

**City Clerk Catherine Hoff is inviting you to a scheduled Zoom meeting.  
5:15 PM City of Calipatria Closed Session Public Comment items only**

Join Zoom Meeting

<https://us02web.zoom.us/j/83830509208?pwd=UWErL2hjb3p0SzhaeTBMRDVTSCtNZz09>

Meeting ID: 838 3050 9208

Passcode: 609335

One tap mobile

+16699006833,,83830509208#,,,,\*609335# US (San Jose)

+12532158782,,83830509208#,,,,\*609335# US (Tacoma)

Dial by your location

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 929 436 2866 US (New York)

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+1 312 626 6799 US (Chicago)

Meeting ID: 838 3050 9208

Passcode: 609335

Find your local number: <https://us02web.zoom.us/j/83830509208?pwd=UWErL2hjb3p0SzhaeTBMRDVTSCtNZz09>

OPEN TO PUBLIC COMMENT FOR CLOSED SESSION ITEMS:

**5:20 PM City of Calipatria Closed Session Council only**

Join Zoom Meeting

<https://us02web.zoom.us/j/84198202981?pwd=d1ZnbGRNcHJ1aVZ5aDM4bTVLOVVwdz09>

Meeting ID: 841 9820 2981

Passcode: 718381

One tap mobile

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MOTION:                      SECONDED:                      VOTE:  
ADJOURN TO CLOSED SESSION

Real Property Negotiations- Govt Code 54956.9

One (1) case

Public Employment Performance Govt Code 54957.6

One (1) case

MOTION:                    SECONDED:                VOTE:  
RECONVENE TO OPEN SESSION

**City Clerk Catherine Hoff is inviting you to a scheduled Zoom meeting.**

**6:00 PM City of Calipatria City Council Meeting**

Join Zoom Meeting

<https://us02web.zoom.us/j/81637224200?pwd=bnNJTG5nZkx1QU1oT2NmSFRxOXI0QT09>

Meeting ID: 816 3722 4200

Passcode: 123845

One tap mobile

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Dial by your location

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+1 312 626 6799 US (Chicago)

+1 929 436 2866 US (New York)

+1 301 715 8592 US (Washington DC)

Meeting ID: 816 3722 4200

Passcode: 123845

Find your local number: <https://us02web.zoom.us/u/kdPIRnJy9x>

City of Calipatria  
May 10, 2022  
6 PM

ZOOM MEETING OF THE CITY COUNCIL  
OF THE CITY OF CALIPATRIA  
**IF NOT SPEAKING PLEASE MUTE YOURSELF**  
AGENDA

CALL TO ORDER:

PLEDGE OF ALLEGIANCE:

INVOCATION:

ROLL CALL: Mayor:Javier Amezcua,MayorProTem:Maria Nava-Froelich,Huston Hisel, Hector Cervantes, Sylvia Chavez

PRESENT:

ABSENT:

ALSO PRESENT:

MAYOR’S MESSAGE/PUBLIC COMMENT

At this time the Council will hear comments on any agenda item and on any item not on this agenda. Personal attacks on individuals, slanderous comments or comments that may invade an individual’s privacy are prohibited. If you wish to be heard, please stand and address yourself to the Mayor, we request that you limit your remarks to no more than three (3) minutes.

**THIS AGENDA CONTAINS A BRIEF GENERAL DESCRIPTION OF EACH ITEM TO BE CONSIDERED. EXCEPT AS OTHERWISE PROVIDED BY LAW, NO ACTION OR DISCUSSION SHALL BE TAKEN ON ANY ITEM NOT APPEARING IN THE FOLLOWING AGENDA**

ANNOUNCEMENT FROM CLOSED SESSION

- 1)
- 2)

INFORMATION REPORTS

Police

NEW BUSINESS

MOTION:                      SECONDED:                      VOTE:  
 FIRST READING – ORDINANCE 22-002- The Holt Group- George Galvan

AN ORDINANCE OF THE CITY OF CALIPATRIA APPROVING THE MODEL WATER EFFICIENT LANDSCAPING REGULATIONS

SECTION 1: Chapter 3.15 is hereby added to the City of Calipatria Zoning Code to read as follows:

Chapter 3.15

Water Efficient Landscaping Regulations

Sections:

- 3.15.010 Purpose
- 3.15.020 Applicability
- 3.15.030 Definitions
- 3.15.040 Provisions for New Construction or Rehabilitated Landscapes
- 3.15.050 Compliance with Landscape Documentation Package
- 3.15.060 Penalties
- 3.15.070 Elements of the Landscape Documentation Package
- 3.15.080 Water Efficient Landscape Worksheet
- 3.15.090 Soil Management Report
- 3.15.100 Landscape Design Plan
- 3.15.110 Irrigation Design Plan
- 3.15.120 Grading Design Plan
- 3.15.130 Certificate of Completion
- 3.15.140 Irrigation Scheduling
- 3.15.150 Landscape and Irrigation Maintenance Schedule
- 3.15.160 Irrigation Efficiency
- 3.15.170 Recycled Water
- 3.15.180 Graywater Systems
- 3.15.190 Stormwater Management and Rainwater Retention
- 3.15.200 Public Education
- 3.15.210 Environmental Review
- 3.15.220 Provisions for Existing Landscapes
- 3.15.230 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis
- 3.15.240 Effective Precipitation

3.15.010 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 materials, 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).

### 3.15.020 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).

### 3.15.030 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.  

$$\text{MAWA} = (\text{ETo}) (0.62) [(\text{ETAF} \times \text{LA}) + ((1 - \text{ETAF}) \times \text{SLA})]$$
- (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, amphitheatres 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).

### 3.15.040 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).

### 3.15.050 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.

### 3.15.060 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.

### 3.15.070 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.

### 3.15.080 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).

#### 3.15.090 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).

#### 3.15.100 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 Title 16 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).

### 3.15.110 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 Title 16 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).

### 3.15.120 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.

### 3.15.130 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).

### 3.15.140 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.

#### 3.15.150 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).

#### 3.15.160 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).

#### 3.15.170 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).

### 3.15.180 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).

### 3.15.190 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).

### 3.15.200 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).

### 3.15.210 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).

### 3.15.220 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).

### 3.15.230 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:  $MAWA = (0.8) (ET_o) (LA) (0.62)$ .

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

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

Note: Authority cited: Section 65595, Government Code; 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).

### 3.15.240 Effective Precipitation.

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

$MAWA = (ET_o - Eppt) (0.62) [(0.55 \times LA) + (0.45 \times SLA)]$  for residential areas.

$MAWA = (ET_o - EPPT) (0.62) [(0.45 \times LA) + (0.55 \times SLA)]$  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).

## Appendices.

Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.Appendix A - Reference Evapotranspiration (ET<sub>o</sub>) Table\*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Nov Dec Annual ET <sub>o</sub>										
ALAMEDA										
Fremont	1.5	1.9	3.4	4.7	5.4	6.3	6.7	6.0	4.5	3.4
1.8 1.5	47.0									
Livermore	1.2	1.5	2.9	4.4	5.9	6.6	7.4	6.4	5.3	3.2
1.5 0.9	47.2									
Oakland	1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1
1.4 0.9	41.8									
Oakland Foothills		1.1	1.4	2.7	3.7	5.1	6.4	5.8	4.9	3.6
2.6 1.4	39.6									
Pleasanton	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3
1.5 1.0	46.2									
Union City	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1
1.5 1.2	44.2									
ALPINE										
Markleeville	0.7	0.9	2.0	3.5	5.0	6.1	7.3	6.4	4.4	2.6
1.2 0.5	40.6									
AMADOR										
Jackson	1.2	1.5	2.8	4.4	6.0	7.2	7.9	7.2	5.3	3.2
1.4 0.9	48.9									
Shanandoah Valley		1.0	1.7	2.9	4.4	5.6	6.8	7.9	7.1	5.2
3.6 1.7	1.0	48.8								
BUTTE										
Chico	1.2	1.8	2.9	4.7	6.1	7.4	8.5	7.3	5.4	3.7
1.0 51.7										
Durham	1.1	1.8	3.2	5.0	6.5	7.4	7.8	6.9	5.3	3.6
1.7 1.0	51.1									
Gridley	1.2	1.8	3.0	4.7	6.1	7.7	8.5	7.1	5.4	3.7
1.7 1.0	51.9									
Oroville	1.2	1.7	2.8	4.7	6.1	7.6	8.5	7.3	5.3	3.7
1.7 1.0	51.5									
CALAVERAS										
San Andreas	1.2	1.5	2.8	4.4	6.0	7.3	7.9	7.0	5.3	3.2
1.4 0.7	48.8									
COLUSA										
Colusa	1.0	1.7	3.4	5.0	6.4	7.6	8.3	7.2	5.4	3.8
1.1 52.8										
Williams	1.2	1.7	2.9	4.5	6.1	7.2	8.5	7.3	5.3	3.4
1.6 1.0	50.8									
CONTRA COSTA										
Benicia	1.3	1.4	2.7	3.8	4.9	5.0	6.4	5.5	4.4	2.9
1.2 0.7	40.3									
Brentwood	1.0	1.5	2.9	4.5	6.1	7.1	7.9	6.7	5.2	3.2
1.4 0.7	48.3									

