entering into the loan contract. For investor–owned utilities, meetings or hearings held by the Public Utilities Commission may serve as Project Feasibility Meetings.

(b) Before a Project Feasibility Meeting, the supplier shall:

(1) Make available information describing the project in a form and location that will enable the water users to review it and to make appropriate comments. The information must be made available for a period of at least fifteen days before the Project Feasibility Meeting.

(2) Establish a date for the meeting agreeable to the Department and Department of Health Services.

(3) Notify the Department, the Department of Health Services and appropriate county health agencies in writing at least twenty calendar days before the meeting, and notify all water users and the local news media in writing at least fifteen calendar days before the meeting. The notice shall state: the date, time, location, and purpose of the meeting and the location of information describing the project for review by the water users. Sample notice forms will be provided by the Department.

(4) Obtain a meeting place of sufficient size and at a convenient location to accommodate the anticipated attendance.

(c) The agenda of the meeting shall include the following matters: (1) A discussion of applicable public health and water works standards, existing and potential health hazards associated with the water system, how the proposed project will bring the system to minimum health standards, and alternative solutions to the problem. (2) The supplier shall describe the proposed project in detail, using maps, charts, and other illustrative devices, if appropriate. The discussion shall include the costs, sources of funds, the amount of the loan–grant commitment, and changes in water costs resulting from the project.

(3) A representative of the State may describe the Act, the State's role in its administration and the Department's recommendation regarding the supplier's loan application. Persons present at the meeting shall be permitted to ask questions regarding all subjects discussed at the meeting.

(d) If no representative of the Department is present at the meeting, the supplier shall submit an official written report to the Department describing the meeting and its outcome including the results of any vote taken.

NOTE: Authority cited: Section 13834, Water Code. Reference: Section 13834, Water Code.

§ 489.1. Plans and Specifications.

Before commencing construction, each Supplier shall provide detailed plans and specifications to the Department of Health Services for review and approval by a registered Civil Engineer employed by the Department of Health Services. Unless otherwise authorized in writing by the Department of Health Services, the supplier shall not commence construction without written notification from the Department of Health Services that the plans and specifications have been approved.

NOTE: Authority cited: Section 13834, Water Code. Reference: Section 13837, Water Code.

§ 489.2. Certification of Completion.

Department of Health Services shall inspect the completed project and if satisfied that the project has been completed in accordance with approved plans and specifications, shall provide the supplier and the Department with written certification to that effect.

NOTE: Authority cited: Section 13834, Water Code. Reference: Section 13834, Water Code.

Chapter 2.6. Weather Resources Management [Repealed]

NOTE: Authority cited: Sections 161, 401, 403 and 6078, Water Code. Reference: Sections 401, 402 and 403, Water Code and Sections 21000 et seq., Public Resources Code.

HISTORY

1. New Subchapter 2.6 (Articles 1–5, Sections 490–495.03, not consecutive) filed 6–28–79; effective thirtieth day thereafter (Register 79, No. 39).
2. Repealer of Subchapter 2.6 (Articles 1–5, Sections 490–495.03, not consecutive, not previously repealed by OAL Order of Repeal) filed 6–5–86; effective thirtieth day thereafter (Register 86, No. 23). For prior history, see Register 85, No. 26; 81, Nos. 40 and 38; and 80, No. 7.

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;

(5) that landscape design, installation, maintenance and management can and should be water efficient;

(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 the legislative findings, the purpose of this model ordinance is to:

(1) promote the values and benefits of landscaping practices that integrate and go beyond the conservation and efficient use of water;

(2) establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects by encouraging the use of a watershed approach that requires cross–sector collaboration of industry, government and property owners to achieve the many benefits possible;

(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.

(c) Landscapes that are planned, designed, installed, managed and maintained with the watershed based approach can improve California's environmental conditions and provide benefits and realize sustainability goals. Such landscapes will make the urban environment resilient in the face of climatic extremes. Consistent with the legislative findings and purpose of the Ordinance, conditions in the urban setting will be improved by:

(1) Creating the conditions to support life in the soil by reducing compaction, incorporating organic matter that increases water retention, and promoting productive plant growth that leads to more carbon storage, oxygen production, shade, habitat and esthetic benefits.

