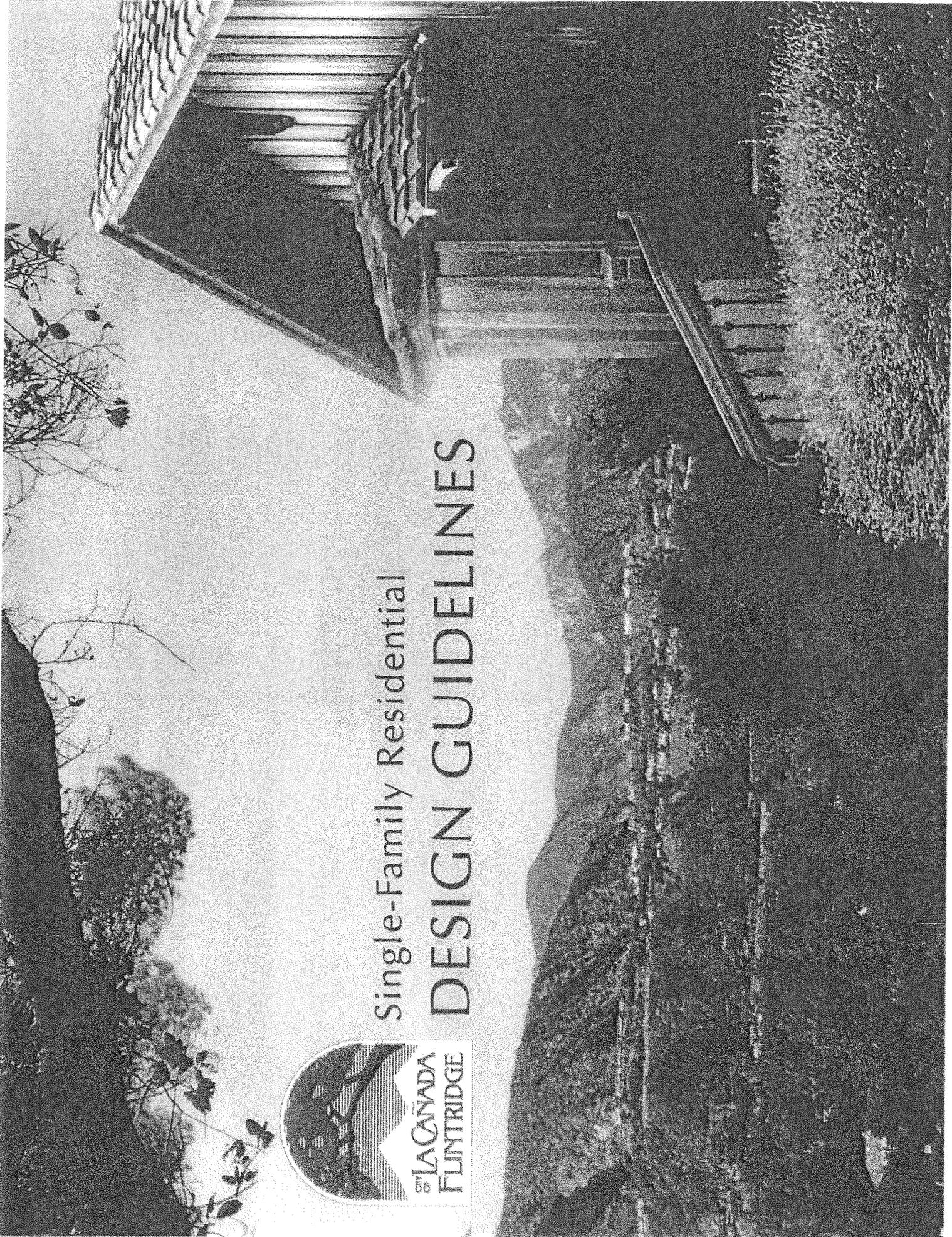
CITY OF LA CANADA –
FLINTRIDGE

APPENDIX

C3



Single-Family Residential
DESIGN GUIDELINES



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DEPARTMENT OF
WATER RESOURCES

APPENDIX

C4

**Model Water Efficient Landscape Ordinance
September 10, 2009**

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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:
- (1) registered local, state or federal historical sites;
 - (2) ecological restoration projects that do not require a permanent irrigation system;
 - (3) mined-land reclamation projects that do not require a permanent irrigation system; or
 - (4) plant collections, as part of botanical gardens and arboretums open to the public.

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

§ 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 $(0.7) \div (0.5/0.71)$. 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.

(oo) “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 “ET_o” means a standard measurement of environmental parameters which affect the water use of plants. ET_o 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.

(jjj) “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.

(lll) “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.

(ooo) “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.

Note: Authority Cited: Section 65595, Government Code. Reference: Sections 65592, 65596, Government Code.

§ 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.

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

MAWA = Maximum Applied Water Allowance (gallons per year)

ET_o = 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)

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

$$= 1,108,870 \text{ gallons per year}$$

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

$$= 1,108,870/748 = 1,482 \text{ hundred-cubic-feet per year}$$

(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.

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

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

$$= 31.68 \times [35,000 + 600] \text{ gallons per year}$$

$$= 31.68 \times 35,600 \text{ gallons per year}$$

$$= 1,127,808 \text{ gallons per year or } 1,508 \text{ hundred-cubic-feet per year}$$

(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.

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

Where:

ETWU = Estimated Total Water Use per year (gallons)

ET_o = 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.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	7,000	5,600
2	High	0.7	10,000	7,000
3	Medium	0.5	16,000	8,000
4	Low	0.3	7,000	2,100
5	Low	0.2	10,000	2,000
			Sum	24,700

*Plant Factor from 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 x 50,000) + (0.3 x 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.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	7,000	5,600
2	High	0.7	9,000	6,300
3	Medium	0.5	15,000	7,500
4	Low	0.3	7,000	2,100
5	Low	0.2	10,000	2,000
			Sum	23,500
6	SLA	1.0	2,000	2,000

*Plant Factor 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 x 50,000) + (0.3 x 2,000)]
= 31.68 x [35,000 + 600]
= 31.68 x 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 on-site 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 Title 16 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, 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 Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

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

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

§ 492.10 Irrigation Scheduling.

(a) 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.

(2) 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.

(3) 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.

(4) 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.
- (5) 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.

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

§ 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.

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

§ 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: $MAWA = (0.8)(ET_o)(LA)(0.62)$.

(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:

$MAWA = (ET_o - Eppt) (0.62) [(0.7 \times LA) + (0.3 \times SLA)]$.

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

Appendices.

Appendix A. Reference Evapotranspiration (ET_o) Table.

Appendix A - Reference Evapotranspiration (ETo) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
ALAMEDA													
Fremont	1.5	1.9	3.4	4.7	5.4	6.3	6.7	6.0	4.5	3.4	1.8	1.5	47.0
Livermore	1.2	1.5	2.9	4.4	5.9	6.6	7.4	6.4	5.3	3.2	1.5	0.9	47.2
Oakland	1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1	1.4	0.9	41.8
Oakland Foothills	1.1	1.4	2.7	3.7	5.1	6.4	5.8	4.9	3.6	2.6	1.4	1.0	39.6
Pleasanton	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
Union City	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1	1.5	1.2	44.2
ALPINE													
Markleeville	0.7	0.9	2.0	3.5	5.0	6.1	7.3	6.4	4.4	2.6	1.2	0.5	40.6
AMADOR													
Jackson	1.2	1.5	2.8	4.4	6.0	7.2	7.9	7.2	5.3	3.2	1.4	0.9	48.9
Shanandoah Valley	1.0	1.7	2.9	4.4	5.6	6.8	7.9	7.1	5.2	3.6	1.7	1.0	48.8
BUTTE													
Chico	1.2	1.8	2.9	4.7	6.1	7.4	8.5	7.3	5.4	3.7	1.7	1.0	51.7
Durham	1.1	1.8	3.2	5.0	6.5	7.4	7.8	6.9	5.3	3.6	1.7	1.0	51.1
Gridley	1.2	1.8	3.0	4.7	6.1	7.7	8.5	7.1	5.4	3.7	1.7	1.0	51.9
Oroville	1.2	1.7	2.8	4.7	6.1	7.6	8.5	7.3	5.3	3.7	1.7	1.0	51.5
CALAVERAS													
San Andreas	1.2	1.5	2.8	4.4	6.0	7.3	7.9	7.0	5.3	3.2	1.4	0.7	48.8
COLUSA													
Colusa	1.0	1.7	3.4	5.0	6.4	7.6	8.3	7.2	5.4	3.8	1.8	1.1	52.8
Williams	1.2	1.7	2.9	4.5	6.1	7.2	8.5	7.3	5.3	3.4	1.6	1.0	50.8
CONTRA COSTA													
Benicia	1.3	1.4	2.7	3.8	4.9	5.0	6.4	5.5	4.4	2.9	1.2	0.7	40.3
Brentwood	1.0	1.5	2.9	4.5	6.1	7.1	7.9	6.7	5.2	3.2	1.4	0.7	48.3
Concord	1.1	1.4	2.4	4.0	5.5	5.9	7.0	6.0	4.8	3.2	1.3	0.7	43.4
Courtland	0.9	1.5	2.9	4.4	6.1	6.9	7.9	6.7	5.3	3.2	1.4	0.7	48.0
Martinez	1.2	1.4	2.4	3.9	5.3	5.6	6.7	5.6	4.7	3.1	1.2	0.7	41.8
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7	5.9	4.6	3.2	1.6	1.0	44.9
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	6.4	5.0	3.2	1.3	0.7	45.4
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
DEL NORTE													
Crescent City	0.5	0.9	2.0	3.0	3.7	3.5	4.3	3.7	3.0	2.0	0.9	0.5	27.7
EL DORADO													
Camino	0.9	1.7	2.5	3.9	5.9	7.2	7.8	6.8	5.1	3.1	1.5	0.9	47.3
FRESNO													
Clovis	1.0	1.5	3.2	4.8	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Coalinga	1.2	1.7	3.1	4.6	6.2	7.2	8.5	7.3	5.3	3.4	1.6	0.7	50.9
Firebaugh	1.0	1.8	3.7	5.7	7.3	8.1	8.2	7.2	5.5	3.9	2.0	1.1	55.4
FivePoints	1.3	2.0	4.0	6.1	7.7	8.5	8.7	8.0	6.2	4.5	2.4	1.2	60.4
Fresno	0.9	1.7	3.3	4.8	6.7	7.8	8.4	7.1	5.2	3.2	1.4	0.6	51.1
Fresno State	0.9	1.6	3.2	5.2	7.0	8.0	8.7	7.6	5.4	3.6	1.7	0.9	53.7
Friant	1.2	1.5	3.1	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Kerman	0.9	1.5	3.2	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.2
Kingsburg	1.0	1.5	3.4	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.6
Mendota	1.5	2.5	4.6	6.2	7.9	8.6	8.8	7.5	5.9	4.5	2.4	1.5	61.7
Orange Cove	1.2	1.9	3.5	4.7	7.4	8.5	8.9	7.9	5.9	3.7	1.8	1.2	56.7
Panoche	1.1	2.0	4.0	5.6	7.8	8.5	8.3	7.3	5.6	3.9	1.8	1.2	57.2
Parlier	1.0	1.9	3.6	5.2	6.8	7.6	8.1	7.0	5.1	3.4	1.7	0.9	52.0
Reedley	1.1	1.5	3.2	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Westlands	0.9	1.7	3.8	6.3	8.0	8.6	8.6	7.8	5.9	4.3	2.1	1.1	58.8

Appendix A - Reference Evapotranspiration (ETo) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
GLENN													
Orland	1.1	1.8	3.4	5.0	6.4	7.5	7.9	6.7	5.3	3.9	1.8	1.4	52.1
Willows	1.2	1.7	2.9	4.7	6.1	7.2	8.5	7.3	5.3	3.6	1.7	1.0	51.3
HUMBOLDT													
Eureka	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Ferndale	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Garberville	0.6	1.2	2.2	3.1	4.5	5.0	5.5	4.9	3.8	2.4	1.0	0.7	34.9
Hoopla	0.5	1.1	2.1	3.0	4.4	5.4	6.1	5.1	3.8	2.4	0.9	0.7	35.6
IMPERIAL													
Brawley	2.8	3.8	5.9	8.0	10.4	11.5	11.7	10.0	8.4	6.2	3.5	2.1	84.2
Calipatria/Mulberry	2.4	3.2	5.1	6.8	8.6	9.2	9.2	8.6	7.0	5.2	3.1	2.3	70.7
El Centro	2.7	3.5	5.6	7.9	10.1	11.1	11.6	9.5	8.3	6.1	3.3	2.0	81.7
Holtville	2.8	3.8	5.9	7.9	10.4	11.6	12.0	10.0	8.6	6.2	3.5	2.1	84.7
Meloland	2.5	3.2	5.5	7.5	8.9	9.2	9.0	8.5	6.8	5.3	3.1	2.2	71.6
Palo Verde II	2.5	3.3	5.7	6.9	8.5	8.9	8.6	7.9	6.2	4.5	2.9	2.3	68.2
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4	2.2	75.4
Westmoreland	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
INYO													
Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	4.8	2.5	1.6	68.3
Death Valley Jct	2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3	5.4	2.9	1.7	79.1
Independence	1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5	7.1	3.9	2.0	1.5	65.2
Lower Haiwee Res.	1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	4.2	2.6	1.5	67.6
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0	8.4	6.2	3.4	2.1	83.1
KERN													
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5	1.6	0.9	52.4
Bakersfield/Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Bakersfield/Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Blackwells Corner	1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7	1.6	0.8	54.4
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
McFarland/Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1	2.0	1.2	56.5
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4	1.7	1.0	51.2
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4	2.1	1.2	52.9
KINGS													
Caruthers	1.6	2.5	4.0	5.7	7.8	8.7	9.3	8.4	6.3	4.4	2.4	1.6	62.7
Corcoran	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Hanford	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.2	5.4	3.4	1.4	0.7	51.5
Kettleman	1.1	2.0	4.0	6.0	7.5	8.5	9.1	8.2	6.1	4.5	2.2	1.1	60.2
Lemoore	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.4	0.7	51.7
Stratford	0.9	1.9	3.9	6.1	7.8	8.6	8.8	7.7	5.9	4.1	2.1	1.0	58.7

Appendix A - Reference Evapotranspiration (ETo) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
LAKE													
Lakeport	1.1	1.3	2.6	3.5	5.1	6.0	7.3	6.1	4.7	2.9	1.2	0.9	42.8
Lower Lake	1.2	1.4	2.7	4.5	5.3	6.3	7.4	6.4	5.0	3.1	1.3	0.9	45.4
LASSEN													
Buntingville	1.0	1.7	3.5	4.9	6.2	7.3	8.4	7.5	5.4	3.4	1.5	0.9	51.8
Ravendale	0.6	1.1	2.3	4.1	5.6	6.7	7.9	7.3	4.7	2.8	1.2	0.5	44.9
Susanville	0.7	1.0	2.2	4.1	5.6	6.5	7.8	7.0	4.6	2.8	1.2	0.5	44.0
LOS ANGELES													
Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0	2.6	2.0	51.7
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0	2.7	2.1	51.3
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2	2.2	1.7	46.3
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3	2.2	1.8	43.7
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2	2.6	2.0	53.1
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6	2.4	1.1	52.4
Hollywood Hills	2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2	3.7	2.8	2.1	52.8
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6	2.8	1.7	71.1
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8	1.8	1.5	39.7
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	1.9	50.1
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0	50.2
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2	2.6	2.0	52.3
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0	2.6	1.6	59.9
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8	2.4	2.0	42.6
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9	2.6	2.0	52.0
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4	2.4	2.2	44.2
MADERA													
Chowchilla	1.0	1.4	3.2	4.7	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Madera	0.9	1.4	3.2	4.8	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.5
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4	1.4	0.7	50.5
MARIN													
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
Novato	1.3	1.5	2.4	3.5	4.4	6.0	5.9	5.4	4.4	2.8	1.4	0.7	39.8
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8	4.8	4.9	4.3	2.7	1.3	0.7	35.8
MARIPOSA													
Coulterville	1.1	1.5	2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4	1.4	0.7	48.8
Mariposa	1.1	1.5	2.8	4.4	5.9	7.4	8.2	7.1	5.0	3.4	1.4	0.7	49.0
Yosemite Village	0.7	1.0	2.3	3.7	5.1	6.5	7.1	6.1	4.4	2.9	1.1	0.6	41.4
MENDOCINO													
Fort Bragg	0.9	1.3	2.2	3.0	3.7	3.5	3.7	3.7	3.0	2.3	1.2	0.7	29.0
Hopland	1.1	1.3	2.6	3.4	5.0	5.9	6.5	5.7	4.5	2.8	1.3	0.7	40.9
Point Arena	1.0	1.3	2.3	3.0	3.7	3.9	3.7	3.7	3.0	2.3	1.2	0.7	29.6
Sanel Valley	1.0	1.6	3.0	4.6	6.0	7.0	8.0	7.0	5.2	3.4	1.4	0.9	49.1
Ukiah	1.0	1.3	2.6	3.3	5.0	5.8	6.7	5.9	4.5	2.8	1.3	0.7	40.9
MERCED													
Kesterson	0.9	1.7	3.4	5.5	7.3	8.2	8.6	7.4	5.5	3.8	1.8	0.9	55.1
Los Banos	1.0	1.5	3.2	4.7	6.1	7.4	8.2	7.0	5.3	3.4	1.4	0.7	50.0
Merced	1.0	1.5	3.2	4.7	6.6	7.9	8.5	7.2	5.3	3.4	1.4	0.7	51.5