Concord	1.1	1.4	2.4	4.0	5.5	5.9	7.0	6.0	4.8	3.2
1.3	0.7	43.4								
Courtland	0.9	1.5	2.9	4.4	6.1	6.9	7.9	6.7	5.3	3.2
1.4	0.7	48.0								
Martinez	1.2	1.4	2.4	3.9	5.3	5.6	6.7	5.6	4.7	3.1
1.2	0.7	41.8								
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7	5.9	4.6	3.2
1.6	1.0	44.9								
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	6.4	5.0	3.2
1.3	0.7	45.4								
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3
1.5	1.0	46.2								
DEL NORTE										
Crescent City	0.5	0.9	2.0	3.0	3.7	3.5	4.3	3.7	3.0	2.0
0.9	0.5	27.7								
EL DORADO										
Camino	0.9	1.7	2.5	3.9	5.9	7.2	7.8	6.8	5.1	3.1
1.5	0.9	47.3								
FRESNO										
Clovis	1.0	1.5	3.2	4.8	6.4	7.7	8.5	7.3	5.3	3.4
0.7	51.4									
Coalinga	1.2	1.7	3.1	4.6	6.2	7.2	8.5	7.3	5.3	3.4
1.6	0.7	50.9								
Firebaugh	1.0	1.8	3.7	5.7	7.3	8.1	8.2	7.2	5.5	3.9
2.0	1.1	55.4								
FivePoints	1.3	2.0	4.0	6.1	7.7	8.5	8.7	8.0	6.2	4.5
2.4	1.2	60.4								
Fresno	0.9	1.7	3.3	4.8	6.7	7.8	8.4	7.1	5.2	3.2
0.6	51.1									
Fresno State	0.9	1.6	3.2	5.2	7.0	8.0	8.7	7.6	5.4	3.6
1.7	0.9	53.7								
Friant	1.2	1.5	3.1	4.7	6.4	7.7	8.5	7.3	5.3	3.4
0.7	51.3									
Kerman	0.9	1.5	3.2	4.8	6.6	7.7	8.4	7.2	5.3	3.4
1.4	0.7	51.2								
Kingsburg	1.0	1.5	3.4	4.8	6.6	7.7	8.4	7.2	5.3	3.4
1.4	0.7	51.6								
Mendota	1.5	2.5	4.6	6.2	7.9	8.6	8.8	7.5	5.9	4.5
2.4	1.5	61.7								
Orange Cove	1.2	1.9	3.5	4.7	7.4	8.5	8.9	7.9	5.9	3.7
1.8	1.2	56.7								
Panoche	1.1	2.0	4.0	5.6	7.8	8.5	8.3	7.3	5.6	3.9
1.8	1.2	57.2								
Parlier	1.0	1.9	3.6	5.2	6.8	7.6	8.1	7.0	5.1	3.4
0.9	52.0									
Reedley	1.1	1.5	3.2	4.7	6.4	7.7	8.5	7.3	5.3	3.4
1.4	0.7	51.3								
Westlands	0.9	1.7	3.8	6.3	8.0	8.6	8.6	7.8	5.9	4.3
2.1	1.1	58.8								

Appendix A - Reference Evapotranspiration (ETo) Table\*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Nov	Dec	Annual ETo								

## GLENN

Orland	1.1	1.8	3.4	5.0	6.4	7.5	7.9	6.7	5.3	3.9	1.8
1.4	52.1										
Willows		1.2	1.7	2.9	4.7	6.1	7.2	8.5	7.3	5.3	3.6
1.7	1.0	51.3									

## HUMBOLDT

Eureka	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9
0.5	27.5										
Ferndale		0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0
0.9	0.5	27.5									
Garberville		0.6	1.2	2.2	3.1	4.5	5.0	5.5	4.9	3.8	2.4
1.0	0.7	34.9									
Hoopa	0.5	1.1	2.1	3.0	4.4	5.4	6.1	5.1	3.8	2.4	0.9
0.7	35.6										

## IMPERIAL

Brawley		2.8	3.8	5.9	8.0	10.4	11.5	11.7	10.0	8.4	6.2
3.5	2.1	84.2									
Calipatria/ Mulberry		2.4	3.2	5.1	6.8	8.6	9.2	9.2	8.6	7.0	5.2
3.1	2.3	70.7									
El Centro		2.7	3.5	5.6	7.9	10.1	11.1	11.6	9.5	8.3	6.1
3.3	2.0	81.7									
Holtville		2.8	3.8	5.9	7.9	10.4	11.6	12.0	10.0	8.6	6.2
3.5	2.1	84.7									
Meloland		2.5	3.2	5.5	7.5	8.9	9.2	9.0	8.5	6.8	5.3
3.1	2.2	71.6									
Palo Verde II		2.5	3.3	5.7	6.9	8.5	8.9	8.6	7.9	6.2	4.5
2.9	2.3	68.2									
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4
2.2	75.4										
Westmoreland		2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0
3.0	2.2	71.4									
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0
2.2	71.6										

## INYO

Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	4.8	2.5
1.6	68.3										
Death Valley Jct			2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3
5.4	2.9	1.7	79.1								
Independence		1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5	7.1	3.9
2.0	1.5	65.2									
Lower Haiwee Res.		1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	
4.2	2.6	1.5	67.6								
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0	8.4	6.2	3.4
2.1	83.1										

## KERN

Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7
1.0	51.9										
Bakersfield		1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5
1.6	0.9	52.4									

Bakersfield/ Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0
2.1	1.2	57.9								
Bakersfield/ Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0
2.1	1.2	57.9								
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8
2.0	1.5	59.2								
Blackwells Corner		1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8
3.9	1.9	1.2	56.6							
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4
1.5	0.9	52.0								
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9
2.7	1.7	74.8								
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4
1.4	0.7	52.0								
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5
1.7	1.3	53.1								
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4
1.9	1.0	49.5								
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1
2.6	1.7	72.4								
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2
1.7	0.9	48.4								
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7
1.6	0.8	54.4								
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0
2.1	1.6	57.1								
McFarland/ Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1
1.2	56.5									
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4
1.5	0.9	52.1								
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4
1.0	51.2									
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4
2.1	1.2	52.9								
KINGS										
Caruthers	1.6	2.5	4.0	5.7	7.8	8.7	9.3	8.4	6.3	4.4
2.4	1.6	62.7								
Corcoran	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0
2.1	1.6	57.1								
Hanford	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.2	5.4	3.4
1.4	0.7	51.5								
Kettleman	1.1	2.0	4.0	6.0	7.5	8.5	9.1	8.2	6.1	4.5
2.2	1.1	60.2								
Lemoore	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4
1.4	0.7	51.7								
Stratford	0.9	1.9	3.9	6.1	7.8	8.6	8.8	7.7	5.9	4.1
2.1	1.0	58.7								

Appendix A - Reference Evapotranspiration (ET<sub>o</sub>) Table\*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Nov	Dec	Annual ET <sub>o</sub>								

## LAKE

Lakeport	1.1	1.3	2.6	3.5	5.1	6.0	7.3	6.1	4.7	2.9
1.2	0.9	42.8								
Lower Lake	1.2	1.4	2.7	4.5	5.3	6.3	7.4	6.4	5.0	3.1
1.3	0.9	45.4								

## LASSEN

Buntingville	1.0	1.7	3.5	4.9	6.2	7.3	8.4	7.5	5.4	3.4
1.5	0.9	51.8								
Ravendale	0.6	1.1	2.3	4.1	5.6	6.7	7.9	7.3	4.7	2.8
1.2	0.5	44.9								
Susanville	0.7	1.0	2.2	4.1	5.6	6.5	7.8	7.0	4.6	2.8
1.2	0.5	44.0								

## LOS ANGELES

Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0
2.6	2.0	51.7								
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0
2.7	2.1	51.3								
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2
2.2	1.7	46.3								
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3
2.2	1.8	43.7								
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2
2.6	2.0	53.1								
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6
2.4	1.1	52.4								
Hollywood Hills		2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2
3.7	2.8	2.1	52.8							
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6
2.8	1.7	71.1								
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8
1.8	1.5	39.7								
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9
2.6	1.9	50.1								
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2
2.5	2.0	50.2								
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7
2.7	2.1	66.2								
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2
2.6	2.0	52.3								
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0
2.6	1.6	59.9								
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5
2.3	1.7	47.5								
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8
2.4	2.0	42.6								
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9
2.6	2.0	52.0								
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2
3.7	3.2	61.5								
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4
2.4	2.2	44.2								

## MADERA



Chowchilla	1.0	1.4	3.2	4.7	6.6	7.8	8.5	7.3	5.3	3.4
1.4	0.7	51.4								
Madera	0.9	1.4	3.2	4.8	6.6	7.8	8.5	7.3	5.3	3.4
1.4	0.7	51.5								
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4
1.4	0.7	50.5								
MARIN										
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8
1.3	0.9	43.0								
Novato	1.3	1.5	2.4	3.5	4.4	6.0	5.9	5.4	4.4	2.8
1.4	0.7	39.8								
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8
1.3	0.9	43.0								
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8	4.8	4.9	4.3	2.7
1.3	0.7	35.8								
MARIPOSA										
Coulterville	1.1	1.5	2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4
1.4	0.7	48.8								
Mariposa	1.1	1.5	2.8	4.4	5.9	7.4	8.2	7.1	5.0	3.4
1.4	0.7	49.0								
Yosemite Village		0.7	1.0	2.3	3.7	5.1	6.5	7.1	6.1	4.4
2.9	1.1	0.6	41.4							
MENDOCINO										
Fort Bragg	0.9	1.3	2.2	3.0	3.7	3.5	3.7	3.7	3.0	2.3
1.2	0.7	29.0								
Hopland	1.1	1.3	2.6	3.4	5.0	5.9	6.5	5.7	4.5	2.8
1.3	0.7	40.9								
Point Arena	1.0	1.3	2.3	3.0	3.7	3.9	3.7	3.7	3.0	2.3
1.2	0.7	29.6								
Sanel Valley	1.0	1.6	3.0	4.6	6.0	7.0	8.0	7.0	5.2	3.4
1.4	0.9	49.1								
Ukiah	1.0	1.3	2.6	3.3	5.0	5.8	6.7	5.9	4.5	2.8
0.7	40.9									1.3
MERCED										
Kesterson	0.9	1.7	3.4	5.5	7.3	8.2	8.6	7.4	5.5	3.8
1.8	0.9	55.1								
Los Banos	1.0	1.5	3.2	4.7	6.1	7.4	8.2	7.0	5.3	3.4
1.4	0.7	50.0								
Merced	1.0	1.5	3.2	4.7	6.6	7.9	8.5	7.2	5.3	3.4
1.4	0.7	51.5								
Appendix A - Reference Evapotranspiration (ETo) Table*										
County and City		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Oct	Nov	Dec	Annual ETo							
MODOC										
Modoc/Alturas	0.9	1.4	2.8	3.7	5.1	6.2	7.5	6.6	4.6	2.8
1.2	0.7	43.2								
MONO										
Bridgeport	0.7	0.9	2.2	3.8	5.5	6.6	7.4	6.7	4.7	2.7
1.2	0.5	43.0								

