WATER EFFICIENT LANDSCAPE ORDINANCE SUPPLEMENT LANDSCAPE DOCUMENTATION PACKAGE AND CERTIFICATION OF COMPLETION FORMS

The State of California's Updated Model Water Efficient Landscape Ordinance became effective on December 1, 2015. The State Model Ordinance is in effect in Santa Barbara County. All sections cited in this application package refers to The California Code of Regulations §490 et. seq....

THIS PACKAGE CONTAINS

- ✓ APPLICABILITY
- ✓ DEFINITIONS
- ✓ PERMITTED DOCUMENT PREPARERS
- ✓ SUBMITTAL REQUIREMENTS

South County Office

123 E. Anapamu Street Santa Barbara, CA 93101 Phone: (805) 568-2000 Fax: (805) 568-2030

Website: www.sbcountyplanning.org

North County Office

624 W. Foster Road, Suite C Santa Maria, CA 93455 Phone: (805) 934-6250 Fax: (805) 934-6258 PLEASE COMPLETELY FILL OUT EITHER THE LANDSCAPE DOCUMENTAION PACKAGE OR APPENDIX D PRIOR TO ISSUANCE OF A LAND USE PERMIT, COASTAL DEVELOPMENT PERMIT, OR ZONING CLEARANCE.

PLEASE COMPLETELY FILL OUT CERTIFICATE OF COMPLETION PRIOR TO FINAL BUILDING OCCUPANCY CLEARANCE.

Table of Contents

Application f	Page 4	
Applicability	•	Page 5
Definitions	Page 6	
List of Autho	Page 11	
Elements of t	Page 13	
Water	r Efficient Landscape Worksheet	Page 14
Soil N	Management Report	Page 15
Lands	scape Design Plan	Page 16
Irriga	tion Design Plan	Page 18
Gradi	ng Design Plan	Page 21
Certificate of	Page 22	
Irriga	Page 23	
Lands	Page 24	
Irriga	Page 24	
Irrigation Eff	ïciency	Page 24
Recycled Wa	iter	Page 24
Graywater Sy	ystem	Page 25
Stormwater I	Management and Rainwater Retention	Page 25
Effective Pre	cipitation	Page 25
Appendix A:	Reference Evapotranspiration	Page 26
Appendix B	Sample Water Efficient Worksheet	Page 27
Appendix C	Sample Certificate of Completion	Page 28
Appendix D	Prescriptive Compliance Option	Page 29



PLANNING & DEVELOPMENT PERMIT APPLICATION

ASSESSOR PARCEL NUMBER:	
PARCEL SIZE (acres/sq.ft.): Gross Net	
ZONING: COMPREHENSIVE/COASTAL PLAN DESIGNATION:	
Are there previous permits/applications?	
(include permit# & lot # if tract)	
Did you have a pre-application? □no □yes if yes, who was the planner?	
Are there previous environmental (CEQA) documents? Ino Iyes numbers:	
Project description summary including total square footage of irrigated and non-irrigated landscaping and clarification	of
square footage of turf:	O.
square rootage or turn .	
1. Financially Responsible PersonPhone:FAX:	
(For this project)	
Mailing Address: Street City State Zip	
2. Owner:	
Mailing Address:E-mail:	
Street City State Zip	
3. Agent:	
Street City State Zip	
4. Arch./Designer: Phone:FAX:	
Mailing Address:State/Reg Lic# Street City State Zip	
5. Engineer/Surveyor: Phone: FAX:	
Mailing Address:State/Reg Lic#	
Street City State Zip	
6. Contractor: Phone: FAX: Mailing Address: State/Reg Lic#	
Street City State Zip	
I hereby certify to the best of my knowledge, the information contained in this application and a attached materials are correct, true and complete.	I
Signature Print name/date	
**************************************	*****
COUNTY USE ONLY	
Case Number:Companion Case Number:	
Supervisorial District:Submittal Date:Submittal Date:Submittal Date:Submittal Date:	
Project Planner:	

§ 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.

§ 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 updated by DE 101818

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.
- (000) "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 updated by DE 101818

ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Augustine grass, 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.

