

6/15/92

**MODEL
WATER EFFICIENT
LANDSCAPE
ORDINANCE**

TEXT OF PROPOSED REGULATIONS

In Division 2, Title 23, California Code of Regulations, add Chapter 2.7, Sections 490 through 495, inclusive to read as follows:

Chapter 2.7. Model Water Efficient Landscape Ordinance.

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490. Purpose.

(a) The State Legislature has found:

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

(b) Consistent with the 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 designing, installing, and maintaining water efficient landscapes in new projects; and
- (3) establish provisions for water management practices and water waste prevention for established landscapes.

Note: Authority cited: Sections 65591.5, 65594, Gov. Code. Reference: Sections 65591, 65591.5, 65597, Gov. Code.

491. Definitions.

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

- (a) **"anti-drain valve" or "check valve"** means a valve located under a sprinkler head to hold water in the system so it minimizes drainage from the lower elevation sprinkler heads.
- (b) **"application rate"** means the depth of water applied to a given area, usually measured in inches per hour.
- (c) **"applied water"** means the portion of water supplied by the irrigation system to the landscape.
- (d) **"automatic controller"** means a mechanical or solid state timer, capable of operating valve stations to set the days and length of time of a water application.
- (e) **"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.
- (f) **"conversion factor (0.62)"** means a number that converts the maximum applied water allowance from acre-inches per acre per year to gallons per square foot per year. The conversion factor is calculated as follows:

$$(325,851 \text{ gallons} / 43,560 \text{ square feet}) / 12 \text{ inches} = (0.62)$$

$$325,851 \text{ gallons} = \text{one acre foot}$$

$$43,560 \text{ square feet} = \text{one acre}$$

$$12 \text{ inches} = \text{one foot}$$

To convert gallons per year to 100-cubic-feet per year, another common billing unit for water, divide gallons per year by 748. (748 gallons = 100 cubic feet.)

- (g) **"ecological restoration project"** means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- (h) **"effective precipitation" or "usable rainfall"** means the portion of total precipitation that is used by the plants. Precipitation is not a reliable source of water, but can contribute to some degree toward the water needs of the landscape.
- (i) **"emitter"** means drip irrigation fittings that deliver water slowly from the system to the soil.
- (j) **"established landscape"** means the point at which plants in the landscape have developed roots into the soil adjacent to the root ball.
- (k) **"establishment period"** means the first year after installing the plant in the landscape.
- (l) **"Estimated Applied Water Use"** means the portion of the Estimated Total Water Use that is derived from applied water. The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance. The Estimated Applied Water Use may be the sum of the water recommended through the irrigation schedule, as referenced in Section 492 (c) (3).
- (m) **"Estimated Total Water Use"** means the annual total amount of water estimated to be needed to keep the plants in the landscaped area healthy. It is based upon such factors as the local evapotranspiration rate, the size of the landscaped area, the types of plants, and the efficiency of the irrigation system, as described in Section 492 (c) (4).
- (n) **"ET adjustment factor"** means a factor of 0.8, 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. The irrigation efficiency for purposes of the ET Adjustment Factor is 0.625.

Therefore, the ET Adjustment Factor $(0.8) = (0.5/0.625)$.

(o) "evapotranspiration" means the quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time.

(p) "flow rate" means the rate at which water flows through pipes and valves (gallons per minute or cubic feet per second).

(q) "hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same schedule. A hydrozone may be irrigated or non-irrigated. For example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a non-irrigated hydrozone.

(r) "infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).

(s) "irrigation efficiency" 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 irrigation efficiency for purposes of this ordinance is 0.625. Greater irrigation efficiency can be expected from well designed and maintained systems.

(t) "landscape irrigation audit" means a process to perform site inspections, evaluate irrigation systems, and develop efficient irrigation schedules.

- (u) **"landscaped area"** means the entire parcel less the building footprint, driveways, non-irrigated portions of parking lots, hardscapes- such as decks and patios, and other non-porous areas. Water features are included in the calculation of the landscaped area. Areas dedicated to edible plants, such as orchards or vegetable gardens are not included.
- (v) **"lateral line"** means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- (w) **"main line"** means the pressurized pipeline that delivers water from the water source to the valve or outlet.
- (x) **"Maximum Applied Water Allowance"** means, for design purposes, the upper limit of annual applied water for the established landscaped area as specified in Section 492 (c) (2). It is based upon the area's reference evapotranspiration, the ET Adjustment Factor, and the size of the landscaped area. The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance.
- (y) **"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.
- (z) **"mulch"** means any material such as leaves, bark, straw or other materials left loose and applied to the soil surface for the beneficial purpose of reducing evaporation .
- (aa) **"operating pressure"** means the pressure at which a system of sprinklers is designed to operate, usually indicated at the base of a sprinkler.
- (bb) **"overhead sprinkler irrigation systems"** means those with high flow rates (pop-ups, impulse sprinklers, rotors, etc.)
- (cc) **"overspray"** means the water which is delivered beyond the landscaped area, wetting pavements, walks, structures, or other non-landscaped areas.