Appendix A - Reference Evapotranspiration (ETo) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
MODOC													
Modoc/Alturas	0.9	1.4	2.8	3.7	5.1	6.2	7.5	6.6	4.6	2.8	1.2	0.7	43.2
MONO													
Bridgeport	0.7	0.9	2.2	3.8	5.5	6.6	7.4	6.7	4.7	2.7	1.2	0.5	43.0
MONTEREY													
Arroyo Seco	1.5	2.0	3.7	5.4	6.3	7.3	7.2	6.7	5.0	3.9	2.0	1.6	52.6
Castroville	1.4	1.7	3.0	4.2	4.6	4.8	4.0	3.8	3.0	2.6	1.6	1.4	36.2
Gonzales	1.3	1.7	3.4	4.7	5.4	6.3	6.3	5.9	4.4	3.4	1.9	1.3	45.7
Greenfield	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
King City	1.7	2.0	3.4	4.4	4.4	5.6	6.1	6.7	6.5	5.2	2.2	1.3	49.6
King City-Oasis Rd.	1.4	1.9	3.6	5.3	6.5	7.3	7.4	6.8	5.1	4.0	2.0	1.5	52.7
Long Valley	1.5	1.9	3.2	4.1	5.8	6.5	7.3	6.7	5.3	3.6	2.0	1.2	49.1
Monterey	1.7	1.8	2.7	3.5	4.0	4.1	4.3	4.2	3.5	2.8	1.9	1.5	36.0
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.1
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.0	4.5	4.0	2.9	1.9	1.3	39.1
Salinas North	1.2	1.5	2.9	4.1	4.6	5.2	4.5	4.3	3.2	2.8	1.5	1.2	36.9
San Ardo	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
San Juan	1.8	2.1	3.4	4.6	5.3	5.7	5.5	4.9	3.8	3.2	2.2	1.9	44.2
Soledad	1.7	2.0	3.4	4.4	5.5	5.4	6.5	6.2	5.2	3.7	2.2	1.5	47.7
NAPA													
Angwin	1.8	1.9	3.2	4.7	5.8	7.3	8.1	7.1	5.5	4.5	2.9	2.1	54.9
Carneros	0.8	1.5	3.1	4.6	5.5	6.6	6.9	6.2	4.7	3.5	1.4	1.0	45.8
Oakville	1.0	1.5	2.9	4.7	5.8	6.9	7.2	6.4	4.9	3.5	1.6	1.2	47.7
St Helena	1.2	1.5	2.8	3.9	5.1	6.1	7.0	6.2	4.8	3.1	1.4	0.9	44.1
Yountville	1.3	1.7	2.8	3.9	5.1	6.0	7.1	6.1	4.8	3.1	1.5	0.9	44.3
NEVADA													
Grass Valley	1.1	1.5	2.6	4.0	5.7	7.1	7.9	7.1	5.3	3.2	1.5	0.9	48.0
Nevada City	1.1	1.5	2.6	3.9	5.8	6.9	7.9	7.0	5.3	3.2	1.4	0.9	47.4
ORANGE													
Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6	2.3	49.6
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	2.4	2.0	43.2
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	2.5	2.0	48.2
PLACER													
Auburn	1.2	1.7	2.8	4.4	6.1	7.4	8.3	7.3	5.4	3.4	1.6	1.0	50.6
Blue Canyon	0.7	1.1	2.1	3.4	4.8	6.0	7.2	6.1	4.6	2.9	0.9	0.6	40.5
Colfax	1.1	1.5	2.6	4.0	5.8	7.1	7.9	7.0	5.3	3.2	1.4	0.9	47.9
Roseville	1.1	1.7	3.1	4.7	6.2	7.7	8.5	7.3	5.6	3.7	1.7	1.0	52.2
Soda Springs	0.7	0.7	1.8	3.0	4.3	5.3	6.2	5.5	4.1	2.5	0.7	0.7	35.4
Tahoe City	0.7	0.7	1.7	3.0	4.3	5.4	6.1	5.6	4.1	2.4	0.8	0.6	35.5
Truckee	0.7	0.7	1.7	3.2	4.4	5.4	6.4	5.7	4.1	2.4	0.8	0.6	36.2
PLUMAS													
Portola	0.7	0.9	1.9	3.5	4.9	5.9	7.3	5.9	4.3	2.7	0.9	0.5	39.4
Quincy	0.7	0.9	2.2	3.5	4.9	5.9	7.3	5.9	4.4	2.8	1.2	0.5	40.2
RIVERSIDE													
Beaumont	2.0	2.3	3.4	4.4	6.1	7.1	7.6	7.9	6.0	3.9	2.6	1.7	55.0
Blythe	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Cathedral City	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Coachella	2.9	4.4	6.2	8.4	10.5	11.9	12.3	10.1	8.9	6.2	3.8	2.4	88.1
Desert Center	2.9	4.1	6.4	8.5	11.0	12.1	12.2	11.1	9.0	6.4	3.9	2.6	90.0
Elsinore	2.1	2.8	3.9	4.4	5.9	7.1	7.6	7.0	5.8	3.9	2.6	1.9	55.0
Indio	3.1	3.6	6.5	8.3	10.5	11.0	10.8	9.7	8.3	5.9	3.7	2.7	83.9

Appendix A - Reference Evapotranspiration (ET_o) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET_o
RIVERSIDE													
La Quinta	2.4	2.8	5.2	6.5	8.3	8.7	8.5	7.9	6.5	4.5	2.7	2.2	66.2
Mecca	2.6	3.3	5.7	7.2	8.6	9.0	8.8	8.2	6.8	5.0	3.2	2.4	70.8
Oasis	2.9	3.3	5.3	6.1	8.5	8.9	8.7	7.9	6.9	4.8	2.9	2.3	68.4
Palm Deser	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
Palm Springs	2.0	2.9	4.9	7.2	8.3	8.5	11.6	8.3	7.2	5.9	2.7	1.7	71.1
Rancho California	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
Rancho Mirage	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Ripley	2.7	3.3	5.6	7.2	8.7	8.7	8.4	7.6	6.2	4.6	2.8	2.2	67.8
Salton Sea North	2.5	3.3	5.5	7.2	8.8	9.3	9.2	8.5	6.8	5.2	3.1	2.3	71.7
Temecula East II	2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	56.7
Thermal	2.4	3.3	5.5	7.6	9.1	9.6	9.3	8.6	7.1	5.2	3.1	2.1	72.8
Riverside UC	2.5	2.9	4.2	5.3	5.9	6.6	7.2	6.9	5.4	4.1	2.9	2.6	56.4
Winchester	2.3	2.4	4.1	4.9	6.4	6.9	7.7	7.5	6.0	3.9	2.6	2.1	56.8
SACRAMENTO													
Fair Oaks	1.0	1.6	3.4	4.1	6.5	7.5	8.1	7.1	5.2	3.4	1.5	1.0	50.5
Sacramento	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
Twitchell Island	1.2	1.8	3.9	5.3	7.4	8.8	9.1	7.8	5.9	3.8	1.7	1.2	57.9
SAN BENITO													
Hollister	1.5	1.8	3.1	4.3	5.5	5.7	6.4	5.9	5.0	3.5	1.7	1.1	45.1
San Benito	1.2	1.6	3.1	4.6	5.6	6.4	6.9	6.5	4.8	3.7	1.7	1.2	47.2
San Juan Valley	1.4	1.8	3.4	4.5	6.0	6.7	7.1	6.4	5.0	3.5	1.8	1.4	49.1
SAN BERNARDINO													
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1	3.3	2.1	86.6
Barstow NE	2.2	2.9	5.3	6.9	9.0	10.1	9.9	8.9	6.8	4.8	2.7	2.1	71.7
Big Bear Lake	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Chino	2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6
Crestline	1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4	3.5	2.2	1.6	50.8
Lake Arrowhead	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Lucerne Valley	2.2	2.9	5.1	6.5	9.1	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3
Needles	3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9	6.6	4.0	2.7	92.1
Newberry Springs	2.1	2.9	5.3	8.4	9.8	10.9	11.1	9.9	7.6	5.2	3.1	2.0	78.2
San Bernardino	2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55.6
Twentynine Palms	2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6	5.9	3.4	2.2	82.9
Victorville	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
SAN DIEGO													
Chula Vista	2.2	2.7	3.4	3.8	4.9	4.7	5.5	4.9	4.5	3.4	2.4	2.0	44.2
Escondido SPV	2.4	2.6	3.9	4.7	5.9	6.5	7.1	6.7	5.3	3.9	2.8	2.3	54.2
Miramar	2.3	2.5	3.7	4.1	5.1	5.4	6.1	5.8	4.5	3.3	2.4	2.1	47.1
Oceanside	2.2	2.7	3.4	3.7	4.9	4.6	4.6	5.1	4.1	3.3	2.4	2.0	42.9
Otay Lake	2.3	2.7	3.9	4.6	5.6	5.9	6.2	6.1	4.8	3.7	2.6	2.2	50.4
Pine Valley	1.5	2.4	3.8	5.1	6.0	7.0	7.8	7.3	6.0	4.0	2.2	1.7	54.8
Ramona	2.1	2.1	3.4	4.6	5.2	6.3	6.7	6.8	5.3	4.1	2.8	2.1	51.6
San Diego	2.1	2.4	3.4	4.6	5.1	5.3	5.7	5.6	4.3	3.6	2.4	2.0	46.5
Santee	2.1	2.7	3.7	4.5	5.5	6.1	6.6	6.2	5.4	3.8	2.6	2.0	51.1
Torrey Pines	2.2	2.3	3.4	3.9	4.0	4.1	4.6	4.7	3.8	2.8	2.0	2.0	39.8
Warner Springs	1.6	2.7	3.7	4.7	5.7	7.6	8.3	7.7	6.3	4.0	2.5	1.3	56.0
SAN FRANCISCO													
San Francisco	1.5	1.3	2.4	3.0	3.7	4.6	4.9	4.8	4.1	2.8	1.3	0.7	35.1
SAN JOAQUIN													
Farmington	1.5	1.5	2.9	4.7	6.2	7.6	8.1	6.8	5.3	3.3	1.4	0.7	50.0

Appendix A - Reference Evapotranspiration (ET_o) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET_o
SAN JOAQUIN													
Lodi West	1.0	1.6	3.3	4.3	6.3	6.9	7.3	6.4	4.5	3.0	1.4	0.8	46.7
Manteca	0.9	1.7	3.4	5.0	6.5	7.5	8.0	7.1	5.2	3.3	1.6	0.9	51.2
Stockton	0.8	1.5	2.9	4.7	6.2	7.4	8.1	6.8	5.3	3.2	1.4	0.6	49.1
Tracy	1.0	1.5	2.9	4.5	6.1	7.3	7.9	6.7	5.3	3.2	1.3	0.7	48.5
SAN LUIS OBISPO													
Arroyo Grande	2.0	2.2	3.2	3.8	4.3	4.7	4.3	4.6	3.8	3.2	2.4	1.7	40.0
Atascadero	1.2	1.5	2.8	3.9	4.5	6.0	6.7	6.2	5.0	3.2	1.7	1.0	43.7
Morro Bay	2.0	2.2	3.1	3.5	4.3	4.5	4.6	4.6	3.8	3.5	2.1	1.7	39.9
Nipomo	2.2	2.5	3.8	5.1	5.7	6.2	6.4	6.1	4.9	4.1	2.9	2.3	52.1
Paso Robles	1.6	2.0	3.2	4.3	5.5	6.3	7.3	6.7	5.1	3.7	2.1	1.4	49.0
San Luis Obispo	2.0	2.2	3.2	4.1	4.9	5.3	4.6	5.5	4.4	3.5	2.4	1.7	43.8
San Miguel	1.6	2.0	3.2	4.3	5.0	6.4	7.4	6.8	5.1	3.7	2.1	1.4	49.0
San Simeon	2.0	2.0	2.9	3.5	4.2	4.4	4.6	4.3	3.5	3.1	2.0	1.7	38.1
SAN MATEO													
Hal Moon Bay	1.5	1.7	2.4	3.0	3.9	4.3	4.3	4.2	3.5	2.8	1.3	1.0	33.7
Redwood City	1.5	1.8	2.9	3.8	5.2	5.3	6.2	5.6	4.8	3.1	1.7	1.0	42.8
Woodside	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
SANTA BARBARA													
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3	2.7	2.1	49.1
Carpenteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4	2.4	2.0	44.9
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5	2.6	2.0	59.7
Goleta	2.1	2.5	3.9	5.1	5.7	5.7	5.4	5.4	4.2	3.2	2.8	2.2	48.1
Goleta Foothills	2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5	3.9	2.8	2.3	49.6
Guadalupe	2.0	2.2	3.2	3.7	4.9	4.6	4.5	4.6	4.1	3.3	2.4	1.7	41.1
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2	2.4	1.7	41.1
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7	2.4	1.6	44.6
Santa Barbara	2.0	2.5	3.2	3.8	4.6	5.1	5.5	4.5	3.4	2.4	1.8	1.8	40.6
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5	2.4	1.9	47.4
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6	2.2	1.7	48.7
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4	2.3	1.8	49.2
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7	2.2	1.6	45.6
SANTA CLARA													
Gilroy	1.3	1.8	3.1	4.1	5.3	5.6	6.1	5.5	4.7	3.4	1.7	1.1	43.6
Los Gatos	1.5	1.8	2.8	3.9	5.0	5.6	6.2	5.5	4.7	3.2	1.7	1.1	42.9
Morgan Hill	1.5	1.8	3.4	4.2	6.3	7.0	7.1	6.0	5.1	3.7	1.9	1.4	49.5
Palo Alto	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0	43.0
San Jose	1.5	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3	1.8	1.0	45.3
SANTA CRUZ													
De Laveaga	1.4	1.9	3.3	4.7	4.9	5.3	5.0	4.8	3.6	3.0	1.6	1.3	40.8
Green Valley Rd	1.2	1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7	3.1	1.6	1.3	40.6
Santa Cruz	1.5	1.8	2.6	3.5	4.3	4.4	4.8	4.4	3.8	2.8	1.7	1.2	36.6
Watsonville	1.5	1.8	2.7	3.7	4.6	4.5	4.9	4.2	4.0	2.9	1.8	1.2	37.7
Webb	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.2
SHASTA													
Burney	0.7	1.0	2.1	3.5	4.9	5.9	7.4	6.4	4.4	2.9	0.9	0.6	40.9
Fall River Mills	0.6	1.0	2.1	3.7	5.0	6.1	7.8	6.7	4.6	2.8	0.9	0.5	41.8
Glenburn	0.6	1.0	2.1	3.7	5.0	6.3	7.8	6.7	4.7	2.8	0.9	0.6	42.1
McArthur	0.7	1.4	2.9	4.2	5.6	6.9	8.2	7.2	5.0	3.0	1.1	0.6	46.8
Redding	1.2	1.4	2.6	4.1	5.6	7.1	8.5	7.3	5.3	3.2	1.4	0.9	48.8