List of Authorized Landscape Designers

PERMITTED PRACTICES IN CALIFORNIA

Permitted Practice for Professionals, Practitioners, and Unlicensed Persons

This document has been prepared by the Landscape Architects Technical Committee (LATC), the licensing and regulatory agency for the practice of landscape architecture in California. The purpose of this document is to provide a quick reference regarding the various professionals, practitioners, and unlicensed persons who may offer landscape design services and the permitted scope and/or limitations that pertain to each. Please note that a licensed professional is required when the scope of a particular project demands the applicable professional services. While every effort has been made to ensure the accuracy of this document, it does not have legal effect. Should any difference or error occur, the law will take precedence. For more information, contact the LATC at (916) 575-7230 or latc@dca.ca.gov, or visit www.latc.ca.gov.

LANDSCAPE ARCHITECTS

Hold a professional license to practice landscape architecture. May perform professional services for the purpose of landscape preservation, development, and enhancement, such as consultation, investigation, reconnaissance, research, planning, design, preparation of drawings, construction documents and specifications, and responsible construction observation

APPLICABLE STATUTE: Section 5615 of the Business and Professions Code (BPC)

ARCHITECTS

Hold a professional license to practice architecture. May offer, perform, or be in responsible control of, professional services which require the skills of an architect in the planning of sites.

APPLICABLE STATUTES: Sections 5500.1 and 5641.3 of the BPC

PROFESSIONAL ENGINEERS

Hold professional registration to practice professional engineering. May perform professional services, as defined under BPC 5615, as long as the work is incidental to an engineering project.

APPLICABLE STATUTES: Sections 5615, 5641.3, and 6701 et seq. of the BPC

LANDSCAPE CONTRACTORS

Hold a C-27 (landscaping contractor) license. May design systems and facilities for work to be performed and supervised by that contractor.

APPLICABLE REGULATION/STATUTES: Section 832.27 of the California Code of Regulations, Title 16, Division 8 and Section 5641.4 and 7027.5 of the BPC

NURSERY PERSONS

Hold a license to sell nursery stock. May prepare planting plans or drawings as an adjunct to merchandizing nursery stock and related products.

APPLICABLE STATUTES: Section 5641.2 of the BPC and Section 6721 et seq. of the Food and Agriculture Code

UNLICENSED PERSONS

Landscape/Garden Designers, etc.

May prepare plans, drawings, and specifications for the selection, placement, or use of plants for single family dwellings. May prepare drawings for the conceptual design and placement of tangible objects and landscape features. May NOT prepare construction documents, details, or specifications for tangible landscape objects or landscape features. May NOT prepare grading and drainage plans for the alteration of sites.

Personal Property Owners

May prepare any plans, drawings, or specifications for any property owned by that person.

Golf Course Architects

May engage in the practice of, or offer to practice as, a golf course architect. May perform professional services, such as consultation, investigation, reconnaissance, research, design, preparation of drawings and specifications and responsible supervision, where the dominant purpose of such services is the design of a golf course, in accordance with accepted professional standards of public health and safety.

Irrigation Consultants

May engage in the practice of, or offer to practice as, an irrigation consultant. May perform professional services, such as consultation, investigation, reconnaissance, research, design, preparation of drawings and specifications and responsible supervision, where the dominant purpose of such service is the design of landscape irrigation, in accordance with accepted professional standards of public health and safety.

APPLICABLE STATUTES: Sections 5641, 5641.1, 5641.5, 5641.6 of the BPC

§ 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.

§ 492.4 Water Efficient Landscape Worksheet.

- (a) A project applicant shall complete the Water Efficient Landscape Worksheet which contains two sections (see sample worksheet in Appendix B):
 - (1) a hydrozone information table (see Appendix B, Section A) for the landscape project; and
 - (2) a water budget calculation (see Appendix B, Section B) for the landscape project. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, a project applicant shall use the ETo values from the Reference Evapotranspiration Table in Appendix A. For geographic areas not covered in Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.
- (b) Water budget calculations shall adhere to the following requirements:
 - (1) The plant factor used shall be from WUCOLS. The plant factor ranges from 0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.
 - (2) All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.
 - (3) All Special Landscape Areas shall be identified and their water use calculated as described below.
 - (4) ETAF for Special Landscape Areas shall not exceed 1.0.

§ 492.5 Soil Management Report.