(dd) "plant factor" means a factor that when multiplied by reference evapotranspiration, estimates the amount of water used by plants. For purposes of this ordinance, the average plant factor of low water using plants ranges from 0 to 0.3, for average water using plants the range is 0.4 to 0.6, and for high water using plants the range is 0.7 to 1.0.

(ee) "rain sensing device" means a system which automatically shuts off the irrigation system when it rains.

(ff) "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.

(gg) "recreational area" means areas of active play or recreation such as sports fields, school yards, picnic grounds, or other areas with intense foot traffic.

(hh) "recycled water," "reclaimed water," or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation; not intended for human consumption.

(ii) "reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants. ETo is given in inches per day, month, or year as represented in Section 495, 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 Allowances so that regional differences in climate can be accommodated.

(jj) "rehabilitated landscape" means any relandscaping project that requires a permit.

(kk) "run off" means water which is not absorbed by the soil or landscape to which it is applied and flows from the area. For example, run off may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a severe slope.

(ll) "soil moisture sensing device" means a device that measures the amount of water in the soil.

(mm) "soil texture" means the classification of soil based on the percentage of sand, silt, and clay in the soil.

(nn) "sprinkler head" means a device which sprays water through a nozzle.

(oo) "static water pressure" means the pipeline or municipal water supply pressure when water is not flowing.

(pp) "station" means an area served by one valve or by a set of valves that operate simultaneously.

(qq) "turf" means a surface layer of earth containing mowed grass with its roots. 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.

(rr) "valve" means a device used to control the flow of water in the irrigation system.

(ss) "water conservation concept statement" means a one-page checklist and a narrative summary of the project as shown in Section 492 (c) (1).

Note: Section 65594, Gov. Code. Reference: Section 65597, Gov. Code.

492. Provisions for New or Rehabilitated Landscapes

(a) Applicability

- (1) Except as provided in Section 492 (a) (3), this section shall apply to:
 - (A) all new and rehabilitated landscaping for public agency projects and private development projects that require a permit; and
 - (B) developer-installed landscaping in single-family and multi-family projects.
- (2) Projects subject to this section shall conform to the provisions in Section 492.
- (3) This section shall not apply to:
 - (A) homeowner-provided landscaping at single-family and multi-family projects;
 - (B) cemeteries;
 - (C) registered historical sites;
 - (D) ecological restoration projects that do not require a permanent irrigation system;
 - (E) mined-land reclamation projects that do not require a permanent irrigation system; or
 - (F) any project with a landscaped area less than 2,500 square feet.

(b) Landscape Documentation Package

(1) A copy of the landscape documentation package conforming to this chapter shall be submitted to the city or county. No permit shall be issued until the city or county reviews and approves the landscape documentation package.

(2) A copy of the approved landscape documentation package shall be provided to the property owner or site manager along with the record drawings and any other information normally forwarded to the property owner or site manager.

(3) A copy of the Water Conservation Concept Statement and the Certificate of Substantial Completion shall be sent by the project manager to the local retail water purveyor.

(4) Each landscape documentation package shall include the following elements, which are described in Section 492 (c):

- (A) Water Conservation Concept Statement
- (B) Calculation of the Maximum Applied Water Allowance
- (C) Calculation of the Estimated Applied Water Use
- (D) Calculation of the Estimated Total Water Use
- (E) Landscape Design Plan
- (F) Irrigation Design Plan
- (G) Irrigation Schedules
- (H) Maintenance Schedule
- (I) Landscape Irrigation Audit Schedule
- (J) Grading Design Plan
- (K) Soil Analysis
- (L) Certificate of Substantial Completion. (To be submitted after installation of the project.)

(5) If effective precipitation is included in the calculation of the Estimated Total Water Use, then an Effective Precipitation Disclosure Statement from the landscape professional and the property owner shall be submitted with the Landscape Documentation Package.

(c) Elements of Landscape Documentation Package**(1) Water - Conservation Concept Statement**

Each landscape documentation package shall include a cover sheet, referred to as the Water Conservation Concept Statement similar to the following example. It serves as a check list to verify that the elements of the landscape documentation package have been completed and has a narrative summary of the project.

(Sample Water Conservation Concept Statement, continued)

Description of Project

(Briefly describe the planning and design actions that are intended to achieve conservation and efficiency in water use.)