Appendix A - Reference Evapotranspiration (ET_o) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET_o
SIERRA													
Downieville	0.7	1.0	2.3	3.5	5.0	6.0	7.4	6.2	4.7	2.8	0.9	0.6	41.3
Sierraville	0.7	1.1	2.2	3.2	4.5	5.9	7.3	6.4	4.3	2.6	0.9	0.5	39.6
SISKIYOU													
Happy Camp	0.5	0.9	2.0	3.0	4.3	5.2	6.1	5.3	4.1	2.4	0.9	0.5	35.1
MacDoel	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
Mt Shasta	0.5	0.9	2.0	3.0	4.5	5.3	6.7	5.7	4.0	2.2	0.7	0.5	36.0
Tule lake FS	0.7	1.3	2.7	4.0	5.4	6.3	7.1	6.4	4.7	2.8	1.0	0.6	42.9
Weed	0.5	0.9	2.0	2.5	4.5	5.3	6.7	5.5	3.7	2.0	0.9	0.5	34.9
Yreka	0.6	0.9	2.1	3.0	4.9	5.8	7.3	6.5	4.3	2.5	0.9	0.5	39.2
SOLANO													
Dixon	0.7	1.4	3.2	5.2	6.3	7.6	8.2	7.2	5.5	4.3	1.6	1.1	52.1
Fairfield	1.1	1.7	2.8	4.0	5.5	6.1	7.8	6.0	4.8	3.1	1.4	0.9	45.2
Hastings Tract	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Putah Creek	1.0	1.6	3.2	4.9	6.1	7.3	7.9	7.0	5.3	3.8	1.8	1.2	51.0
Rio Vista	0.9	1.7	2.8	4.4	5.9	6.7	7.9	6.5	5.1	3.2	1.3	0.7	47.0
Suisun Valley	0.6	1.3	3.0	4.7	5.8	7.0	7.7	6.8	5.3	3.8	1.4	0.9	48.3
Winters	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
SONOMA													
Bennett Valley	1.1	1.7	3.2	4.1	5.5	6.5	6.6	5.7	4.5	3.1	1.5	0.9	44.4
Cloverdale	1.1	1.4	2.6	3.4	5.0	5.9	6.2	5.6	4.5	2.8	1.4	0.7	40.7
Fort Ross	1.2	1.4	2.2	3.0	3.7	4.5	4.2	4.3	3.4	2.4	1.2	0.5	31.9
Healdsburg	1.2	1.5	2.4	3.5	5.0	5.9	6.1	5.6	4.5	2.8	1.4	0.7	40.8
Lincoln	1.2	1.7	2.8	4.7	6.1	7.4	8.4	7.3	5.4	3.7	1.9	1.2	51.9
Petaluma	1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.6
Santa Rosa	1.2	1.7	2.8	3.7	5.0	6.0	6.1	5.9	4.5	2.9	1.5	0.7	42.0
Valley of the Moon	1.0	1.6	3.0	4.5	5.6	6.6	7.1	6.3	4.7	3.3	1.5	1.0	46.1
Windsor	0.9	1.6	3.0	4.5	5.5	6.5	6.5	5.9	4.4	3.2	1.4	1.0	44.2
STANISLAUS													
Denair	1.0	1.9	3.6	4.7	7.0	7.9	8.0	6.1	5.3	3.4	1.5	1.0	51.4
La Grange	1.2	1.5	3.1	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Modesto	0.9	1.4	3.2	4.7	6.4	7.7	8.1	6.8	5.0	3.4	1.4	0.7	49.7
Newman	1.0	1.5	3.2	4.6	6.2	7.4	8.1	6.7	5.0	3.4	1.4	0.7	49.3
Oakdale	1.2	1.5	3.2	4.7	6.2	7.7	8.1	7.1	5.1	3.4	1.4	0.7	50.3
Patterson	1.3	2.1	4.2	5.4	7.9	8.6	8.2	6.6	5.8	4.0	1.9	1.3	57.3
Turlock	0.9	1.5	3.2	4.7	6.5	7.7	8.2	7.0	5.1	3.4	1.4	0.7	50.2
SUTTER													
Nicolaus	0.9	1.6	3.2	4.9	6.3	7.5	8.0	6.9	5.2	3.4	1.5	0.9	50.2
Yuba City	1.3	2.1	2.8	4.4	5.7	7.2	7.1	6.1	4.7	3.2	1.2	0.9	46.7
TEHAMA													
Corning	1.2	1.8	2.9	4.5	6.1	7.3	8.1	7.2	5.3	3.7	1.7	1.1	50.7
Gerber	1.0	1.8	3.5	5.0	6.6	7.9	8.7	7.4	5.8	4.1	1.8	1.1	54.7
Gerber Dryland	0.9	1.6	3.2	4.7	6.7	8.4	9.0	7.9	6.0	4.2	2.0	1.0	55.5
Red Bluff	1.2	1.8	2.9	4.4	5.9	7.4	8.5	7.3	5.4	3.5	1.7	1.0	51.1
TRINITY													
Hay Fork	0.5	1.1	2.3	3.5	4.9	5.9	7.0	6.0	4.5	2.8	0.9	0.7	40.1
Weaverville	0.6	1.1	2.2	3.3	4.9	5.9	7.3	6.0	4.4	2.7	0.9	0.7	40.0
TULARE													
Alpaugh	0.9	1.7	3.4	4.8	6.6	7.7	8.2	7.3	5.4	3.4	1.4	0.7	51.6
Badger	1.0	1.3	2.7	4.1	6.0	7.3	7.7	7.0	4.8	3.3	1.4	0.7	47.3
Delano	1.1	1.9	4.0	4.9	7.2	7.9	8.1	7.3	5.4	3.2	1.5	1.2	53.6

Appendix A - Reference Evapotranspiration (ET_o) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET_o
TULARE													
Dinuba	1.1	1.5	3.2	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Lindcove	0.9	1.6	3.0	4.8	6.5	7.6	8.1	7.2	5.2	3.4	1.6	0.9	50.6
Porterville	1.2	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.3	3.4	1.4	0.7	52.1
Visalia	0.9	1.7	3.3	5.1	6.8	7.7	7.9	6.9	4.9	3.2	1.5	0.8	50.7
TUOLUMNE													
Groveland	1.1	1.5	2.8	4.1	5.7	7.2	7.9	6.6	5.1	3.3	1.4	0.7	47.5
Sonora	1.1	1.5	2.8	4.1	5.8	7.2	7.9	6.7	5.1	3.2	1.4	0.7	47.6
VENTURA													
Camarillo	2.2	2.5	3.7	4.3	5.0	5.2	5.9	5.4	4.2	3.0	2.5	2.1	46.1
Oxnard	2.2	2.5	3.2	3.7	4.4	4.6	5.4	4.8	4.0	3.3	2.4	2.0	42.3
Piru	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Port Hueneme	2.0	2.3	3.3	4.6	4.9	4.9	4.9	5.0	3.7	3.2	2.5	2.2	43.5
Thousand Oaks	2.2	2.6	3.4	4.5	5.4	5.9	6.7	6.4	5.4	3.9	2.6	2.0	51.0
Ventura	2.2	2.6	3.2	3.8	4.6	4.7	5.5	4.9	4.1	3.4	2.5	2.0	43.5
YOLO													
Bryte	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
Davis	1.0	1.9	3.3	5.0	6.4	7.6	8.2	7.1	5.4	4.0	1.8	1.0	52.5
Esparto	1.0	1.7	3.4	5.5	6.9	8.1	8.5	7.5	5.8	4.2	2.0	1.2	55.8
Winters	1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.3	3.3	1.6	1.0	49.4
Woodland	1.0	1.8	3.2	4.7	6.1	7.7	8.2	7.2	5.4	3.7	1.7	1.0	51.6
Zamora	1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0	5.5	4.0	1.9	1.2	52.8
YUBA													
Browns Valley	1.0	1.7	3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1	2.0	1.1	52.9
Brownsville	1.1	1.4	2.6	4.0	5.7	6.8	7.9	6.8	5.3	3.4	1.5	0.9	47.4

* The values in this table were derived from:

- 1) California Irrigation Management Information System (CIMIS);
- 2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and
- 3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922, 4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426

Appendix B – Sample Water Efficient Landscape Worksheet.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.
Please complete all sections (A and B) of the worksheet.

SECTION A. HYDROZONE INFORMATION TABLE

Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone*	Zone or Valve	Irrigation Method**	Area (Sq. Ft.)	% of Landscape Area
Total				100%

*** Hydrozone**
HW = High Water Use Plants
MW = Moderate Water Use Plants
LW = Low Water Use Plants

****Irrigation Method**
MS = Micro-spray
S = Spray
R = Rotor
B= Bubbler
D= Drip
O = Other

SECTION B. WATER BUDGET CALCULATIONS

Section B1. Maximum Applied Water Allowance (MAWA)

The project's Maximum Applied Water Allowance shall be calculated using this equation:

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

where:

- MAWA = Maximum Applied Water Allowance (gallons per year)
- ETo = Reference Evapotranspiration from Appendix A (inches per year)
- 0.7 = ET Adjustment Factor (ETAF)
- LA = Landscaped Area includes Special Landscape Area (square feet)
- 0.62 = Conversion factor (to gallons per square foot)
- SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
- 0.3 = the additional ET Adjustment Factor for Special Landscape Area (1.0 - 0.7 = 0.3)

Maximum Applied Water Allowance = _____ gallons per year

Show calculations.

Effective Precipitation (Eppt)

If considering Effective Precipitation, use 25% of annual precipitation. Use the following equation to calculate Maximum Applied Water Allowance:

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.7 \times \text{LA}) + (0.3 \times \text{SLA})]$$

Maximum Applied Water Allowance = _____ gallons per year

Show calculations.

Section B2. Estimated Total Water Use (ETWU)

The project’s Estimated Total Water Use is calculated using the following formula:

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

where:

- ETWU = Estimated total water use per year (gallons per year)
- ET_o = Reference Evapotranspiration (inches per year)
- PF = Plant Factor from WUCOLS (see Definitions)
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor (to gallons per square foot)
- IE = Irrigation Efficiency (minimum 0.71)

Hydrozone Table for Calculating ETWU

Please complete the hydrozone table(s). Use as many tables as necessary.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)	Area (HA) (square feet)	PF x HA (square feet)
			Sum	
	SLA			

Estimated Total Water Use = _____ gallons

Show calculations.

Appendix C – Sample Certificate of Completion.

CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

PART 1. PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Project Address and Location:

Street Address		Parcel, tract or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

Property Owner or his/her designee:

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Property Owner

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

Property Owner Signature

Date

Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the local agency _____
2. Date the Landscape Documentation Package was approved by the local agency _____
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor _____

PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE

"I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

PART 3. IRRIGATION SCHEDULING

Attach parameters for setting the irrigation schedule on controller per ordinance Section 492.10.

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11.

PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

PART 6. SOIL MANAGEMENT REPORT

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package per ordinance Section 492.5.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.5.

Assembly Bill No. 1881

CHAPTER 559

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.

[Approved by Governor September 28, 2006. Filed with
Secretary of State September 28, 2006.]

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.

(l) 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.

LA CANADA
IRRIGATION DISTRICT

APPENDIX

C5

RESOLUTION OF THE BOARD OF DIRECTORS OF LA CAÑADA IRRIGATION DISTRICT ADOPTING A WATER CONSERVATION ALERT SYSTEM

Section I: Title.

This resolution shall be known as the La Cañada Irrigation District Water Conservation Alert System.

Section II: Findings.

- a. The District's primary source of water is imported water from the Metropolitan Water District of Southern California via Foothill Municipal Water District.
- b. The District's imported water supply connections with Foothill Municipal Water District and the emergency water supply interconnections with Crescenta Valley Water District and Valley Water Company are limited in size and capacity, may be subjected to random failures, and are being subjected to increased demands.
- c. Foothill Municipal Water District may be unable to supply the La Cañada Irrigation District with enough water to meet customer demand during periods of high water use.
- d. The District is a user of significant quantities of energy to meet its system demands for the production, transmission and distribution of water.
- e. The District will pay ever-increasing amounts for "peak" water and power demands.
- f. Under Section 375 of the California Water Code, the La Cañada Irrigation District has the power and authority to adopt water conservation measures for activities within its service area.

Section III: Purpose and Intent

- a. The purpose of this resolution is to adopt a Water Conservation Alert System.
- b. The District, through its public information program, should advise and alert its customers to the serious nature of the situation and the need for a reduction in demand by customers through the use of a conservation alert system.

Section IV: Water Conservation Alert System.

- a. The La Cañada Irrigation District urges its customers to follow the color coded alert system explained below:
 1. "Blue" is defined as the Normal Water Conservation Alert, where Foothill Municipal Water District can meet all Member Agency demands. Standard water conservation applies, as defined in Section VI of the Water Conservation and Water Supply Shortage Program.
 2. "Green" is defined as Increased Voluntary Conservation Alert, where some

supplies have been impacted and customers should increase efforts to conserve. Customers are asked to follow strict water conservation practices indoors and limiting outdoor water use to odd or even days based on the ending number of the customer's address.

3. "Yellow" is defined as an Extraordinary Conservation Alert and is equivalent to a Level 1 Water Supply Shortage. Metropolitan Water District of Southern California is withdrawing water from most of its storage programs to meet demands. Extraordinary conservation is called for from all customers, who are requested to minimize indoor water use and water outdoors no more than 3 days per week based on the following schedule:
 - i. Odd numbered last digit addresses may water on Tuesdays, Thursdays and Saturdays
 - ii. Even numbered last digit addresses may water on Wednesdays, Fridays, and Saturdays.
 - iii. Watering is prohibited on Mondays.

During the months of November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than two days per week based on the following schedule:

- i. Odd numbered last digit addresses may water on Tuesdays and Saturdays
 - ii. Even numbered last digit addresses may water on Wednesdays and Sundays
 - iii. Watering is prohibited on Mondays, Thursdays and Fridays.
4. "Orange" is defined as an Allocation Conservation Alert and is equivalent to a Level 2 Water Supply Shortage. Metropolitan Water District of Southern California has implemented its allocation plan to its member agencies. Customers are obliged to minimize indoor water use and severely limit outdoor water use as follows:

Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to two days per week based on the following schedule:

- i. Odd numbered last digit addresses may water on Tuesdays and Saturdays
- ii. Even numbered last digit addresses may water on Wednesdays and Sundays
- iii. Watering is prohibited on Mondays, Thursdays and Fridays.

During the months of November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than one day per week based on the following schedule:

- i. Odd numbered last digit addresses may water on Saturdays
- ii. Even numbered last digit addresses may water on Sundays
- iii. Watering is prohibited on Monday through Friday.

Plumbing leaks must be fixed within 48 hours.

The use of water to clean, maintain, fill, or refill decorative fountains or similar structures is prohibited.

5. "Red" is defined as a Critical Water Conservation Alert and is equivalent to a

Level 3 Water Supply Shortage as described in Section IX of the Water Conservation and Supply Shortage Program. Water supplies are only available for health and safety needs. Customers are required to minimize indoor water use and curtail all outdoor water use. Any plumbing leaks must be repaired within 24 hours.

RESOLUTION OF THE BOARD OF DIRECTORS OF LA CAÑADA IRRIGATION DISTRICT ADOPTING A WATER SHORTAGE LEVEL 2

Section I: Title.

This resolution shall be known as the La Cañada Irrigation District Level 2 Water Supply Shortage beginning July 1, 2009.

Section II: Findings.

- a. A prolonged drought has created severe water shortages throughout California. As a result, water imported into Southern California has been greatly restricted.
- b. The District's primary source of water is imported water from the Metropolitan Water District of Southern California via Foothill Municipal Water District.
- c. Metropolitan Water District of Southern California has instituted an allocation plan that limits Foothill Municipal Water District to 10,061 acre-feet beginning July 1, 2009.
- d. Foothill Municipal Water District will adopt an allocation plan beginning July 1, 2009, that limits the La Cañada Irrigation District to 2,477 acre-feet, a reduction of 15%.
- e. Severe financial penalties will be incurred should the customers of the La Cañada Irrigation District exceed the allocation.
- f. Under Section 375 of the California Water Code, the La Cañada Irrigation District has the power and authority to adopt water conservation measures for activities within its service area.

Section III: Purpose and Intent

- a. The purpose of this resolution is to adopt a Level 2 Water Supply Shortage that will reduce water consumption within the La Cañada Irrigation District.
- b. The goal of this resolution is to reduce water use to below that allocated by Foothill Municipal Water District. In doing so, the La Cañada Irrigation District will avoid harsh financial penalties imposed by the Metropolitan Water District.

Section IV: Other.

- a. This resolution is effective July 1, 2009.
- b. If critical water shortages continue to exist and if current measures prove insufficient to accomplish the necessary conservation, the La Cañada Irrigation District will consider additional and more restrictive levels of water conservation.
- c. Should water shortages decrease, the La Cañada Irrigation District will consider less restrictive levels of water conservation.

WATER AUDIT
VALIDITY SCORE

APPENDIX

D

GALLONS PER CAPITA
PER DAY (GPCD)
COMPLIANCE OPTION

APPENDIX

F

AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.2

[Back to Instructions](#)

[?](#) Click to access definition

Water Audit Report for: **Crescenta Valley Water District**
 Reporting Year: **2011** 1/2011 - 12/2011

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	?	8	977.873	Million gallons (US)/yr (MG/Yr)
Master meter error adjustment (enter positive value):	?	9	9.800	under-registered MG/Yr
Water imported:	?	8	464.221	MG/Yr
Water exported:	?	n/a	0.000	MG/Yr
WATER SUPPLIED:			1,451.894	MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	?	7	1,255.511	MG/Yr
Billed unmetered:	?	n/a		MG/Yr
Unbilled metered:	?	n/a		MG/Yr
Unbilled unmetered:	?	6	6.894	MG/Yr
AUTHORIZED CONSUMPTION:	?		1,262.405	MG/Yr

Click here: [?](#)
for help using option buttons below

Pent: Value: 6.894

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption)

189.489 MG/Yr

Apparent Losses

Unauthorized consumption:	?	4	7.000	MG/Yr
Customer metering inaccuracies:	?	4	25.623	MG/Yr
Systematic data handling errors:	?	6	3.000	MG/Yr
Apparent Losses:	?		35.623	

Pent: Value: 7.000

2.00%

Choose this option to enter a percentage of billed metered consumption. This is NOT a default value

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses:	?		153.866	MG/Yr
WATER LOSSES:			189.489	MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: [?](#) 196.383 MG/Yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	?	6	88.0	miles
Number of active AND inactive service connections:	?	6	7,985	
Connection density:			91	conn./mile main
Average length of customer service line:	?	10	0.0	ft (pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	?	7	100.0	psi

COST DATA

Total annual cost of operating water system:	?	10	\$7,770,700	\$/Year
Customer retail unit cost (applied to Apparent Losses):	?	9	\$4.53	\$/1000 gallons (US)
Variable production cost (applied to Real Losses):	?	10	\$1,250.00	\$/Million gallons

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	13.5%
Non-revenue water as percent by cost of operating system:	4.7%
Annual cost of Apparent Losses:	\$161,371
Annual cost of Real Losses:	\$192,333

Operational Efficiency Indicators

Apparent Losses per service connection per day:	12.22	gallons/connection/day
Real Losses per service connection per day*:	52.79	gallons/connection/day
Real Losses per length of main per day*:	N/A	
Real Losses per service connection per day per psi pressure:	0.53	gallons/connection/day/psi
? Unavoidable Annual Real Losses (UARL):	61.09	million gallons/year
From Above, Real Losses = Current Annual Real Losses (CARL):	153.87	million gallons/year
? Infrastructure Leakage Index (ILI) [CARL/UARL]:	2.52	

* only the most applicable of these two indicators will be calculated

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 77 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Customer metering inaccuracies
- 3: Billed metered

[For more information, click here to see the Grading Matrix worksheet](#)

WATER CONSERVATION
EDUCATION PRESENTATION

APPENDIX

E



Crescenta Valley Water District presents...

