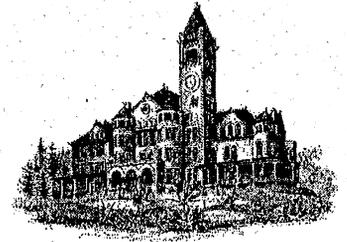


# City of Ione

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September 20, 2010

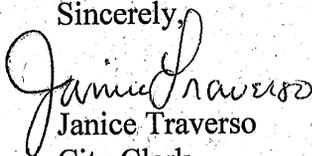
Mr. Peter Brostrom  
California Department of Water Resources  
Water Use and Efficiency Branch  
P.O. Box 942836  
Sacramento, CA 94236-0001

RE: Water Efficient Landscape Ordinance

Dear Mr. Brostrom:

As requested, enclosed is the City of Ione's Water Efficient Landscape Ordinance.  
If you should need anything else, please let me know.

Sincerely,

  
Janice Traverso  
City Clerk

jmt

## ORDINANCE NO. 432

### AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IONE ADOPTING THE WATER EFFICIENT LANDSCAPE ORDINANCE

The City Council of the City of Ione does ordain as follows:

#### Section 1: Purpose and Authority

The purpose of this Ordinance is to amend the City of Ione Municipal Code to add requirements for water efficient landscaping as provided under the California Department of Water Resources' Model Water Efficient Landscape Ordinance, consistent with State law.

#### Section 2:

The City Council hereby adopts Chapter 18.16 "Water Efficient Landscaping" as provided in the attached Exhibit A, incorporated herein by reference.

#### Section 3: Findings

The City Council hereby bases these amendments upon the following findings.

#### **California Environmental Quality Act (CEQA)**

Finding: The proposed amendment to the City's Municipal Code is exempt from the California Environmental Quality Act.

Evidence: General Plan Policy CO-4.1 calls for promotion of water conservation within existing and future urban uses. Action CO-4.1.2 requires planting of drought-tolerant and native vegetation as part of new developments. Policy CO-4.2 encourages the use of treated wastewater to irrigate landscaping. The proposed ordinance furthers these policies and implements this action by requiring the preparation of landscaping plans, the reporting on the water efficiency of proposed landscaping, the requiring of irrigation schedules and maintenance of irrigation systems, and designing irrigation systems for future use of recycled water as those resources are made available.

#### **General Plan Consistency**

Finding: The proposed amendment is consistent with the General Plan goals, policies, and implementation programs.

Evidence: Section 15061(b)(3) of the California Environmental Quality Act (CEQA) states that an activity is covered by the general rule that CEQA only applies to projects, which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA review. Approving the State's updated model water efficient landscape ordinance does not create any direct, physical change on the environment and therefore will not have any potential for causing a significant effect on the environment.

Section 4: No Mandatory Duty of Care

This ordinance is not intended to and shall not be construed or given effect in a manner that imposes upon the City or any officer or employee thereof a mandatory duty of care towards persons and property within or without the City, so as to provide a basis of civil liability for damages, except as otherwise imposed by law.

Section 5: Severability

If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the ordinance which can be given effect without invalid provision or application, and to this end the provisions of this ordinance are severable. This City Council hereby declares that it would have adopted this Ordinance irrespective of the invalidity of any particular portion thereof and intends that the invalid portions should be severed and the balance of the ordinance enforced.

Section 6: Effective Date and Publication

This Ordinance shall take effect thirty (30) days after its adoption. In lieu of publication of the full text of the ordinance within fifteen (15) days after its passage, a summary of the ordinance may be published at least five days prior to and fifteen (15) days after adoption by the City Council and a certified copy shall be posted in the office of the City Clerk, pursuant to GC 36933(c)(1).