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

§ 492.6 Landscape Design Plan.

- (a) For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.
 - (1) Plant Material
 - (A) Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. To encourage the efficient use of water, the following is highly recommended:
 - 1. protection and preservation of native species and natural vegetation;
 - 2. selection of water-conserving plant and turf species;
 - 3. selection of plants based on disease and pest resistance;
 - 4. selection of trees based on applicable local tree ordinances or tree shading guidelines; and
 - 5. selection of plants from local and regional landscape program plant lists.
 - (B) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D).
 - (C) Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended:
 - 1. use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
 - 2. recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; and
 - 3. consider the solar orientation for plant placement to maximize summer shade and winter solar gain.
 - (D) Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).
 - (E) A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches.
 - (F) The use of invasive and/or noxious plant species is strongly discouraged.
 - (G) The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.
 - (2) Water Features
 - (A) Recirculating water systems shall be used for water features.
 - (B) Where available, recycled water shall be used as a source for decorative water features.
 - (C) Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.
 - (D) Pool and spa covers are highly recommended.
 - (3) Mulch and Amendments
 - (A) A minimum two inch (2") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.
 - (B) Stabilizing mulching products shall be used on slopes.
 - (C) The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

- (D) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).
 - (b) The landscape design plan, at a minimum, shall:
 - (1) delineate and label each hydrozone by number, letter, or other method;
 - (2) identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;
 - (3) identify recreational areas;
 - (4) identify areas permanently and solely dedicated to edible plants;
 - (5) identify areas irrigated with recycled water;
 - (6) identify type of mulch and application depth;
 - (7) identify soil amendments, type, and quantity;
 - (8) identify type and surface area of water features;
 - (9) identify hardscapes (pervious and non-pervious);
 - (10) identify location and installation details of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Stormwater best management practices are encouraged in the landscape design plan and examples include, but are not limited to:
 - (A) infiltration beds, swales, and basins that allow water to collect and soak into the ground;
 - (B) constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and
 - (C) pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.
 - (11) identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, cisterns, etc.);
 - (12) contain the following statement: "I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan"; and
 - (13) bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.)

§ 492.7 Irrigation Design Plan.

(a) For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

(1) System

- (A) Dedicated landscape water meters are highly recommended on landscape areas smaller than 5,000 square feet to facilitate water management.
- (B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling in all irrigation systems.
- (C) The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.
 - 1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.
 - 2. Static water pressure, dynamic or operating pressure. and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.
- (D) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.
- (E) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.
- (F) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.
- (G) High flow sensors that detect and report high flow conditions created by system damage or malfunction are recommended.
- (H) The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, nonirrigated areas, hardscapes, roadways, or structures.
- (I) Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.
- (J) The design of the irrigation system shall conform to the hydrozones of the landscape design plan.
- (K) The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance.
- (L) It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.
- (M) In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
- (N) Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

- (O) Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.
- (P) Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to high traffic areas.
- (Q) Check valves or anti-drain valves are required for all irrigation systems.
- (R) Narrow or irregularly shaped areas, including turf, less than eight (8) feet in width in any direction shall be irrigated with subsurface irrigation or low volume irrigation system.
- (S) Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:
 - 1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or
 - 2 he adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
 - 3. the irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section 492.7 (a)(1)(H). Prevention of overspray and runoff must be confirmed during the irrigation audit.
- (T) Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

(2) Hydrozone

- (A) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.
- (B) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.
- (C) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.
- (D) Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:
 - 1. plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
 - 2. the plant factor of the higher water using plant is used for calculations.
- (E) Individual hydrozones that mix high and low water use plants shall not be permitted.
- (F) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.
- (b) The irrigation design plan, at a minimum, shall contain:
 - (1) location and size of separate water meters for landscape;
 - (2) location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;
 - (3) static water pressure at the point of connection to the public water supply;
 - (4) flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;

- (5) recycled water irrigation systems as specified in Section 492.14;
- (6) the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and
- (7) the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

§ 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.

§ 492.9 Certificate of Completion.

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

§ 492.10 Irrigation Scheduling.

- (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.

§ 492.11 Landscape and Irrigation Maintenance Schedule.