From Home...



H O

2

to Ocean!



Get ready for a little fun...

B

I

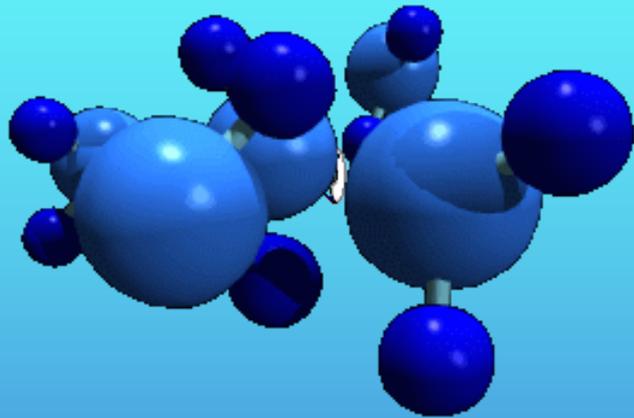
N

G

O



What is Water?



Two atoms of hydrogen

+ one atom of oxygen

W A T E R

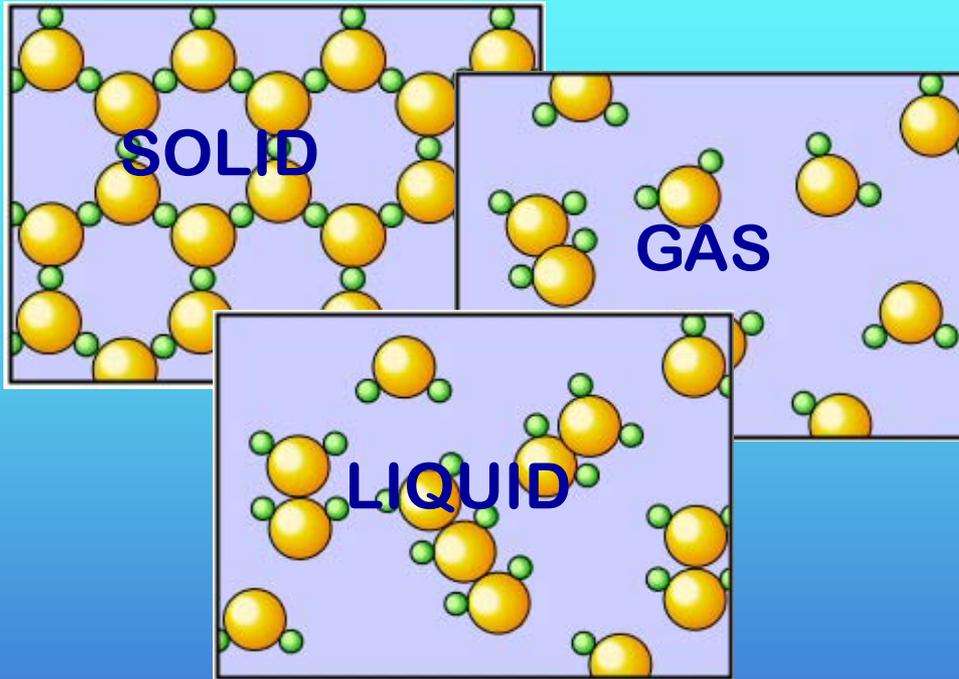
There are about 8 **septillion** water molecules in an 8 oz. glass of water!

Water can be called *the elixir of life* – without it there would be no living things.

8, 000, 000, 000, 000, 000, 000, 000, 000



Let's Learn More...

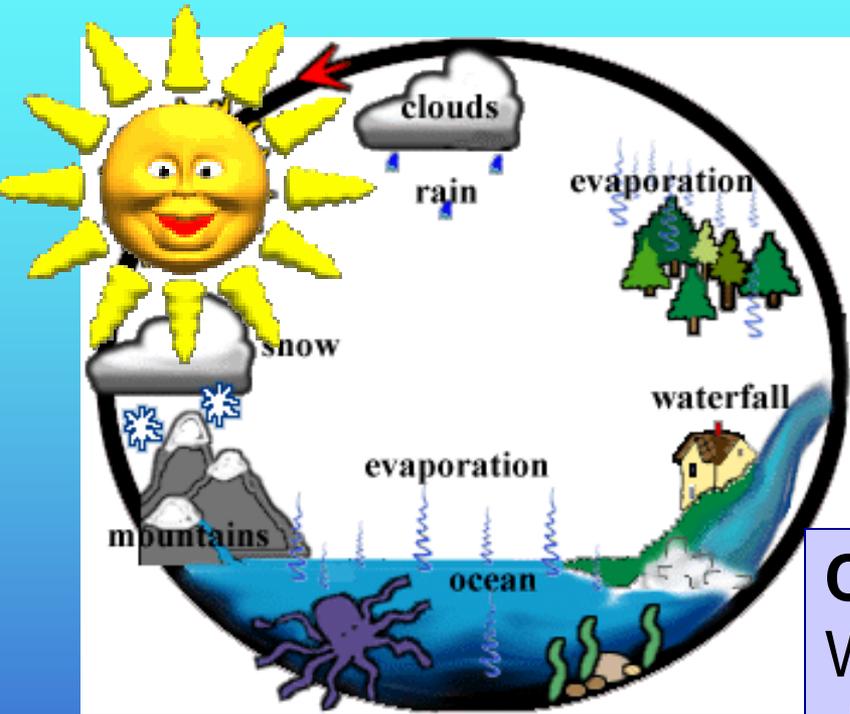


There are three forms of water: *solid*, *liquid*, and *gas*.



The molecules in ice are considered "*ordered*" while the molecules in vapor are considered "*random*".

Remember the H₂O Cycle???



Evaporation –
Heat from the sun causes water to become vapors (gas).

Precipitation –
As the drops fall back to earth, they become rain!

Condensation –
Water vapors rise to the sky as little drops, forming clouds.

And the circle of
Life Continues

On and On!

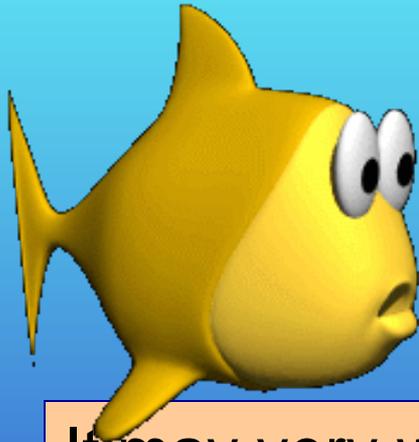


Where Does Your Water Come From?

Rivers

Lakes **Wells**

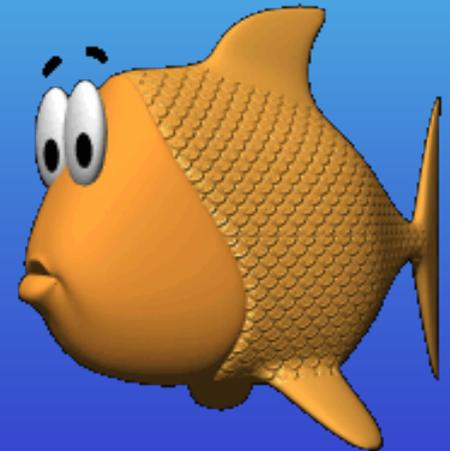
The only water we will ever have is the water we have now!



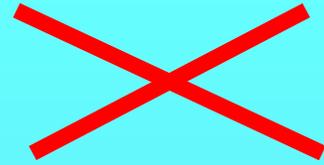
It may very well be...you ARE drinking dinosaur water!

And some day...

The Ocean!



River, Lake, Well Water? Yuck!



Before water comes out of your faucet, it is sent to a water treatment facility.



YUM!



Water that is safe to drink is called **potable** (rhymes with float-able).

Getting Water to Your House...

Water travels to your house often through many miles of pipes.

Many people work together so water will flow from your faucet.



Office Staff

Work Crews

Managers

Equipment Operators

Meter Readers

Scientists

How Does Water Leave Your House?



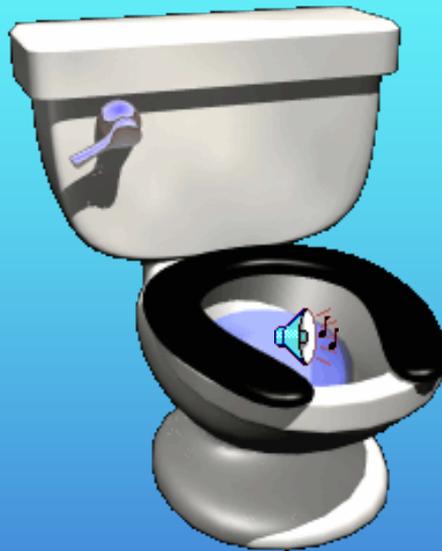
Down the Drain
into the sewer
and on to a
waste-water
treatment plant.

Run-off soaks
into the ground
and/or heads
directly into the
environment.

The **Evaporation**
process helps water
return to the water
cycle.

Wastewater Treatment Facility?

Wastewater treatment plants clean up the water so some of it can be used again.



Recycled water is water that is used more than once.



Run-off into the Environment?

Water that runs off into the environment starts the long journey back to the ocean.



Storm water picks up pollution along the way.



Storm Water Pollution...



Storm water pollution can threaten our water supplies.

Once polluted, ground water can stay that way for 2,000 years!

Storm Water Pollution Prevention

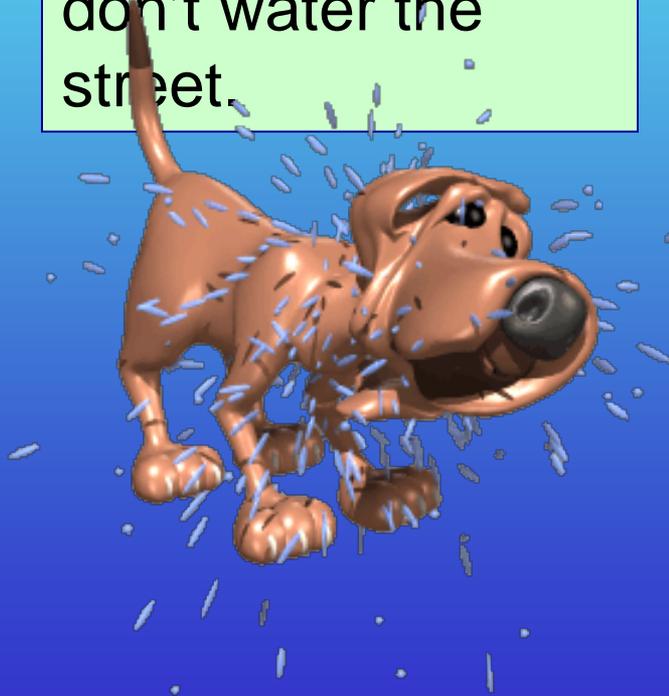
YOU can help...

Don't over-water your plants. Make sure the sprinklers don't water the street.

Take your car to a carwash instead of washing it in the driveway.

Sweep instead of hosing down outdoor surfaces.

Recycle, reduce, reuse – NEVER litter.



Water Conservation...Why?

The # of people living in So.CA is increasing along with the amount of water used.

Our water supply is NOT unlimited!

We need to reduce how much we use and we need to find ways to protect what we have!



Great Ideas... YOU can do It!



Don't let the water run when you brush your teeth or wash your face.

Wash only full loads of dishes or clothes.

Water plants only when they need it

Water the landscape in the coolest part of the day – in the early morning

Take shorter showers – limit them to no more than 5 minutes.

Think more about using less!



More Great Ideas...



When you're taking a bath, fill the tub only $\frac{1}{3}$ of the way full.



CUT!

(the end)



TARGETS / COMPLIANCE (SBx7-7)

Input cells:
 Calculated cells:

Target Summary	2020	2015
Method 1	128.7	144.8
Method 2	N/A	N/A
Method 3	141.6	151.2
Method 4	0.0	0.0
	Min Value	Max Value

GPCD in 2010	109.9
Base daily per capita water use (10-15yr baseline)	160.9
Base daily per capita water use (5yr baseline)	157.9
<u>Max.</u> allowable GPCD target in 2020 (95% x 5yr baseline)	150.0

Method 1: Baseline per Capita Water Use

80% x Base daily per capita water use (10-15yr baseline):

2015 Target:

2020 Target:

Method 2: Performance Standards

TM 2 Indoor Water Use allowance:

TM 6 Landscaped Area Water Use:

TM 7 Baseline CII Water Use:

2015 Target:

2020 Target:

Method 3: Hydrologic Region Targets

Enter the percentage of your service area population in each hydrologic region

Region	Region Name	% Population	GPCD Target
1	North Coast	<input type="text"/>	137
2	San Francisco Bay	<input type="text"/>	131
3	Central Coast	<input type="text"/>	123
4	South Coast	100.0%	149
5	Sacramento River	<input type="text"/>	176
6	San Jacinto	<input type="text"/>	174
7	Tulare lake	<input type="text"/>	188
8	North Lahontan	<input type="text"/>	173
9	South Lahontan	<input type="text"/>	170
10	Colorado River	<input type="text"/>	211

2015 Target:

2020 Target:

Method 4:

To be Developed



TARGETS / COMPLIANCE (CUWCC MOU)

Baseline / Initial GPCD (Use option buttons to select)

GPCD in 2006 143.7
 Baseline GPCD (1997 to 2006) 159.5

 GPCD in 2010 109.9
 GPCD Target for 2018 130.8

Potable Water GPCD for each Year in the Baseline Period

Year	GPCD
2006	143.7
2005	191.5
2004	154.3
2003	155.8
2002	158.2
2001	157.5
2000	162.4
1999	161.2
1998	147.8
1997	162.2

Biennial GPCD Compliance Table

Year	Report	Target		Highest Acceptable Bound	
		% Base	GPCD	% Base	GPCD
2010	1	96.4%	153.7	100%	159.5
2012	2	92.8%	148.0	96.4%	153.7
2014	3	89.2%	142.2	92.8%	148.0
2016	4	85.6%	136.5	89.2%	142.2
2018	5	82.0%	130.8	82.0%	130.8

Monthly GPCD Data for Weather Normalization

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9
Baseline avg*	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5

* The average for each month is based on the baseline period 1997 to 2006

CITY OF GLENDALE
MUNICIPAL CODE

APPENDIX

C2



13.36 Water Conservation

- 13.36.010 Established.
- 13.36.020 Policy.
- 13.36.030 Purpose.
- 13.36.040 Definitions.
- 13.36.050 Scope.
- 13.36.060 No water waste policy.
- 13.36.070 Phases.
- 13.36.080 Phase implementation and exemptions.
- 13.36.090 Enforcement.
- 13.36.100 Reports.
- 13.36.110 Rules and Regulations.

13.36.010 Established.

There is established a city mandatory water conservation plan. (Prior code § 9-150)

13.36.020 Policy.

It is declared that, because of the conditions prevailing in the city and in the areas of this state and elsewhere from which the city obtains its water supplies, because water needs are projected to increase in the future and while water is a renewable resource, it is a finite one, the general welfare requires that the water resources available to the city be put to the maximum beneficial use to the extent to which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interests of the people of the city and for the public welfare.

(Ord. 5112 § 61, 1996: prior code § 9-151)

13.36.030 Purpose.

The purpose of this chapter is to provide a mandatory water conservation plan to minimize the effect of a shortage of water to the customers of the city and, by means of this chapter, to adopt provisions that will significantly reduce the consumption of water over an extended period of time thereby extending the available water required for the customers of the city, to protect basic human health, safety and quality of life, to share the impacts caused by the water shortage in accord with the severity of the water shortage, and to minimize the hardship to the city and the general public to the greatest extent possible.

(Ord. 5112 § 62, 1996; prior code § 9-153)

13.36.040 Definitions.

The following words and phrases, whenever used in this chapter, shall be construed as defined in this section unless from the context a different meaning is intended or unless a different meaning is specifically defined within individual sections of this chapter:

"California-friendly plantings" or "California-friendly landscaping" means those landscape plantings, including, but not limited to, trees, shrubs, perennials, groundcovers, ornamental grasses and California-native plants, that require low water use for maintenance and that are included in the Metropolitan Water District's California Friendly Garden Guide catalogue, available at <http://www.bewaterwise.com>.

"Dining establishment" means a catering business or a restaurant, hotel, cafe, cafeteria or other public place where food or drink is sold, served or offered for sale.

"Low income individual" means any individual that is eligible for participation in the division's public benefit charge low-income program.

"Potable water" shall be defined as set forth in Section 13.38.020 of this code.

"Process water" means water used to manufacture, alter, convert, clean, heat or cool a product, or the equipment used for such purpose; water used for plant and equipment washing and for transporting the raw materials and products; and water used to grow and maintain trees and plants for sale or installation. Process water does not include water used in the preparation of food or drinks.