The foregoing Ordinance of the City Council of the City of Ione was duly introduced on April 6, 2010 and adopted by the City Council at its regular meeting on April 20, 2010 by the following vote:

**AYES: Bonham, Ulm, Ard, Schaufel, Plank**

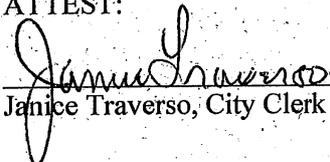
**NOES: None**

**ABSTAIN: None**

**ABSENT: None**

  
Chester Schaufel, Mayor

ATTEST:

  
Janice Traverso, City Clerk

## 18.16 Water Efficient Landscaping

### Sections:

- 18.16.010 Purpose
- 18.16.020 Applicability
- 18.16.030 Definitions
- 18.16.040 Permit Required
- 18.16.050 Application Process
- 18.16.060 Submittal Requirements – Elements of the Landscape Documentation Package
- 18.16.070 Landscape Certificate of Completion
- 18.16.080 Water Efficient Landscape Worksheet - Contents
- 18.16.090 Soil Management Report
- 18.16.100 Landscape Design Plan
- 18.16.110 Irrigation Design Plan
- 18.16.120 Grading Design Plan
- 18.16.130 Irrigation Scheduling
- 18.16.140 Landscape Irrigation Maintenance Schedule
- 18.16.150 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis
- 18.16.160 Irrigation Efficiency
- 18.16.170 Recycled Water
- 18.16.180 Stormwater Management
- 18.16.190 Public Education
- 18.16.200 Provisions for Existing Landscapes
- 18.16.210 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis for Existing Landscapes
- 18.16.220 Water Waste Prevention
- 18.16.230 Effective Precipitation
- 18.16.240 Reference Evapotranspiration (ET<sub>o</sub>) Table
- 18.16.250 Enforcement and Penalties
- 18.16.260 Relative Water Requirements of Commonly Used Plants

### 18.16.010 Purpose

The purpose of this Chapter is to:

- A. Promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;
- B. Establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects;
- C. Establish provisions for water management practices and water waste prevention for existing landscapes;
- D. 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;
- E. Encourage cooperation between the City of Lone and other local agencies to implement and enforce the provisions of this chapter.

**18.16.020 Applicability**

- A. This chapter shall apply to all of the following landscape projects:
1. **Public Agency and Non-Residential Projects.** New construction and rehabilitated landscaping for public agency projects and private development projects.
  2. **Developer-Installed Landscaping Exceeding 2,500 Square Feet in Single-Family Residential Projects.** New construction and rehabilitated landscaping which is developer-installed in single-family projects with a landscape area equal to or greater than 2,500 square feet requiring a building permit, improvement plan approval, or site plan review.
  3. **Developer-Installed Landscaping Less than 2,500 Square Feet in Single-Family Residential Projects.** New construction and rehabilitated landscaping which is developer-installed in single-family projects with a landscape area less than 2,500 square feet shall be required to comply only with the following:
    - a. Turf shall not comprise greater than fifty percent (50%) of the front yard planting area of developer-installed single-family landscaping.
    - b. The irrigation system shall be operated by an automatic controller. At a minimum, each controller shall have a 7-day calendar, three cycle/day capacity, dual programs, adjustments of watering times down to two (2) minutes, and rain switch.
    - c. A typical four (4) season irrigation schedule shall be developed and supplied to the owner. Instructions for establishment of landscaping shall be included. The schedule shall be physically attached in a prominent location adjacent to the irrigation controller.
  4. **Multi-family Residential Projects.** All new construction and rehabilitated landscaping.
  5. **Homeowner-Provided Landscaping.** New construction or rehabilitated landscaping which are homeowner-installed and/or homeowner-hired in single family residential projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building permit, improvement plan approval, or design review.
  6. **Existing Landscaping.** Landscaping constructed prior to the effective date of this Chapter and not rehabilitated shall only be required to comply with the requirements contained in Section 18.16.200.
  7. **Cemeteries.** Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries shall only be required to comply with the requirements contained in Sections 18.16.080, 18.16.130, 18.16.140, and 18.16.150. Existing cemeteries shall comply with the requirements contained in Section 18.16.200.
  8. **Homeowners Associations and Common Interest Developments.** The architectural guidelines (i.e., CC&Rs) of a common interest development, which may include community apartment projects, condominiums, planned developments, stock cooperatives, or single family subdivisions governed by a Homeowners Association shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group. Further, said guidelines shall not prohibit the removal of turf, nor restrict or prohibit the reduction of turf in lieu of more water efficient alternatives (Civil Code Section 1353.8).