(2) Minimizing energy use by reducing irrigation water requirements, reducing reliance on petroleum based fertilizers and pesticides, and planting climate appropriate shade trees in urban areas.

(3) Conserving water by capturing and reusing rainwater and graywater wherever possible and selecting climate appropriate plants that need minimal supplemental water after establishment.

(4) Protecting air and water quality by reducing power equipment use and landfill disposal trips, selecting recycled and locally sourced materi-

als, and using compost, mulch and efficient irrigation equipment to prevent erosion.

(5) Protecting existing habitat and creating new habitat by choosing local native plants, climate adapted non–natives and avoiding invasive plants. Utilizing integrated pest management with least toxic methods as the first course of action.

NOTE: Authority cited: Section 65593, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Sections 65591, 65593 and 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New chapter 2.7 (sections 490–495) filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Amendment of section and NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of subsections (a)(4) and (b)(1)–(2), new subsections (c)–(c)(5) and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 490.1. Applicability.

(a) After December 1, 2015, and consistent with Executive Order No. B–29–15, this ordinance shall apply to all of the following landscape projects:

(1) new construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review;

(2) rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;

(3) existing landscapes limited to Sections 493, 493.1 and 493.2; and

(4) 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) For local land use agencies working together to develop a regional water efficient landscape ordinance, the reporting requirements of this ordinance shall become effective December 1, 2015 and the remainder of this ordinance shall be effective no later than February 1, 2016.

(c) Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix D.

(d) For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2500 sq. ft. of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Appendix D section (5).

(e) 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) existing plant collections, as part of botanical gardens and arboretums open to the public.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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 a timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self–adjust and 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) "compost" means the safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.

(j) "conversion factor (0.62)" means the number that converts acre–inches per acre per year to gallons per square foot per year.

(k) "distribution uniformity" means the measure of the uniformity of irrigation water over a defined area.

(*l*) "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.

(m) "ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

(n) "effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth.

(o) "emitter" means a drip irrigation emission device that delivers water slowly from the system to the soil.

(p) "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.

(q) "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. Native habitat mitigation areas and trees may need three to five years for establishment.

(r) "Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in Section 492.4.

(s) "ET adjustment factor" (ETAF) means a factor of 0.55 for residential areas and 0.45 for non–residential areas, 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. The ETAF for new and existing (non–rehabilitated) Special Landscape Areas shall not exceed 1.0. The ETAF for existing non–rehabilitated landscapes is 0.8.

(t) "evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

(u) "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.

(v) "flow sensor" means an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller, or flow monitor capable of receiving flow signals and operating master valves. This combination flow sensor/controller may also function as a landscape water meter or submeter.

(w) "friable" means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.

(x) "Fuel Modification Plan Guideline" means guidelines from a local fire authority to assist residents and businesses that are developing land or building structures in a fire hazard severity zone.

(y) "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Health and Safety Code Section 17922.12.

(z) "hardscapes" means any durable material (pervious and non–pervious).

(aa) "hydrozone" means a portion of the landscaped area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or non–irrigated.

(bb) "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).

(cc) "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. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

(dd) "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. The audit must be conducted in a manner consistent with the Irrigation Association's Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency "Watersense" labeled auditing program.

(ee) "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 irrigation efficiency for purposes of this ordinance are 0.75 for overhead spray devices and 0.81 for drip systems.

(ff) "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.

(gg) "irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.

(hh) "landscape architect" means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

(ii) "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).

(jj) "landscape contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

(kk) "Landscape Documentation Package" means the documents required under Section 492.3.

(*ll*) "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.

(mm) "landscape water meter" means an inline device installed at the irrigation supply point that measures the flow of water into the irrigation system and is connected to a totalizer to record water use.

(nn) "lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

(oo) "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.