"Recycled water" shall be defined as set forth in Section 13.38.020 of this code.

(Ord. No. 5660, § 3, 6-30-2009; Ord. 5112 § 63, 1996; prior code § 9-154)

13.36.050 Scope.

The provisions of this chapter shall apply to all water customers and property served water by the department wherever situated, and shall also apply to all property and facilities owned, maintained, operated or under the jurisdiction of the various officers, boards, departments or agencies of the city.

(Ord. No. 5660, § 4, 6-30-2009; prior code § 9-156)

13.36.060 No water waste policy.

There is in effect at all times in the city a "no water waste" policy as set forth herein. Except as otherwise provided in this chapter, at no time shall any person make, cause, use, or permit the use of water from the department for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this chapter or in an amount in excess of that use permitted by the conservation phase then in effect pursuant to action taken by the city council in accordance with the provisions of this chapter.

A. Water Use Restrictions.

1. **Hose Washing.** Potable water shall not be used for hose washing of sidewalks, walkways, driveways, or parking areas, tennis courts, patios, porches or other paved areas, except (i) where necessary to alleviate safety or sanitary hazards, and then only by use of a handheld bucket or similar container or a hand-held hose equipped with a water shut-off device; (ii) when using a low-volume high-pressure cleaning machine or (iii) that flammable or other dangerous substances may be disposed of by direct hose flushing by public safety officers for the benefit of public health and safety.
2. **Overspray or Runoff.** There shall be no use of water for any purpose which results in overspray, runoff in flooding or runoff onto hardscape, driveways, streets, adjacent lands or into gutters.
3. **Decorative Fountains.** Except for water play features in city parks, no water shall be used to clean, fill or maintain levels in decorative fountains or similar structures unless such water is part of a recirculation system or unless such water is recycled water, which must be clearly posted.
4. **Leaks.** No water customer of the department shall permit water to leak from any facility on his premises; failure to effect the repair of any leak, within seventy-two (72) hours after the customer is notified of or discovers the leak, shall subject said customer to all penalties provided herein for waste of water.
5. **Irrigation Times.**
 - a. No landscaped or vegetated areas, whether or not such areas include California-friendly plantings and including, but not limited to, grass, lawn, groundcover, shrubbery, annual and perennial plants, crops, and trees, including in golf courses, cemeteries, parks and school areas, shall be watered, sprinkled, or irrigated between the hours of nine a.m. and six p.m., except for very short periods of time for the express purpose of adjusting or repairing an irrigation system. Irrigation using recycled water is exempt from this limitation provided such usage is permitted by law and is clearly posted.
 - b. No landscaped or vegetated areas, whether or not such areas include California-friendly plantings, shall be watered, sprinkled or irrigated on days when the wind is blowing causing overspray and on days when it is raining.
6. **Vehicle Washing.** The washing of commercial and noncommercial privately owned automobiles, trucks, trailers, motor homes, boats, busses, airplanes and other types of vehicles is restricted to use of a hand-held bucket and quick rinses using a hose with a positive shutoff nozzle. Exceptions: the use of wash water which is on the immediate premises of a commercial car wash or commercial service station; or where health, safety and welfare of the public is contingent upon frequent vehicle cleaning, such as garbage trucks and vehicles which transport food and perishables.
7. **Commercial Car Wash and Laundry Systems.** The installation of a nonrecirculating water system for any new commercial conveyor car wash system or new commercial laundry system is prohibited. Effective July 1, 2014, no commercial conveyor car wash may use a nonrecirculating water system in its operation.
8. **Water for Construction Purposes.** Water for construction purposes including, but not limited to, debrushing of vacant land, compaction of fills and pads, trench backfill and other construction uses, shall only be used in an efficient manner which will not result in runoff. Recycled water shall be used whenever it is an available and feasible alternative source of water.

9. Fire Hydrants. Unless a permit has been obtained in accordance with Section 13.04.080 of this code, the use of potable water from fire hydrants shall be limited to firefighting, related activities or other activities immediately necessary to maintain the health, safety and welfare of the residents of the city.

10. Dining Establishments.

a. No dining establishment shall serve drinking water to any customer unless expressly requested by the customer.

b. Effective January 1, 2010, dining establishments are prohibited from using nonwater-conserving pre-rinse dishwashing spray valves.

11. Conservation Notices. Dining establishments, hotels, motels and other commercial lodging establishments are required to post notices informing their guests about the city's "no water waste policy" and urging guests to conserve water.

12. Laundry Service. Hotels, motels and other commercial lodging establishments are required to post notices giving their guests the option of not laundering towels and linens daily.

13. Single Pass Cooling Systems. The installation of a single pass cooling system is prohibited in any building requesting new or expanded water service from the department.

14. Process Water. Process water shall be recycled to the greatest extent possible.

B. The water use restrictions set forth in paragraph (A) of this section shall be in effect at all times, except that in the event that the city council declares the need for conservation as set forth in Section 13.36.080, the water use restrictions shall be amended and the use of water shall be further restricted as required by the phase of conservation then in effect, as described in Section 13.36.070.

(Ord. No. 5675, § 1, 10-27-2009; Ord. No. 5660, § 5, 6-30-2009; Ord. 5112 § 64, 1996)

13.36.070 Phases.

A. Phase I.

1. Water Use Restrictions.

- a. No use of water may be made contrary to the provisions of the no water waste policy set forth in Section 13.36.060(A)(1) through (14). During conservation phase I, the division of parks, recreation and community services will review its irrigation system for possible efficiencies.

B. Phase II.

1. Water Use Restrictions.

- a. No use of water may be made contrary to the no water waste policy set forth in Section 13.36.060(A)(1) through(14).

- b. During conservation phase II, the following additional water use restrictions shall also be in effect:
- i. Landscape Irrigation Days and Durations. The use of potable water to irrigate any landscaped or vegetated areas shall only be permitted on Tuesdays, Thursdays and Saturdays, for no more than ten (10) minutes per watering station per permitted irrigation day. (a) Exceptions.
 - (1) The director of parks, recreation and community services may establish different irrigation days for any or all city park land, provided that such irrigation shall be limited to three (3) days per week and ten (10) minutes per watering station per permitted irrigation day, unless otherwise exempted by this chapter.
 - (2) Irrigation by a drip irrigation system or with low-flow sprinkler heads that require additional watering time are exempt from the ten-minute time limitation, but such irrigation shall be limited to the permitted irrigation days and times of day.
 - (3) Irrigation with a hand-held bucket or similar container, or a hand-held **hose equipped with a water shut off nozzle** or device are exempt from the ten-minute time limitation and from the restriction on landscape irrigation days set forth in subsection (B)(1)(b)(i) of this section, provided that such irrigation occurs before nine a.m. or after six p.m.
 - (4) The restriction on landscape irrigation days and durations shall not apply to: (a) an area designated by the fire chief or city engineer as an area that must be watered for fire prevention or for erosion control; (b) commercial nurseries and commercial growers that water to the extent necessary to sustain plants, trees, shrubs, crops or other vegetation intended for lawful commercial sale; (c) watering to the extent necessary to maintain vegetation, including fruit trees and shrubs, intended for consumption; (d) watering to the extent necessary to establish newly-planted landscaping, during the first two (2) weeks after such landscaping has been planted and (e) irrigation with recycled water in a manner that complies with all applicable laws.
 - ii. Landscaping Projects. Except for California-friendly landscaping, there shall be a deferral of all new or retrofit landscaping or turf planting requiring potable water service for irrigation. However, the deferral shall not be required for any new or retrofit landscaping plans that have been approved in accordance with Chapter 30.47 of the code prior to the date of adoption of a resolution implementing conservation phase II, III, IV or V, as applicable.
 - iii. New and Retrofit City and Agency Landscapes. Except for California-friendly landscaping, there shall be a deferral of all new and retrofit landscape and turf planting which requires potable water service for irrigation, on any property owned, controlled or maintained by the city or the redevelopment agency. However, the deferral shall not be required for any new or retrofit landscaping plans that have been approved in accordance with

Chapter 30.47 of the code prior to the date of adoption of a resolution implementing conservation phase II, III, IV or V, as applicable.

C. C. Phase III.

1. Water Use Restrictions.

- a. Except as further restricted or as amended by this subsection (C), no use of water may be made contrary to the provisions of the no water waste policy set forth in Section 13.36.060(A)(1) through (14) and conservation phase II as set forth in subsection (B) of this section.
- b. During conservation phase III, the following additional water use restrictions shall also be in effect:
 1. Water play features. The operation of city-owned water play features such as splash fountains in children's playgrounds, but not including swimming pools or wading pools, shall be limited to no more than five (5) hours per day.
 2. Landscape irrigation days and durations. The use of potable water to irrigate any landscaped or vegetated areas shall only be permitted on Tuesdays and Saturdays, for no more than ten (10) minutes per watering station per permitted irrigation day.
 - (a) Exceptions.
 - (1) The director of parks and recreational services may establish different irrigation days for any or all city park land, provided that such irrigation shall be limited to three (3) days per week and ten (10) minutes per watering station per permitted irrigation day, unless otherwise exempted by this chapter.
 - (2) Irrigation by a drip irrigation system or with low-flow sprinkler heads that require additional watering time are exempt from the time limitation, but such irrigation shall be limited to the permitted irrigation days and times of day.
 - (3) Irrigation with a hand-held bucket or similar container, or a hand-held hose equipped with a water shut off nozzle or device are exempt from the ten-minute time limitation, but shall be limited to the permitted irrigation days and times of day.
 - (4) The restriction on landscape irrigation days and durations shall not apply to: (a) an area designated by the fire chief or city engineer as an area that must be watered for fire prevention or for erosion control; (b) commercial nurseries and commercial growers that water to the extent necessary to sustain plants, trees, shrubs, crops or other vegetation intended for lawful commercial sale; (c) watering to the extent necessary to maintain vegetation, including fruit trees and shrubs, intended for consumption; (d) watering to the extent necessary to establish newly-planted landscaping, during the first

two (2) weeks after such landscaping has been planted and (e) irrigation with recycled water in a manner that complies with all applicable laws.

D. Phase IV.

1. Water Use Restrictions.

- a. Except as further restricted or as amended by this subsection (D), no use of water may be made contrary to the provisions of Sections 13.36.060(A)(1) through (14) and conservation phases II and III as set forth in subsections (B) and (C) of this section.
- b. During conservation phase IV, the following additional water use restriction shall also be in effect:
 - i. **Decorative Fountains.** The use of potable water to clean, fill or maintain levels in decorative exterior fountains or similar exterior structures is prohibited.
 - ii. **Lakes or Ponds.** The use of potable water to fill decorative lakes or ponds is prohibited, except to the extent necessary to maintain aquatic life.
 - iii. **Landscape Irrigation Days and Durations.** The use of potable water to irrigate any landscaped or vegetated areas shall only be permitted on Saturdays, for no more than fifteen (15) minutes per watering station.

(a) Exceptions.

(1) The director of parks, recreation and community services may establish different irrigation days for any or all city park land, provided that such irrigation shall be limited to three (3) days per week and ten (10) minutes per **watering station per permitted irrigation day, unless otherwise exempted by this chapter.**

(2) Irrigation by a drip irrigation system or with low-flow sprinkler heads that require additional watering time are exempt from the time limitation, but such irrigation shall be limited to the permitted irrigation days and times of day.

(3) Irrigation with a hand-held bucket or similar container, or a hand-held hose equipped with an automatic shut off nozzle or device are exempt from the fifteen-minute time limitation, but shall be limited to the permitted irrigation days and times of day.

(4) The restriction on landscape irrigation days and durations shall not apply to: (a) an area designated by the fire chief or city engineer as an area that must be watered for fire prevention or for erosion control; (b) commercial nurseries and commercial growers that water to the extent necessary to sustain plants, trees, shrubs, crops or other vegetation intended for lawful commercial sale; (c) watering to the extent necessary to maintain vegetation,

including fruit trees and shrubs, intended for consumption and (d) irrigation with recycled water in a manner that complies with all applicable laws.

E. E. Phase V.

1. Water Use Restrictions.

- a. Except as further restricted or as amended by this subsection (E), no use of water may be made contrary to the provisions of the no water waste policy set forth in Section 13.36.060(A)(1) through (14) and conservation phases II, III, and IV as set forth in subsections (B),(C) and (D) of this section.
- b. During conservation phase V, the following additional water use restriction shall also be in effect:
 - i. **Decorative Fountains.** The use of potable water to clean, fill or maintain levels in decorative fountains or similar structures, whether such fountains or structures are on the interior or exterior of a site, is prohibited.
 - ii. **Water Play Features.** The operation of city-owned water play features such as splash fountains in children's playgrounds, but not including swimming pools or wading pools, shall be limited to no more than four (4) hours per day.
 - iii. **Landscape Irrigation Days and Durations.** The use of potable water to irrigate any landscaped or vegetated areas shall only be permitted on the first and third Saturdays of each month. Irrigation is limited to the deep irrigation of trees and shrubs for no more than twenty (20) minutes per permitted watering station per irrigation day.

(a) Exceptions.

(1) The director of parks, recreation and community services may establish different irrigation days for any or all city park land, provided that such irrigation shall be limited to three (3) days per week and ten (10) minutes per watering station per permitted irrigation day, unless otherwise exempted by this chapter. Irrigation of city park land shall not be limited to the deep irrigation of trees and shrubs.

(2) Irrigation by a drip irrigation system that requires additional watering time is exempt from the time limitation, but such irrigation shall be limited to the permitted irrigation days and times of day.

(3) Irrigation of trees or shrubs with a hand-held bucket or similar container, or a hand-held hose equipped with an automatic shut off nozzle or device are exempt from the twenty-minute time limitation, but shall be limited to the permitted irrigation days and times of day.

(4) The restriction on landscape irrigation days and durations shall not apply to: (a) an area designated by the fire chief or city engineer as an area that must be watered for fire prevention or for erosion control; (b) commercial

nurseries and commercial growers that water to the extent necessary to sustain plants, trees, shrubs, crops or other vegetation intended for lawful commercial sale; (c) watering to the extent necessary to maintain vegetation, including fruit trees and shrubs, intended for consumption and (d) irrigation with recycled water in a manner that complies with all applicable laws.

- iv. Vehicle Washing. There shall be no washing of any commercial or noncommercial privately-owned automobile, truck, trailer, motor home, boat, bus, airplane or other types of vehicles, except by the use of wash water which is on the immediate premises of a commercial car wash or commercial service station; or where health, safety and welfare of the public is contingent upon frequent vehicle cleaning, such as garbage trucks and vehicles which transport food and perishables.

F. Exception. The prohibited use of water from the department provided for by Section 13.36.060 (A)(1) through (14) and subsections (A)(1), (B)(1), (C)(1), (D)(1) and (E)(1) of this section are **not applicable to that use of water necessary to preserve the public health and safety or for essential government services** such as police, fire, and other similar emergency services.

(Ord. No. 5675, § 2, 10-27-2009; Ord. No. 5660, § 6, 6-30-2009; Ord. 5112 § 65, 1996; prior code § 9-157)

13.36.080 Phase implementation and exemptions.

- A. The department shall monitor and evaluate the projected supply and demand for water by its customers monthly, and shall recommend to the city manager the extent of the conservation required by the customers of the department in order for the department to prudently plan for and supply water to its customers. The city manager shall, in turn, notify and recommend to the city council the appropriate phase of water conservation to be implemented. Such phase implementation shall be made by council resolution. Any such resolution shall include such findings or other determinations as may be required to comply with the California Environmental Quality Act. Such phase implementation and the water use restrictions for the declared conservation phase shall become operable immediately upon the effective date of the resolution of the council and shall be published once in a daily newspaper of general circulation. Each new customer of the department shall be provided with a copy of said prohibited use provisions at the time of application for service.
- B. Any customer of the department may prospectively apply to the general manager for a modification of, or an exemption from, the water use restrictions set forth in this chapter based upon the unique needs and circumstances of the customer or his or her premises. The general manager may grant such modifications or exemptions, provided that such modifications or exemptions are consistent with the purpose and intent of this chapter.

(Ord. No. 5675, § 3, 10-27-2009; Ord. No. 5660, § 7, 6-30-2009; Ord. 5112 § 66, 1996; prior code § 9-158)

13.36.090 Enforcement.

- A. Penalties. It is unlawful for any customer of the department to fail to comply with any of the provisions of this chapter. The penalties set forth in this section shall be additional to those penalties provided in any other section of this code. The penalties for failure to comply with any of the provisions of this chapter shall be as follows:
1. For the first observed or reported violation of any of the provisions of subsections A.1. through 14. of Section 13.36.060 and subsections A.1., B.1, C.1., D.1. or E.1. of Section 13.36.070, in accordance with the applicable water conservation phase in effect at the time of the violation, the department shall issue a written courtesy notice of the fact of such violation to the customer and a written copy of Chapter 13.36 of this title.
 2. Any subsequent violation of any of the provisions of subsections A.1. through 14. of Section 13.36.060 and subsections A.1., B.1., C.1., D.1. or E.1. of Section 13.36.070, in accordance with the applicable water conservation phase in effect at the time of the violation, shall be punishable as an infraction in accordance with Chapter 1.20 of the code.
 3. In addition to the penalties set forth in Chapter 1.20 of the code, the city may pursue any available civil remedies and criminal penalties, including, but not limited to, seek a court order permitting the installation of a flow-restricting device and/or disconnection of water service on the service of the customer at the premises at which the violation occurred or is occurring, together with any and all costs incurred by the city as a result of the waste of water, including, but not limited to, attorneys' fees, the costs of installation and removal of said flow restrictor and the cost of disconnection and restoration of service.
- B. The general manager, or his or her designee, may enter into a written agreement to resolve any violation provided that such agreement is consistent with the purpose and intent of this chapter.
- C. Reservation of Rights. The rights of the department hereunder shall be cumulative to any other rights of the department, including, but not limited to, its right to discontinue service.