- B. This chapter does not apply to:
1. Registered local, state or federal historical sites;
  2. Ecological restoration projects that do not require a permanent irrigation system;
  3. Mined-land reclamation projects that do not require a permanent irrigation system; or
  4. Plant collections, as part of botanical gardens and arboreturns open to the public.

### 18.16.030 Definitions

The terms used in this chapter have the meaning set forth below:

A. "A" Definitions.

1. "Applied water" means the portion of water supplied by the irrigation system to the landscape;
2. "Automatic irrigation controller" means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data;

B. "B" Definitions.

1. "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;

C. "C" Definitions.

1. "Certificate of Completion" means the document required to be submitted to the City upon the completion of the project applicant's landscape project;
2. "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;
3. "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;
4. "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;
5. "Common interest developments" means community apartment projects, condominium projects, planned developments, and stock cooperatives per Section 1351 of the Civil Code;
6. "Conversion factor (0.62)" means the number that converts acre-inches per acre per year to gallons per square foot per year;

D. "D" Definitions.

1. "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;

E. "E" Definitions.

1. "Ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem;
2. "Effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth;
3. "Emitter" means a drip irrigation emission device that delivers water slowly from the system to the soil;
4. "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 (1) or two (2) years of growth;
5. "Establishment period of the plants" means the first (1<sup>st</sup>) year after installing the plant in the landscape or the first two (2) years if irrigation will be terminated after establishment. Typically, most plants are established after one (1) or two (2) years of growth;
6. "Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in IMC Section 18.16.080;
7. "ET adjustment factor" (ETAF) means a factor of seven tenths (0.7), that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. A combined plant mix with a site-wide average of five tenths (0.5) is the basis of the plant factor portion of this calculation. For purposes of the ETAF, the average irrigation efficiency is seventy-one hundredths (0.71). Therefore, the ET Adjustment Factor is  $(0.7) = (0.5/0.71)$ . ETAF for a Special Landscape Area shall not exceed one (1.0). ETAF for existing non-rehabilitated landscapes is eight tenths (0.8);
8. "Evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time;

F. "F" Definitions.

1. "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;

G. Reserved for future use.

H. "H" Definitions.

1. "Hardscapes" means any durable material (pervious and non-pervious);
2. "Homeowner-provided landscaping" means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this chapter, is a person who occupies the dwelling he or she owns. This excludes speculative homes, which are not owner-occupied dwellings;

3. "Hydrozone" means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated;
- I. "I" Definitions.
1. "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);
  2. "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;
  3. "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;
  4. "Irrigation efficiency" (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this chapter is seventy-one hundredths (0.71). Greater irrigation efficiency can be expected from well designed and maintained systems;
  5. "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;
  6. "Irrigation water use analysis" means an analysis of water use data based on meter readings and billing data;
- J. Reserved for future use.
- K. Reserved for future use.
- L. "L" Definitions.
1. "Landscape architect" means a person who holds a license to practice landscape architecture in the state of California, Section 5615 of the Business and Professions Code;
  2. "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);
  3. "Landscape contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems;
  4. "Landscape Documentation Package" means the documents required under IMC Section 18.16.060;

5. "Landscape project" means total area of landscape in a project as defined in "landscape area" for the purposes of this ordinance; meeting requirements under IMC Section 18.16.020;
6. "Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve;
7. "Local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service;
8. "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;