(pp) "local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.

(qq) "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.

(rr) "main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet.

(ss) "master shut–off valve" is an automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

(tt) "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. MAWA = (ETo) (0.62) [(ETAF x LA) + ((1–ETAF) x SLA)]

(uu) "median" is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

(vv) "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.

(ww) "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.

(xx) "mulch" means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, or 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.

(yy) "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.

(zz) "non–residential landscape" means landscapes in commercial, institutional, industrial and public settings that may have areas designated for recreation or public assembly. It also includes portions of common areas of common interest developments with designated recreational areas.

(aaa) "operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

(bbb) "overhead sprinkler irrigation systems" or "overhead spray irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors).

(ccc) "overspray" means the irrigation water which is delivered beyond the target area.

(ddd) "parkway" means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

(eee) "permit" means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.

(fff) "pervious" means any surface or material that allows the passage of water through the material and into the underlying soil.

(ggg) "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 very low water use plants is 0 to 0.1, the plant factor range for low water use plants is 0.1 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 publication "Water Use Classification of Landscape Species". Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).

(hhh) "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.

(iii) "rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains.

(jjj) "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.

(kkk) "recreational area" means areas, excluding private single family residential areas, designated for active play, recreation or public assembly in parks, sports fields, picnic grounds, amphitheaters or golf course tees, fairways, roughs, surrounds and greens.

(*lll*) "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 and water features. This water is not intended for human consumption.

(mmm) "reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix A, 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.

(nnn) "Regional Water Efficient Landscape Ordinance" means a local Ordinance adopted by two or more local agencies, water suppliers and other stakeholders for implementing a consistent set of landscape provisions throughout a geographical region. Regional ordinances are strongly encouraged to provide a consistent framework for the landscape industry and applicants to adhere to.

(ooo) "rehabilitated landscape" means any relandscaping 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.

(ppp) "residential landscape" means landscapes surrounding single or multifamily homes.

(qqq) "run off" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape 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 slope.

(rrr) "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.

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

(ttt) "Special Landscape Area" (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.

(uuu) "sprinkler head" or "spray head" means a device which delivers water through a nozzle.

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

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

(xxx) "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.

(yyy) "submeter" means a metering device to measure water applied to the landscape that is installed after the primary utility water meter.

(zzz) "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.

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

(bbbb) "water conserving plant species" means a plant species identified as having a very low or low plant factor.

(cccc) "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.

(dddd) "watering window" means the time of day irrigation is allowed.

(eeee) "WUCOLS" means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension and the Department of Water Resources 2014.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Sections 65592 and 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Amendment of section and NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492. Provisions for New Construction or Rehabilitated Landscapes.

(a) A local agency may designate by mutual agreement, 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; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596,

Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Amendment of section heading, repealer and new section and amendment of NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 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.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 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.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 492.4. Water Efficient Landscape Worksheet.

(a) A project applicant shall complete the Water Efficient Landscape Worksheet in Appendix B which contains information on the plant factor, irrigation method, irrigation efficiency, and area associated with each hydrozone. Calculations are then made to show that the evapotranspiration adjustment factor (ETAF) for the landscape project does not exceed a factor of 0.55 for residential areas and 0.45 for non–residential areas, exclusive of Special Landscape Areas. The ETAF for a landscape project is based on the plant factors and irrigation methods selected. The Maximum Applied Water Allowance is calculated based on the maximum ETAF allowed (0.55 for residential areas and 0.45 for non–residential areas) and expressed as annual gallons required. The Estimated Total Water Use (ETWU) is calculated based on the plants used and irrigation method selected for the landscape design. ETWU must be below the MAWA.

(1) In calculating 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 or from horticultural researchers with academic institutions or professional associations as approved by the California Department of Water Resources (DWR). The plant factor ranges from 0 to 0.1 for very low water using plants, 0.1 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 shown in Appendix B.

(4) ETAF for new and existing (non–rehabilitated) Special Landscape Areas shall not exceed 1.0.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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 shall 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.