(Ord. No. 5660, §§ 8, 9, 6-30-2009; Ord. 5112 § 67, 1996: prior code § 9-159)

13.36.100 Reports.

- A. All commercial and industrial customers of the department using twenty-five thousand (25,000) billing units per year or more shall submit a water conservation plan to the city manager's office and the general manager. These users shall submit quarterly to the city manager's office and the general manager a report on the progress of their conservation plans.
- B. All city departments shall submit to the city manager and the general manager an annual public report on their water conservation efforts. The reports are [to] present the level of performance compared to their water conservation plans.

(Ord. No. 5660, §§ 10, 11, 6-30-2009; Ord. 5112 § 68, 1996; prior code § 9-160)

13.36.110 Rules and Regulations.

The general manager shall have the power to establish rules and regulations consistent with the provisions of this Chapter 13.36 for the administration of the provisions of this chapter.

(Ord. No. 5660, § 12, 6-30-2009)

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No Water Waste Policy - Glendale Municipal Code 13.36.060

The City of Glendale's Water Conservation Ordinance (Chapter 13.36 of the Glendale Municipal Code) contains a section entitled "**No Water Waste Policy.**" This policy consists of 14 water use restrictions that are in effect all times. Non compliance with these provisions will be treated as municipal code violations. Violators would be subject to code enforcement which could result in criminal penalties ranging from \$100 to \$1,000, installation of a flow restrictor, or water shut off.

A summary of the water use restrictions in the "**No Water Waste Policy**" are:

1. No hose washing of paved areas (we suggest using a broom for cleaning these areas);
2. No overspray or runoff of water at any time;
3. Decorative fountains must have a water recirculation system;
4. Water leaks must be repaired within 72 hours;
5. Irrigation Times:
 - a. No irrigation of landscaped areas between the hours of 9:00 a.m. and 6:00 p.m.;
 - b. No irrigation when wind is blowing or when it is raining;
6. Hand washing of commercial and non-commercial privately owned vehicles must be done using a hand-held bucket and quick rinses using a hose with a positive shutoff nozzle;
7. Commercial Car Wash and Laundry:
 - a. New commercial conveyor car wash and commercial laundry must use recirculating water system;
 - b. All commercial conveyor car washes must install recirculating water systems by July 1, 2014;
8. Construction water will not result in runoff and recycled water is to be used when available;

9. Fire hydrants are to be used only for fire fighting unless a permit has been obtained;
10. Dining Establishments
 - a. Drinking water served only upon request of customer;
 - b. Must use water-conserving pre-rinse spray valves effective January 1, 2010;
11. Dining establishments and lodging establishments required to post water conservation notices;
12. Commercial lodging establishments required to post notices giving guests option of no daily laundry service;
13. Single pass cooling systems prohibited in new buildings or in buildings expanding water service;
14. Process water for business and industrial use shall be recycled to the greatest extent possible.

RESOLUTION NO. 706

APPENDIX

A

RESOLUTION NO. 706

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE CRESCENTA VALLEY WATER DISTRICT**

**APPROVING APPLICATION AND SIGNATURE OF THE MEMORANDUM
OF UNDERSTANDING OF THE CALIFORNIA URBAN WATER
CONSERVATION COUNCIL**

WHEREAS, the Crescenta Valley Water District obtains approximately 60% of its water from local groundwater, which is less expensive and more reliable than imported water;

WHEREAS, the groundwater supply is decreasing due to the age of the District wells and lowering of the water table;

WHEREAS, there is a need to increase efficient water use and maximize the availability of existing local water supplies;

WHEREAS, there is a need to increase efficient water use for the protection of streams, wetlands, and estuaries and increase overall supply reliability;

WHEREAS, the Local Groundwater Assistance Grant Program (Water Code section 75001 *et seq.*) provides money for groundwater management activities by local agencies and requires compliance with AB1420 which requires urban water suppliers be in compliance with Best Management Practices (BMP'S);

NOW, THEREFORE, BE IT RESOLVED, by the Directors of the Crescenta Valley Water District, that application be made to the California Urban Water Conservation Council for membership. The Program Specialist of the Crescenta Valley Water District is hereby authorized and directed to prepare the necessary data, file such applications, sign the Memorandum of Understanding and execute an agreement with the California Urban Water Conservation Council.

PASSED, APPROVED, AND ADOPTED at a Regular Meeting of the Board of Directors of Crescenta Valley Water District held on June 19, 2012, Resolution No. 706 was adopted by the following vote:

Valley Water District held on June 19, 2012, Resolution No. 706 was adopted by the following vote:

AYES: Director Bodnar
Director Putnam
Director Ross

NOES: Director Erickson
Director Tejada

ABSENT: None

ATTEST:


President, Board of Directors
Crescenta Valley Water District


Secretary of the Board of Directors

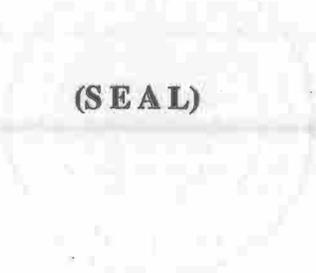
STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES) ss.

I, RON MITCHELL, Secretary of the Crescenta Valley Water District, DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 705 of the Board of Directors of Crescenta Valley Water District adopted at an Adjourned Meeting held on June 19, 2012, and that the same has not been amended or repealed.



Secretary of the Board of Directors of
Crescenta Valley Water District

DATED: June 19, 2012



(SEAL)

CVWD WATER
CONSERVATION REGULATION

APPENDIX

B

APPENDIX G

CRESCENTA VALLEY WATER DISTRICT

WATER CONSERVATION PROGRAM

CRESCENTA VALLEY WATER DISTRICT

APPENDIX G

WATER CONSERVATION PROGRAM

GENERAL STATEMENT

1. Due to the water supply conditions prevailing in the Crescenta Valley Water District (CVWD) and/or in the area from which CVWD obtains a portion of its water supply, the general welfare requires that:
 - The water resources available to the CVWD be put to the maximum beneficial use;
 - The waste or unreasonable use, or unreasonable method of use of water be prevented;
 - The conservation of such water be practiced with a view to the reasonable and beneficial use thereof in the interest of the customers of CVWD and for the public health and safety.
2. The purpose of this program is to provide water conservation regulations, in a phased approach, to minimize the effect of a shortage of water supplies on the customers of CVWD during various critical stages of a water shortage.

PHASE I –NORMAL WATER CONSERVATION

Phase I standard water conservation practices will be in effect at all times. The CVWD Board of Directors has adopted the following measures to reduce consumption and prohibit water waste for existing and new water users within CVWD in order to sustain water supply reliability.

Prohibited Use Applicable to Existing and New Customers

1. **Water hose usage:** Hose washing of sidewalks, walkways, driveways, or parking areas, tennis courts, patios, porches or other paved areas shall not be permitted. Exception: Flammable or other dangerous substances may be disposed of by direct hose flushing by public safety officers for the benefit of public health and safety. Businesses or schools required to hose down public eating areas will be provided with access to a water broom.
2. **Overspray and runoff:** Use of water for any purpose which results in overspray, excessive runoff onto hardscapes, driveways, streets, adjacent lands or into gutters shall not be permitted.
3. **Fountains, similar structures and swimming pools:** Water used to clean, fill or maintain levels in decorative fountains or similar structures must be part of a recirculation system.
4. **Leaks:** Leaks from any facility both inside and outside of a customer's premises must be repaired within seventy-two hours after the customer is notified of, or discovers the leak. Failure to affect the repair of any leak shall subject said customer to all penalties provided herein for waste of water.
5. **Irrigating times:** No watering, sprinkling or irrigating shall take place between the hours of nine a.m. (9:00AM) and five p.m. (5:00PM) in any landscaped or vegetated areas, including, but not limited to, golf courses, parks, cemeteries and school areas landscaped with, but not limited to, grass, lawn, groundcover, shrubbery, annual and perennial plants, crops, trees, and California-friendly plantings. With the exception of drip irrigation systems or weather based irrigation controllers, residential timers shall not run for more than a total of 10 minutes per station.

- 6. Hand Watering:** Hand watering of non-turf areas is allowed using a hose with a positive shut-off nozzle or watering can within the allowable times as specified above.
- 7. Windy and rainy days:** No watering, sprinkling or irrigating shall take place in any landscaped or vegetated areas on days when the wind is blowing causing overspray, and on days when it is raining.
- 8. Vehicle washing:** The washing of commercial and non-commercial privately owned automobiles, trucks, trailers, motor-homes, boats, buses, airplanes and other types of vehicles is restricted to use of a hand-held bucket and quick rinses using a hose with a positive shut-off nozzle. Exceptions: the use of wash water which is on the immediate premises of a commercial car wash or commercial service station; where health, safety and welfare of the public is contingent upon frequent vehicle cleaning, such as garbage trucks and vehicles which transport food and perishables.
- 9. Swimming pools:** Owners of outdoor swimming pools, wading pools or spas, when these are not in use, are requested to use covers to minimize the evaporation of water.
- 10. Construction water restrictions:** Water for construction purposes including but not limited to de-brushing of vacant land, compaction of fills and pads, trench backfill and other construction uses, shall be used in an efficient manner which will not result in runoff.
- 11. Fire hydrants:** The use of potable water from fire hydrants shall be limited to firefighting related activities or other activities immediately necessary to maintain the health, safety, and welfare of the residents of the city.
- 12. Drinking water upon request:** No restaurant, hotel, café, cafeteria or other public place where food is sold, served or offered for sale, shall serve drinking water to any customer unless expressly requested by a customer.
- 13. Hotels/Motels:** Hotels, motels, and other commercial lodging establishments are requested to post notices informing their guests about the city's water conservation policy and urging guests to conserve water. Water conservation notices will be provided by CVWD.
- 14. Hotels/Motels:** Hotels, motels and other commercial lodgings are requested to post notices giving their guests the option of not laundering towels and linens daily.
- 15. Reporting waste of water:** The District shall maintain a program for residents to report waste of water throughout the District boundaries. This will include an online submittal form, a dedicated phone number, and follow-up by District staff on all waste of water reports. Residents are requested to report any observed waste of water from surrounding properties or in the community and report to the District for follow-up.
- 16. Pre-rinse spray valve:** Where applicable, restaurants must utilize water conserving nozzles.
- 17. New Development (new commercial and multi-family accounts):**
 - 1) All new commercial and multi-family accounts are prohibited from water waste such as, but not limited to: single-pass cooling systems; conveyor and in-bay vehicle wash and commercial laundry systems which do not reuse water; non-recirculating decorative water fountains.
 - 2) All landscape must be in accordance with the permitting agency's landscape ordinance. If the permitting agency does not have a landscape ordinance, the Department of Water Resources Model Landscape Ordinance will apply.

BE IT FURTHER RESOLVED, Crescenta Valley Water District urges the following water usage to all of its customers:

1. To reduce the amount of turf and install new drought tolerant landscaping, low-water using trees and plants, and efficient irrigation systems including but not limited to ET controllers, drip irrigation, and “high efficiency sprinkler heads”.
2. To wash only full loads of dishes or clothes in automatic washers, and do not allow indoor faucets to run continuously.
3. To turn water system off when leaving property unoccupied for an extended period of time.
4. To use covers to minimize the evaporation of water from outdoor swimming pools, wading pools or spas when they are not in use.

WATER CONSERVATION ALERT SYSTEM

When a water conservation alert system is implemented by direction of the General Manager, the following measures to reduce water consumption will be required for all water users within CVWD.

- a. Color Code “Blue” is defined as the Normal Water Conservation Alert, Foothill Municipal Water District can meet all Member Agency demands. Standard water conservation applies as defined in Appendix G of the Rules and Regulations.
- b. Color Code “Green” is defined as an Increased Voluntary Conservation Alert, some supplies have been impacted and customers should increase efforts to conserve by following strict water conservation practices indoors and limiting outdoor water use to odd or even days, based on ending number of customer address.
- c. Color Code “Yellow” is defined as an Extraordinary Conservation Alert, when Metropolitan Water District of Southern California is pulling water from most of its storage programs to meet demands. Extraordinary conservation is called for from customers. Customers are requested to minimize indoor water use and water outdoors only on assigned odd or even days.
- d. Color Code “Orange” is defined as a Rationing Conservation Alert, when Metropolitan Water District of Southern California has implemented its allocation plan to its member agencies. Customers are requested to minimize indoor water use and severely limit outdoor water use as follows:
 1. Residential and commercial landscape irrigation is limited to no more than three (3) days per week on Tuesday, Thursday and Saturday. Watering limits are seven (7) minutes per watering station.

Exemption: Public use areas owned and/or operated by School Districts are exempt from watering days, and public use areas greater than 4,000 square feet are exempt from watering days so long as best management practices are applied by all.
 2. The filling, refilling or adding of water to indoor and outdoor pools, wading pools, or spas is prohibited. Exemptions: Commercial Repairs mandated by the Federal Virginia Graeme Baker Act, or adding water for the prevention of equipment failure is permissible, however, the District strongly urges that a cover be used to prevent evaporation and thereby reducing the frequency of refilling.
 3. The use of water to clean, maintain, fill, or refill decorative fountains or similar structures is prohibited. Exemptions: Adding water for the prevention of equipment failure is permissible.

4. Vehicle washing is restricted to the use of a hand-held bucket and quick rinses using a hose with a positive shut-off nozzle.
 5. Fix leaks within 48 hours.
- e. Color Code “Red” is defined as a Critical Water Conservation Alert, when water supplies are only available for health and safety needs. Customers are required to minimize indoor water use and curtail all outdoor water use. Fix any leaks within 24 hours.

Notification of the Water Conservation Alert System status on any given day shall be visibly posted at the exterior of the District’s Administration Office (2700 Foothill Blvd., La Crescenta) and other accessible locations throughout the District service area where allowed. At least one direct mailing shall be made to all water customer accounts, with notification and explanation of the alert system. Newspaper coverage will also be used to disseminate alert system status and water conservation updates.

Date	Revisions	Approved by Board	Initials
04/28/2010	Residential and commercial landscape irrigation has been increased from two (2) days per week to no more than three (3) days per week on Tuesday, Thursday and Saturday. Watering limits have been reduced to seven (7) minutes per watering station from (10) minutes per station.	04/27/2010	
07/11/12	<ol style="list-style-type: none"> 1. Revise "Prohibited Use Applicable to all Customers" was revised to "Prohibited Use Applicable to Existing and New Customers" 2. Add the following: <ol style="list-style-type: none"> 17. New Development (new commercial and multi-family accounts) <ol style="list-style-type: none"> 1) All new commercial and multi-family accounts are prohibited from water waste such as, but not limited to: single-pass cooling systems; conveyor and in-bay vehicle wash and commercial laundry systems which do not reuse water; non-recirculating decorative water fountains. 2) All landscape must be in accordance with the permitting agency's landscape ordinance. If the permitting agency does not have a landscape ordinance, the Department of Water Resources Model Landscape Ordinance will apply. 	07/10/12	

AGENCY LANDSCAPE
ORDINANCES

APPENDIX

C

LOS ANGELES COUNTY

APPENDIX

C1

ORDINANCE NO. 2008-0064

An ordinance amending Title 21 - Subdivisions and Title 22 - Planning and Zoning of the Los Angeles County Code to establish drought-tolerant landscaping requirements for projects constructed after January 1, 2009.

The Board of Supervisors of the County of Los Angeles ordains as follows:

SECTION 1. Section 21.24.430 of Title 21 is hereby added to read as follows:

21.24.430 Drought-tolerant landscaping.

All projects, as defined therein, including their common areas, shall comply with the drought-tolerant landscaping requirements of Part 21 of Chapter 22.52 of Title 22.

SECTION 2. Part 21 of Chapter 22.52 of Title 22 is hereby added to read as follows:

Part 21

DROUGHT-TOLERANT LANDSCAPING

Sections:

- 22.52.2200 Purpose.
- 22.52.2210 Definitions.
- 22.55.2220 Applicability.
- 22.52.2230 Drought-tolerant landscaping requirements.
- 22.52.2240 Site plan review.
- 22.52.2250 Additional requirements.
- 22.52.2260 Exemptions.
- 22.52.2270 Modification of landscaping requirements.

22.52.2200 Purpose.

A. The purpose of this Part 21 is to establish minimum standards for the design and installation of landscaping using drought-tolerant plants and native plants that require minimal use of water. These requirements will help conserve water resources by requiring landscaping that is appropriate to the region's climate and to the nature of a project's use.

B. The provisions of this Part 21 shall be construed to augment the regulations of any retail or wholesale water provider, and any county, state, or federal ordinance, statute, regulation, or other requirement governing the same or related matter, including a supplemental district, community standards district, or transit-oriented district established under this Title 22, and also including Chapter 71 of Title 26 of the Los Angeles County Code (Water Efficient Landscaping), and where a conflict exists between a provision in this Part 21 and such other ordinance, statute, regulation, or other requirement, the stricter provision shall apply to the extent permitted by law.