M. "M" Definitions.

1. "Main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet;
2. "Maximum Applied Water Allowance" (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in IMC Section 18.16.080. 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 one (1.0);
3. "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;
4. "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;
5. "Mulch" means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion;

N. "N" Definitions.

1. "New construction" means, for the purposes of this chapter, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building;
2. "Noxious weeds" means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list. Lists of invasive plants are maintained at the California Invasive Plant Inventory and US Department of Agriculture invasive and noxious weeds database;

O. "O" Definitions.

1. "Operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate;

2. "Overhead sprinkler irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors);
3. "Overspray" means the irrigation water which is delivered beyond the target area;

P. "P" Definitions.

1. "Permit" means an authorizing document issued by the City for new construction or rehabilitated landscapes;
2. "Pervious" means any surface or material that allows the passage of water through the material and into the underlying soil;
3. "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 chapter, the plant factor range for low water use plants is zero (0.0) to three tenths (0.3), the plant factor range for moderate water use plants is four tenths (0.4) to six tenths (0.6), and the plant factor range for high water use plants is seven tenths (0.7) to one (1.0). Plant factors cited in this chapter are derived from the Department of Water Resources 2000 publication "Water Use Classification of Landscape Species";
4. "Precipitation rate" means the rate of application of water measured in inches per hour;
5. "Project applicant" means the individual or entity submitting a Landscape Documentation Package required under IMC Section 18.16.070, to request a permit, plan check, or design review from the City of Lone. A project applicant may be the property owner or his or her designee;

Q. Reserved for future use.

R. "R" Definitions.

1. "Rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains;
2. "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;
3. "Recreational area" means areas dedicated to active play such as parks, sports fields, and golf courses where turf provides a playing surface;
4. "Recycled water", "reclaimed water", or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption;
5. "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 and is an estimate of the evapotranspiration of a large field of four- to seven- (4" – 7") inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowance so that regional differences in climate can be accommodated;

6. "Rehabilitated landscape" means any re-landscaping project that requires a permit, plan check, or site plan review, meets the requirements of IMC Section 18.16.020, and the modified landscape area is equal to or greater than two thousand five hundred (2,500 ft<sup>2</sup>) square feet;
7. "Runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope;

S. "S" Definitions.

1. "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;
2. "Soil texture" means the classification of soil based on its percentage of sand, silt, and clay;
3. "Special Landscape Area" (SLA) means an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface;
4. "Sprinkler head" means a device which delivers water through a nozzle;
5. "Static water pressure" means the pipeline or municipal water supply pressure when water is not flowing;
6. "Station" means an area served by one (1) valve or by a set of valves that operate simultaneously;
7. "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;

T. "T" Definitions.

1. "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;

U. Reserved for future use.

V. "V" Definitions.

1. "Valve" means a device used to control the flow of water in the irrigation system;

W. "W" Definitions.

1. "Water conserving plant species" means a plant species identified as having a low plant factor;
2. "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;

3. "Watering window" means the time of day irrigation is allowed;
4. "WUCOLS" means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension, the Department of Water Resources and the Bureau of Reclamation, 2000.

- X. Reserved for future use.
- Y. Reserved for future use.
- Z. Reserved for future use.

#### **18.16.040 Permit Required**

Prior to issuance of a Building Permit or Improvement Plans, the project applicant shall submit a Landscape Documentation Package to the City for review and approval. The Landscape Package shall contain the information required by Section 18.16.070 and shall be incorporated into the improvement plan and/or landscape plan set in a form determined acceptable to the City Planner.

#### **18.16.050 Application Process**

- A. Prior to construction, the City shall:
  1. Provide the project applicant with this chapter 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 submit a Landscape Documentation Package to the City Planning Department of the City of Lone.
- C. Upon the City's approval of the Landscape Documentation Package, the project applicant shall:
  1. Receive a permit or approval of the plan check and record the date;
  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.