(C) In projects with multiple landscape installations (i.e. production home developments) a soil sampling rate of 1 in 7 lots or approximately 15% will satisfy this requirement. Large landscape projects shall sample at a rate equivalent to 1 in 7 lots.

(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; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of subsection (a)(1)(B), new subsection (a)(1)(C) and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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. Methods to achieve water efficiency shall include one or more of the following:

1. protection and preservation of native species and natural vegetation;

2. selection of water–conserving plant, tree and turf species, especially local native plants;

3. selection of plants based on local climate suitability, disease and pest resistance;

4. selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area; and

5. selection of plants from local and regional landscape program plant lists.

6. selection of plants from local Fuel Modification Plan Guidelines.

(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. Methods to achieve water efficiency shall include one or more of the following:

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]; allow for adequate soil volume for healthy root growth; 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) High water use plants, characterized by a plant factor of 0.7 to 1.0, are prohibited in street medians.

(F) 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. Refer to the local Fuel Modification Plan guidelines.

(G) The use of invasive plant species, such as those listed by the California Invasive Plant Council, is strongly discouraged.

(H) 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) Soil Preparation, Mulch and Amendments

(A) Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need meet this requirement.

(B) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).

(C) For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil. Soils with greater than 6% organic matter in the top 6 inches of soil are exempt from adding compost and tilling.

(D) A minimum three inch (3″) 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. To provide habitat for beneficial insects and other wildlife, up to 5 % of the landscape area may be left without mulch. Designated insect habitat must be included in the landscape design plan as such.

(E) Stabilizing mulching products shall be used on slopes that meet current engineering standards.

(F) The mulching portion of the seed/mulch slurry in hydro–seeded applications shall meet the mulching requirement.

(G) Organic mulch materials made from recycled or post–consumer shall take precedence over inorganic materials or virgin forest products unless the recycled post–consumer organic products are not locally available. Organic mulches are not required where prohibited by local Fuel Modification Plan Guidelines or other applicable local ordinances.

(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, installation details, and 24–hour retention or infiltration capacity of any applicable stormwater best management practices that encourage on–site retention and infiltration of stormwater. Project applicants shall refer to the local agency or regional Water Quality Control Board for information on any applicable stormwater technical requirements. Stormwater best management practices are encouraged in the landscape design plan and examples are provided in Section 492.16.

(11) identify any applicable rain harvesting or catchment technologies as discussed in Section 492.16 and their 24–hour retention or infiltration capacity;

(12) identify any applicable graywater discharge piping, system components and area(s) of distribution;

(13) 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

(14) bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.).

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; Section 1351, Civil Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.7. Irrigation Design Plan.

(a) This section applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. 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) Landscape water meters, defined as either a dedicated water service meter or private submeter, shall be installed for all non–residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000 sq.ft. (the level at which Water Code 535 applies) and residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either:

1. a customer service meter dedicated to landscape use provided by the local water purveyor; or

2. a privately owned meter or submeter.

(B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non–volatile memory shall be required for irrigation scheduling in all irrigation systems.

(C) If the water pressure is below or exceeds the recommended pressure of the specified irrigation devices, the installation of a pressure regulating device is required 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) Flow sensors that detect high flow conditions created by system damage or malfunction are required for all on non–residential landscapes and residential landscapes of 5000 sq. ft. or larger.

(H) Master shut–off valves are required on all projects except landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features.

(I) 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.

(J) Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

(K) The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

(L) 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.

(M) All irrigation emission devices must meet the requirements set in the American National Standards Institute (ANSI) standard, American Society of Agricultural and Biological Engineers'/International Code Council's (ASABE/ICC) 802–2014 "Landscape Irrigation Sprinkler and Emitter Standard, All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802–2014.

(N) 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.

(O) In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

(P) Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

(Q) Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

(R) Swing joints or other riser–protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.

(S) Check valves or anti–drain valves are required on all sprinkler heads where low point drainage could occur.