Date: _____ **Prepared By:** _____

(2) The Maximum Applied Water Allowance

(A) A project's Maximum Applied Water Allowance shall be calculated using the following formula:

MAWA = (ETo) (0.8) (LA) (0.62) where:

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.8 = ET Adjustment Factor

LA = Landscaped Area (square feet)

0.62 = conversion factor (to gallons per square foot)

(B) Two example calculations of the Maximum Applied Water Allowance are:

(i) **PROJECT SITE ONE: Landscaped area of 50,000 sq. ft. in Fresno**

MAWA = (ETo) (.8) (LA) (.62)

= (51 inches) (.8) (50,000 square feet) (.62)

Maximum Applied Water Allowance = 1,264,800 gallons per year

(or 1,691 hundred-cubic-feet per year: 1,264,800/748=1,691)

(ii) **PROJECT SITE TWO: Landscaped area of 50,000 sq. ft. in San Francisco**

MAWA = (ETo) (.8) (LA) (.62)

= (35 inches) (.8) (50,000 square feet) (.62)

Maximum Applied Water Allowance = 868,000 gallons per year

(or 1,160 hundred-cubic-feet per year)

(C) Portions of landscaped areas in public and private projects such as parks, playgrounds, sports fields, golf courses, or school yards where turf provides a playing surface or serves other recreational purposes are considered recreational areas and may require water in addition to the Maximum Applied Water Allowance. A statement shall be included with the landscape design plan, designating recreational areas to be used for such purposes and specifying any needed amount of additional water above the Maximum Applied Water Allowance.

(3) Estimated Applied Water Use

(A) The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance.

(B) A calculation of the Estimated Applied Water Use shall be submitted with the Landscape Documentation Package. It may be calculated by summing the amount of water recommended in the irrigation schedule.

(4) Estimated Total Water Use

(A) A calculation of the Estimated Total Water Use shall be submitted with the Landscape Documentation Package. The Estimated Total Water Use may be calculated by summing the amount of water recommended in the irrigation schedule and adding any amount of water expected from effective precipitation (not to exceed 25 percent of the local annual mean precipitation) or may be calculated from a formula such as the following:

The Estimated Total Water Use for the entire landscaped area equals the sum of the Estimated Water Use of all hydrozones in that landscaped area.

$$\text{EWU (hydrozone)} = \frac{(\text{ETo}) (\text{PF}) (\text{HA}) (.62)}{(\text{IE})}$$

EWU (hydrozone) = Estimated Water Use (gallons per year)
 ETo = Reference Evapotranspiration (inches per year)
 PF = plant factor
 HA = hydrozone area (square feet)
 (.62) = conversion factor
 IE = irrigation efficiency

(B) If the Estimated Total Water Use is greater than the Estimated Applied Water Use due to precipitation being included as a source of water, an Effective Precipitation Disclosure Statement such as the one in Section 494 shall be included in the Landscape Documentation Package.

(5) Landscape Design Plan

A landscape design plan meeting the following requirements shall be submitted as part of the landscape documentation package.

(A) Plant Selection and Grouping

(i) Any plants may be used in the landscape, providing the Estimated Applied Water Use recommended does not exceed the Maximum Applied Water Allowance and that the plants meet the specifications set forth in (ii), (iii) and (iv).

(ii) Plants having similar water use shall be grouped together in distinct hydrozones.

(iii) Plants shall be selected appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the site. Protection and preservation of native species and natural areas is encouraged. The planting of trees is encouraged wherever it is consistent with the other provisions of this ordinance.

(iv) Fire prevention needs shall be addressed in areas that are fire prone. Information about fire prone areas and appropriate landscaping for fire safety is available from local fire departments or the California Department of Forestry.

(B) Water Features

(i) Recirculating water shall be used for decorative water features.

(ii) Pool and spa covers are encouraged.

(C) Landscape Design Plan Specifications

The landscape design plan shall be drawn on project base sheets at a scale that accurately and clearly identifies:

- (i) Designation of hydrozones.
- (ii) Landscape materials, trees, shrubs, groundcover, turf, and other vegetation. Planting symbols shall be clearly drawn and plants labeled by botanical name, common name, container size, spacing, and quantities of each group of plants indicated.
- (iii) Property lines and street names.
- (iv) Streets, driveways, walkways, and other paved areas.
- (v) Pools, ponds, water features, fences, and retaining walls.
- (vi) Existing and proposed buildings and structures including elevation if applicable.
- (vii) Natural features including but not limited to rock outcroppings, existing trees, shrubs that will remain.
- (viii) Tree staking, plant installation, soil preparation details, and any other applicable planting and installation details.
- (ix) A calculation of the total landscaped area.
- (x) Designation of recreational areas.

(6) Irrigation Design Plan

An irrigation design plan meeting the following conditions shall be submitted as part of the Landscape Documentation Package.

(A) Irrigation Design Criteria

(i) Runoff and Overspray. Soil types and infiltration rate shall be considered when designing irrigation systems. All irrigation systems shall be designed to avoid runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, or structures. Proper irrigation equipment and schedules, including features such as repeat cycles, shall be used to closely match application rates to infiltration rates therefore minimizing runoff.

Special attention shall be given to avoid runoff on slopes and to avoid overspray in planting areas with a width less than ten feet, and in median strips.