## MONTEREY

Arroyo Seco	1.5	2.0	3.7	5.4	6.3	7.3	7.2	6.7	5.0	3.9
2.0	1.6	52.6								
Castroville	1.4	1.7	3.0	4.2	4.6	4.8	4.0	3.8	3.0	2.6
1.6	1.4	36.2								
Gonzales	1.3	1.7	3.4	4.7	5.4	6.3	6.3	5.9	4.4	3.4
1.9	1.3	45.7								
Greenfield	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7
2.4	1.8	49.5								
King City	1.7	2.0	3.4	4.4	4.4	5.6	6.1	6.7	6.5	5.2
2.2	1.3	49.6								
King City-Oasis Rd.		1.4	1.9	3.6	5.3	6.5	7.3	7.4	6.8	5.1
4.0	2.0	1.5	52.7							
Long Valley	1.5	1.9	3.2	4.1	5.8	6.5	7.3	6.7	5.3	3.6
2.0	1.2	49.1								
Monterey	1.7	1.8	2.7	3.5	4.0	4.1	4.3	4.2	3.5	2.8
1.9	1.5	36.0								
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	2.4
1.8	46.1									
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.0	4.5	4.0	2.9
1.9	1.3	39.1								
Salinas North	1.2	1.5	2.9	4.1	4.6	5.2	4.5	4.3	3.2	2.8
1.5	1.2	36.9								
San Ardo	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1
1.5	1.0	49.0								
San Juan	1.8	2.1	3.4	4.6	5.3	5.7	5.5	4.9	3.8	3.2
2.2	1.9	44.2								
Soledad	1.7	2.0	3.4	4.4	5.5	5.4	6.5	6.2	5.2	3.7
2.2	1.5	47.7								

## NAPA

Angwin	1.8	1.9	3.2	4.7	5.8	7.3	8.1	7.1	5.5	4.5
2.9	2.1	54.9								
Carneros	0.8	1.5	3.1	4.6	5.5	6.6	6.9	6.2	4.7	3.5
1.4	1.0	45.8								
Oakville	1.0	1.5	2.9	4.7	5.8	6.9	7.2	6.4	4.9	3.5
1.6	1.2	47.7								
St Helena	1.2	1.5	2.8	3.9	5.1	6.1	7.0	6.2	4.8	3.1
1.4	0.9	44.1								
Yountville	1.3	1.7	2.8	3.9	5.1	6.0	7.1	6.1	4.8	3.1
1.5	0.9	44.3								

## NEVADA

Grass Valley	1.1	1.5	2.6	4.0	5.7	7.1	7.9	7.1	5.3	3.2
1.5	0.9	48.0								
Nevada City	1.1	1.5	2.6	3.9	5.8	6.9	7.9	7.0	5.3	3.2
1.4	0.9	47.4								

## ORANGE

Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6
2.3	49.6										
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	
2.4	2.0	43.2									
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	
2.5	2.0	48.2									

## PLACER

Auburn	1.2	1.7	2.8	4.4	6.1	7.4	8.3	7.3	5.4	3.4
1.6	1.0	50.6								
Blue Canyon	0.7	1.1	2.1	3.4	4.8	6.0	7.2	6.1	4.6	2.9
0.9	0.6	40.5								
Colfax	1.1	1.5	2.6	4.0	5.8	7.1	7.9	7.0	5.3	3.2
0.9	47.9									
Roseville	1.1	1.7	3.1	4.7	6.2	7.7	8.5	7.3	5.6	3.7
1.7	1.0	52.2								
Soda Springs	0.7	0.7	1.8	3.0	4.3	5.3	6.2	5.5	4.1	2.5
0.7	0.7	35.4								
Tahoe City	0.7	0.7	1.7	3.0	4.3	5.4	6.1	5.6	4.1	2.4
0.8	0.6	35.5								
Truckee	0.7	0.7	1.7	3.2	4.4	5.4	6.4	5.7	4.1	2.4
0.8	0.6	36.2								

## PLUMAS

Portola	0.7	0.9	1.9	3.5	4.9	5.9	7.3	5.9	4.3	2.7
0.9	0.5	39.4								
Quincy	0.7	0.9	2.2	3.5	4.9	5.9	7.3	5.9	4.4	2.8
1.2	0.5	40.2								

## RIVERSIDE

Beaumont	2.0	2.3	3.4	4.4	6.1	7.1	7.6	7.9	6.0	3.9
2.6	1.7	55.0								
Blythe	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	3.0
2.2	71.4									
Cathedral City	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0
2.1	1.6	57.1								
Coachella	2.9	4.4	6.2	8.4	10.5	11.9	12.3	10.1	8.9	6.2
3.8	2.4	88.1								
Desert Center	2.9	4.1	6.4	8.5	11.0	12.1	12.2	11.1	9.0	6.4
3.9	2.6	90.0								
Elsinore	2.1	2.8	3.9	4.4	5.9	7.1	7.6	7.0	5.8	3.9
2.6	1.9	55.0								
Indio	3.1	3.6	6.5	8.3	10.5	11.0	10.8	9.7	8.3	3.7
2.7	83.9									

## Appendix A - Reference Evapotranspiration (ETo) Table\*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Oct	Nov	Dec	Annual ETo							
RIVERSIDE										
La Quinta	2.4	2.8	5.2	6.5	8.3	8.7	8.5	7.9	6.5	4.5
2.7	2.2	66.2								
Mecca	2.6	3.3	5.7	7.2	8.6	9.0	8.8	8.2	6.8	3.2
2.4	70.8									
Oasis	2.9	3.3	5.3	6.1	8.5	8.9	8.7	7.9	6.9	2.9
2.3	68.4									
Palm Deser	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0
3.0	2.2	71.6								
Palm Springs	2.0	2.9	4.9	7.2	8.3	8.5	11.6	8.3	7.2	5.9
2.7	1.7	71.1								
Rancho California		1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8
3.7	2.4	1.8	49.5							

Rancho Mirage	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0
3.0	2.2	71.4								
Ripley	2.7	3.3	5.6	7.2	8.7	8.7	8.4	7.6	6.2	4.6
2.2	67.8									
Salton Sea North		2.5	3.3	5.5	7.2	8.8	9.3	9.2	8.5	6.8
5.2	3.1	2.3	71.7							
Temecula East II		2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7
4.1	2.6	2.2	56.7							
Thermal		2.4	3.3	5.5	7.6	9.1	9.6	9.3	8.6	7.1
3.1	2.1	72.8								
Riverside UC		2.5	2.9	4.2	5.3	5.9	6.6	7.2	6.9	5.4
2.9	2.6	56.4								
Winchester		2.3	2.4	4.1	4.9	6.4	6.9	7.7	7.5	6.0
2.6	2.1	56.8								
SACRAMENTO										
Fair Oaks		1.0	1.6	3.4	4.1	6.5	7.5	8.1	7.1	5.2
1.5	1.0	50.5								
Sacramento		1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4
1.7	0.9	51.9								
Twitchell Island		1.2	1.8	3.9	5.3	7.4	8.8	9.1	7.8	5.9
3.8	1.7	1.2	57.9							
SAN BENITO										
Hollister		1.5	1.8	3.1	4.3	5.5	5.7	6.4	5.9	5.0
1.7	1.1	45.1								
San Benito		1.2	1.6	3.1	4.6	5.6	6.4	6.9	6.5	4.8
1.7	1.2	47.2								
San Juan Valley		1.4	1.8	3.4	4.5	6.0	6.7	7.1	6.4	5.0
3.5	1.8	1.4	49.1							
SAN BERNARDINO										
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1
2.1	86.6									
Barstow NE		2.2	2.9	5.3	6.9	9.0	10.1	9.9	8.9	6.8
2.7	2.1	71.7								
Big Bear Lake		1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4
2.4	1.8	58.6								
Chino		2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9
2.0	54.6									
Crestline		1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4
2.2	1.6	50.8								
Lake Arrowhead		1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4
4.1	2.4	1.8	58.6							
Lucerne Valley		2.2	2.9	5.1	6.5	9.1	11.0	11.4	9.9	7.4
3.0	1.8	75.3								
Needles		3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9
4.0	2.7	92.1								
Newberry Springs		2.1	2.9	5.3	8.4	9.8	10.9	11.1	9.9	7.6
5.2	3.1	2.0	78.2							
San Bernardino		2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9
2.6	2.0	55.6								
Twentynine Palms		2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6
5.9	3.4	2.2	82.9							
Victorville		2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5
2.7	2.1	66.2								