22.52.2210 Definitions.

For purposes of this Part 21, the following definitions shall apply:

A. "Department" shall mean the Los Angeles County Department of Regional Planning.

B. "Drought-tolerant plant" shall mean a native or non-native plant that requires minimal use of water, and that is appropriate to the region's climate and the nature of a project's use.

C. "Drought-tolerant plant list" shall mean a list of native and non-native plant species, approved by the Director and maintained by the Department, which list is organized by ecological zones for use in landscaped areas within all projects.

D. "Ecological zone" shall mean a geographic area where plants are indigenous or otherwise appropriate.

E. "Green building technical manual" is a manual prepared by the Department that includes the most recent third-party standards and rating systems accepted by the commission for inclusion in the manual, as required by Section 22.52.2130.E in Part 20 of Chapter 22.52, as well as other pertinent information, to assist applicants to comply with the requirements of this Part 21. The green building technical manual includes the drought-tolerant plant list.

F. "Hydrozone" shall mean a portion of a landscaped area that has plants with similar water and sun needs and that are served by an irrigation valve or set of valves operating on the same schedule.

G. "Landscaped area" shall mean any area planted with turf, shrubbery, flowers, or trees.

H. "Mature tree" shall mean any tree rooted on a lot or parcel of land, the trunk of which is at least six (6) inches in diameter, measured four and one-half feet above mean natural grade.

I. "Project" shall have the same meaning as set forth in Section 22.52.2110.P of Part 20 of Chapter 22.52, and shall include any construction

described in said Section that requires discretionary or non-discretionary land use approval from the County.

J. "Public recreational lawn" shall mean an area planted with turf or other mowed ground cover that is maintained for recreation or enjoyment by the public, including athletic fields that are available for use by the public or membership associations.

K. "Public Works" shall mean the Los Angeles County Department of Public Works.

L. "Registered historic site" shall mean a property listed on any federal, state, or county register related to historic designation or status, including, but not limited to, the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and State Points of Historical Interest.

M. "Third-party standards and rating systems" are the three independent green building standards and rating systems, CGB, GPR, and LEED™, as those standards and rating systems are defined in Part 20 of Chapter 22.52, and as may be updated from time to time.

N. "Total landscaped area" is the cumulative landscaped area of a lot or parcel of land, or portion thereof as determined by the Director, but shall not include the area in which any tree required by Part 20 of Section 22.52 or any mature tree on the site is situated. For single-family residences, the total landscaped area shall be any area measured from the front property line to the front of the residence.

O. "Turf" shall mean grass maintained by mowing and watering.

ORDINANCE NO. 2008-0065

An ordinance amending Title 21 - Subdivisions and Title 22 - Planning and Zoning of the Los Angeles County Code to establish green building development standards for projects constructed after January 1, 2009.

The Board of Supervisors of the County of Los Angeles ordains as follows:

SECTION 1. Section 21.24.440 is hereby added to read as follows:

21.24.440 Green Building.

All projects, as defined therein, shall comply with the green building requirements of Part 20 of Chapter 22.52, subject to the applicability provisions of said Part 20.

SECTION 2. Part 20 of Chapter 22.52 is hereby added to read as follows:

Part 20

GREEN BUILDING

Sections:

- 22.52.2100 Purpose.
- 22.52.2110 Definitions.
- 22.52.2120 Applicability.
- 22.52.2130 General Provisions.
- 22.52.2140 Site Plan Review.
- 22.52.2150 Waiver or Modification of Requirements.
- 22.52.2160 Exemptions.

22.52.2100 Purpose.

A. The purpose of this Part 20 is to establish green building development standards for new projects. Green building practices are intended to:

- a. Conserve water;
- b. Conserve energy;
- c. Conserve natural resources;
- d. Divert waste from landfills;
- e. Minimize impacts to existing infrastructure; and
- f. Promote a healthier environment.

B. The provisions of this Part 20 shall be construed to augment any county, state or federal ordinance, statute, regulation, or other requirement governing the same or related matter, including a supplemental district, community standards district, or transit-oriented district established under this Title 22, and where a conflict exists between a provision in this Part 20 and such other ordinance, statute, regulation, or requirement, the stricter provision shall apply to the extent permitted by law.

22.52.2110 Definitions.

For purposes of this Part 20, the following definitions shall apply:

A. "Agricultural accessory structure" shall mean a structure used to shelter animals or agricultural equipment, hay, feed, and/or other agricultural supplies.

Examples include a barn, a greenhouse, a coop, a corral, and a pen.

B. "Build It Green™" is a non-profit organization whose mission is to promote healthy, energy and resource-efficient residential building practices in California.

C. "California energy efficiency standards" are the energy efficiency standards for residential and non-residential buildings established in Title 24, Part 6 (California Energy Code) of the California Code of Regulations, as these standards may be updated from time to time.

D. "County green building standards" are the minimum green building development requirements for all projects in the unincorporated areas of the County, as set forth in Sections 22.52.2130.C.1 through 22.52.2130.C.5.

E. "CGB" means California Green Builder, a green building rating system for residential construction developed by the California Building Industry Association.

F. "Department" shall mean the Los Angeles County Department of Regional Planning.

G. "Drought-tolerant plant list" shall mean a list of native and non-native plant species, approved by the Director and maintained by the Department, which list is organized by ecological zones for use in landscaped areas within all projects.

H. "First-time tenant improvement" is the initial improvement of the interior of a building or portion thereof, where the work requires a building, electrical, plumbing, and/or mechanical permit.

I. "GPR" means Green Point Rated™, a green building rating system for residential construction, developed and administered by Build It Green™.

J. "Green building technical manual" is a manual prepared by the Department that includes the most recent third-party standards and rating systems accepted by the commission for inclusion in the manual, as required by Section 22.52.2130.E, as well as other pertinent information, to assist applicants to comply with the requirements of this Part 20. The green building technical manual includes the drought-tolerant plant list.

K. "Landscaped area" shall mean the cumulative landscaped area of a lot or parcel of land, but shall not include the area in which any tree required by this Part 20 or any mature tree is situated. For single-family residences, the landscaped area shall be any area measured from the front property line to the front of the residence.

L. "LEED™" shall mean Leadership in Energy and Environmental Design Green Building Rating System™, an independent certification system of green building point categories and guidelines established by the United States Green Building Council as a means to verify the sustainable qualities of differing building types. LEED™ certification has four ratings from lowest to highest, respectively, in terms of sustainable qualities: certified, silver, gold, and platinum.

M. "LEED™ accredited professional" shall mean an accredited professional from the building industry with a demonstrated knowledge and understanding of green building practices and principles, as well as a familiarity with LEED™ requirements, resources, and processes, all as described by LEED™.

N. "Lodging house" shall mean any building or portion thereof containing five or fewer guest rooms designed, used, intended to be used, or hired out to guests for purposes of lodging.

O. "Mature tree" shall mean any tree rooted on a lot or parcel of land, the trunk of which is at least six inches in diameter, measured four and one-half feet above the mean natural grade.

P. "Project" shall mean the construction of any building, as defined in Title 22, or first-time tenant improvement, but shall exclude the remodel or addition to an existing building. If a site contains one or more separate buildings, each separate building shall comply with this Title 20.

Q. "Public Works" shall mean the Los Angeles County Department of Public Works.

R. "Registered historic site" shall mean a property listed on any federal, state, or county register related to historic designation or status, including, but not limited to, the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and State Points of Historical Interest.

S. "Smart irrigation controller" is a watering device that uses sensors and weather information to automatically adjust watering times and frequency in response to weather changes.

T. "Third-party standards and rating systems" are the three independent green building standards and rating systems, CGB, GPR, and LEED™, as those standards and rating systems may be updated from time to time.

U. "United States Green Building Council (USGBC)" is a non-profit organization whose mission is to promote the development of buildings and structures that are environmentally responsible, profitable, and healthy places to live and work.

22.52.2120 Applicability.

A. This Part 20 shall become effective on January 1, 2009, and shall apply to all projects within the unincorporated areas of the County after that date except for the following:

1. Any project where a complete building permit application was filed with Public Works prior to January 1, 2009, except as provided in subsection 3;
2. Any project where a building permit was obtained prior to January 1, 2009, and expired prior to its use, where Public Works determines that the use of the building permit was delayed because of third-party litigation against the County related to the County's approval of the project. This exemption shall not apply if

Public Works determines that material changes to the scope of the building permit are required as a result of the litigation;

3. Any project involving construction of single-family residences on lots created by a parcel map which created four or fewer residential lots, or any project involving a building permit for the construction of one single-family residence on a legal lot, in both cases where a complete building permit application was filed with Public Works prior to April 1, 2009; and

4. Any project that is exempt from the provisions of this Part 20 pursuant to Section 22.52.2160.

B. Where a project involves a subdivision map with single-family lots and the map was approved after the effective date of this Part 20, the total number of single-family lots on the originally approved map shall be deemed to be the number of dwelling units in the project for purposes of determining the project's appropriate green building requirements under Table 22.52.2130-1.

22.52.2130 General Provisions.

A. Table 22.52.2130-1 summarizes the general green building requirements for a project, which requirements shall be based on the building permit application filing date for the project.

B. If a project falls within more than one project description in Table 22.52.2130-1, the project description with the more stringent green building requirements shall apply.

TABLE 22.52.2130-1
GREEN BUILDING REQUIREMENTS FOR PROJECTS

	Project Description	Building Permit Application Filed on or after January 1, 2009, but before January 1, 2010	Building Permit Application Filed on or after January 1, 2010
1	Residential projects with < 5 dwelling units	County Green Building Standards	County Green Building Standards
2	Residential projects with ≥ 5 dwelling units	County Green Building Standards	County Green Building Standards & (GPR or CGB or LEED Certified)
3	Hotels/motels, lodging houses, non-residential, and mixed-use buildings, with a gross floor area of < 10,000 square feet	County Green Building Standards	County Green Building Standards
4	Hotels/motels, lodging houses, non-residential, and mixed-use buildings, and first-time tenant improvements, with a gross floor area of ≥ 10,000 square feet and < 25,000	County Green Building Standards	County Green Building Standards & LEED™ Certified
5	Hotels/motels, lodging houses, non-residential, and mixed-use buildings, and first-time tenant improvements, with a gross floor area of ≥ 25,000 square feet	County Green Building Standards	County Green Building Standards & LEED™ Silver
6	High-rise buildings > 75 feet in height	County Green Building Standards	County Green Building Standards & LEED™ Silver

C. County Green Building Standards.

1. Energy Conservation. All projects shall be designed to consume at least fifteen (15) percent less energy than allowed under the 2005 Update to the California Energy Efficiency Standards, except that projects exempt from energy compliance under these 2005 standards shall also be exempt from this requirement.

Energy usage for purposes of this subsection shall be determined by the Time Dependent Valuation Method described in Title 24, Part 6 (California Energy Code) of the California Code of Regulations.

2. Outdoor Water Conservation.

a. A smart irrigation controller shall be installed for any area of a lot that is landscaped or designated for future landscaping.

b. All landscaped areas shall meet the drought-tolerant requirements set forth in Part 21 of Chapter 22.52.

3. Indoor Water Conservation.

All tank-type toilets installed in residential projects containing five or more dwelling units regardless of gross floor area, or in hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of at least 10,000 square feet shall be high-efficiency toilets (maximum 1.28 gallons/flush).

4. Resource Conservation.

a. A minimum of 50 percent of non-hazardous construction and demolition debris by weight from all residential projects containing less than five dwelling units regardless of gross floor area, or from hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of less than 10,000 square feet shall be recycled and/or salvaged for reuse.

b. A minimum of 65 percent of non-hazardous construction and demolition debris by weight from all residential projects containing at least five dwelling units regardless of gross floor area, or from hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of at least 10,000 square feet shall be recycled and/or salvaged for reuse.

c. Compliance with this subsection C.4 shall be governed by the methods and procedures set forth in Chapter 20.87 of the County Code.

5. Tree Planting.

a. For each lot containing a single-family residence, a minimum of two 15-gallon trees shall be planted and maintained, at least one of which shall be from the drought-tolerant plant list. The satisfaction of this requirement may be used to fulfill other tree-planting requirements of this Title 22.

b. For each lot containing a multi-family building, a minimum of one 15-gallon tree shall be planted and maintained for every 5,000 square feet of developed area, at least fifty (50) percent of which shall be from the drought-tolerant plant list. The satisfaction of this requirement may be used to fulfill other tree-planting requirements of this Title 22.

c. For each lot containing a hotel/motel, lodging houses, and non-residential buildings, a minimum of three 15-gallon trees shall be planted and maintained for every 10,000 square feet of developed area, at least sixty-five (65) percent of which shall be from the drought-tolerant plant list. The satisfaction of this requirement may be used to fulfill other tree-planting requirements of this Title 22.

d. Exceptions to tree-planting requirements.

i. If the lot size or other site condition makes the planting of the required trees pursuant to this subsection C.5 impractical in the opinion of the Director, the Director may approve the planting of the required trees off-site at twice the ratio than would otherwise be required by this subsection C.5. The procedures for planting trees off-site shall be set forth in the Green Building Technical Manual and proof that such trees have been planted off-site shall be submitted to the Department.

ii. Any existing mature tree on the involved lot shall count towards the tree planting requirements of this subsection C.5 regardless of whether such tree is listed on the drought-tolerant plant list. Such existing mature tree shall be shown on the site plan submitted to the Department.

D. Additional Green Building Requirements for Certain Projects After January 1, 2010. In addition to the green building requirements set forth in subsections C.1 through C.5, this subsection sets forth green building requirements for certain projects, described below, where the building permit application for such project is filed on or after January 1, 2010.

1. For a residential project containing five (5) or more dwelling units, the project shall achieve GPR, CGB, or LEED™ certification or, at the option of the applicant, shall achieve the equivalency of any such certification, as determined by Public Works.

2. For a hotel/motel, lodging house, non-residential or mixed-use building, or first-time tenant improvement, with a gross floor area of at least 10,000 square feet but less than 25,000 square feet, the project applicant shall retain a LEED™ accredited professional or other green building professional, approved by the Director and the Director of Public Works, to be part of the project design team. In addition, the project shall achieve the equivalency of LEED™ certification, either through USGBC certification or through an equivalency determination by Public Works. The building design submitted to Public Works shall show all of the building elements that will be used to achieve such certification or such equivalency determination.

3. For a hotel/motel, lodging house, non-residential or mixed-use building, or first-time tenant improvement project, with a gross floor area greater than 25,000 square feet or for a high-rise building greater than seventy-five (75) feet in

height, the project applicant shall retain a LEED™ accredited professional or other green building professional, approved by the Director and the Director of Public Works, to be part of the project design team. In addition, the project shall achieve the equivalency of a LEED™ silver certification, either through USGBC certification or through an equivalency determination by Public Works. The building design submitted to Public Works shall show all of the building elements that will be used to achieve such certification or such equivalency determination.

4. For purposes of this subsection D, the determination of whether a project achieves the equivalency of LEED™ certification shall be based on the project's use of a defined subset of menu options set forth in the green building technical manual.

E. Updates to the Green Building Technical Manual. The green building technical manual shall be updated with revised third-party standards and rating systems as provided in this subsection E.

1. The green building taskforce established by the Board of Supervisors shall annually review all updates to the third-party standards and rating systems, or more frequently as deemed necessary by the taskforce, to determine whether, in its opinion, the inclusion of such updates in the green building technical manual is appropriate. Any such determination by the green building taskforce shall be submitted to the commission in the form of a recommendation.

2. The commission shall hold a public hearing pursuant to Part 4 of Chapter 22.60 to consider any and all recommendations by the green building taskforce described in subsection E.1. No update to the third-party standards and rating systems may be included in the green building technical manual, or relied upon for compliance with this Part 20, until such update is approved for inclusion in the manual by the commission. Any decision by the commission regarding such inclusion shall be

ANALYSIS

This ordinance amends Title 22 - Planning and Zoning of the Los Angeles County Code relating to the La Crescenta-Montrose Community Standards District. The ordinance establishes area-specific standards for the Foothill Boulevard corridor. The intent is to improve the appearance of the corridor through design of pedestrian-friendly structures and landscaping. The standards cover architectural styles, design standards, and landscaping requirements. The ordinance also establishes revised procedures relating to modifications of development standards.

ROBERT E. KALUNIAN
Acting County Counsel

By 
ELAINE M. LEMKE
Principal Deputy County Counsel
Property Division

EML:vn

04/29/09 (requested)

08/13/09 (revised)

ORDINANCE NO. 2009-0032

An ordinance amending Title 22 - Planning and Zoning of the Los Angeles County Code, to add provisions and amend the La Crescenta-Montrose Community Standards District relating to area-specific standards for the Foothill Boulevard corridor and revised modification procedures.

The Board of Supervisors of the County of Los Angeles ordains as follows:

SECTION 1. Section 22.44.139 is hereby amended to read as follows:

22.44.139 La Crescenta-Montrose Community Standards District.

A. Purpose. The La Crescenta-Montrose Community Standards District ("CSD") is established to ensure that new multi-family buildings are designed to be compatible with the character of existing residential neighborhoods and to improve the appearance of the Foothill Boulevard commercial corridor through the thoughtful design of pedestrian-friendly structures integrated with extensive landscaping.