**18.16.060 Submittal Requirements - Elements of the Landscape Documentation Package**

The Landscape Documentation Package shall include the following six elements:

- A. Project information containing:
  - 1. Date;
  - 2. Project applicant;
  - 3. Project address (if available, parcel and/or lot number(s));
  - 4. Total landscape area (square feet);
  - 5. Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed);
  - 6. 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.
  - 7. Checklist of all documents in Landscape Documentation Package
  - 8. Project contacts to include contact information for the project applicant and property owner
  - 9. Applicant's signature and date with statement, "I agree to comply with the requirements of the City of Lone's water efficient landscape requirements and submit a complete Landscape Documentation Package".
- B. Water Efficient Landscape Worksheet containing the following information, consistent with Section 18.16.080 (Water Efficient Landscape Worksheet – Contents):
  - 1. Hydrozone information table
  - 2. Water budget calculations including:
    - i. Maximum Applied Water Allowance (MAWA)
    - ii. Estimated Total Water Use (ETWU)
- C. Soil management report (see Section 18.16.090);
- D. Landscape design plan (see Section 18.16.100);
- E. Irrigation design plan (see Section 18.16.110); and
- F. Grading design plan (see Section 18.16.120).

**18.16.070 Landscape Certificate of Completion**

- A. Prior to issuance of certificate of occupancy, a signed Landscape Certificate of Completion shall be submitted to the City Planning Department on a form prescribed by the City Planner that shall include the following information and documents:
  - 1. Date, project name, project address, applicant name, telephone, and mailing address;
  - 2. Property owner name, telephone, and mailing address;
  - 3. Certification by either the signer of the Landscape Documentation Package, the signer of the Irrigation Design Plan, or the licensed landscape contractor that the landscape project has been installed per the approved landscape package;

4. Scheduling parameters used to set the irrigation controller (see Section 18.16.140);
  5. Landscape and irrigation maintenance schedule (see Section 18.16.150);
  6. Irrigation audit report (see Section 18.16.160); and,
  7. Soil analysis report, if not initially submitted with the Landscape Documentation Package and documentation verifying implementation of soil management report recommendations.
- B. The project applicant shall ensure that copies of the approved landscape certificate of completion are submitted to the owner or his/her designee.
- C. Following receipt and review, the City shall either approve or deny the Landscape Certificate of Completion. If the Landscape Certificate of Completion is denied, the City shall not be obligated to issue an occupancy permit and will provide information to the project applicant regarding necessary corrections, appeal, or other assistance.

**18.16.080 Water Efficient Landscape Worksheet – Contents**

- A. A project applicant shall complete the Water Efficient Landscape Worksheet which contains two (2) sections (sample worksheet shall be obtained from the City):
1. A hydrozone information table for the landscape project; and
  2. A water budget calculation for the landscape project. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, a project applicant shall use the ETo values from the Reference Evapotranspiration Table in IMC Section 18.16.240.
- B. Water budget calculations shall adhere to the following requirements:
1. The plant factor used shall be from WUCOLS. The plant factor ranges from zero (0.0) to three tenths (0.3) for low water use plants, from four tenths (0.4) to six tenths (0.6) for moderate water use plants, and from seven tenths (0.7) to one (1.0) for high water use plants.
  2. All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.
  3. All Special Landscape Areas shall be identified and their water use calculated as described below.
  4. ETAF for Special Landscape Areas shall not exceed one (1.0).
- C. **Maximum Applied Water Allowance.** The Maximum Applied Water Allowance shall be calculated using the equation:

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

Where:

- MAWA = Maximum Applied Water Allowance (gallons per year)  
 ETo = Reference Evapotranspiration (inches per year) as listed in the Reference Evapotranspiration Table in IMC Section 18.16.240.  
 0.62 = Conversion Factor (to gallons)  
 0.7 = ET Adjustment Factor (ETAF)  
 LA = Landscape Area including SLA (square feet)

0.3 = Additional Water Allowance for SLA  
 SLA = Special Landscape Area (square feet)

- D. **Estimated Total Water Use.** The Estimated Total Water Use shall be calculated using the equation below. The sum of the Estimated Total Water Use calculated for all hydrozones shall not exceed MAWA.