(T) Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

(U) 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)(I). Prevention of overspray and runoff must be confirmed during the irrigation audit.

(V) Slopes greater than 25% shall not be irrigated with an irrigation system with a application 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 to facilitate the appropriate irrigation of trees. The mature size and extent of the root zone shall be considered when designing irrigation for the tree.

(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 Title16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 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;

(B) A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes.

(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; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. New subsection (a)(2)(B) and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 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; auditing, adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; topdressing with compost, replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing obstructions 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 or with components with greater efficiency.

(d) A project applicant is encouraged to implement established landscape industry sustainable Best Practices for all landscape maintenance activities.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

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

(a) All landscape irrigation audits shall be conducted by a local agency landscape irrigation auditor or a third party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed the landscape or installed the landscape.

(b) In large projects or projects with multiple landscape installations (i.e. production home developments) an auditing rate of 1 in 7 lots or approximately 15% will satisfy this requirement.

(c) For new construction and rehabilitated landscape projects installed after December 1, 2015, 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, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and any other factors necessary for accurate programming;

(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; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.13. Irrigation Efficiency.

(a) For the purpose of determining Estimated Total Water Use, average irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596,

Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.14. Recycled Water.

(a) The installation of recycled water irrigation systems shall allow for the current and future use of recycled water.

(b) All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.

(c) Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for new and existing (non–rehabilitated) Special Landscape Areas shall not exceed 1.0.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.15. Graywater Systems.

(a) Graywater systems promote the efficient use of water and are encouraged to assist in on–site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards. Refer to § 490.1 (d) for the applicability of this ordinance to landscape areas less than 2,500 square feet with the Estimated Total Water Use met entirely by graywater.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Renumbering of former section 492.15 to 492.16, new section 492.15 and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.16. Stormwater Management and Rainwater Retention.

(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 rainwater 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 technical requirements.

(c) All planted landscape areas are required to have friable soil to maximize water retention and infiltration. Refer to § 492.6(a)(3).

(d) It is strongly recommended that landscape areas be designed for capture and infiltration capacity that is sufficient to prevent runoff from impervious surfaces (i.e. roof and paved areas) from either: the one inch, 24–hour rain event or (2) the 85th percentile, 24–hour rain event, and/or additional capacity as required by any applicable local, regional, state or federal regulation.

(e) It is recommended that storm water projects incorporate any of the following elements to improve on–site storm water and dry weather runoff capture and use:

- Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.
- Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.
- Incorporate pervious or porous surfaces (e.g., gravel, permeable pavers or blocks, pervious or porous concrete) that minimize runoff.
- Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water capture and reuse.
- Incorporate rain gardens, cisterns, and other rain harvesting or catchment systems.
- Incorporate infiltration beds, swales, basins and drywells to capture storm water and dry weather runoff and increase percolation into the soil.
- Consider constructed wetlands and ponds that retain water, equalize excess flow, and filter pollutants.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Renumbering of former section 492.16 to section 492.17 and renumbering of former section 492.15 to new section 492.16, including amendment of section heading, section and NOTE, filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.17. 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 or water supplier/purveyor shall provide information to owners of permitted renovations and new, single–family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes based on a water budget.

(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. Signage shall include information about the site water use as designed per the local ordinance; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.

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

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Renumbering of former section 492.17 to new section 492.18 and renumbering of former section 492.16 to new section 492.17, including amendment of section and NOTE, filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.18. 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; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Sections 21080 and 21082, Public Resources Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. Renumbering of former section 492.17 to new section 492.18, including amendment of NOTE, filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 493. Provisions for Existing Landscapes.

(a) A local agency may by mutual agreement, 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; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Repealer and new section and amendment of NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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 December 1, 2015 and are over one acre in size.

(1) For all landscapes in 493.1 (a) that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as: MAWA = (0.8) (ETo) (LA) (0.62).

(2) For all landscapes in 493.1(a), that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

(b) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of subsection (a) and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 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.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 494. Effective Precipitation.