No overhead sprinkler irrigation systems shall be installed in median strips less than ten feet wide.

(ii) Irrigation Efficiency. For the purpose of determining the maximum applied water allowance, irrigation efficiency is assumed to be 0.625. Irrigation systems shall be designed, maintained, and managed to meet or exceed 0.625 efficiency.

(iii) Equipment.

Water meters. Separate landscape water meters shall be installed for all projects except for single family homes or any project with a landscaped area of less than 5,000 square feet.

Controllers. Automatic control systems shall be required for all irrigation systems and must be able to accommodate all aspects of the design.

Valves. Plants which require different amounts of water shall be irrigated by separate valves. If one valve is used for a given area, only plants with similar water use shall be used in that area. Anti-drain (check) valves shall be installed in strategic points to minimize or prevent low-head drainage.

Sprinkler heads. Heads and emitters shall have consistent application rates within each control valve circuit. Sprinkler heads shall be selected for proper area coverage, application rate, operating pressure, adjustment capability, and ease of maintenance.

Rain Sensing Override Devices. Rain sensing override devices shall be required on all irrigation systems.

Soil Moisture Sensing Devices. It is recommended that soil moisture sensing devices be considered where appropriate.

(B) Recycled Water

(i) The installation of recycled water irrigation systems (dual distribution systems) shall be required to allow for the current and future use of recycled water, unless a written exemption has been granted as described in the following section (B) (ii).

(ii) Irrigation systems shall make use of recycled water unless a written exemption has been granted by the local water agency, stating that recycled water meeting all health standards is not available and will not be available in the foreseeable future.

(iii) The recycled water irrigation systems shall be designed and operated in accordance with all local and state codes.

(C) Irrigation Design Plan Specifications

Irrigation systems shall be designed to be consistent with hydrozones.

The irrigation design plan shall be drawn on project base sheets. It shall be separate from, but use the same format as, the landscape design plan. The scale shall be the same as that used for the landscape design plan described in Section 492 (c) (5) (C).

The irrigation design plan shall accurately and clearly identify:

- (i) Location and size of separate water meters for the landscape.
- (ii) Location, type, and size of all components of the irrigation system, including automatic controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, and backflow prevention devices.
- (iii) Static water pressure at the point of connection to the public water supply.
- (iv) Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (psi) for each station.
- (v) Recycled water irrigation systems as specified in the Section 492 (c) (4) (B).

(7) Irrigation Schedules

Irrigation schedules satisfying the following conditions shall be submitted as part of the Landscape Documentation Package.

(A) An annual irrigation program with monthly irrigation schedules shall be required for the plant establishment period, for the established landscape, and for any temporarily irrigated areas.

(B) The irrigation schedule shall:

(i) include run time (in minutes per cycle), suggested number of cycles per day, and frequency of irrigation for each station; and

(ii) provide the amount of applied water (in hundred cubic feet, gallons, or in whatever billing units the local water supplier uses) recommended on a monthly and annual basis.

(C) The total amount of water for the project shall include water designated in the Estimated Total Water Use calculation plus water needed for any water features, which shall be considered as a high water using hydrozone.

(D) Recreational areas designated in the landscape design plan shall be highlighted and the irrigation schedule shall indicate if any additional water is needed above the Maximum Applied Water Allowance because of high plant factors (but not due to irrigation inefficiency.)

(E) Whenever possible, irrigation scheduling shall incorporate the use of evapotranspiration data such as those from the California Irrigation Management Information System (CIMIS) weather stations to apply the appropriate levels of water for different climates.

(F) Whenever possible, landscape irrigation shall be scheduled between 2:00 a.m. and 10:00 a.m. to avoid irrigating during times of high wind or high temperature.

(8) Maintenance Schedules

A regular maintenance schedule satisfying the following conditions shall be submitted as part of the Landscape Documentation Package:

(A) Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule shall include but not be limited to checking, adjusting, and repairing irrigation equipment; resetting the automatic controller; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning, and weeding in all landscaped areas.

(B) Whenever possible, repair of irrigation equipment shall be done with the originally specified materials or their equivalents.

(9) Landscape Irrigation Audit Schedules

A schedule of landscape irrigation audits, for all but single family residences, satisfying the following conditions shall be submitted to the city or county as part of the Landscape Documentation Package.

(A) At a minimum, audits shall be in accordance with the State of California Landscape Water Management Program as described in the Landscape Irrigation Auditor Handbook, the entire document, which is hereby incorporated by reference. (See Landscape Irrigation Auditor Handbook (June 1990) version 5.5 [formerly Master Auditor Training].)

(B) The schedule shall provide for landscape irrigation audits to be conducted by certified landscape irrigation auditors at least once every five years.

(10) Grading Design Plan

Grading design plans satisfying the following conditions shall be submitted as part of the Landscape Documentation Package.

(A) A grading design plan shall be drawn on project base sheets. It shall be separate from but use the same format as the landscape design plan.