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

Where:

ETWU = Estimated Total Water Use per year (gallons)  
 ET<sub>o</sub> = Reference Evapotranspiration (inches)  
 PF = Plant Factor from WUCOLS (see IMC Section 18.16.030)  
 HA = Hydrozone Area [high, medium, and low water use areas] (square feet)  
 SLA = Special Landscape Area (square feet)  
 0.62 = Conversion Factor  
 IE = Irrigation Efficiency (minimum 0.71)

#### 18.16.090 Soil Management Report

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:

- A. Submit soil samples to the laboratory for analysis and recommendations.
1. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.
  2. Soil analysis may include:
    - i. Soil texture;
    - ii. Infiltration rate determined by laboratory test or soil infiltration rate table;
    - iii. pH;
    - iv. Total soluble salts;
    - v. Sodium;
    - vi. Percent organic matter; and
    - vii. Recommendations
- B. The project applicant, or his/her designee, shall comply with one of the following:
1. If significant mass grading is not planned, the soil analysis report shall be submitted to the City Planning Department of the City of Lone as part of the Landscape Documentation Package; or
  2. If significant mass grading is planned, the soil analysis report shall be submitted to the City as part of the Certificate of Completion.
- C. 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.

- D. The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the City with Certificate of Completion.

#### 18.16.100 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

- i. Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. To encourage the efficient use of water, the following is highly recommended:
  1. Protection and preservation of native species and natural vegetation;
  2. Selection of water-conserving plant and turf species;
  3. Selection of plants based on disease and pest resistance;
  4. Selection of trees based on the City's local tree preservation and tree shading guidelines; and
  5. Selection of plants from the City's applicable land use planning documents, the WUCOLS (see IMC Subsection 18.16.030(W)(4)), and as described in IMC Section 18.16.260.
- ii. Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in IMC Subsection 18.16.110 (A).
- iii. Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended:
  1. Use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
  2. Recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; and
  3. Consider the solar orientation for plant placement to maximize summer shade and winter solar gain.
- iv. Turf is not allowed on slopes greater than twenty-five (25%) percent where the toe of the slope is adjacent to an impermeable hardscape and where twenty-five (25%) percent means one (1' 0") foot of vertical elevation change for every four (4' 0") feet of horizontal length (rise divided by run x 100 = slope percent).

- v. 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 Sections 4291(a) and (b) of the Public Resources Code. Avoid fire-prone plant materials and highly flammable mulches.
- vi. The use of invasive and/or noxious plant species is strongly discouraged.
- vii. 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

- i. Recirculating water systems shall be used for water features.
- ii. Where available, recycled water shall be used as a source for decorative water features.
- iii. Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.
- iv. Pool and spa covers are highly recommended.

## 3. Mulch and Amendments

- i. A minimum two (2") inch 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 contra-indicated.
- ii. Stabilizing mulching products shall be used on slopes.
- iii. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.
- iv. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see IMC Section 18.16.090).

## B. The landscape design plan, at a minimum, shall:

- 1. Delineate and label each hydrozone by number, letter, or other method;
- 2. Identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;
- 3. Identify recreational areas;
- 4. Identify areas permanently and solely dedicated to edible plants;
- 5. Identify areas irrigated with recycled water;
- 6. Identify type of mulch and application depth;
- 7. Identify soil amendments, type, and quantity;
- 8. Identify type and surface area of water features;
- 9. Identify hardscapes (pervious and non-pervious);

10. Identify location and installation details of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Stormwater best management practices are encouraged in the landscape design plan and examples include, but are not limited to:
  - i. Infiltration beds, swales, and basins that allow water to collect and soak into the ground;
  - ii. Constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and
  - iii. Pervious or porous surfaces (e.g. permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.
11. Identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, cisterns, etc.);
12. Contain the following statement: "I have complied with the criteria established by the City of Lone in IMC Chapter 18.16 and applied them for the efficient use of water in the landscape design plan"; and
13. Bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape.