- (a) Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.
- (b) A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing and obstruction to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.
- (c) Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.
- (d) A project applicant is encouraged to implement sustainable or environmentally-friendly practices for overall landscape maintenance.

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

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

§ 492.13 Irrigation Efficiency.

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

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

§ 492.14 Recycled Water.

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

§ 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.

§ 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.

§ 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) [$(0.55 \times LA) + (0.45 \times SLA)$] for residential areas. MAWA = (ETo - EPPT) (0.62) [$(0.45 \times LA) + (0.55 \times SLA)$] for non-residential areas.

Appendix A – Reference Evapotranspiration (ETo) Table for Santa Barbara County

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual ETo
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3	2.7	2.1	49.1
Carpinteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4	2.4	2.0	44.9
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5	2.6	2.0	59.7
Goleta	2.1	2.5	3.9	5.1	5.7	5.7	5.4	5.4	4.2	3.2	2.8	2.2	48.1
Goleta Foothills	2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5	3.9	2.8	2.3	49.6
Guadalupe	1.5	2.0	3.5	4.7	5.3	5.3	5.1	4.8	3.7	3.3	2.0	1.7	42.8
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2	2.4	1.7	41.1
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7	2.4	1.6	44.6
Santa Barbara	1.7	2.2	3.4	5.0	5.0	5.2	5.3	5.3	3.9	3.5	2.2	1.8	40.6
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5	2.4	1.9	47.4
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6	2.2	1.7	48.7
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4	2.3	1.8	49.2
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7	2.2	1.6	45.6

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	Plant Factor	Irrigation Method ^b	Irrigation Efficiency	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use		
Description ^a	(PF)		(IE) ^c				(ETWU) ^d		
Regular Landso	cape areas								
				/D 4 1	(4)	(D)			
				Totals	(A)	(B)			
Special Landsca	ape Areas								
				1					
				1					
				1					
				Totals	(C)	(D)			
				ETWU Total					
				Maximum Allowed Water Allowance					
				(MAWA) ^e					

^aHydrozone #/Planting Description e.g.

^bIrrigation Method Overhead spray or drip ^cIrrigation Efficiency 0.75 for spray head 0.81 for drip ^dETWU (Annual Gallons Required) Eto x 0.62 x ETAF x Area

> where 0.62 is conversion factor that converts acreinches per acre per year to per square foot per year. per square foot per year.

2.) Low water use plantings

3.) Medium water use planting

^eMAWA (Annual Gallons Allowed) = (Eto) (0.62) / (ETAF x LA)

+ ((1-ETAF) x SLA))

1.) Front Lawn

where 0.62 is conversion factor that converts acreinches per acre per year to gallon 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 nonresidential areas

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF	$\mathbf{B} \div \mathbf{A}$

All Landscape Areas

Total ETAF x Area	(B + D)
Total Area	$(\mathbf{A} + \mathbf{C})$
Sitewide ETAF	$(\mathbf{B} + \mathbf{D}) \div (\mathbf{A} + \mathbf{C})$

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

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. 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).

This database is current through 9/25/15 Register 2015, No. 39 23 CCR Appendix B, 23 CA ADC Appendix B

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.	Telephone No.			
			Fax No.				
Title			Email Address	Email Address			
Company	pany			Street Address			
City		State		Zip Code			
Project Address and Loca	tion:						
Street Address			Parcel, tract or lot nu	ımber, if available			
City			Latitude/Longitude (optional)			
State	Zip Code						
Name			elephone No. x No.				
Title			ail Address eet Address				
Company City		Sta					
City		Sia	<u>ie</u>		Zip Code		
Property Owner: "I/we certify that I/we have Completion and that it is ou Maintenance Schedule."							

Please answer the questions below:

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

PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE

DOCUMENTATION PACKAGE

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

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

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

PART 3. IRRIGATION SCHEDULING

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

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

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

PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

PART 6. SOIL MANAGEMENT REPORT

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

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

History

- 1. New Appendix C filed 9-10-2009 pursuant to Government Code Section 11343.4 (Register 2009, No. 37).
- Repealer and new Appendix C filed 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).

This database is current through 9/25/15 Register 2015, No. 39 23CCR Appendix C, 23 CA ADC Appendix C

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 date 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.
- (d) Certificate of completion shall be submitted to the project planner.