(B) The grading design plan shall indicate finished configurations and elevations of the landscaped area, including the height of graded slopes, drainage patterns, pad elevations, and finish grade.

(11) Soils

(A) A soil analysis satisfying the following conditions shall be submitted as part of the Landscape Documentation Package.

(i) Determination of soil texture, indicating the percentage of organic matter.

(ii) An approximate soil infiltration rate (either measured or derived from soil texture/infiltration rate tables.) A range of infiltration rates shall be noted where appropriate.

(iii) Measure of pH, and total soluble salts.

(B) A mulch of at least three inches shall be applied to all planting areas except turf.

(12) Certification

(A) Upon completing the installation of the landscaping and the irrigation system, an irrigation audit shall be conducted by a certified landscape irrigation auditor prior to the final field observation. (See Landscape Irrigation Auditor Handbook as referenced in Section 492 (c)(9)(A)).

(B) A licensed landscape architect or contractor, certified irrigation designer, or other licensed or certified professional in a related field shall conduct a final field observation and shall provide a certificate of substantial completion to the city or county. The certificate shall specifically indicate that plants were installed as specified, that the irrigation system was installed as designed, and that an irrigation audit has been performed, along with a list of any observed deficiencies.

(C) Certification shall be accomplished by completing a Certificate of Substantial Completion and delivering it to the city or county, to the retail water supplier, and to the Owner of Record. A sample of such a form, which shall be provided by the city or county is:

(Certificate of Substantial Completion, continued)

____Project submittal package and a copy of this certification has been provided to owner/manager and local water agency

Comments:

I/we certify that work has been installed in accordance with the contract documents.

Contractor	Signature	Date	State License Number
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I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the Water Efficient Landscape Ordinance and that the landscape planting and irrigation installation conform with the approved plans and specifications.

Landscape Architect or Irrigation Designer/Consultant or Licensed or Certified Professional in a Related Field	Signature	Date	State License Number
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I/we certify that I/we have received all of the contract documents and that it is our responsibility to see that the project is maintained in accordance with the contract documents.

Owner	Signature	Date
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Note: Authority cited: Section 65594, Gov. Code. Reference: Section 65597, Gov. Code.

(d) Public Education**(1) Publications.**

(A) Local agencies shall provide information to owners of all new, single family residential homes regarding the design, installation, and maintenance of water efficient landscapes.

(B) Information about the efficient use of landscape water shall be provided to water users throughout the community.

(2) Model Homes.

At least one model home that is landscaped in each project consisting of eight or more homes shall demonstrate via signs and information the principles of water efficient landscapes described in this ordinance.

(A) Signs shall be used to identify the model as an example of a water efficient landscape and featuring elements such as hydrozones, irrigation equipment and others which contribute to the overall water efficient theme.

(B) Information shall be provided about designing, installing, and maintaining water efficient landscapes.

Note: Authority cited: Section 65594, Gov. Code. Reference: Section 65597.

493. PROVISIONS FOR EXISTING LANDSCAPES.

(a) Water Management

All existing landscaped areas to which the city or county provides water that are one acre or more, including golf courses, green belts, common areas, multi-family housing, schools, businesses, parks, cemeteries, and publicly owned landscapes shall have a landscape irrigation audit at least every five years. At a minimum, the audit shall be in accordance with the California Landscape Water Management Program as described in the Landscape Irrigation Auditor Handbook, the entire document which is hereby incorporated by reference. (See Landscape Irrigation Auditor Handbook, Dept. of Water Resources, Water Conservation Office (June 1990) version 5.5.)

(1) If the project's water bills indicate that they are using less than or equal to the Maximum Applied Water Allowance for that project site, an audit shall not be required.

(2) Recognition of projects that stay within the Maximum Applied Water Allowance is encouraged.

(b) Water Waste Prevention

Cities and counties shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, or structures. Penalties for violation of these prohibitions shall be established locally.

(Authority cited: Section 65594, Gov. Code. Reference: Section 65597, Gov. Code.)

Section 494. Effective Precipitation

If effective precipitation is included in the calculation of the Estimated Total Water Use, an Effective Precipitation Disclosure Statement (similar to the following Sample Effective Precipitation Disclosure Statement) shall be completed, signed, and submitted with the Landscape Documentation Package. No more than 25 percent of the local annual mean precipitation shall be considered effective precipitation in the calculation of the Estimated Total Water Use.

SAMPLE EFFECTIVE PRECIPITATION DISCLOSURE STATEMENT

I certify that I have informed the project owner and developer that this project depends on _____ (gallons or cubic feet) of effective precipitation per year. This represents _____ percent of the local mean precipitation of _____ inches per year.

I have based my assumptions about the amount of precipitation that is effective upon: _____

_____.

I certify that I have informed the project owner and developer that in times of drought, there may not be enough water available to keep the entire landscape alive.