#### **18.16.110 Irrigation Design Plan**

- A. **Requirements.** 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 Requirements**

- i. Dedicated landscape water meters are highly recommended on landscape areas smaller than 5,000 square feet to facilitate water management.
- ii. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling in all irrigation systems.
- iii. The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.
  1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system
  2. Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not

available at the design stage, the measurements shall be conducted at installation

- iv. 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.
- v. 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.
- vi. 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.
- vii. High flow sensors that detect and report high flow conditions created by system damage or malfunction are recommended.
- viii. 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.
- ix. Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.
- x. The design of the irrigation system shall conform to the hydrozones of the landscape design plan.
- xi. The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in IMC Section 18.16.080 regarding the Maximum Applied Water Allowance.
- xii. 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.
- xiii. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
- xiv. Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.
- xv. Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.
- xvi. Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to high traffic areas.
- xvii. Check valves or anti-drain valves are required for all irrigation systems.

- xviii. Narrow or irregularly shaped areas, including turf, less than eight feet in width in any direction shall be irrigated with subsurface irrigation or low volume irrigation system.
- xix. 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
- xx. 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 IMC Subsection 18.16.110(A). Prevention of overspray and runoff must be confirmed during the irrigation audit.
- xxi. Slopes greater than 25 percent shall not be irrigated with an irrigation system with a precipitation rate exceeding seventy-five hundredth (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 Requirements

- i. Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.
- ii. Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.
- iii. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.
- iv. 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.
- v. Individual hydrozones that mix high and low water use plants shall not be permitted.
- vi. 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 IMC Section 18.16.260). This table can also assist with the irrigation audit and programming the controller.

- B. **Design Plan Contents.** 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 IMC Section 18.16.180;
  6. The following statement: "I have complied with the criteria of IMC Chapter 18.16 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.

#### **18.16.120 Grading Design Plan**

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.

- A. The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:
1. Height of graded slopes;
  2. Drainage patterns;
  3. Pad elevations;
  4. Finish grade; and
  5. Stormwater retention improvements, if applicable.
- B. To prevent excessive erosion and runoff, it is highly recommended that project applicants:
1. Grade so that all irrigation and normal rainfall remains within property lines and does not drain onto non-permeable hardscapes;
  2. Avoid disruption of natural drainage patterns and undisturbed soil; and
  3. Avoid soil compaction in landscape areas.
- C. The grading design plan shall contain the following statement: "I have complied with the criteria of IMC Chapter 18.16 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.

**18.16.130 Irrigation Scheduling**

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:

- A. Irrigation scheduling shall be regulated by automatic irrigation controllers.
- B. 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.
- C. 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.
- D. Parameters used to set the automatic controller shall be developed and submitted for each of the following:
  1. The plant establishment period;
  2. The established landscape; and
  3. Temporarily irrigated areas.
- E. Each irrigation schedule shall consider for each station all of the following that apply:
  1. Irrigation interval (days between irrigation);
  2. Irrigation run times (hours or minutes per irrigation event to avoid runoff);
  3. Number of cycle starts required for each irrigation event to avoid runoff;
  4. Amount of applied water scheduled to be applied on a monthly basis;
  5. Application rate setting;
  6. Root depth setting;
  7. Plant type setting;
  8. Soil type;
  9. Slope factor setting;
  10. Shade factor setting; and
  11. Irrigation uniformity or efficiency setting.

**18.16.140 Landscape Irrigation Maintenance Schedule**

- A. Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.
- B. A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas; and removing any obstruction to emission devices. Operation of the irrigation

system outside the normal watering window is allowed for auditing and system maintenance.