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

MAWA= (ETo – Eppt) (0.62) [(0.55 x LA) + (0.45 x SLA)] for residential areas.

MAWA= (ETo–EPPT) (0.62) [(0.45 x LA) + (0.55 x SLA)] for non–residential areas.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. Repealer and new section; new NOTE and new Appendices A–C filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 495. Reporting.

(a) Local agencies shall report on implementation and enforcement by December 31, 2015. Local agencies responsible for administering individual ordinances shall report on their updated ordinance, while those agencies developing a regional ordinance shall report on their existing ordinance. Those agencies crafting a regional ordinances shall also report on their new ordinance by March 1, 2016. Subsequently, reporting for all agencies will be due by January 31st of each year. Reports shall be submitted to the Department of Water Resources.

(b) Local agencies are to address the following:

(1) State whether you are adopting a single agency ordinance or a regional agency alliance ordinance, and the date of adoption or anticipated date of adoption.

(2) Define the reporting period. The reporting period shall commence on December 1, 2015 and the end on December 28, 2015. For local agencies crafting regional ordinances with other agencies, there shall be an additional reporting period commencing on February 1, 2016 and ending on February 28, 2016. In subsequent years, all local agency reporting will be for the calendar year.

(3) State if using a locally modified Water Efficient Landscape Ordinance (WELO) or the MWELO. If using a locally modified WELO, how is it different than MWELO, is it at least as efficient as MWELO, and are there any exemptions specified?

(4) State the entity responsible for implementing the ordinance.

(5) State number and types of projects subject to the ordinance during the specified reporting period.

(6) State the total area (in square feet or acres) subject to the ordinance over the reporting period, if available.

(7) Provide the number of new housing starts, new commercial projects, and landscape retrofits during the reporting period.

(8) Describe the procedure for review of projects subject to the ordinance.

(9) Describe actions taken to verify compliance. Is a plan check performed; if so, by what entity? Is a site inspection performed; if so, by what entity? Is a post–installation audit required; if so, by whom?

(10) Describe enforcement measures.

(11) Explain challenges to implementing and enforcing the ordinance.

(12) Describe educational and other needs to properly apply the ordinance.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38). For prior history, see Register 2009, No. 37.

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
STANISLAUS													
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
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

HISTORY

1. New Appendix A filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Repealer and new Appendix A filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

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.

Reference Evapotranspiration (ETo) _____

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
				Totals	(A)	(B)	
Special Landscape Areas							
				1			
				1			
				1			
				Totals	(C)	(D)	
						ETWU Total	
			Maximum Allowed Water Allowance (MAWA)[e]				

[a] ***Hydrozone #/Planting Description***
E.g
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method***
overhead spray or drip

[c] ***Irrigation Efficiency***
0.75 for spray head
0.81 for drip

[d] ***ETWU*** **(Annual Gallons Required) =**
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed)*** *= (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF	**B ÷ A**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	**(B+D) ÷ (A+C)**

HISTORY

1. New Appendix B filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Repealer and new Appendix B filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

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 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 492.6.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.6.

HISTORY

1. New Appendix C filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Repealer and new Appendix C filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

Appendix D — Prescriptive Compliance Option.

(a) This appendix contains prescriptive requirements which may be used as a compliance option to the Model Water Efficient Landscape Ordinance.

(b) Compliance with the following items is mandatory and must be documented on a landscape plan in order to use the prescriptive compliance option:

(1) Submit a Landscape Documentation Package which includes the following elements:

(A) date

(B) project applicant

(C) project address (if available, parcel and/or lot number(s))

(D) total landscape area (square feet), including a breakdown of turf and plant material

(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) contact information for the project applicant and property owner

(H) applicant signature and date with statement, "I agree to comply with the requirements of the prescriptive compliance option to the MWELO".

(2) Incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six inches into landscape area (unless contra–indicated by a soil test);

(3) Plant material shall comply with all of the following;

(A) For residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 75% of the plant area excluding edibles and areas using recycled water; For non–residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 100% of the plant area excluding edibles and areas using recycled water;

(B) A minimum three inch (3″) 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.