## SAN DIEGO

Chula Vista	2.2	2.7	3.4	3.8	4.9	4.7	5.5	4.9	4.5	3.4
2.4	2.0	44.2								
Escondido SPV	2.4	2.6	3.9	4.7	5.9	6.5	7.1	6.7	5.3	3.9
2.8	2.3	54.2								
Miramar	2.3	2.5	3.7	4.1	5.1	5.4	6.1	5.8	4.5	3.3
2.4	2.1	47.1								
Oceanside	2.2	2.7	3.4	3.7	4.9	4.6	4.6	5.1	4.1	3.3
2.4	2.0	42.9								
Otay Lake	2.3	2.7	3.9	4.6	5.6	5.9	6.2	6.1	4.8	3.7
2.6	2.2	50.4								
Pine Valley	1.5	2.4	3.8	5.1	6.0	7.0	7.8	7.3	6.0	4.0
2.2	1.7	54.8								
Ramona	2.1	2.1	3.4	4.6	5.2	6.3	6.7	6.8	5.3	4.1
2.8	2.1	51.6								
San Diego	2.1	2.4	3.4	4.6	5.1	5.3	5.7	5.6	4.3	3.6
2.4	2.0	46.5								
Santee	2.1	2.7	3.7	4.5	5.5	6.1	6.6	6.2	5.4	2.6
2.0	51.1									
Torrey Pines	2.2	2.3	3.4	3.9	4.0	4.1	4.6	4.7	3.8	2.8
2.0	2.0	39.8								
Warner Springs	1.6	2.7	3.7	4.7	5.7	7.6	8.3	7.7	6.3	4.0
2.5	1.3	56.0								

## SAN FRANCISCO

San Francisco	1.5	1.3	2.4	3.0	3.7	4.6	4.9	4.8	4.1	2.8
1.3	0.7	35.1								

## SAN JOAQUIN

Farmington	1.5	1.5	2.9	4.7	6.2	7.6	8.1	6.8	5.3	3.3
1.4	0.7	50.0								

Appendix A - Reference Evapotranspiration (ET<sub>o</sub>) Table\*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Oct	Nov	Dec	Annual ET <sub>o</sub>						

## SAN JOAQUIN

Lodi West	1.0	1.6	3.3	4.3	6.3	6.9	7.3	6.4	4.5	3.0
1.4	0.8	46.7								
Manteca	0.9	1.7	3.4	5.0	6.5	7.5	8.0	7.1	5.2	3.3
1.6	0.9	51.2								
Stockton	0.8	1.5	2.9	4.7	6.2	7.4	8.1	6.8	5.3	3.2
1.4	0.6	49.1								
Tracy	1.0	1.5	2.9	4.5	6.1	7.3	7.9	6.7	5.3	1.3
0.7	48.5									

## SAN LUIS OBISPO

Arroyo Grande	2.0	2.2	3.2	3.8	4.3	4.7	4.3	4.6	3.8	3.2
2.4	1.7	40.0								
Atascadero	1.2	1.5	2.8	3.9	4.5	6.0	6.7	6.2	5.0	3.2
1.7	1.0	43.7								
Morro Bay	2.0	2.2	3.1	3.5	4.3	4.5	4.6	4.6	3.8	3.5
2.1	1.7	39.9								
Nipomo	2.2	2.5	3.8	5.1	5.7	6.2	6.4	6.1	4.9	4.1
2.9	2.3	52.1								

Paso Robles	1.6	2.0	3.2	4.3	5.5	6.3	7.3	6.7	5.1	3.7
2.1	1.4	49.0								
San Luis Obispo		2.0	2.2	3.2	4.1	4.9	5.3	4.6	5.5	4.4
3.5	2.4	1.7	43.8							
San Miguel	1.6	2.0	3.2	4.3	5.0	6.4	7.4	6.8	5.1	3.7
2.1	1.4	49.0								
San Simeon	2.0	2.0	2.9	3.5	4.2	4.4	4.6	4.3	3.5	3.1
2.0	1.7	38.1								
SAN MATEO										
Hal Moon Bay	1.5	1.7	2.4	3.0	3.9	4.3	4.3	4.2	3.5	2.8
1.3	1.0	33.7								
Redwood City	1.5	1.8	2.9	3.8	5.2	5.3	6.2	5.6	4.8	3.1
1.7	1.0	42.8								
Woodside	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7
2.4	1.8	49.5								
SANTA BARBARA										
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3
2.7	2.1	49.1								
Carpenteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4
2.4	2.0	44.9								
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5
2.6	2.0	59.7								
Goleta	2.1	2.5	3.9	5.1	5.7	5.4	5.4	4.2	3.2	2.8
2.2	48.1									
Goleta Foothills		2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5
3.9	2.8	2.3	49.6							
Guadalupe	2.0	2.2	3.2	3.7	4.9	4.6	4.5	4.6	4.1	3.3
2.4	1.7	41.1								
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2
2.4	1.7	41.1								
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7
2.4	1.6	44.6								
Santa Barbara	2.0	2.5	3.2	3.8	4.6	5.1	5.5	4.5	3.4	2.4
1.8	1.8	40.6								
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5
2.4	1.9	47.4								
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6
2.2	1.7	48.7								
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4
2.3	1.8	49.2								
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7
2.2	1.6	45.6								
SANTA CLARA										
Gilroy	1.3	1.8	3.1	4.1	5.3	5.6	6.1	5.5	4.7	3.4
1.1	43.6									
Los Gatos	1.5	1.8	2.8	3.9	5.0	5.6	6.2	5.5	4.7	3.2
1.7	1.1	42.9								
Morgan Hill	1.5	1.8	3.4	4.2	6.3	7.0	7.1	6.0	5.1	3.7
1.9	1.4	49.5								
Palo Alto	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2
1.7	1.0	43.0								
San Jose	1.5	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3
1.8	1.0	45.3								

## SANTA CRUZ

De Laveaga	1.4	1.9	3.3	4.7	4.9	5.3	5.0	4.8	3.6	3.0
1.6	1.3	40.8								
Green Valley Rd		1.2	1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7
3.1	1.6	1.3	40.6							
Santa Cruz	1.5	1.8	2.6	3.5	4.3	4.4	4.8	4.4	3.8	2.8
1.7	1.2	36.6								
Watsonville	1.5	1.8	2.7	3.7	4.6	4.5	4.9	4.2	4.0	2.9
1.8	1.2	37.7								
Webb	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	2.4
1.8	46.2									

## SHASTA

Burney	0.7	1.0	2.1	3.5	4.9	5.9	7.4	6.4	4.4	2.9
0.9	0.6	40.9								
Fall River Mills	0.6	1.0	2.1	3.7	5.0	6.1	7.8	6.7	4.6	2.8
0.9	0.5	41.8								
Glenburn	0.6	1.0	2.1	3.7	5.0	6.3	7.8	6.7	4.7	2.8
0.9	0.6	42.1								
McArthur	0.7	1.4	2.9	4.2	5.6	6.9	8.2	7.2	5.0	3.0
1.1	0.6	46.8								
Redding	1.2	1.4	2.6	4.1	5.6	7.1	8.5	7.3	5.3	3.2
1.4	0.9	48.8								

## Appendix A - Reference Evapotranspiration (ETo) Table\*

County and City			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Oct	Nov	Dec	Annual ETo								
SIERRA											
Downieville	0.7	1.0	2.3	3.5	5.0	6.0	7.4	6.2	4.7	2.8	
0.9	0.6	41.3									
Sierraville	0.7	1.1	2.2	3.2	4.5	5.9	7.3	6.4	4.3	2.6	
0.9	0.5	39.6									
SISKIYOU											
Happy Camp	0.5	0.9	2.0	3.0	4.3	5.2	6.1	5.3	4.1	2.4	
0.9	0.5	35.1									
MacDoel	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	
1.5	1.0	49.0									
Mt Shasta	0.5	0.9	2.0	3.0	4.5	5.3	6.7	5.7	4.0	2.2	
0.7	0.5	36.0									
Tule lake FS	0.7	1.3	2.7	4.0	5.4	6.3	7.1	6.4	4.7	2.8	
1.0	0.6	42.9									
Weed	0.5	0.9	2.0	2.5	4.5	5.3	6.7	5.5	3.7	2.0	0.9
0.5	34.9										
Yreka	0.6	0.9	2.1	3.0	4.9	5.8	7.3	6.5	4.3	2.5	0.9
0.5	39.2										
SOLANO											
Dixon	0.7	1.4	3.2	5.2	6.3	7.6	8.2	7.2	5.5	4.3	1.6
1.1	52.1										
Fairfield	1.1	1.7	2.8	4.0	5.5	6.1	7.8	6.0	4.8	3.1	
1.4	0.9	45.2									
Hastings Tract	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	
2.1	1.6	57.1									