- C. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.
- D. A project applicant is encouraged to implement sustainable or environmentally-friendly practices for overall landscape maintenance.

#### **18.16.150 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis**

- A. For new construction and rehabilitated landscape projects installed after the effective date of this Chapter:
  - 1. The project applicant shall submit an irrigation audit report with the Certificate of Completion to the City Planner that may include, but is not limited to: inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule;
  - 2. The City shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.
- B. All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

#### **18.16.160 Irrigation Efficiency**

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

#### **18.16.170 Recycled Water**

- A. Water irrigation systems and decorative water features shall allow for the future use of recycled water. At the time recycled water is made available to the project site, the project shall be required to convert landscape irrigation and water feature water to recycled water service.
- 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 Special Landscape Areas shall not exceed one (1.0).

#### **18.16.180 Stormwater Management**

- A. Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site retention and infiltration are encouraged.

- B. Rain gardens, cisterns, and other landscapes features and practices that increase rainwater capture and create opportunities for infiltration and/or onsite storage are recommended.

#### 18.16.190 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. The City shall provide information to owners of new, single-family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes.
- B. **Model Homes.** All model homes that are landscaped shall use signs and written information to demonstrate the principles of water efficient landscapes described in this chapter.
  - 1. Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme.
  - 2. Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes.

#### 18.16.200 Provisions for Existing Landscapes

The City of Lone hereby designates the Amador Water Agency to implement the requirements of this Chapter on landscape areas established before the effective date of this Chapter.

#### 18.16.210 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis for Existing Landscapes

This section shall apply to all existing landscapes that were installed before the effective date of this Chapter and are over one (1) acre in size. All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

- A. For all existing landscapes that have a water meter, the Amador Water 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:  $MAWA = (0.8)(ET_o)(LA)(0.62)$ .
- B. For all existing landscapes that do not have a meter, the Amador Water 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.

#### 18.16.220 Water Waste Prevention

- A. The City of Lone shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-

irrigated areas, walks, roadways, parking lots, or structures. Penalties for violation of these prohibitions shall be established locally.

- B. Restrictions regarding overspray and runoff may be modified if:
  1. The landscape area is adjacent to permeable surfacing and no runoff occurs; or
  2. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping;

**18.16.230 Effective Precipitation**

The City may consider Effective Precipitation, 25 percent of annual precipitation, in tracking water use and may use the following equation to calculate Maximum Applied Water Allowance:

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

**18.16.240 Reference Evapotranspiration (ET<sub>o</sub>) Table**

The following table describes the adopted reference evapotranspiration values for use in calculating water efficiency as required by this Chapter.

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

**18.16.250 Enforcement**

- A. Enforcement of this title shall be the responsibility of the City Planner or his or her designee. The City Planner shall investigate all matters of violations and, if a violation exists, the City shall take enforcement action pursuant to Chapter 1.10 (Administrative enforcement provisions).
- B. Any landscaping that is installed, constructed, altered, enlarged, converted, moved, or maintained contrary to the provisions of this Chapter, or failure to comply with any of the conditions of a permit or variance granted under this Chapter is declared to be unlawful. The City Planner may initiate an action or proceeding to enforce the provisions of this Chapter, as appropriate.

**18.16.260 Relative Water Requirements of Commonly Used Plants**

A list of plants that are commonly used in landscape designs with water requirement classifications of low (L), medium (M), or high (H) shall be adopted by resolution of the Council. To use species other than those listed by Council resolution or identified in the WUCOLS (see IMC Subsection 18.16.030(W)(4)), the designer shall provide the City with information indicating the water requirement of the species. Information shall include the listing of a plant in an acceptable reference stating its water requirement characteristics, comparing it to a species in the plant list, field data, etc. Acceptable references include the "Sunset Western Garden Book"; "Trees and Shrubs for Dry California Landscapes," Robert Perry; and "Water Wise Gardening," East Bay Municipal Utility District (EBMUD).