(4) Turf shall comply with all of the following:

(A) Turf shall not exceed 25% of the landscape area in residential areas, and there shall be no turf in non–residential areas;

(B) Turf shall not be planted on sloped areas which exceed a slope of 1 foot vertical elevation change for every 4 feet of horizontal length;

(C) Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub–surface irrigation or by other technology that creates no overspray or runoff.

(5) Irrigation systems shall comply with the following:

(A) Automatic irrigation controllers are required and must use evapotranspiration or soil moisture sensor data and utilize a rain sensor.

(B) Irrigation controllers shall be of a type which does not lose programming data in the event the primary power source is interrupted.

(C) Pressure regulators shall be installed on the irrigation system to ensure the dynamic pressure of the system is within the manufacturers recommended pressure range.

(D) Manual shut–off valves (such as a gate valve, ball valve, or butterfly valve) shall be installed as close as possible to the point of connection of the water supply.

(E) All irrigation emission devices must meet the requirements set in the ANSI standard, ASABE/ICC 802–2014. "Landscape Irrigation Sprinkler and Emitter Standard," All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802–2014.

(F) Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

(6) For non–residential projects with landscape areas of 1,000 sq. ft. or more, a private submeter(s) to measure landscape water use shall be installed.

(c) At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule and a schedule of landscape and irrigation maintenance.

HISTORY

1. New Appendix D filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

Chapter 2.7.1. Flood Protection Corridor Program of the Costa–Machado Water Act of 2000

§ 497.1. Scope.

(a) These regulations implement Sections 79035 through 79044, and 79044.9 in Article 2.5 of Chapter 5 of Division 26 of the Water Code, which Division is the Costa–Machado Water Act of 2000. They establish a process for funding acquisition of property rights and related activities for flood protection corridor projects undertaken by the Department of Water Resources directly or through grants to local public agencies or nonprofit organizations.

(b) The Flood Protection Corridor Program is statewide in scope. Within the geographic scope of the CALFED Bay–Delta Program, funds in the subaccount for this program shall be used for projects that, to the greatest extent possible, are consistent with the CALFED long–term plan identified in the Programmatic Record of Decision of August 28, 2000.

NOTE: Authority cited: Sections 8300, 12580 and 79044.9, Water Code; 2000 Cal. Stat. Ch. 52, Item No. 3860–101–6005; 2001 Cal. Stat. Ch. 106, Item No. 3860–001–0001, Provision 3; and 2002 Cal. Stat. Ch. 379, Item No. 3860–101–6005. Reference: Sections 79037, 79043, 79044 and 79044.9, Water Code

HISTORY

1. New chapter 2.7.1 (sections 497.1–497.12) and section filed 8–19–2003; operative 8–19–2003 pursuant to Government Code section 11343.4 (Register 2003, No. 34).

§ 497.2. Definitions.

The words used in this chapter have meanings set forth as follows:

(a) "A List" means the preferred priority list of projects described in Section 497.6.

(b) "Applicant" means an entity that is acting as the principal party making an application for funding under the provisions of the Costa–Machado Water Act of 2000.

(c) "B List" means the reserve priority list of projects described in Section 497.6.

(d) "CEQA" means the California Environmental Quality Act, Public Resources Code Sections 21000 *et seq.*

(e) "Department" means the California Department of Water Resources.

(f) "Director" means the Director of the Department of Water Resources.

(g) "FEMA" means the Federal Emergency Management Agency.

(h) "Fully funded" with respect to a grant project means funded to the full amount of the requested funds or to the funding limit, whichever is less.

(i) "Grant application form" means the Department's form entitled "Flood Protection Corridor Program Project Evaluation Criteria and Competitive Grant Application Form" dated April 9, 2003 and incorporated herein by this reference.

(j) "Local public agency" means any political subdivision of the State of California, including but not limited to any county, city, city and county, district, joint powers agency, or council of governments.