Putah Creek	1.0	1.6	3.2	4.9	6.1	7.3	7.9	7.0	5.3	3.8
1.8	1.2	51.0								
Rio Vista	0.9	1.7	2.8	4.4	5.9	6.7	7.9	6.5	5.1	3.2
1.3	0.7	47.0								
Suisun Valley	0.6	1.3	3.0	4.7	5.8	7.0	7.7	6.8	5.3	3.8
1.4	0.9	48.3								
Winters	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5
1.6	1.0	51.0								
SONOMA										
Bennett Valley	1.1	1.7	3.2	4.1	5.5	6.5	6.6	5.7	4.5	3.1
1.5	0.9	44.4								
Cloverdale	1.1	1.4	2.6	3.4	5.0	5.9	6.2	5.6	4.5	2.8
1.4	0.7	40.7								
Fort Ross	1.2	1.4	2.2	3.0	3.7	4.5	4.2	4.3	3.4	2.4
1.2	0.5	31.9								
Healdsburg	1.2	1.5	2.4	3.5	5.0	5.9	6.1	5.6	4.5	2.8
1.4	0.7	40.8								
Lincoln	1.2	1.7	2.8	4.7	6.1	7.4	8.4	7.3	5.4	3.7
1.9	1.2	51.9								
Petaluma	1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9
1.4	0.9	39.6								
Santa Rosa	1.2	1.7	2.8	3.7	5.0	6.0	6.1	5.9	4.5	2.9
1.5	0.7	42.0								
Valley of the Moon		1.0	1.6	3.0	4.5	5.6	6.6	7.1	6.3	4.7
3.3	1.5	1.0	46.1							
Windsor	0.9	1.6	3.0	4.5	5.5	6.5	6.5	5.9	4.4	3.2
1.4	1.0	44.2								
STANISLAUS										
Denair	1.0	1.9	3.6	4.7	7.0	7.9	8.0	6.1	5.3	3.4
1.0	51.4									
La Grange	1.2	1.5	3.1	4.7	6.2	7.7	8.5	7.3	5.3	3.4
1.4	0.7	51.2								
Modesto	0.9	1.4	3.2	4.7	6.4	7.7	8.1	6.8	5.0	3.4
1.4	0.7	49.7								
Newman	1.0	1.5	3.2	4.6	6.2	7.4	8.1	6.7	5.0	3.4
1.4	0.7	49.3								
Oakdale	1.2	1.5	3.2	4.7	6.2	7.7	8.1	7.1	5.1	3.4
1.4	0.7	50.3								
Patterson	1.3	2.1	4.2	5.4	7.9	8.6	8.2	6.6	5.8	4.0
1.9	1.3	57.3								
Turlock	0.9	1.5	3.2	4.7	6.5	7.7	8.2	7.0	5.1	3.4
1.4	0.7	50.2								
SUTTER										
Nicolaus	0.9	1.6	3.2	4.9	6.3	7.5	8.0	6.9	5.2	3.4
1.5	0.9	50.2								
Yuba City	1.3	2.1	2.8	4.4	5.7	7.2	7.1	6.1	4.7	3.2
1.2	0.9	46.7								
TEHAMA										
Corning	1.2	1.8	2.9	4.5	6.1	7.3	8.1	7.2	5.3	3.7
1.7	1.1	50.7								
Gerber	1.0	1.8	3.5	5.0	6.6	7.9	8.7	7.4	5.8	1.8
1.1	54.7									



Gerber Dryland	0.9	1.6	3.2	4.7	6.7	8.4	9.0	7.9	6.0	4.2
2.0	1.0	55.5								
Red Bluff	1.2	1.8	2.9	4.4	5.9	7.4	8.5	7.3	5.4	3.5
1.7	1.0	51.1								
TRINITY										
Hay Fork	0.5	1.1	2.3	3.5	4.9	5.9	7.0	6.0	4.5	2.8
0.9	0.7	40.1								
Weaverville	0.6	1.1	2.2	3.3	4.9	5.9	7.3	6.0	4.4	2.7
0.9	0.7	40.0								
TULARE										
Alpaugh	0.9	1.7	3.4	4.8	6.6	7.7	8.2	7.3	5.4	3.4
1.4	0.7	51.6								
Badger	1.0	1.3	2.7	4.1	6.0	7.3	7.7	7.0	4.8	3.3
1.4	0.7	47.3								
Delano	1.1	1.9	4.0	4.9	7.2	7.9	8.1	7.3	5.4	3.2
1.5	1.2	53.6								

## Appendix A - Reference Evapotranspiration (ETo) Table\*

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

Davis	1.0	1.9	3.3	5.0	6.4	7.6	8.2	7.1	5.4	4.0	1.8
1.0	52.5										
Esparto		1.0	1.7	3.4	5.5	6.9	8.1	8.5	7.5	5.8	4.2
2.0	1.2	55.8									
Winters		1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.3	3.3
1.6	1.0	49.4									
Woodland		1.0	1.8	3.2	4.7	6.1	7.7	8.2	7.2	5.4	3.7
1.7	1.0	51.6									
Zamora		1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0	5.5	4.0
1.9	1.2	52.8									
YUBA											
Browns Valley		1.0	1.7	3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1
2.0	1.1	52.9									
Brownsville		1.1	1.4	2.6	4.0	5.7	6.8	7.9	6.8	5.3	3.4
1.5	0.9	47.4									

\* The values in this table were derived from:  
 1) California Irrigation Management Information System (CIMIS);  
 2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and  
 3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922, 4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426

Appendix B – Sample Water Efficient Landscape Worksheet.

WATER EFFICIENT LANDSCAPE WORKSHEET

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

SECTION A. HYDROZONE INFORMATION TABLE

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

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

\* Hydrozone  
 HW = High Water Use Plants  
 MW = Moderate Water Use Plants  
 LW = Low Water Use Plants      \*\*Irrigation Method  
 MS=Micro-spray  
 S=Spray  
 R=Rotor  
 B=Bubbler  
 D=Drop  
 O=Other

SECTION B. WATER BUDGET CALCULATIONS

Section B1. Maximum Applied Water Allowance (MAWA)

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

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

where:

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

Maximum Applied Water Allowance = \_\_\_\_\_gallons per year

Show calculations.

Effective Precipitation (Eppt)

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

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

Maximum Applied Water Allowance = \_\_\_\_\_gallons per year

Show calculations.

Section B2. Estimated Total Water Use (ETWU)

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

where:

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

Hydrozone Table for Calculating ETWU

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

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

Sum SLA

Estimated Total Water Use = \_\_\_\_\_gallons

Show calculations.

Appendix C – Sample Certificate of Completion.

CERTIFICATE OF COMPLETION

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

PART 1. PROJECT INFORMATION SHEET

- Date
- Project Name
- Name of Project Applicant

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

Project Address and Location:  
Street Address Parcel, tract or lot number, if available.

City Latitude/Longitude (optional)  
State Zip Code

Property Owner or his/her designee:  
Name Telephone No.  
Fax No.  
Title Email Address  
Company Street Address  
City State Zip Code

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

\_\_\_\_\_  
Property Owner Signature Date

Please answer the questions below:

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

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

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

Signature\* Date  
Name (print) Telephone No.  
Fax No.  
Title Email Address  
License No. or Certification No.  
Company Street Address

City State Zip Code

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

**PART 3. IRRIGATION SCHEDULING**

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

**PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE**

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

## PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

## PART 6. SOIL MANAGEMENT REPORT

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

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

MOTION:

SECONDED:

VOTE:

RESOLUTION 22-23 C. Hoff, City Clerk

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALIPATRIA ORDERING AN ELECTION, REQUESTING COUNTY ELECTIONS TO CONDUCT THE ELECTION, AND REQUESTING CONSOLIDATION OF THE ELECTION FOR CITY OF CALIPATRIA

*WHEREAS*, pursuant to Elections Code Section 10002, the governing body of any city or district may be resolution request the Board of Supervisors of the county to permit the county elections official to render specified services to the city or district relating to the conduct of an election; and

*WHEREAS* the resolution of the governing body of the city shall specify the services requested; and

*WHEREAS*, pursuant to Elections Code Section 10002, the city shall reimburse the county in full for the services performed upon presentation of a bill to the city; and

*WHEREAS*, pursuant to Elections Code 10400, whenever two or more elections, including bond elections, of any legislative or congressional district public district, city, county, or other political subdivision are called to be held on the same day, in the same territory, or in territory that is in part the same, they may be consolidated upon the order of the governing body/bodies or officer/officers calling the elections; and

*WHEREAS*, pursuant to Elections Code 10400, such election for cities and special districts may be either completely or partially consolidated; and

*WHEREAS*, pursuant to Elections Code Section 10403, whenever an election called by a district, city or other political subdivision for the submission of any question, proposition, or office to be filled is to be consolidated with a statewide election, and the question, proposition, or office to be filled is to appear upon the same ballot as that provided for that statewide election, the district, city or other political subdivision shall, at least 88 days prior to the date of the election, file with the board of supervisors, and a copy with the elections official, a resolution of its governing board requesting the consolidation, and setting forth the exact form of any question, proposition, or office to be voted upon at the election, as it is to appear on the ballot, acknowledging that the consolidation election will be held and conducted in the manner prescribed in Section 10418. Upon such request, the Board of Supervisors may order the consolidation; and

*WHEREAS*, pursuant to Elections Code Section 10418, if consolidated, the consolidated election shall be held and conducted, election boards appointed, voting precincts designated, candidates nominated, ballots printed, polls opened and closed, voter challenges determined, ballots counted and returned, returns canvassed, results declared, certificates of election issued, recounts conducted, election contests presented, and all other proceedings incidental to and connected with the election shall be regulated and done in accordance with the provisions of law regulating the statewide or special election, or the election held pursuant to Section 1302 or 1303, as applicable.

*WHEREAS*, the resolution requesting the consolidation shall be adopted and filed at the same time as the adoption of the ordinance, resolution, or order calling the election; and

*WHEREAS*, various district, county, state and other political subdivision elections may be or have been called to be held on November 8, 2022.