B. District Boundary. The boundaries of this CSD are shown on the map following this section.

C. Exemptions. This CSD shall not apply to development proposals which are the subject of applications for the following types of permits or approvals:

...

D. Community-wide Development Standards. (Reserved)

E. Zone-specific Development Standards.

...

F. Area-specific Development Standards. (Reserved)

1. Definitions. The following definitions shall apply in Area 1 (Foothill Boulevard West Town Area), Area 2 (Foothill Boulevard Mid-Town Area), and Area 3 (Foothill Boulevard East Town Area) as described hereafter:

a. Earth tone colors. Earth tone colors are defined as colors that draw from a palette of browns, tans, grays, greens, and reds, and are muted and flat in emulation of the natural colors found in dirt, rocks, and vegetation.

b. (Reserved).

2. Applicability, Review, and Certification. The following standards of applicability, review, and certification shall apply in Area 1 (Foothill Boulevard West Town Area), Area 2 (Foothill Boulevard Mid-Town Area), and Area 3 (Foothill Boulevard East Town Area) as described hereafter:

a. Applicability. These area-specific standards shall apply to development proposals that involve one or more of the activities listed in the chart below, except for development proposals for which building permit applications were submitted to, and deemed complete by, the Department or the Department of Public Works prior to the effective date of these area-specific development standards:

Activity	Applicable Standards		
	Area 1	Area 2	Area 3
New or change of land use	Subsection F.3.c (Apartment Houses); and Subsection F.3.d (Zone-specific Use Standards)	Subsection F.4.c (Apartment Houses); and Section F.4.d (Zone-specific Use Standards)	Subsection F.5.c (Apartment Houses); and Subsection F.5.d (Zone-specific Use Standards)

Activity	Applicable Standards		
	Area 1	Area 2	Area 3
New structure	Subsection F.3.e (Lot Coverage); Subsection F.3.f (Required Yards); Subsection F.3.g (Structure Height); and Subsection F.3.h (Structure Design)	Subsection F.4.e; (Lot Coverage); Subsection F.4.f; (Required Yards); Subsection F.4.g (Structure Height); and Subsection F.4.h (Structure Design)	Subsection F.5.e (Lot Coverage); Subsection F.5.f (Required Yards); Subsection F.5.g (Structure Height); and Subsection F.5.h (Structure Design)
New addition to existing structure	Subsection F.3.e (Lot Coverage); Subsection F.3.f (Required Yards); Subsection F.3.g (Structure Height); and Subsection F.3.h.iv through F.3.h.iv (Structure Design)	Subsection F.3.e (Lot Coverage); Subsection F.4.f (Required Yards); Subsection F.4.g (Structure Height); and Subsection F.4.h.ii (Structure Design)	Subsection F.3.e (Lot Coverage); Subsection F.5.f (Required Yards); Subsection F.5.g (Structure Height); and Subsection F.5.h.ii (Structure Design)
New alteration to the exterior of existing structure that requires permits from the Department of Public Works	Subsections F.3.h.iv through F.3.h.xiii (Structure Design) as they apply to the new alteration being proposed	Subsection F.4.h.ii (Structure Design) as it applies to the new alteration being proposed	Subsection F.5.h.ii (Structure Design) as it applies to the new alteration being proposed
New parking lot; New addition to existing parking lot; and Replacement of existing parking lot	Subsection F.3.i (Parking Lot Design)	Subsection F.4.i (Parking Lot Design)	Subsection F.5.i (Parking Lot Design)

Activity	Applicable Standards		
	Area 1	Area 2	Area 3
Installation or replacement of landscaping in connection with a project as defined in Section 22.52.2210; Replacement of existing landscaping	Subsection F.3.j (Landscaping)	Subsection F.4.j (Landscaping)	Subsection F.5.j (Landscaping)
New wall or fence; New addition to existing wall or fence; and Replacement of existing wall or fence	Subsection F.3.k (Walls and Fences)	Subsection F.4.k (Walls and Fences)	Subsection F.5.k (Walls and Fences)
New sign; Enlargement or alteration of existing sign; and Replacement of existing sign	Subsection F.3.l (Signs)	Subsection F.4.l (Signs)	Subsection F.5.l (Signs)

b. Review.

i. Development proposals subject to these area-specific standards shall require a site plan review, unless a different approval is required by this Title 22.

ii. Applications for approval shall include all information necessary to evaluate compliance with these area-specific standards, as determined by the Director, including but not limited to site plans, floor plans, elevation plans, and landscaping plans, in addition to all other information required by this Title 22.

iii. Site plans, floor plans, and elevation plans shall be prepared by an architect licensed by the State of California. On each plan, the architect

shall affix his or her name, license number, signature, and a statement made under penalty of perjury pursuant to section 2015.5 of the Code of Civil Procedure that such plan complies in his or her professional opinion with the requirements of these area-specific standards and all other applicable provisions of this Title 22.

iv. Landscaping plans shall be prepared by a landscape architect licensed by the State of California. On each plan, the landscape architect shall affix his or her name, license number, signature, and a statement made under penalty of perjury pursuant to section 2015.5 of the Code of Civil Procedure that such plan complies in his or her professional opinion with the requirements of these area-specific standards and all other applicable provisions of this Title 22.

v. If an application includes landscaping plans, the application shall also include a covenant and agreement, to be recorded in the office of the County Recorder following site plan review approval, that all landscaping will be installed and maintained in compliance with the approved landscaping plans, these area-specific standards, and all other applicable provisions of this Title 22.

c. Certification. Prior to each inspection required by Sections 108.4.2, 108.4.3, 108.4.4, and 108.4.6 of Title 26, an architect, general contractor, or applicable contractor licensed by the State of California shall submit a statement to the Department made under penalty of perjury pursuant to section 2015.5 of the Code of Civil Procedure that all construction to be inspected complies in his or her professional opinion with all approved plans, these area-specific standards, and all other applicable provisions of this Title 22.

3. Area 1 – Foothill Boulevard West Town Area.

a. Purpose. The Foothill Boulevard West Town Area is established to improve the appearance of the western Foothill Boulevard commercial corridor through the thoughtful design of pedestrian-friendly structures integrated with extensive landscaping and to provide buffering from adjacent residential uses.

b. Description of Area. The boundaries of this area are shown on the map following this section.

c. Apartment Houses. In approving a conditional use permit for an apartment house, the Commission or Hearing Officer shall make the following findings in addition to those required by Section 22.56.090:

i. That the inclusion of commercial uses into the proposed project, including but not limited to joint live and work units, is unfeasible due to access constraints, lot size or dimensions, or economic constraints substantiated by a market analysis; and

ii. That the proposed project substantially complies with these area-specific standards and that approval of such project will not be materially detrimental to properties or improvements in the area or contrary to the intent and purpose of this CSD, as provided in subsection A of this section.

d. Zone-specific Use Standards.

i. Zone C-1. In addition to the uses listed in Section 22.28.110, the following uses shall require a conditional use permit pursuant to Part 1 of Chapter 22.56:

-- Recreation clubs, commercial, including tennis, polo, swimming, and similar outdoor recreational activities together with appurtenant clubhouse.

-- Swimming pools.

-- Tennis, volleyball, badminton, croquet, lawn bowling, and similar courts.

e. Lot Coverage. Structures shall not cumulatively occupy more than eighty-five (85) percent of the net area of a lot or parcel of land.

f. Required Yards.

i. Front and Corner Side Yards.

(1) Each lot or parcel of land shall have a front yard of at least twenty (20) feet in depth and a corner side yard of at least ten (10) feet in depth.

(2) At least twenty-five (25) percent of the area of each required front or corner side yard shall be landscaped and such landscaping shall comply with subsection F.3.j.

(3) The following uses are permitted in required front and corner side yards:

(a) Driveways, subject to the limitations of subsection F.3.i.i.;

(b) Outdoor dining;

(c) Street furniture; and

(d) Pedestrian circulation areas, subject to the limitations of subsection F.3.h.viii.

(4) Each required front or corner side yard shall be landscaped in areas where none of the uses in the immediately preceding subsection F.3.f.i.(3) are maintained and such landscaping shall comply with subsection F.3.j.

ii. Rear Yards.

(1) If a lot or parcel of land adjoins a residential zone at its rear lot line, such lot or parcel of land shall have a rear yard of at least five (5) feet in depth and such rear yard shall be landscaped to provide shielding for the adjoining residential zone with landscaping that complies with subsection F.3.j and the following requirements:

(a) If a lot or parcel of land is sixty (60) feet or less in width at its rear lot line, at least two (2) twenty-four (24)-inch box trees shall be planted and such trees shall be planted twenty-seven (27) feet apart; and

(b) If a lot or parcel of land is more than sixty (60) feet in width at its rear lot line, a twenty-four (24)-inch box tree shall be planted in both directions at intervals of twenty-seven (27) feet, as measured from the midpoint of the width of such lot at its rear lot line.

g. Structure Height.

i. If a lot or parcel of land does not adjoin a residential zone at its rear lot line, the maximum structure height shall be thirty-five (35) feet as

measured from grade before any fill is placed on any portion of the lot or parcel upon which the structure is to be located.

ii. If a lot or parcel of land adjoins a residential zone at its rear lot line, the maximum structure height shall vary across the depth of the lot from front to back with the maximum height allowed at the front of the lot, and shall be established as follows.

(1) If the adjoining lot or parcel of land in a residential zone has a lower elevation, the maximum structure height shall be established as a forty-five (45)-degree projection measured from six (6) feet above the grade of the rear lot line before any fill is placed on any portion of the lot or parcel upon which the structure is to be located.

(2) If the adjoining lot or parcel of land in a residential zone has a higher elevation, the maximum structure height shall be established as a forty-five (45)-degree projection measured from the grade of the rear lot line before any fill is placed on any portion of the lot or parcel upon which the structure is to be located.

h. Structure Design.

i. Design Features. New primary structures shall include at least five (5) of the following design features, and all such features shall be consistent with the chosen architectural style, as defined in subsection F.3.h.iii.:

(1) Arcading;

(2) Arches;

~~writing and such notification shall indicate that the applicant may file an appeal within 15 calendar days of receipt of such notice with a request for a public hearing before the commission.~~

~~c. — No appeal fee shall be required except for an appeal filed by the applicant, who shall pay the additional fee for a public hearing as set forth in Section 22.60.100 under Site Plan Review for Director' s Review for Modification of Development Standards in a Community Standards District.~~

1. Modification Authorized. Except as set forth in subsections F.3.i.i.(3) and F.3.i.iv.(4), modification of the development standards specified in subsections E.1 (Zone R-3), F.3.f (Required Yards), F.3.h (Structure Design), F.3.i (Parking Lot Design), F.3.j (Landscaping), F.3.k (Walls and Fences), F.3.l (Signs), F.4.f (Required Yards), F.4.h (Structure Design), F.4.i (Parking Lot Design), F.4.j (Landscaping), F.4.k (Walls and Fences), F.4.l (Signs), F.5.f (Required Yards), F.5.h (Structure Design), F.5.i (Parking Lot Design), F.5.j (Landscaping), F.5.k (Walls and Fences), and F.5.l (Signs) shall be subject to the procedures specified in this subsection G. Modification of the other development standards in this CSD shall be subject to a variance, as provided in Part 2 or Chapter 22.56.

2. Application. The procedure for filing a request for modification shall be the same as that for Director's review, as set forth in Part 12 of Chapter 22.56, except that the applicant shall also submit:

a. A list, certified by affidavit or statement under penalty of perjury of the names and addresses of all persons who are shown on the latest

available assessment role of the County of Los Angeles as owners of the subject property, and as owning property within one thousand (1,000) feet from the exterior boundaries of the subject property;

b. Two sets of gummed mailing labels with the property owners' names and addresses and one (1) photocopy of the labels;

c. A one thousand (1,000)-foot ownership map drawn to a scale of one (1) inch to one hundred (100) feet indicating the location of all such properties and the owners of such properties; and

d. A filing fee as set forth in Section 22.60.100 under Site Plan Review, Director's Review for Modification of Development Standards in a Community Standard District.

3. Notice.

a. At least thirty (30) days prior to the date a decision is made, the Director shall send notice of the pending application by first-class mail to the property owners on the list provided by the applicant and to the Crescenta Valley Town Council.

b. The notice shall describe the development proposal and the request for modification. The notice shall also indicate that recipients of the notice or a representative of the Crescenta Valley Town Council may submit a written protest to the Director within fourteen (14) calendar days following the date on the notice and that such written protest shall provide evidence that the request for modification does not meet one or more of the findings identified in subsection G.4.a.

4. Findings.

a. The Director shall approve or deny the application pursuant to the principles and standards of Section 22.56.1690 and the following findings:

i. There are exceptional circumstances or conditions applicable to the subject property or to the intended development of the property that do not apply to other properties within the CSD area; and

ii. That granting the request for modification will not be materially detrimental to properties or improvements in the area or contrary to the intent and purpose of this CSD, as provided in subsection A.

b. The Director shall consider each written protest when making a decision on the application. If he determines that the request for modification does not meet one or more of the above principles, standards, or findings, he may request alterations to the development proposal or impose conditions of approval before making a decision on the application.

c. The Director may refer an application to the Commission for consideration at a public hearing. All procedures relative to the public hearing set forth in Part 4 of Chapter 22.60 shall be followed except that no fee shall be required. The Commission shall approve, conditionally approve, or deny the application pursuant to the principles, standards, and findings identified in subsection G.4.a. The decision of the Commission shall become final and effective on the date of the decision and shall not be subject to further administrative appeal.

5. Decision.

a. Notice.

i. If the Director approves, conditionally approves, or denies the application, he shall send notice of the decision by certified mail to the applicant, anyone who submitted a written protest, and the Crescenta Valley Town Council.

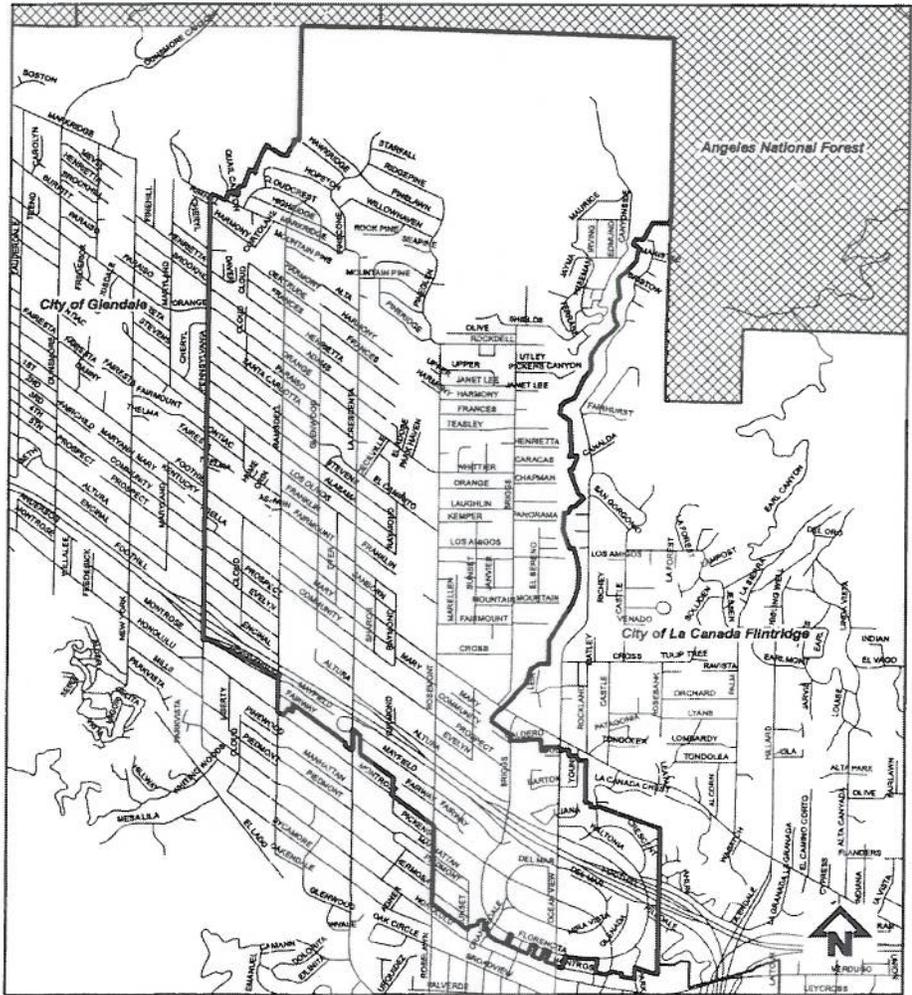
ii. The notice shall indicate that an appeal may be filed by a recipient of the notice or a representative of the Crescenta Valley Town Council with the Commission within fourteen (14) calendar days following the date on the notice.

b. Appeal.

i. An appeal shall be accompanied by an additional fee for a public hearing as set forth in Section 22.60.100 under Site Plan Review, Director's Review for Modification of Development Standards in a Community Standards District. All procedures relative to a public hearing set forth in Part 4 of Chapter 22.60 shall be followed.

ii. The Commission shall approve, conditionally approve, or deny the appeal pursuant to the findings identified in subsection G.4.a. The decision of the Regional Planning Commission shall become final and effective on the date of the decision and shall not be subject to further administrative appeal.

[2244139ELCC]



**La Crescenta - Montrose
Community Standards District Boundary**



1 inch equals 2,000 feet