Licensed or Certified Landscape Professional

I certify that I have been informed by the licensed or certified landscape professional that this project depends upon _____ (gallons or cubic feet) of effective precipitation per year. This represents _____ percent of the local mean precipitation of _____ inches per year.

I certify that I have been informed that in times of drought, there may not be enough water available to keep the entire landscape alive.

Owner

Developer

495.

REFERENCE EVAPOTRANSPIRATION

in inches (Historical Data, extrapolated from 12-Month Normal Year ETo Maps and U.C. publication 21426)

County	City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann. Eto
Alameda	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
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	40.5
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
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
	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	1.1	1.7	2.8	4.8	6.6	7.4	8.2	7.0	5.7	3.5	1.7	1.0	51.4
	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
	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
	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
	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
	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
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
	Five Points	0.9	1.7	3.3	5.0	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.1
	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
	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
	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
Glenn	Orland	1.2	1.7	3.1	4.8	6.7	7.4	8.8	7.3	5.8	3.8	1.7	1.1	53.3
	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
	Hoopa	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	2.9	3.9	6.1	8.3	10.5	11.8	12.0	10.4	8.6	6.5	3.8	2.3	86.9
	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
	Yuma	3.1	4.1	6.6	8.7	11.0	12.4	12.7	11.0	8.9	6.6	4.0	2.6	91.5
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	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	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
	Bakerfield	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
	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
	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
	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
	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
	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
	Lost Hills	0.6	1.1	2.6	4.4	7.0	7.7	8.5	7.1	5.0	3.9	0.8	0.4	49.0
	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

Section 495 Continued

County	City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann. Eto
Kings	Corcoran	0.9	1.5	3.3	5.2	7.2	7.9	8.4	7.3	5.8	3.4	1.4	0.7	53.1
	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 City	1.0	1.8	3.4	5.3	7.2	7.9	8.4	7.4	5.9	3.7	1.7	1.0	54.6
	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
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	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
	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
	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
	Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	2.0	50.1
	Long Beach	2.2	2.5	3.4	3.8	4.8	5.0	5.3	4.9	4.5	3.4	2.4	2.0	44.0
	Palmdale	2.0	2.7	4.2	5.1	7.6	8.5	9.9	9.8	6.7	4.2	2.6	1.7	64.8
	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
	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	
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	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
	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
	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
	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
	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	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
	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
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	Castroville	1.6	1.8	2.7	3.5	4.4	4.4	4.5	4.2	3.8	2.8	1.8	1.3	36.7
	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
	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
	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
	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	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	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
	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
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
	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

Section 495 Continued

County	City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann. Eto
Plumas	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
	Portola	-0.7	0.9	2.0	3.5	4.9	5.9	7.3	5.9	4.3	2.7	0.9	0.5	39.4
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	3.2	4.2	6.7	8.9	11.1	12.4	12.8	11.1	9.1	6.7	4.0	2.7	92.9
	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	2.0	55.0
	Indio	2.9	4.0	6.2	8.3	10.5	11.9	12.3	10.0	8.9	6.4	3.8	2.4	87.6
	Palm Desert	2.0	3.5	4.9	7.7	8.5	10.6	9.8	9.2	8.4	6.1	2.7	1.8	75.1
	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
	Riverside	2.1	2.9	4.0	4.1	6.1	7.1	7.9	7.6	6.1	4.2	2.6	2.0	56.6
Sacramento	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
	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
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 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	2.6	3.6	5.7	7.9	10.1	11.6	12.0	10.4	8.6	5.7	3.3	2.1	83.6
	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
	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
	Lucerne Valley	2.2	2.9	5.1	6.5	9.2	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3
	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	2.3	3.1	4.9	6.7	9.3	10.0	11.2	9.8	7.4	5.1	2.8	1.8	74.6
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	2.1	2.8	3.8	4.7	5.6	6.7	6.8	6.5	5.4	3.8	2.5	2.0	52.6
	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
	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	2.5	4.0	4.7	5.6	6.5	7.3	7.0	5.6	3.9	2.5	1.7	53.4
	San Diego	2.2	2.5	3.3	3.4	4.4	4.0	4.6	4.6	3.9	3.3	2.2	2.0	40.6
	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
	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
	Lodi	0.9	1.5	2.9	5.1	6.5	7.0	7.7	7.7	5.2	3.1	1.3	0.7	49.5
	Manteca	1.5	1.5	3.0	4.7	6.4	7.6	8.1	6.8	5.3	3.3	1.4	0.6	50.1
	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
	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	Half 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
Santa Barbara	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
	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
	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
	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
	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	2.2	3.2	4.0	5.0	5.1	5.1	5.1	4.5	3.5	2.4	1.7	43.7
	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