NOW THEREFORE BE IT RESOLVED AND ORDERED that the governing body of the City of Calipatria hereby orders and election be called and consolidated with any and all elections also called to be held on November 8, 2022 insofar as said elections are to be held in the same territory that is in part the same as the territory of City of Calipatria requests the Board of Supervisors of the County of Imperial to order such consolidation under Elections Code Section 10401 10403 and 10418.

BE IT FURTHER RESOLVED AND ORDERED that said governing body hereby requests the Board of Supervisors to permit the Imperial County Elections Department to provide any and all services necessary for conducting the election and agrees to pay for said services, and

BE IT FURTHER RESOLVED AND ORDERED that the Imperial County Elections Department conducts the election for the following offices on the November 8, 2022 ballot:

SEATS OPEN	OFFICE	TERM
THREE	CITY COUNCIL	FOUR YEAR

MOTION:                        SECONDED:                    VOTE:  
RESOLUTION 22-25 Chief Llanas, fire

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALIPATRIA APPROVING THE LETTER OF INTENT TO BECOME AN ASSIGNEE OF A CALOES TYPE VI ENGINE

WHEREAS, the Calipatria Fire Department has researched all requirements for becoming an Assignee of a Type VI Engine: and

WHEREAS, the city has the responsibility to maintain the minimum insurance requirements, staffing availability and training requirements; and

DISSCUSSION/DIRECTION

Lithium Valley Economic Opportunity Investment Plan-  
LITHIUM VALLEY ECONOMIC OPPORTUNITY INVESTMENT PLAN  
Summary

Lithium/rare-mineral mining/processing/manufacturing and renewable energy generation/storage possess the opportunity to propel the economic future of Imperial County residents for generations.

Introduction

The County of Imperial desires to increase the overall wealth of its residents through private economic investment into the Imperial Valley Region in the form of lithium and rare mineral extraction, processing and manufacturing/packaging for end-user applications and renewable energy generation/storage in the form of geothermal, solar, wind and energy storage. The Imperial County Lithium Valley Economic Opportunity Investment Plan will be accomplished through specific actions of the County of Imperial, State of California and the United States Federal Government. Lithium is a vital mineral in the rechargeable batteries used by consumers in portable computing devices, electric vehicles and battery storage. More than 80% of the world’s raw lithium is mined in Australia, Chile, and China. Currently, China controls more than half of the world’s lithium processing and refining and has three fourths of the lithium-ion battery mega factories in the world, according to the International Energy Agency. Today, the United States has only 1% of global lithium being mined and processed, according to the U.S. Geological Survey. Imperial County, California is blessed with an abundance of Geothermal Brine at the Salton Sea. The earth heated brine is rich in critical minerals needed for the production of batteries and alloys, including lithium, manganese and zinc. Industry professionals estimate there may be as much as fifteen (15) million tons of lithium in Imperial County that would take 50-100 years to extract. Additionally, there is an estimated 1,000-1,500 MW of additional geothermal energy generation available. The mining of lithium (and other rare-earth minerals) in addition to geothermal power generation provide the opportunity for the United States to have greater control over needed material in the supply chain for electric vehicles and consumer/commercial electronics while providing greater stability to our energy supply. Benefits of Economic Investment County (Local)Employment opportunities (construction and operation). Education/training opportunities for persons desiring a career in lithium/rare mineral extraction, processing and manufacturing/processing or renewable energy generation/storage from geothermal, wind and energy storage. Lithium Valley Economic Opportunity Investment Plan (Imperial County LVIP) Tax Revenue improved and consistent tax base for which the County can provide appropriate government level services to its residents (in the form of public safety, infrastructure, judicial, social services and quality of life including recreational and cultural/arts). State of California Employment opportunities which reduce individual reliance on social services.

Education/training providing for an enhanced workforce to propel a variety of industries (primary and secondary). Tax Revenue providing financial resources to the State of California to fund education (K-16+), infrastructure, public safety, social services and quality of life activities. Environmental improvements by providing necessary products to propel rechargeable zero-emission transportation. Digital connectivity and productivity by providing necessary resources used for consumer and commercial application communication. Vertical production capability to increase assembly/manufacturing in California, creating products exported domestically and internationally. Energy Supply stability is enhanced by additional base-load renewable energy generation from geothermal facilities providing needed power when solar/wind is unable to produce. Renewable Energy compliant with Renewable Portfolio Standards (RPS) in the form of geothermal energy generation produced in California for Californian's. United States Federal Government National Security: lithium/rare-minerals and renewable energy generation are key to the National Security interests of the United States. The case for renewable energy is simple – its cleaner and safer for the environment and it is domestically produced. For lithium and rare-minerals, high value communication products (both consumer and commercial scale) depend on these elements. Reliance on foreign nations for these products places our communication systems at risk of geopolitical instability. Environmental transformation: as the United States continues marching toward rechargeable vehicles, lithium is an essential element for batteries. In order to achieve its climate change goals, the country needs a long-term, stable and preferably domestic source of lithium, otherwise the United States is at the mercy of other nations which again exposes our interests to geopolitical instability. Supply Chain Certainty: historically, United States consumer demand for passenger vehicles and light trucks exceeds fifteen million vehicles per annum. This is exclusive of commercial and mass-transit vehicles. The ability to deliver vehicles to consumers at a “affordable” price is dependent on mass production in order to maximize efficiency. Supply chain certainly is at the heart of scaled efficiency. As with many other raw and semi-finished materials, it is incumbent on the United States to have capacity within our nation. Lithium Valley Economic Opportunity Investment Plan (Imperial County LVIP)

**Self-Determination** In its purest form, self-determination is defined as the process by which a person controls their own life. For purposes of the Lithium Valley Economic Opportunity Investment Plan this shall be defined as the process by which the County of Imperial controls its economic future as it relates to lithium/rare mineral extraction, processing, manufacturing and renewable energy generation and storage through specific actions that will be taken with intention and transparency. Specific Actions of the County of Imperial

1. Board of Supervisors adopting a Resolution in support of the Lithium Valley Economic Opportunity Investment Plan.
2. Board of Supervisors creating a subcommittee known as the Lithium Valley Economic Opportunity Investment Plan Subcommittee comprised of two (2) members of the Board of Supervisors.
3. Creation of an internal working group to the County Board of Supervisors to include:
  - Lithium Valley Subcommittee (2 persons of the Board of Supervisors)
  - County Executive Officer
  - County Counsel
  - County Director of Planning and Development Services
  - County Director of Intergovernmental Relations
  - Contract Economist/Economic Development Consultant to the County.
4. County of Imperial seeking voter approval to establish appropriate remuneration for lithium/rare mineral mining and power generation/storage to provide appropriate financial benefits to the County (as a municipal corporation) and community organizations that further the economic interests of the region. Said remuneration shall be used to address environmental impacts of industry and infrastructure improvements. The remuneration vehicle shall provide tax credits for lithium/rare mineral extraction used within Imperial County for mid-stream processes (may include but not be limited to processing and manufacturing).
5. County of Imperial establishing a Lithium Valley Project Ombudsperson to work directly with economic investors seeking to engage in lithium/rare-mineral mining and renewable energy generation to provide enhanced communication by and between internal departments to the County as well as assistance in communication with State and Federal Agencies.
6. County of Imperial exploring economic viability of an Enhanced Infrastructure Finance District (EIFD) to finance infrastructure improvements.
7. County of Imperial providing leadership (Subcommittee of the Board of Supervisors) and professional staff resources for which to locally implement the specific actions requested of the State of California and the United States Federal Government, including the following:

- a. Effectuate rule changes giving local jurisdictions authority to entitle and permit up to 99.9 MW of energy generation and changes to definition of “net-to-grid”.
- b. Create a Specific Plan (SP) for Lithium Valley within Imperial County.
- c. Create a Programmatic Environmental Impact Report (EIR) for Lithium Valley within Imperial County
- d. Create and implement the Lithium Valley Development Office to assist with the development of lithium/rare-mineral mining, ancillary processing, assembly and manufacturing and renewable energy generation projects. Lithium Valley Economic Opportunity Investment Plan (Imperial County LVIP)
- e. Assist State and local agencies in the development, construction and operation of a California Polytechnic University or similar institution to provide education and training in support of lithium/rare-mineral mining and renewable energy generation. Specific Actions Requested of the State of California Governor Newsom identified Lithium Valley in remarks on his fiscal year 2022-23 proposed budget, The California Blueprint which was released on January 10, 2022. “We have what someone described as the Saudi Arabia of lithium right here in the state of California down in Imperial County near the Salton Sea,” Newsom remarked. Imperial County agrees with the Governor’s assessment and Lithium Valley can produce these valuable resources in an environmentally-conscious way. Each proposed lithium extraction plant would be a closed-loop system, without the creation of open pits or solar evaporation ponds. California and the United States can secure a strategic mineral resource and promoted environmentally-friendly business practices. Delegating planning and permitting authority of Geothermal Development up to 99.9 Megawatts generation, to the County of Imperial. (Currently limited to 49.9 Megawatts) Currently, Imperial County is authorized to permit Geothermal Power Plants that generate up to 49.9 MWs, and a developer wishing to construct a Geothermal Power Plant 50MWs or larger is required to follow the California Energy Commission’s (“CEC”) Application for Certification Process (“AFC”). However, the CEC’s Small Power Plant Exemption Program (“SPPE”) allows for a proposed Thermal Power Plant project to be exempted from the AFC when: 1) the project will generate between 50 and 100 MWs; and 2) the CEC has made a determination that the project will not have a significant effect on the environment or energy resources. Imperial County is respectfully requesting that the (“CEC”) grant our County the ability to permit Geothermal Power Plants up to the maximum 99.9 MWs in accordance with the SPPE. Further, formally change the definition of “net-to-grid” to provide opportunity for energy generation facilities in Imperial County to deliver power to themselves (parasitic load), adjacent users (affiliated and non-affiliated) and micro-grid users (affiliated and non-affiliated) within five (5) miles of the boundaries of the host site. Host site shall be defined as the parcel at which the power generation facility is located (or all parcels if facility is located on multiple parcels). When said changes are granted by the State of California, it will kick start both the development of mineral recovery and increase the State baseload renewable power portfolio. Provide Direct Funding to Imperial County for the Lithium Valley Specific Plan and Programmatic Environmental Impact Report (\$5,000,000) to be available within 30 days of adoption of the FY 2022-23 State Budget The Lithium Valley Specific Plan and Program EIR seeks to help meet the State of California’s renewable energy production goals, while providing Industry with a clear timeline for project delivery. The Specific Plan’s goal is built upon this effort, expanding the development opportunities, both in additional geothermal energy production along with mineral recovery, hydrogen, biofuels, and renewable (cathode, battery, electric vehicle) manufacturing facilities. The Program EIR ensures consideration of CEQA requirements and environmental impacts on a large project area plus avoids duplication of individual project CEQA reviews. There are a number of other sectors of the renewability that the Salton Sea Resource has the potential to develop. This includes: 1) creating environmentally safe and renewable mineral recovery through geothermal brine, 2) developing other sustainable fuels such as green hydrogen and bio-based fuels, and 3) recycling and reusing Lithium Valley Economic Opportunity Investment Plan (Imperial County LVIP) organic (plant based) and inorganic mineral waste (battery recovery), both diverting from landfills and reducing the depletion of raw materials. Imperial County released a Specific Plan and Programmatic Environmental Impact Report (EIR) Request for Proposals on January 13, 2022. The responses will be brought to the Imperial County Board of Supervisors in March 2022, with a recommendation to award. We are seeking support and funding of the Lithium Valley Specific Plan and Program EIR, with an estimated cost of \$5 million to be made directly available to the County of Imperial within 30 days of adoption of the FY 2022-23 State of California Budget. Direct Funding to the County of Imperial for the Lithium Valley Development Office (\$500,000 annually, increasing by 5% per annum) for a period of ten (10 years) beginning with the FY 2022-23 State Budget Imperial County is seeking support and funding of a Lithium Valley Development Office, located in Imperial County.



The office function will be to provide direct feedback to the development on project status and shepherd projects through the County of Imperial permitting and planning offices. In addition, the office will follow the Lithium Valley Specific Plan and Program EIR, answer Industry inquiries, and encourage ancillary business development in Lithium Valley. The Lithium Valley Development Office will include an economic development officer, civil engineer, planner and analyst. Each position would be limited term and compensated at 30% greater than the current corresponding County pay structure. The team will report to the Imperial County Board of Supervisors and provide collaboration reports to the California Energy Commission, Lithium Valley Commission and Governor's Office of Economic Development (GOBIZ). The estimated cost is \$500,000 annually (increasing by 5% per annum) and would be for a term of ten (10) years, between July 1, 2022, and June 30, 2031. State of California Support and Assistance in creation of an Imperial County Severance Tax or Resource Levy for critical minerals (delegated authority to Imperial County) In November 2022, the County of Imperial shall seek voter approval to establish appropriate remuneration for lithium/rare mineral mining and power generation/storage to provide appropriate financial benefits to the County (as a municipal corporation) and community organizations that further the economic interests of the region. The State of California shall support this self-determination effort so that the County of Imperial and its residents will directly benefit from the production of lithium/rare minerals and renewable energy resources being exported elsewhere in California, the nation and internationally. A mineral tax/levy/fee would be directed to infrastructure, environmental mitigation, and community enhancement, all within Imperial County. Infrastructure needs are being identified by Imperial County Public Works and the Lithium Valley Specific Plan. Already, Imperial County has invested in the repair and reopening of two (2) critical bridges that serve the Lithium Valley Area. As the Salton Sea recedes, additional Geothermal resources and mineral extraction sites will need road and utility connection. A guaranteed revenue allows Imperial County to make the improvements, as industry demands grow. Environmental mitigation needs are found at the South Salton Sea. Air pollution dust control projects, wetlands, remediation, land reclamation, and tree planting are some of the measures available. These projects would be on land around or near the Lithium Valley area. Lithium Valley Economic Opportunity Investment Plan (Imperial County LVIP) Community enhancement needs are items that make our neighborhoods alive. Imperial County, in partnership with the Cities and Special Districts within the County would begin investment in cultural projects, music, art, parks and education endowment. Celebrating the contributions of our diverse community and encouraging some of the new workforce to locate in our communities. The State of California will work cooperatively with the County of Imperial relative to any fee/taxation being discussed by State officials in an effort to ensure that such fees/taxes combined with local fees/taxes (for the benefit of the host community/region) do not place an undue burden on the industry, thus making lithium/rare mineral extraction and geothermal energy generation unfeasible. Support and Funding of a Cal-Poly campus in Imperial County (\$100 million) or Expansion of Current/Past Efforts (including cooperatives with UC Riverside and UC Davis to include educational opportunities in engineering, geology and chemistry for which to train/support the lithium industry in Imperial County) Imperial County requests the support and funding of a California Polytechnical University in Lithium Valley. A Cal Poly campus would provide the engineers and chemists needed to work in the geothermal and lithium development sector; as well as any co-locating cathode or battery company workforce needs. The polytechnical college provides opportunities for the vocational and technical development of the workforce as well, plus it would complement the need for supporting our continuing agricultural business. As an immediate action, the State of California would establish a Cal-Poly extension at the three hundred (300) acres site in Brawley, California. The property was previously donated by a local businessperson with the hopes that a full four-year university would be established. The site has some superstructures, though is currently vacant. The on-site buildings could be remodeled and re-opened to immediately establish a Cal-Poly extension on this land with temporary classrooms/laboratories while a full campus is designed and constructed. The need is immediate. Support and Provide Seed-Funding a Reference Lab for Lithium Purity Testing The value and use applicability of metals, minerals and other elements rely on their laboratory-tested purity. Laboratory facilities must be located at or near actual mining facilities for quality control purposes. As the host community for lithium extraction, the Imperial Valley must have appropriate testing facilities to ultimately benefit commercial and consumer applications of lithium and other rare-earth minerals. Such a facility could be run as a cooperative serving many different extraction operations and (ultimately) be paid for out of a remuneration tax or fee. Go-Biz Tax Credit Carve-Out for Lithium, Geothermal The County of Imperial requests that the State of California dedicate \$5,000,000 annually for new Employment Tax Credits for employers within appropriate NAICS codes making new investments of

lithium/rare-mineral mining in Imperial County for a period of five (5) years (time period of FY 2024 through FY 2028). This carve-out would provide the impetus for lithium/rare-mineral mining/processing/manufacturing and geothermal energy generation to begin immediately to meet the market demands and thus providing for supply-chain and environmental benefits to the State of California sooner. Executive Order or Legislative Action exempting lithium/rare-mineral and geothermal producers from additional compliance from CEQA after PEIR and SP

The County of Imperial requests that the State of California take an executive or legislative action that results in the exclusion of current and future projects that are within the County's (to be created) Specific Plan and Lithium Valley Economic Opportunity Investment Plan (Imperial County LVIP) Page 7 of 8 Programmatic Environmental Impact Report from further environmental review, such as the California Environmental Quality Act (CEQA). Specific Actions Requested of the United States Federal Government

The United States Department of Energy (U.S. energy Secretary Granholm) produced the National Blueprint for Lithium Batteries (released in June 2021). It outlined the need for lithium production as a means of propelling the United States economy and providing for environmental improvements. It quotes President Biden's Executive Order 14008 "Tackling the Climate Crisis Home and Abroad" (1/27/21). Lithium/rare-mineral mining and renewable energy generation domestically helps reduce American reliance on foreign sources for needed manufacturing inputs and energy production. The Infrastructure Investment and Jobs Act of 2021 provides \$1.2 trillion of future spending from the United States Federal Government on various programs and projects. Included in this is about \$550 billion of direct spending on infrastructure projects. Imperial County's Lithium Valley Economic Opportunity Investment Plan needs the direct involvement and investment from the Federal Government. The Infrastructure Bill included future spending in the following categories that can be used to propel the Lithium Valley Economic Opportunity Investment Plan: Roads & Bridges: \$157 billion Railways: \$66 billion Electrical Grid: \$65 billion Environmental Remediation: \$21 billion Portions of the Infrastructure Bill can be utilized to help propel investment in lithium/rare-mineral mining and renewable energy generation in Imperial County: Roads & Bridges (\$157 billion): Imperial County needs an allocation of \$50 million to provide for road and bridge infrastructure to portions of the region where lithium/rare-mineral mining and renewable power generation occur. This will provide the opportunity for increased access in a safe manner for production equipment and construction/operational personnel. Railways (\$66 billion): An estimated 15,000,000 tons of lithium will be extracted over a 50+ year period (Upstream). Some of this material will be used directly in midstream (material processing, and cell manufacturing). Ultimately almost all either upstream or midstream material/products will be exported out of Imperial County to end-users. Rail is an efficient and effective means to move these materials and goods. Imperial County needs \$1 billion of railway upgrades in the form of additional tracks, loading and siding/spur infrastructure. Electrical Grid (\$65 billion): The process of lithium and rare-mineral extraction (in the case of Imperial County) also generates significant geothermal (baseload) power. Energy production is reliant on transmission and distribution. Expanded capacity is needed to move energy from Imperial Valley to more populous areas throughout California and the Western United States. Imperial County requests \$500 million in funding offsets for grid upgrades and wheeling charges from energy producers. Lithium Valley Economic Opportunity Investment Plan (Imperial County LVIP) Environmental Remediation (\$21 billion): Lithium battery production will (ultimately) generate an issue at the back end, "End-of-life recycling and reuse". Without significant advanced planning and investment, this will become an immense environmental issue for generations to come. The Federal Government has the opportunity to utilize funds from the Infrastructure Bill to invest in appropriate facilities for "End of Life Recycling and Reuse." Imperial County believes such activities should occur where (or near) the lithium was originally mined and processed. The Federal Government should allocate up to \$500 million in direct funding and/or loan guarantees for companies that desire to build/operate End of Life Recycling and Reuse facilities in Imperial County to support the lithium battery and technology industry. Call to Action The Lithium Valley Economic Opportunity Investment Plan will create billions of dollars of private economic investment in Imperial County producing lithium/rare-minerals and renewable energy helping propel the United States economy for generations. This will result in employment opportunities for residents of the region and tax revenue at the local, state and federal government. The success of the Lithium Valley Economic Opportunity Investment Plan relies on the adoption and funding of the Plan at all levels of government (County, State and Federal). The actions needed by each level of government are outlined quantitatively within the plan. It is incumbent on each participant to take immediate action on their portion of the plan in order to achieve the desired outcome for economic investment.