Section 495 Continued

County	City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann. Eto
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
	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	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
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
	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
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
	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
	Tulelake	0.5	0.9	2.1	3.4	5.3	5.9	7.9	6.7	4.4	2.7	0.9	0.5	41.2
	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	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
	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
Sonoma	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
	Hearlidsburg	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
Stanislaus	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
	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	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	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
	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
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
Toulomme	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
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
	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
	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	1.0	1.8	3.4	5.4	7.0	8.2	8.4	7.2	5.7	3.8	1.7	0.9	54.3
Ventura	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
	Thousand Oaks	2.2	2.7	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	2.7	3.2	3.8	4.6	4.7	5.5	4.9	4.1	3.4	2.5	2.0	43.5
Yolo	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
	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
Yuba	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
	Average	1.4	1.9	3.2	4.6	6.0	6.9	7.6	6.8	5.3	3.6	1.8	1.1	50.2
	Max	3.2	4.4	6.7	8.9	11.1	12.4	12.8	11.1	9.1	6.7	4.0	2.7	92.9
	Min	0.5	0.7	1.7	2.5	3.7	3.5	3.7	3.7	3.0	2.0	0.7	0.4	27.5

CHAPTER 1145

An act to add Article 10.8 (commencing with Section 65590) to Chapter 3 of Division 1 of Title 7 of the Government Code, relating to water conservation.

[Approved by Governor September 20, 1990. Filed with Secretary of State September 21, 1990.]

LEGISLATIVE COUNSEL'S DIGEST

AB 325, Clute. Water conservation: landscaping ordinance.

(1) Under existing law, local agencies are not required to adopt ordinances concerning landscape water conservation.

This bill would require the Department of Water Resources by February 1, 1991, to appoint an advisory task force to work with the department in the drafting of a model water efficient landscape ordinance and to submit the recommended ordinance to the department by May 1, 1991. The bill would require the department by January 1, 1992, after holding a public hearing, based on recommendations of the task force, to adopt a model local water efficient landscape ordinance which each local agency, as defined, may adopt. The bill would provide that if any local agency has not adopted a water landscape ordinance or findings, based on specified factors, that no ordinance is necessary, by January 1, 1993, the model ordinance shall take effect and shall be enforced by that local agency and have the same force and effect as if adopted by that local agency. The bill would require each local agency, not later than January 31, 1993, to file with the department a copy of the water efficient landscape ordinance adopted, or the findings which state that no ordinance is necessary, thereby imposing a state-mandated local program.

The bill would require the department to report to the Legislature on the status of these local ordinances by July 1, 1993.

The bill would require the model ordinance to contain specified provisions and would specify related matters.

The bill would make legislative findings and declarations and would declare legislative intent.

(2) 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 no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. Article 10.8 (commencing with Section 65590) is added to Chapter 3 of Division 1 of Title 7 of the Government Code, to read:

Article 10.8. Water Conservation in Landscaping

65590. This article may be cited and shall be known as the Water Conservation in Landscaping Act.

65591. 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, and maintenance can and should be water efficient.

65591.5. (a) It is the intent of the Legislature that the Department of Water Resources prepare and promote the use of a model water efficient landscape ordinance which local agencies may adopt.

(b) It is the intent of the Legislature that the Department of Water Resources adopt a model water efficient landscape ordinance based on recommendations from a task force representing the landscape, water, and building industries, local agencies, and others.

(c) It is the intent of the Legislature that the task force reach general agreement on those provisions which will be included in the model water efficient landscape ordinance.

(d) It is the intent of the Legislature that the task force consider the most recent information on efficient landscape irrigation technologies and those elements of existing water efficient landscape ordinances which have proven successful in reducing water consumption.

(e) It is the intent of the Legislature that the model water efficient landscape ordinance developed pursuant to this article promote the most efficient use of water in the landscape while respecting the economic, environmental, aesthetic, and lifestyle choices of individuals and property owners.

65592. Unless the context requires otherwise, the definitions used in this section 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.

(c) "Water efficient landscape ordinance" means an ordinance or resolution adopted by a local agency to address the efficient use of water in landscaping.

65593. Not later than February 1, 1991, the department shall appoint an advisory task force to work with department staff in the drafting of a model water efficient landscape ordinance. The task force shall consist of the following members:

(a) One member selected from a list provided by the League of California Cities.

(b) One member selected from a list provided by the County Supervisors Association of California.

(c) One member selected from a list provided by a recognized professional association in California representing water agencies.

(d) One member selected from a list provided by a recognized association in California representing commercial builders.

(e) One member selected from a list provided by a recognized professional association in California representing residential builders.

(f) One member representing a nonprofit environmental protection organization or a water conservation organization whose principal purpose includes promoting the efficient use of water or water conservation.

(g) One member selected from a list provided by a recognized professional association in California representing the nursery industry.

(h) One member selected from a list provided by a recognized professional association in California representing landscape contractors.

(i) One member selected from a list provided by a recognized professional association in California representing landscape architects.

(j) One member selected from a list provided by a recognized professional association in California representing the manufacturers or designers of irrigation equipment.

(k) One member representing the Green Industry Council of California.

(l) One member selected from a list provided by a recognized association in California representing the growers or producers of turf grass.

(m) One member selected by the Director of Water Resources.

Membership of the task force shall, to the extent practicable, be representative of the state's cultural, racial, and ethnic diversity and gender balance.

All meetings of the task force shall be subject to Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code.

The Legislature declares that some individuals appointed as

members of the task force must be chosen as representatives of the industries and professions impacted by local water conservation ordinances, and that their representation of these industries and professions does serve the general public interest as they have unique information, expertise, and experience on the issue of water conservation and landscaping that should be taken into consideration by the department as it considers the development of model water conservation ordinances. Therefore, for purposes of persons who hold this office, the industries and professions which are represented on the task force constitute the public generally within the meaning of Section 87103 of the Government Code in those decisions impacting those specific industries and professions, unless the results of their actions taken as task force members have a material financial effect on those members distinguishable from their effect on other members of their respective industries and professions generally.

The task force shall submit the recommended model local water efficient landscape ordinance to the department on or before May 1, 1991.

The department shall adopt a model local water efficient landscape ordinance based on the recommendations of the task force.

The task force shall cease to exist on the date the department adopts a model local water efficient landscape ordinance or January 1, 1992, whichever occurs first.

65594. (a) Not later than January 1, 1992, after holding a public hearing, the department, based on recommendations of the task force established pursuant to Section 65593, shall adopt a model local water efficient landscape ordinance which each local agency may adopt.

(b) In developing the model ordinance, the task force shall recognize and promote the benefits of consistent local ordinances in areas having similar climatic, geological, or topographical conditions.

(c) The department shall notify and deliver a copy of the model local water efficient landscape ordinance to the Joint Legislative Budget Committee. The Joint Legislative Budget Committee shall have 60 days to review the model ordinance before it is formally adopted by the department.

(d) Not later than January 31, 1992, the department shall distribute the adopted model ordinance to all local agencies and other interested parties.

(e) The department shall promote the benefits of consistent local ordinances in areas having similar climatic, geological, or topographical areas.

65595. If by January 1, 1993, a local agency has not adopted a water efficient landscape ordinance or has not adopted findings based on climatic, geological, or topographical conditions, or water availability, which state that a water efficient landscape ordinance is unnecessary, the model water efficient landscape ordinance adopted

by the department pursuant to subdivision (a) of Section 65594 shall take effect on January 1, 1993, and shall be enforced by the local agency and have the same force and effect as if adopted by the local agency.

65596. To the extent feasible, local agencies that adopt a water efficient landscape ordinance after the model water efficient landscape ordinance is adopted by the department, shall consider the provisions of the model.

65597. The proposed model ordinance shall contain, but not be limited to, the following:

(a) Provisions for water conservation through the appropriate use and groupings of plants that are well adapted to particular sites and to particular climatic, geological, or topographical conditions. The model ordinance shall not prohibit or require specific plant species, but it may include conditions for the use of plant species. However, the model shall not include conditions which have the effect of prohibiting or requiring specific plant species.

(b) Provisions for the use of automatic irrigation systems and seasonal irrigation schedules, incorporating water conservation design and utilizing methods appropriate for specific terrains, soil types, wind conditions, temperatures, and other environmental factors, in order to ensure a high degree of water efficiency.

(c) Provisions for 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.

(d) Provisions for the use of reclaimed water supplied through dual distribution systems, if feasible and cost effective, and subject to appropriate health standards.

(e) Provisions to educate water users on the efficient use of water and the benefits of doing so.

(f) Provisions addressing regional differences where necessary and feasible, including fire prevention needs.

(g) Provisions to exempt landscaping which is part of a registered historical site, where feasible.

(h) Provisions for the use of economic incentives to promote the efficient use of water, where feasible.

(i) Provisions for landscape maintenance practices which foster long-term landscape water conservation. Landscape maintenance practices may include, but are not limited to, performing routine irrigation system repair and adjustments, scheduling irrigation based on CIMIS (California Irrigation Management Information System), conducting water audits, and prescribing the amount of water applied per landscaped acre.

65598. The proposed model ordinance shall exempt cemeteries from all provisions of the ordinance except those provisions adopted to conform with subdivisions (e), (h), and (i) of Section 65597. In adopting language specific to cemeteries, the task force shall

recognize their special landscape management needs.

65599. Not later than January 31, 1993, each local agency shall file with the department a copy of the water efficient landscape ordinance adopted pursuant to Section 65595, or adopted before the effective date of this article, or the findings which state that a water efficient landscape ordinance is unnecessary. Not later than July 1, 1993, the department shall prepare and submit a report to the Legislature summarizing the status of water efficient landscape ordinances adopted by local agencies.

65600. 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. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act. Notwithstanding Section 17580 of the Government Code, unless otherwise specified in this act, the provisions of this act shall become operative on the same date that the act takes effect pursuant to the California Constitution.