Support for Imperial County's Lithium Valley Economic Opportunity Investment Plan-/ Letter of Support-  
Rebecca Terreza-Baxter

**Imperial County's Letter of Support**

May 10, 2022

Governor Gavin Newsom  
1021 "O" Street, Suite 9000  
Sacramento, CA 95814

The Honorable Ben Hueso  
California State Senate  
1021 "O" Street, Suite 7340  
Sacramento, CA 95814

The Honorable Eduardo Garcia  
California State Assembly  
11 "O" Street, Suite 8120  
Sacramento, CA 9584

RE: Support for Imperial County's Lithium Valley Economic Opportunity Investment Plan

Dear Governor Newsom:

On behalf of City of Calipatria, I'm writing to share with you our support of Imperial County's Lithium Valley Economic Opportunity Investment Plan.

Imperial County includes several disadvantaged communities and is one of the poorest counties in the state. We believe this proposal, among other efforts, enables an efficient, secure and fair development of an industry that has the potential to propel and improve the economic and environmental future of Imperial County residents for generations to come.

In order to ensure we create the environment necessary to realize the massive potential for the County, California, and the nation, we need to be both thoughtful and aggressive in our development of this opportunity. That is why the Imperial County Board of Supervisors has adopted the Lithium Valley Economic Opportunity Investment Plan. This plan articulates the local, statewide, and national benefits of this endeavor. It also prescribes the specific activities we believe are necessary for the County, the State, and the Federal governments to undertake in order to best capitalize on those benefits.

Given the critical nature of this endeavor, we strongly urge you to do everything you can to help Imperial County make this plan a reality. We greatly appreciate your time and attention. If you have any questions, please contact Romualdo Medina, City Manager-760-348-4141.

**City of Calipatria letter of support:**

May 1, 2022

Governor Gavin Newsom  
1021 O Street, Suite 9000  
Sacramento, CA 95814

The Honorable Ben Hueso  
California State Senate  
1021 O Street, Suite 7340  
Sacramento, CA 95814

The Honorable Eduardo Garcia  
California State Assembly  
1021 O Street, Suite 8120  
Sacramento, CA 95814

RE: Support for Imperial County's Lithium Valley Economic Opportunity Investment Plan; and  
Development of Lithium Valley Disadvantaged Communities Economic Development Plan

As one of several disadvantaged communities in Imperial County, the City of Calipatria supports Imperial County's Lithium Valley Economic Opportunity Investment Plan ("Plan"). The citizens of Calipatria believe that the Plan, along with additional efforts requested in this letter, will enable an efficient, secure,

and fair development of an industry that has the potential to propel and improve the economic future of Calipatria residents for generations to come, but it also has the potential to severely impact the natural and built environment in and around the incorporated boundaries of Calipatria.

The City of Calipatria will be the most impacted municipality due to its close proximity to the Lithium Valley Area. The City of Calipatria is located in the northeastern end of the Imperial Valley, contiguous to the Salton Sea Known Geothermal Resource Area. It is 40 miles north of the US-Mexico border, 96 miles east of San Diego, and 142 miles southeast of Los Angeles. The City of Calipatria's population is 6,515 (April 1, 2020) which includes a prison population of approximately 3,000 in Calipatria State Prison (Census 2020). Currently, the city's population is at a decline of -4.46% annually and has decreased by -15.56% since 2010. The City of Calipatria and Imperial County has among the lowest poverty rates in the nation. Persons in poverty in 2016-2020 for the City of Calipatria was 35.4% compared to Imperial County at 18.1% and State of California at 12.58%. The City's median household income (in 2020 dollars) was \$37,196, compared to County \$46,220 and State \$80,440.

Aware of our economic challenges as a disadvantaged community, the City of Calipatria has taken a proactive and strategic approach to apply our community's unique economic role and assets to help facilitate the momentum of the development of the Lithium Valley project. The City has been actively involved in workshops, meetings, forums, and visits relating to the Lithium Valley project to better assess how we can better support this project. Recent investments undertaken by the City include the sale of city-owned land to facilitate the construction of 130 single-family homes, street improvements, a new park with a 12,655 community center, and wastewater collection system improvements. The City also has several shovel-ready projects that will help mitigate some of the potential environmental impacts from increased production. These include City Entrance Signs, Active Transportation and Safe Routes to School Pedestrian Improvements, State Highway 111 ADA Improvements and Beautification Project, and Sewer Line Replacement Project, all with complete studies pending funding.

The City of Calipatria welcomes the economic and global environmental benefits this Lithium Valley Industry will bring to our municipality, County and State, and to the Nation's energy security. The Calipatria Lithium Valley Disadvantaged Communities Economic Development Plan will lay the foundation to direct our efforts and place-based assets and location advantages to the success of the Lithium Valley project. It will follow a structural sequence of phases and specific tasks that is data driven, identify and inclusive engagement of all stakeholders, and assessment of the economic opportunities for our City and immediate impacted area

The Imperial County Lithium Valley Economic Opportunity Investment Plan outlines the local, statewide, and national benefits of local lithium extraction. It also prescribes the specific activities we believe are necessary for the County, the State, and the Federal governments to undertake in order to best capitalize on those benefits. We strongly urge you to do everything you can to help Imperial County make this plan a reality.

The City of Calipatria also respectfully requests that you develop a Lithium Valley Disadvantaged Communities Plan with an inclusive community engagement process targeting the immediately impacted communities burdened by the increased operational activity, pollution, required public services, infrastructure, poverty, and potential annexation. The plan should follow the State of California Clean Energy of 2018 as well as the Federal Government Green Act of 2021, including but not limited to the following areas of investment categories and goals for the minimum level of investment for disadvantaged communities:

- Five-year clean energy investment plan provided to the California legislature for approval.
- California Budget appropriations for green and clean energy similar as the 'cap and trade' program under AB 32 and in compliance with the Go Biz tax credit program.
- Environmental Impact Report specifically to the Lithium Valley and Salton Sea Geothermal Basin area.
- Maximize economic, environmental, and public health benefits to the Calipatria and Niland communities, particularly from the Salton Sea receding shoreline

- Foster job creation by promoting local impacted communities within the Lithium Valley and Geothermal Basin Area.
  - Complement efforts and increased funding to improve air quality to the impacted communities.
  - Direct investment toward the most immediately impacted disadvantaged communities and households within the redline community of Calipatria and Niland of the Lithium Valley project.
  - Provide opportunities for business, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide and national efforts to promote green clean energy.
  - Infrastructure funding for State Highway 111 improvements, local street improvements, acquisition of the water system, sewer, public safety, and services for the redlined communities of Calipatria and Niland
  - Educational funding assistance to locally impacted Calipatria Unified School District, Imperial Valley College, and funding assistance for a higher institution of learning specializing in minerals and green energy curriculum and degrees, such as University of California Berkeley, Cal Poly, State Universities, and others.
  - Quality control funding for the lithium extraction and mining testing within the Lithium Valley project.
  - Funding for the Calipatria and Niland Impact Severance Tax for the immediate impacts on infrastructure, job training, community enhancements, and environmental mitigation.
  - Funding for increased and improved medical services to our local hospitals, including a children's hospital.
- Immediate funding for Calipatria State Prison wastewater collection system improvements.

As Mayor of the City of Calipatria and speaking on behalf of our directly impacted disadvantaged community, I respectfully deliver this request in an effort to be included in the State of California's green energy community investment plan for green and clean energy. We support the direction the State of California is taking to address green-house emissions and lead the way with new clean energy industries. We look forward to a successful Lithium Valley extraction and battery manufacturing industry, as well as the investment partnership this area critically deserves. We greatly appreciate your time and attention. If you have any questions please contact Rom Medina, City of Calipatria City Manager (760) 348-4141 x3.

#### COUNCIL REPORTS:

Cervantes:

Chavez:

Hisel:

Nava-Froelich:

Amezcua:

STAFF:

Medina:

Hoff:

MOTION:  
ADJOURN:

SECOND:

VOTE: