CALIFORNIA PUBLIC UTILITIES COMMISSION

Water Division

INSTRUCTIONS FOR WATER CONSERVATION, RATIONING AND SERVICE CONNECTION MORATORIA

Standard Practice U-40-W

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INSTRUCTIONS FOR WATER CONSERVATION, RATIONING AND SERVICE CONNECTION MORATORIA

A—PURPOSE AND SCOPE

1. The purpose of this standard practice is to provide guidance to Water Division staff, to the public and to utilities as to steps to be taken when the utility suffers from a water shortage. The three levels of action are voluntary rationing, mandatory rationing and a service connection moratorium.

B—BACKGROUND

- 2. General Order 103, Chart 1, and Standard Practice U-22-W, Determination of Water Supply Requirements of Water Systems, address water supply requirements, but supply can be affected temporarily due to drought or decreased production of a utility's wells. When this happens, utilities may have to resort to mandatory conservation or may have to institute a service connection moratorium.
- 3. Parties may also protest service area extensions (see Standard Practice U-14-W) over concern that the available supplies may be inadequate to serve the new customers, which would be the equivalent of a service connection moratorium (see Section F)¹.
- 4. The position of the Commission in overall water supply planning was set forth in Decision 99-04-061, April 22, 1999 (see Appendix A to this Standard Practice).

C—DEVELOPMENT OF CONSERVATION AND RATIONING

- 5. In mid-1976, due to a drought, the Commission opened an Order Instituting Investigation (OII, Case No. 10114, June 8, 1976) to determine what actions to take. In early 1977, the Commission issued an emergency decision that allowed water utilities to distribute water conservation kits and to implement cost effective water conservation programs.
- 6. The Commission was once again faced with drought conditions in mid-1988. The Commission opened OII 89-03-005 that allowed all classes of water utilities to file a water conservation and rationing plan consisting of two distinct parts: Rule 14.1 (a "voluntary conservation" program) and Schedule 14.1 (the mandatory rationing and penalty part). This plan was based primarily upon the Department of Water Resources and Metropolitan Water District's model plans, but also

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¹ In Resolution No. 4154, August 5, 1999, the Sierra Club protested Valencia Water Company's Advice Letters 84 and 85 for service area extension. The Commission found in the favor of Valencia, that it had adequate supplies, but ordered the utility to file its Water Management Program by application so the long-term water availability issues could be heard.

incorporated aspects of the North Marin Water District, East Bay Municipal Utility District, and California Water Service Company's existing conservation and rationing plans. The main objective of Rule 14.1 and Schedule 14.1 was to have a plan readily available for any utility that needed conservation and/or rationing methods. This plan allowed regulated utilities to achieve conservation of 17.5% to 26%.

7. The drought was officially declared over in February 1993 and the OII was closed. Because history shows that drought occurs in California about once every ten years, Rule 14.1 has remained in place. When conditions become severe, the utility may file an advice letter to institute Schedule 14.1. The Commission must approve implementation of this schedule by resolution.

D—VOLUNTARY RATIONING

8. Voluntary rationing consists of the steps described in Rule 14.1 (Appendix B). This Tariff Rule should be in the tariff book of every utility that might suffer from a water shortage.

E—MANDATORY RATIONING

- 9. Mandatory rationing consists of the steps described in Schedule 14.1. The utility adds schedule 14.1 to its tariff book by filing an advice letter with full justification. Staff will prepare a resolution for consideration by the Commission. The Commission must approve the imposition of mandatory conservation.
- 10. Schedule 14.1 may be modified to fit the needs of the utility and its particular water shortage situation. The following provisions are examples of what might be included in a typical Schedule 14.1:
- A. Prohibit nonessential and unauthorized water use, including:
 - i. use for more than minimal landscaping in connection with new construction;
 - use through any meter when the company has notified the customer in writing to repair a broken or defective plumbing, sprinkler, watering or irrigation system and the customer has failed to effect such repairs within five days;
 - iii. use of water which results in flooding or runoff in gutters or streets;
 - iv. use of water through a hose for washing cars, buses, boats, trailers or other vehicles without a positive automatic shut-off valve on the outlet end of the hose;
 - use of water through a hose for washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hardsurfaced areas;
 - vi. use of water to clean, fill or maintain levels in decorative fountains;

- vii. use of water for construction purposes unless no other source of water or other method can be used;
- viii. service of water by any restaurant except upon the request of a patron; and
- ix. use of water to flush hydrants, except where required for public health or safety.
- B. Establish customer water allocations at a percentage of historical usage with the corresponding billing periods of a non-drought year being the base.
- C. Establish an allocation of a percentage of historical usage with the corresponding billing periods of a non-drought year being the base for consumption for users of process water (water used to manufacture, alter, convert, clean, grow, heat or cool a product, including water used in laundries and car wash facilities that recycle the water used).
- D. Establish a minimum allocation of a number of Ccf per month (one Ccf is one hundred cubic feet) for any customer regardless of historical usage.
- E. Establish an exceptions procedure for customers with no prior billing period record or where unusual circumstances dictate a change in allocation.
- F. Establish a penalty ("conservation fee") of \$2.00 per Ccf for usage over allocated amounts, provided, however, that banking of underusage from month to month is allowed.
- G. Provide that penalty funds are not to be accounted for as income, but are to be kept in a separate reserve account for disposition as directed by the Commission.
- H. Provide that, after written warning for nonessential or unauthorized water use, for subsequent violations the utility may install a flow restrictor to be left in a minimum of three days. The second time a flow restrictor is installed it may be left in until rationing ends.
- I. Establish charges of \$25, \$50, or actual cost depending on meter size for removing restrictors, and provide that continuing nonessential or unauthorized use may result in disconnection.
- J. Establish an appeal procedure first through the utility, then to the Commission staff through the Executive Director, then to the Commission via a formal complaint.

F—SERVICE CONNECTION MORATORIUM

11. A service connection moratorium is sometimes imposed by the California Department of Health Services. The California Water Code, Section 350 et seq.,

provides that any public water supplier may, after public notice and hearing, declare a water shortage emergency within its service area whenever it determines that the ordinary demands and requirements of its consumers cannot be satisfied without depleting the water supply to the extent that there would be insufficient water for human consumption, sanitation, and fire protection. After it has declared a water shortage emergency, it must adopt such regulations and restrictions on water delivery and consumption as it finds will conserve its water supply for the greatest public benefit. Section 357 requires that suppliers which are subject to regulation by the CPUC shall secure its approval before making such regulations and restrictions effective.

12. Section 2708 of the Public Utilities Code states:

2708. Whenever the commission, after a hearing had upon its own motion or upon complaint, finds that any water company which is a public utility operating within this State has reached the limit of its capacity to supply water and that no further consumers of water can be supplied from the system of such utility without injuriously withdrawing the supply wholly or in part from those who have theretofore been supplied by the corporation, the commission may order and require that no such corporation shall furnish water to any new or additional consumers until the order is vacated or modified by the commission. The commission, after hearing upon its own motion or upon complaint, may also require any such water company to allow additional consumers to be served when it appears that service to additional consumers will not injuriously withdraw the supply wholly or in part from those who theretofore had been supplied by such public utility.

- 13. To establish a service connection moratorium the utility must:
 - a. Hold a public meeting under Section 350 and 351 of the Water Code
 - b. Add the following language to each service schedule:

"MORATORIUM

No service shall be provided to any premises not previously served within the ______ Service Area as defined on the Service Area Map filed as a part of these tariffs."

G—EXEMPTIONS

14. Some decisions to impose a moratorium contain exceptions. For example in Citizen's Utilities (CUCC) Montara District:

"The moratorium shall not apply to owners of real property who are customers of CUCC on or before the date of this order, or their successors in interest, if any change in the use of their property

will not increase their demand upon the system." (D.86-05-078, Ordering Paragraph 3.)

15. D.86-05-078 also provided that prospective customers could seek an exemption from the moratorium by filing an application with the Commission showing that extraordinary circumstances required an exemption.

16. In D.00-06-020, June 8, 2000 the Commission granted an application and authorized Citizens Utilities to install a water service connection to applicant's property at APN 037-278-090 following cessation of service at applicant's property at 888 Ocean Boulevard in Montara. Costs were to be borne by applicant. The order made it clear that water service could not be reinstated at 888 Ocean Boulevard absent a lifting or easing of the moratorium. Such determinations were also delegated to staff².

Doc. Mgmt. #106683

² D.86-05-078, May 28, 1986, Ordering Paragraph 4.

The Commission's Role in Water Planning

The two state agencies primarily responsible for overseeing water planning are the California Department of Water Resources, which is manages the State Water Project and produces the California Water Plan, and the State Water Quality Control Board and Regional Water Quality Control Boards which have authority over water allocation and water quality protection.

In addition to the state agencies which have broad planning and management powers, local government also has a part in water use decisions. For example, county boards of supervisors, county water agencies, land use planning agencies, city governments, municipal water districts and many special districts all have a role in the use of water in California.

In this context, the Commission has recognized the futility of one party taking unilateral action to protect a groundwater basin:

Rehabilitation of the Santa Maria Groundwater Basin is not the responsibility of, and is beyond the physical and financial resources of any single individual, company, or agency. Even if [Southern California Water Company] were to stop drawing from the basin entirely and injected into the basin the entire 7,900 AFY it desires to obtain from the [Central Coast Water Authority], the basin's fundamental problems of declining quantity and water quality would not be solved. Most simply put, the basin's salvation as a water resource requires the immediate, undivided, sincere and selfless attention of <u>all</u> its users.

(Re Southern California Water Company, 48 CPUC2d 511, 519 (D.93-03-066)(emphasis in original).)

The Commission's role is limited to ensuring that each jurisdictional water utility provides its customers with "just and reasonable service, . . . and facilities as are necessary to promote the safety, health, comfort and convenience of its patrons, employees, and the public." (§ 451.) The Commission has further delineated the service standard in its General Order 103 where it proscribes Standards of Service

including water quality, water supply, and water pressure, as well as many other details of service.

The Commission has not, however, dictated to investor-owned utilities what method of obtaining water must be used to meet its present and future responsibility of providing safe and adequate supply of water at reasonable rates. (Southern California Water, 48 CPUC2d at 517.)

Which is not to suggest that the Commission ignores issues of water availability in its regulation of water utilities. The Commission requires that all water utilities prepare, file, and update a water management plan which includes identification of water sources as well as consumption projections over 15 years. These plans are updated by the utility as part of its general rate case.

RULE NO. 14.1 WATER CONSERVATION AND RATIONING PLAN

GENERAL INFORMATION

If water supplies are projected to be insufficient to meet normal customer demand, and are beyond the control of the utility, the utility may elect to implement voluntary conservation using the portion of this plan set forth in Section A of this Rule after notifying the Commission's Water Division of its intent. If, in the opinion of the utility, more stringent water measures are required, the utility shall request Commission authorization to implement the mandatory conservation and rationing measures set forth in Section B.

The Commission shall authorize mandatory conservation and rationing by approving Schedule No. 14.1, Mandatory Water Conservation and Rationing. When Schedule No. 14.1 has expired, or is not in effect, mandatory conservation and rationing measures will not be in force. Schedule No. 14.1 will set forth water use violation fines, charges for removal of flow restrictors, and the period during which mandatory conservation and rationing measures will be in effect.

When Schedule No. 14.1 is in effect and the utility determines that water supplies are again sufficient to meet normal demands, and mandatory conservation and rationing measures are no longer necessary, the utility shall seek Commission approval to rescind Schedule No. 14.1 to discontinue rationing.

In the event of a water supply shortage requiring a voluntary or mandatory program, the utility shall make available to its customers water conservation kits as required by Rule 20. The utility shall notify all customers of the availability of conservation kits.

RULE No. 14.1 (continued)

WATER CONSERVATION AND RATIONING PLAN

A. CONSERVATION - NON-ESSENTIAL OR UNAUTHORIZED WATER USE

No customer shall use utility-supplied water for non-essential or unauthorized uses as defined below:

- Use of water through any connection when the utility has notified the customer in writing to repair a broken or defective plumbing, sprinkler, watering or irrigation system and the customer has failed to make such repairs within 5 days after receipt of such notice.
- 2. Use of water which results in flooding or run-off in gutters, waterways, patios, driveway, or streets.
- 3. Use of water for washing aircraft, cars, buses, boats, trailers or other vehicles without a positive shut-off nozzle on the outlet end of the hose. Exceptions include washing vehicles at commercial or fleet vehicle washing facilities operated at fixed locations where equipment using water is properly maintained to avoid wasteful use.
- 4. Use of water through a hose for washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hard-surfaced areas in a manner which results in excessive run-off or waste.
- 5. Use of water for watering streets with trucks, except for initial wash-down for construction purposes (if street sweeping is not feasible), or to protect the health and safety of the public.
- 6. Use of water for construction purposes, such as consolidation of backfill, dust control, or other uses unless no other source of water or other method can be used.
- 7. Use of water for more than minimal landscaping in connection with any new construction.

RULE NO. 14.1 (continued) WATER CONSERVATION AND RATIONING PLAN

A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE (CONT.)

- 8. Use of water for outside plants, lawn, landscape, and turf areas more often than every other day, with even numbered addresses watering on even numbered days of the month and odd numbered addresses watering on the odd numbered days of the month, except that this provision shall not apply to commercial nurseries, golf courses and other water-dependent industries.
- Use of water for watering outside plants, lawn, landscape and turf areas during certain hours if and when specified in Schedule No. 14.1 when the schedule is in effect.
- 10. Use of water for watering outside plants and turf areas using a hand-held hose without a positive shut-off valve.
- 11. Use of water for decorative fountains or the filling or topping off of decorative lakes or ponds. Exceptions are made for those decorative fountains, lakes, or ponds which utilize recycled water.
- 12. Use of water for the filling or refilling of swimming pools.
- 13. Service of water by any restaurant except upon the request of the patron.

B. RATIONING OF WATER USAGE

In the event the conservation measures required by Section A are insufficient to control the water shortage, the utility shall, upon Commission approval, imposed mandatory conservation and rationing. Rationing shall be in accordance with the conditions set forth in Schedule No. 14.1 as filed at the time such rationing is approved by the Commission.

Before mandatory conservation and rationing is authorized by the Commission, the utility shall hold public meetings and takes all other applicable steps required by Sections 350 through 358 of the California Water Code.

RULE N0. 14.1 (continued) WATER CONSERVATION AND RATIONING PLAN

C. <u>ENFORCEMENT OF MANDATORY CONSERVATION AND RATIONING</u>

- 1. The water use restrictions of the conservation program, in Section A of this rule, become mandatory when the rationing program goes into effect. In the event a customer is observed to be using water for any nonessential or unauthorized use as defined in Section A of this rule, the utility may charge a water use violation fine in accordance with Schedule No. 14.1.
- 2. The utility may, after one verbal and one written warning, install a flow-restricting device on the service line of any customer observed by utility personnel to be using water for any non-essential or unauthorized use as defined in Section A above.
- 3. A flow restrictor shall not restrict water delivery by greater than 50% of normal flow and shall provide the premise with a minimum of 6 Ccf/month. The restricting device may be removed only by the utility, only after a three-day period has elapsed, and only upon payment of the appropriate removal charge as set forth in Schedule No. 14.1.
- 4. After the removal of the restricting device, if any non-essential or unauthorized use of water shall continue, the utility may install another flow-restricting device. This device shall remain in place until water supply conditions warrant its removal and until the appropriate charge for removal has been paid to the utility.
- 5. If, despite installation of such flow-restricting device pursuant to the provisions of the previous enforcement conditions, any such non-essential or unauthorized use of water shall continue, then the utility may discontinue water service to such customer. In such latter event, a charge as provided in Rule No. 11 shall be paid to the utility as a condition to restoration of service.
- Any monies collected by the utility through water use violation fines shall not be accounted for as income, but shall be accumulated by the utility in a separate account for disposition as directed or authorized from time to time by the Commission.
- 7. The charge for removal of a flow-restricting device shall be in accordance with Schedule No. 14.1.

RULE N0. 14.1 (continued)

WATER CONSERVATION AND RATIONING PLAN

D. APPEAL PROCEDURE

Any customer who seeks a variance from any of the provisions of this water conservation and rationing plan shall notify the utility in writing, explaining in detail the reason for such a variation. The utility shall respond to each such request.

Any customer not satisfied with the utility's response may file an appeal with the staff of the Commission. The customer and the utility will be notified of the disposition of such appeal by letter from the Executive Director of the Commission.

If the customer disagrees with such disposition, the customer shall have the right to file a formal complaint with the Commission. Except as set forth in this Section, no person shall have any right or claim in law or in equity, against the utility because of, or as a result of, any matter or thing done or threatened to be done pursuant to the provisions of this water conservation and rationing plan.

E. PUBLICITY

In the event the utility finds it necessary to implement this plan, it shall notify customers and hold public hearings concerning the water supply situation, in accordance with Chapter 3, Water Shortage Emergencies, Sections 350 to 358, of the California Water Code. The utility shall also provide each customer with a copy of this plan by means of billing inserts or special mailings; notification shall take place prior to imposing any fines associated with this plan. In addition, the utility shall provide customers with periodic updates regarding its water supply status and the results of customers' conservation efforts. Updates may be by bill insert, special mailing, poster, flyer, newspaper, television or radio spot/advertisement, community bulletin board, or other appropriate methods.

SCHEDULE NO. 14.1 MANDATORY WATER CONSERVATION AND RATIONING

APPLICABILITY

This schedule applies to all water customers served under all tariff rates schedules authorized by the Commission. It is only effective in times of rationing, as required by Rule No. 14.1, and only for the period noted in the Special Conditions section below.

TERRITORY

This schedule is applicable within the entire territory served by the utility.

WATER USE VIOLATION FINE

When this schedule is in effect, the water use restrictions of the conservation program, in Section A of Rule 14.1, become mandatory. If a customer is seen violating the water usage restrictions, as outlined in Rule No. 14.1 and the Special Conditions below, the customer will be subject to the following fine structure:

First offense - written warning Second offense - \$25

(of the same restriction)

Third offense - \$50

(of the same restriction)

Each additional offense - \$25 more than the previous fine imposed.

(of the same restriction)

Offenses for separate water use restrictions will each start at the warning stage.

The water use violation fine is in addition to the regular rate schedule charges.

SCHEDULE NO. 14.1 MANDATORY WATER CONSERVATION AND RATIONING (CONT.)

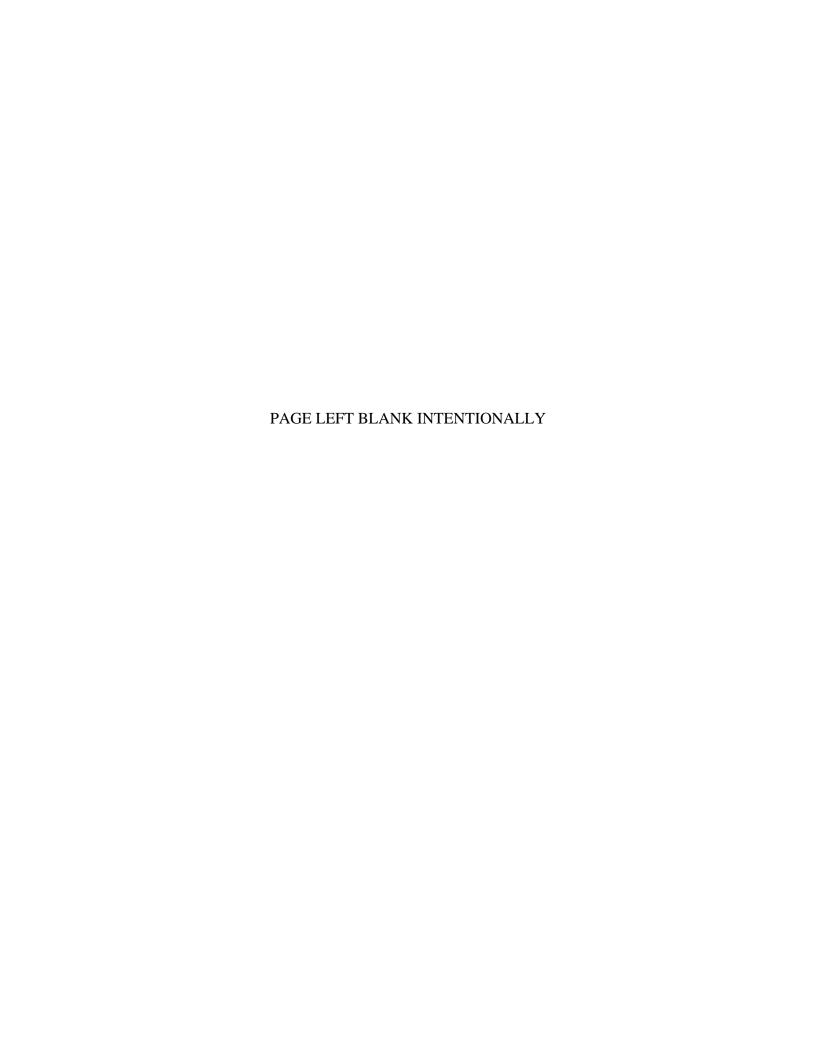
FLOW RESTRICTOR REMOVAL CHARGE

The charge for removal of a flow-restricting device shall be:

Connection Size	Removal Charges
5/8" to 1"	\$25.00 \$50.00
3" and larger	•

SPECIAL CONDITIONS

- 1. This tariff schedule shall remain in effect for period of six (6) months from the effective date set forth below.
- 2. There shall be no use of utility-supplied water for outside plants, lawn, landscape, and turf areas between the hours of 3:00 a.m. to 8:00 p.m., regardless of address or day of the month.
- 3. Water use violation fines may be applied to violations of Section A of Rule No. 14.1, which prohibits non-essential and unauthorized uses of water.
- 4. Water use violation fines must be separately identified on each bill.
- 5. All bills are subject to the reimbursement fee set forth on Schedule No. UF.



Chapter 15.48 WATER-EFFICIENT LANDSCAPING GUIDELINES

Sections:

15.48.050	Irrigation guidelines.
15.48.010	Findings and purpose.
<u>15.48.020</u>	Definitions.
<u>15.48.030</u>	Applicability.
<u>15.48.040</u>	Landscape—Design guidelines.
15.48.050	Irrigation guidelines.

15.48.010 Findings and purpose.

- A. The town finds and declares that:
 - 1. The limited supply of state waters is subject to ever-increasing demands; and
- 2. Landscape, design, installation and maintenance can and should be water efficient; and
- 3. Government Code Sections 65591, 65591.5 and 65597 mandate the adoption of a water-efficient landscape ordinance either locally or through the State Model Ordinance.
 - B. The establishment of water-efficient landscape guidelines is necessary to:
 - 1. Promote the conservation and efficient use of water; and
- 2. Promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible; and
- 3. Establish a structure for designing, installing and maintaining water-efficient landscapes for new projects; and
- 4. Establish provisions for water management practices and water waste prevention for landscapes. (Ord. 480 § 1 (part), 1994)

15.48.020 Definitions.

- A. "Anti-drain valve" or "check valve" means a valve located under a sprinkler head to hold water in the system so it minimizes drainage from the lower elevation sprinkler heads.
- B. "Emitter" means drip irrigation fittings that deliver water slowly from the system to the soil.
- C. "Hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same schedule. A hydrozone may be irrigated or nonirrigated. For example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a nonirrigated hydrozone.
- D. "Infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).
- E. "Landscaped area" means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, hardscapes, such as decks and patios, and other nonporous areas. Water features are included in the calculation of the landscaped area. Areas dedicated to edible plants, such as orchards or vegetable gardens, are not included.
- F. "Overspray" means the water which is delivered beyond the landscaped area, wetting pavements, walks, structures or other nonlandscaped areas.
- G. "Rain-sensing override devices" means a system which automatically shuts off the irrigation system when it rains.
- H. "Soil moisture-sensing device" means a device that measures the amount of water in the soil.

- I. "Sprinkler head" means a device which sprays water through a nozzle.
- J. "Valve" means a device used to control the flow of water in the irrigation system. (Ord. 480 § 1 (part), 1994)

15.48.030 Applicability.

This chapter establishes guidelines for all landscape plans submitted as required in Section <u>17.50.020</u> of this code or as otherwise specified in the planning approval for a project. (Ord. 480 § 1 (part), 1994)

15.48.040 Landscape—Design guidelines.

The following guidelines, if reflected in the landscape screening plan required in Section <u>17.50.050</u> of this code, may serve as a basis upon which to grant approval of the project's water efficiency:

- A. Plants having similar water use should be grouped together in distinct hydrozones.
- B. Plants should be selected appropriately based upon their adaptability to the climatic, geologic and topographical conditions of the site. Protection and preservation of native species and natural areas is encouraged. The planting of trees is encouraged wherever it is consistent with the other provisions of this code.
- C. The combined size of turf areas should not be more than twenty-five percent of the total developed landscape area. Turf should not be used in strip plantings less than five inches in width.
- D. Fire prevention needs should be addressed in areas that exhibit a high fire danger or risk. For projects located at the interface between urban areas and natural open space, water-conserving plants should be selected that will blend in with the native vegetation and are fire resistant or fire retardant. Plants with low fuel volume or high moisture content shall be encouraged. Plants that tend to accumulate an excessive amount of dead wood or debris should be avoided. Further information about fire-prone areas and appropriate landscaping for fire safety is available from the Menlo Park fire protection district fire department or the California Department of Forestry.
- E. Recirculating water should be used for decorative water features. Decorative water features not utilizing recirculating water should be severely limited.
 - F. Pool and spa covers are encouraged to reduce water loss through evaporation.
- G. Plants selected for slope areas should be water-conserving plants suitable for erosion control. Turf should not be incorporated into areas with slopes exceeding fifteen percent. (Ord. 480 § 1 (part) 1994)

15.48.050 Irrigation guidelines.

A. Design.

- 1. Soil types and infiltration rate should be considered when designing irrigation systems. All irrigation systems should be designed to avoid runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, nonirrigated areas, walks, roadways or structures. Proper irrigation equipment and schedules, including features such as repeat cycles, should be used to closely match application rates to infiltration rates, therefore minimizing runoff.
- 2. Special attention should be given to avoid runoff on slopes and to avoid overspray in planting areas with a width less than ten feet, and in median strips.
- 3. No overhead sprinkler irrigation systems should be installed in median strips less than ten feet wide.
- 4. Exposed soil surfaces of nonturf areas within the developed landscape area should be mulched with a minimum two-inch deep layer of organic material. Nonporous material should not be placed under the mulch.

B. Equipment.

 Separate landscape water meters are encouraged for all projects except for single-family homes or any project with a landscaped area of less than five thousand square feet.

- 2. Automatic control systems should be incorporated into all irrigation systems.
- 3. Plants which require different amounts of water should be irrigated by separate valves. If one valve is used for a given area, only plants with similar water use should be used in that area. Anti-drain (check) valves should be installed in strategic points to minimize or prevent low head drainage.
- 4. Heads and emitters should have consistent application rates within each control valve circuit. Sprinkler heads should be selected for proper area coverage, application rate, operating pressure, adjustment capability, and ease of maintenance.
- 5. The use of rain-sensing override devices are encouraged for all irrigation systems.
- 6. It is recommended that soil moisture-sensing devices be considered where appropriate.
 - 7. Irrigation systems should be designed to be consistent with hydrozones.
- 8. The installation of recycled water irrigation systems (dual distribution systems) shall be encouraged to allow for the current and future use of recycled water in accordance with applicable Health Code regulations and the Graywater Use Guidelines developed by the California Department of Water Resources Ad Hoc Graywater Committee to be incorporated into the Uniform Plumbing Code.

C. Schedules.

- 1. Whenever possible, landscape irrigation should be scheduled between two a.m. and ten a.m. to avoid irrigating during times of high wind or high temperature.
- 2. Landscape irrigation systems should be maintained on a continual basis to ensure water efficiency.
- 3. Whenever possible, repair of irrigation equipment should be done with the originally specified materials or their equivalents. (Ord. 480 § 1 (part), 1994)

This page of the Atherton Municipal Code is current through Ordinance 582, passed October 21, 2009. Disclaimer: The City Clerk's Office has the official version of the Atherton Municipal Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

City Website: http://www.ci.atherton.ca.us/ City Telephone: (650) 752-0529 Code Publishing Company Chapter 12.44 Page 1 of 4

Chapter 12.44 WATER-EFFICIENT LANDSCAPING

Sections:

<u>12.44.010</u>	Purpose.
12.44.020	Applicability.
12.44.030	Exemptions from applicability.
12.44.040	Procedure for review and approval of landscape plans.
12.44.050	Landscape plan components.

12.44.010 Purpose.

The purpose of this chapter is to promote the values and benefits of landscaping while recognizing the need to utilize water and other resources as efficiently as possible, establish a structure for designing, installing and maintaining water-efficient landscapes in new projects and establish provisions for water management practices and water waste prevention for established landscapes. (Ord. 840 § 1 (part), 1992).

12.44.020 Applicability.

This chapter shall apply to the following types of projects, except as provided in Section 12.44.030:

- (1) All projects where the entire property is being developed or redeveloped with one or more new structures, other than accessory structures. For purposes of this chapter, new structures are defined as those which have completely new foundation, walls and roof.
- (2) All projects where the remodel, renovation, or expansion of existing structures includes relandscaping or results in the loss of twenty-five percent (25%) or more of the remaining landscaped area due to damage or neglect. In such cases, only the newly landscaped areas and/or damaged areas and all areas directly contiguous to these areas shall be subject to this chapter.
- (3) All landscaping projects, other than the construction of decks, patios, barbecues, play equipment and swimming pools, which require a planning approval or building permit. (Ord. 840 § 1 (part), 1992).

12.44.030 Exemptions from applicability.

This chapter shall not apply to the following types of projects:

- (1) Properties with a historical site zoning designation;
- (2) Ecological restoration projects that do not require a permanent irrigation system;
- (3) Any project with a total landscaped area and/or existing landscaped area loss due to damage or neglect less than two thousand five hundred (2,500) square feet in area;
- (4) Any project with two (2) or less detached single family residential units. (Ord. 840 § 1 (part), 1992).

12.44.040 Procedure for review and approval of landscape plans.

- (a) A landscape plan shall be submitted to the city which includes all documentation listed in Section 12.44.050.
- (b) Applicants must choose one of the following methods for submitting a landscape plan:
- (1) Prior to submittal to the city, the landscape plan and all supporting documentation shall be reviewed by an independent licensed landscape architect to ensure that all components of the landscape plan adhere to this chapter. The licensed landscape architect shall sign the plans as verification that the landscape plans comply with this chapter.

Chapter 12.44 Page 2 of 4

(2) Applicants may submit a landscape plan to the city for review and at the time of submittal, inform the city that they wish to use the city's official landscape and irrigation specialist for the review and verification that the plans comply with this chapter. In this case, the applicant shall pay a fee to the city for all related reviews, inspections and verifications.

- (c) Verification by either an independent licensed landscape architect or the city's official landscape and irrigation specialist shall be completed prior to building permit issuance.
- (d) Prior to final building inspection of the project, the irrigation and landscaping shall be installed and the licensed professional who reviewed the landscape plans shall visually verify that the aboveground installation was completed in compliance with the approved landscape plans and this chapter.
- (e) Prior to final building inspection of the project, a deed restriction shall be filed with the San Mateo County recorder's office stating that the property is subject to the requirements of this chapter and that any relandscaping of the property by the present or future property owners shall adhere to this chapter. (Ord. 840 § 1 (part), 1992).

12.44.050 Landscape plan components.

Landscape plans shall include the following information:

- (a) Landscape Area. The landscape area is defined as the gross lot area less the building footprint, driveway, parking areas, decks, patio, porches, walkways and grasscrete areas.
- (b) Description of Water Delivery Elements. The description of the water delivery elements shall include the following:
- (1) The location, type and size of equipment such as meters, controllers, main and lateral lines, moisture sensors, valves, sprinkler heads, backflow devices and quick-couplers;
 - (2) Flowrate and static water pressure at the point of connection (POC);
 - (3) Flowrate and precipitation rate in inches per hour at each valve station:
 - (4) Projected water use to maintain adequate plant health and growth.
- (c) Soil Care Before Planting. A soils test, conducted by a soil testing company, shall provide information on the soil type including horticultural suitability of the soil, the percentage of organic matter, a measure of pH, a measure of total soluble salts and soil infiltration rate which is either measured or derived from soil texture/infiltration rate tables. A range of infiltration rates shall be noted where appropriate. The soils test shall include recommendations for amending and preparing the soil for planting.
- (d) Soil Care After Planting. A minimum of two inches (2") of mulch shall be used in non-turf areas after planting. Visqueen, sheet plastic or other nonporous materials shall not be placed under mulch.
 - (e) Turf. The following shall apply:
- (1) Turf area includes turf and water areas such as ponds, fountains, swimming pools and outdoor spas.
- (2) Trees which have a deep root system may be planted in turf areas, subject to having an irrigation system which allows for appropriate irrigation of the turf area and fosters the deep root system of the trees.
- (3) No turf shall be allowed in areas on slopes exceeding fifteen percent (15%) (6.6:1).
- (4) Turf areas shall be limited to twenty-five percent (25%) of landscape area or, for residential areas, five hundred (500) square feet per dwelling unit, whichever is greater.
 - (5) Water-efficient turf species are required.
 - (f) Valves. The following shall apply:
 - (1) Sprinkler head check valves shall be used to prevent low head drainage.
- (2) Separate valves shall be used for turf, shrub, flower display areas, and trees and segregated into hydrozones. Each valve shall be designated as a low, moderate, or

Chapter 12.44 Page 3 of 4

high water use valve.

- (g) Sprinkler Heads. The following shall apply:
- (1) Sprinkler heads shall be spaced at a maximum of fifty percent (50%) of the diameter of throw for square spacing and sixty percent (60%) for triangular spacing. The spacing may be altered if warranted by specific conditions.
- (2) Sprinkler heads shall have matched precipitation rates within each control valve circuit.
- (3) Pop-up sprinklers in turf areas shall have at least a four inch (4") pop-up height.
 - (h) Controllers. The following shall apply:
- (1) Be automatic and capable of dual programming, such that they may be set for separation of turf and non-turf areas;
 - (2) Have multiple cycle capability;
- (3) Have percentage switches which should be able to be set for one season or one month and have switches that will easily increase or decrease the time programmed by a certain percentage. All stations should have their time increased/decreased with only one entry.
 - (i) Irrigation schedule and characteristics shall be described as follows:
- (1) A schedule shall be developed which allows for plant material to be established. This shall have a maximum two (2) year time period. Once established, a revised schedule shall be developed for maintenance of the plant material. The schedule presently in effect shall be posted at the controller.
- (2) The schedule shall include run times and frequency, an application rate which achieves optimum system efficiency, a minimum one-hour time interval between all applications, and provisions for irrigation only between the hours of ten p.m. and seven a.m. (10:00 p.m. and 7:00 a.m.)
- (3) Drip, bubbler, or mini-spray irrigation shall be provided for trees and shrubs. Turf and ground cover may use drip or low volume spray as appropriate to the space and materials used.
- (4) Backflow prevention units shall comply with all applicable health and safety standards.
- (5) The irrigation system shall not deliver spray or run-off onto paved area or streets.
 - (j) Plant Selection.
- (1) Plants having similar water use shall be grouped together in distinct hydrozones.
- (2) A list of plant materials shall be submitted with low, moderate or high water use identified for each plant.
 - (3) Water-efficient plant materials are recommended.
 - (k) Water Features.
- (1) All decorative pools, ponds, streams and fountains shall be equipped to recirculate water.
 - (2) Pool and spa covers shall be encouraged.
- (I) Recycled Water. The installation of recycled water irrigation systems (dual distribution systems) for current and future use of recycled water and the use of recycled water for landscaping purposes shall be encouraged.
- (m) Maintenance Schedule. A maintenance schedule shall be prepared which provides for checking, adjusting and repairing irrigation equipment, aerating and dethatching turf areas, replenishing mulch and fertilizing, pruning, weeding and removing litter.
- (n) For projects which are subject to the water-efficient landscaping requirements and which are located on properties one-half (½) acre or larger in size, the following additional information shall be provided:
- (1) A maximum applied water allowance shall be calculated for the property. The maximum applied water allowance is defined as the upper limit of annual applied

Chapter 12.44 Page 4 of 4

water for the established landscaped area. The maximum applied water allowance shall be determined by the following formula:

(42.9) (0.8) (LA) (0.62) =

Maximum Applied Water Allowance, where:

- 42.9 is the Reference Evapotranspiration (inches per year) in Menlo Park
- 0.8 is the ET Adjustment Factor
- LA is the Landscaped Area (square feet)
- 0.62 is the conversion factor (to gallons per square foot)
- (2) A separate water meter shall be provided for the landscaped area in order to calculate and evaluate water usage.
- (3) A water audit, conducted by a licensed landscape irrigation auditor, shall be completed and submitted to the city every five (5) years from the date of final verification of the landscaping installation by the licensed landscape architect.
 - (o) Model Homes.
- (1) At least one model home in projects consisting of eight (8) or more homes shall be landscaped in accordance with this chapter.
- (2) Signs shall be used to identify the model as an example of a water-efficient landscape.
- (3) Information shall be provided which lists the special features of the model home landscape design. Information shall also be provided regarding design, installation and maintenance of water-efficient landscaping.
- (p) Public Education. Information shall be provided about the efficient use of landscape water to all water users of all the water purveyors who serve the city, including those who would otherwise be exempted from the applicability of this chapter. (Ord. 840 § 1 (part), 1992).

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Chapter 7.38 WATER CONSERVATION

Sections:

7.38.010 Findings and determinations.

7.38.020 Definitions.

7.38.030 Regulations and restrictions on water use.

7.38.010 Findings and determinations.

The city council finds and determines that:

- (1) The rules, regulations and restrictions set forth in this chapter are intended to conserve the water supply for the greatest public benefit with particular regard to domestic use, sanitation and fire protection.
- (2) The specific uses prohibited or restricted by this chapter are nonessential and if allowed would constitute wastage of water and should be prohibited pursuant to the water department power under Water Code Section 350 et seq., Water Code Section 71640 et seq., and the common law. (Ord. 849 § 1, 1993).

7.38.020 Definitions.

For the purpose of this chapter, the following terms, phrases, words and their derivations shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular and words in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- (1) "Water department" means an agency of the city.
- (2) "Customer" means any person using water within the city.
- (3) "Director" means the director of engineering services of the city.
- (4) "Person" is any person, firm, partnership, association, corporation, company or organization of any kind. (Ord. 849 § 2, 1993).

7.38.030 Regulations and restrictions on water use.

It is resolved by the city council that in order to conserve the water supply for the greatest public benefit, and to reduce the quantity of water used by the city's customers, that wasteful use of water should be eliminated. Customers of the city shall observe the following regulations and restrictions on water use:

- (1) Broken or defective plumbing, sprinkler, watering or irrigation systems which permit the escape or leakage of water shall be repaired.
- (2) No use of water shall be allowed which results in flooding or runoff in gutters, driveways or streets.
- (3) A hose without a positive shut-off valve shall not be used for washing cars, buses, boats, trailers or other vehicles, nor for washing building structures or parts thereof.
- (4) A hose without a positive shut-off valve shall not be used for washing sidewalks, walkways, driveways, patios, parking lots, tennis courts or other hard-surfaced areas.
 - (5) Restaurants shall serve water to customers only on request.
- (6) Water used for cooling must be recycled to the extent possible. (Ord. 849 § 3, 1993).

Chapter 7.38 Page 2 of 2

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Chapter 7.34 WATER RATIONING

Sections:

7.34.010	Emergency declared—Rationing instituted.
7.34.020	Definitions.
7.34.030	Application.
7.34.040	Regulations and restrictions for all customers.
7.34.050	Allotment.
7.34.060	Exceptions.
7.34.070	Water use in excess of allocation—Remedies and charges.

7.34.010 Emergency declared—Rationing instituted.

- (a) A water shortage emergency condition prevails within the area served by Menlo Park municipal water department (hereafter called the water department) and throughout the city.
- (b) The San Francisco water department, at the direction of the San Francisco public utilities commission, has requested that all resale customers, including the water department immediately institute a revised water rationing program designed to effect further reduction in water usage.
- (c) The rules, regulations and restrictions set forth in this chapter are intended to conserve groundwater and the water supply of the water department for the greatest public benefit with particular regard to domestic use, sanitation and fire protection.
- (d) The specific uses prohibited or restricted by this chapter are nonessential, if allowed would constitute wastage of groundwater and the water department water, and should be prohibited pursuant to the water department power under Water Code Section 350 et seq., Water Code Section 71640 et seq., and the common law.
- (e) The actions taken hereinafter are exempt from the provisions of Sections <u>21000</u> et seq., of the Public Resources Code as a project undertaken as immediate action necessary to prevent or mitigate an emergency pursuant to Title 14, California Administrative Code Section 15269. (Ord. 821 § 1, 1991).

7.34.020 Definitions.

For the purpose of this chapter, the following terms, phrases, words, and their derivations shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular number, and words in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- A. The "water department" is an agency of the city, a municipal corporation.
- B. "Customer" means any person using water supplied by the water department.
- C. "Director" means the director of public works of the city.
- D. "Person" means any person, firm, partnership, association, corporation, company, or organization of any kind.
- E. The "water rationing plan" means any current water rationing plan adopted by resolution of the city council. (Ord. 821 § 2, 1991).

7.34.030 Application.

The provisions of this chapter shall apply to all customers using water, both in and outside the city. (Ord. 821 § 3, 1991).

7.34.040 Regulations and restrictions for all customers.

(a) Broken or defective plumbing, sprinkler, watering or irrigation systems which

Chapter 7.34 Page 2 of 3

permit the escape or leakage of water shall be repaired.

- (b) No new irrigation services will be permitted and additional water will not be allowed for expansion of existing irrigation facilities.
- (c) No use of water shall be allowed which results in flooding or runoff in gutters, driveways, or streets.
- (d) A hose without a positive shutoff valve shall not be used for washing cars, buses, boats, trailers or other vehicles, nor for washing building structures or parts thereof.
 - (e) Filling of any existing or new swimming pools with water is prohibited.
- (f) Sidewalks, walkways, driveways, patios, parking lots, tennis courts or other hardsurfaced areas shall not be cleaned using water from hoses or by use of water directly from faucets or other outlets.
- (g) A water service connection for new construction shall not be allowed, except as provided in the water plan.
 - (h) The use and operation of decorative water fountains shall be discontinued.
 - (i) Restaurants shall serve water to customers only on request.
- (j) Potable water shall not be used for consolidation of backfill, dust control or other nonessential construction purposes.
 - (k) Water used for cooling must be recycled to the extent possible.
- (I) Groundwater may be used for the purposes mentioned in subsections (b), (d), (e), (h) and (j) only to the extent that recycled or reclaimed water is not available and such use has been approved by the San Mateo public health department.
- (m) Verified water waste as determined by the department will serve as prima facie evidence that the allocation assigned to the water account is excessive; therefore the allocation will be subject to review and possible reduction, including termination of service. (Ord. 821 § 4, 1991).

7.34.050 Allotment.

The director shall allot water to customers of the water department in accordance with the water rationing plan. (Ord. 821 § 5, 1991).

7.34.060 Exceptions.

Consideration for exceptions regarding allotments of water or any of the regulations and restrictions set forth herein shall be as follows:

- (1) In the case of a rationing allocation, it must be shown that the allocation is not sufficient to meet public health or safety needs. In the case of water use restrictions, it must be shown that there are no alternatives to the use of water from the Menlo Park water system.
 - (2) A written application for exceptions shall be made to the water department;
 - (3) Appeals must be based on a documented change in circumstances.
 - (4) Water use under this exception procedure must be efficiently used without waste.
- (5) Appeals of rationing allocations determined to contain false information shall result in a reduction in the allocation and the installation of a flow-restricting device in the service line of the customer.
- (6) Approval of exceptions may require verification that all appropriate conservation measures are in place and may require an on-site conservation inspection prior to approval.
- (7) Denials of applications may be appealed to the director of public works whose decisions will be final.
- (8) The only grounds for granting such applications are: prior to granting permission for an exception, the water department must be satisfied that all practical water conservation measures have been adopted by the applicant. (Ord. 821 § 6, 1991).

7.34.070 Water use in excess of allocation—Remedies and charges.

(a) Excess Water Uses Charge. Charges for excess water consumption shall be as set forth in the water rationing plan.

Chapter 7.34 Page 3 of 3

(b) Installation of Restricting Device. The city may, after one written warning, install a flow-restricting device on the service line of any customer observed by its personnel to be violating any of the regulations or exceeding water allocations hereinabove set forth. In the event that further violations occur, the water department may discontinue service.

- (c) Charges for Installation And Removal of Flow-Restricting Devices. Charges for the installation and removal of flow-restricting devices shall be as stated in the water rationing plan. The first installation shall be for a minimum of five (5) days. The second installation shall be for a minimum of ten (10) days.
- (d) Discontinuance of Water Services and Charges for Reactivation of Service. Continued water consumption in excess of the allotment may result in the discontinuance of water service by the water department. Charges for reactivating service shall be as stated in the water rationing plan. (Ord. 821 § 7, 1991).

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ORDINANCE NO. 2010-383

ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF PORTOLA VALLEY ADDING CHAPTER 15.32 [WATER CONSERVATION IN LANDSCAPING] TO TITLE 15 [BUILDINGS AND CONSTRUCTION] OF THE PORTOLA VALLEY MUNICIPAL CODE

WHEREAS, the Town of Portola Valley ("Town") desires to add Chapter 15.32 [Water Conservation in Landscaping] to Title 15 [Buildings and Construction] of the Portola Valley Municipal Code to establish outdoor water conservation regulations.

WHEREAS, a reliable minimum supply of potable water is essential to the public health, safety and welfare of the people and economy of Town.

WHEREAS, the California Water Conservation in Landscaping Act, also known as the State Landscape Model Ordinance ("Model Ordinance"), has been implemented by a Statewide Landscape Task Force which was overseen by the California Urban Water Conservation Council. The California Water Conservation in Landscaping Act was amended pursuant to AB 2717 and AB 1881.

WHEREAS, AB 1881 requires cities and counties, no later than January 1, 2010, to adopt the updated Model Ordinance or an equivalent document which is "at least as effective as" the Model Ordinance in conserving water. In the event cities and counties do not take such action, the State's Model Ordinance will be deemed to be automatically adopted by statute.

WHEREAS, the Town has developed this Water Conservation In Landscaping Ordinance to meet the requirements and guidelines of the Model Ordinance and to address the unique physical characteristics, including average landscaped areas, within the Town's jurisdiction in order to ensure that this Ordinance will be "at least as effective as" the Model Ordinance in conserving water.

WHEREAS, although this Water Conservation in Landscaping ordinance is more streamlined and simplified than the Model Ordinance, the Town finds that it is "at least as effective as" the Model Ordinance for the following reasons: (1) this Ordinance applies to more accounts than the Model Ordinance does because it lowers the size threshold for applicable landscapes from 2,500 square feet (or, in the case of single-family residences, from 5,000 square feet) to 1,000 square feet, to better reflect the typical landscaped areas located within this Town's boundaries; (2) this Ordinance includes a default turf restriction of 25% or 1,000 square feet (whichever is smaller) of the irrigated area and requires that at least 80% of the plants in non-turf landscape areas be native plants, low-water using plants, or no-water using plants (unless the applicant elects to perform a water budget); and (3) this Ordinance expands the requirement for dedicated irrigation meters to all accounts with landscaping greater than 5,000 square feet. The Model Ordinance does not contain any such default turf restrictions or specified plant requirements and only requires dedicated irrigation meters on non-residential accounts with landscaping greater than 5,000 square feet.

WHEREAS, although this Water Conservation in Landscaping Ordinance is more streamlined and simplified than the Model Ordinance, the Town Council further finds that it is "at least as effective as" the Model Ordinance because this Ordinance includes water budget parameters and values and landscape parameters that are consistent with the Model

Ordinance. By using the same water budget parameters as the Model Ordinance (e.g., plant factors, irrigation efficiency), this Ordinance will be as effective as the Model Ordinance in developing landscape water budgets. By using the same landscape parameters as the Model Ordinance for, among other things, slope restrictions and width restrictions for turf, irrigation times, and minimum mulch requirements, this Ordinance will be at least as effective as the Model Ordinance in achieving water savings.

WHEREAS, Article X, Section 2 of the California Constitution and Section 100 of the California Water Code declare that the general welfare requires water resources be put to beneficial use, waste or unreasonable use or unreasonable method of use of water be prevented, and conservation of water be fully exercised with a view to the reasonable and beneficial use thereof.

WHEREAS, the San Francisco Public Utilities Commission has imposed an interim water supply limitation on its wholesale customers, including local water suppliers, until at least 2018.

WHEREAS, current supply and demand projections for the Bay Area Water Supply and Conservation Agency ("BAWSCA") member agencies indicate that, in the absence of increased water conservation, water demands will exceed available water supplies in 2015 and implementation of water conserving ordinances is one mechanism by which agencies can reduce future water demands and remain within existing supplies.

WHEREAS, The Town Council finds and determines that this Ordinance is consistent with the provisions requiring reductions in outdoor water use for landscaping in the California Green Building Standards Code, as such provisions will be implemented in the coming years. Such requirements include the development of a water budget for landscape irrigation in accordance with methodology outlined in either the Model Ordinance or pursuant to a locally adopted ordinance.

WHEREAS, the State Legislature has identified the provision of a more reliable water supply and the protection, restoration and enhancement of the Delta ecosystem as a high priority for the state. Pursuant to this, in November 2009, the State Legislature passed Senate Bill 7 (7th Extraordinary Session) requiring certain urban water suppliers to reduce per capita urban water use by 20% by the year 2020. Accordingly, the Town Council finds that implementation of this Ordinance is consistent with the policies and goals established by the State Legislature in enacting SB 7 (7th Extraordinary Session).

WHEREAS, Article XI, Section 7 of the California Constitution declares that a city or county may make and enforce within its limits all local, policy, sanitary, and other ordinances and regulations not in conflict with general laws.

WHEREAS, pursuant to AB 1881, enforcement of this Ordinance will require supportive measures by California Water Service Company, the local water provider within these jurisdictions, so as to ensure the successful implementation and enforcement of this Ordinance.

WHEREAS, the Town's local water purveyor, California Water Service Company has a long-standing policy of promoting efficient water management measures and practices and will work cooperatively with the Town to maximize effectiveness of the Ordinance.

WHEREAS, the adoption and enforcement of this Ordinance is necessary to manage the Town's potable water supply in the short and long-term and to avoid or minimize the effects

of drought and shortage within the Town. This Ordinance is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare.

NOW, THEREFORE, THE COUNCIL DOES ORDAIN AS FOLLOWS:

1. <u>Addition to Code</u>. Chapter 15.32 [Water Conservation in Landscaping] of Title 15 [Buildings and Construction] of the Portola Valley Municipal Code is hereby added to read as follows:

CHAPTER 15.32 WATER CONSERVATION IN LANDSCAPING

15.32.010	Applicability
15.32.020	Definitions
15.32.030	Water Conservation in Landscaping Requirements
15.32.040	Compliance with Ordinance
15.32.050	Landscape Project Application
15.32.060	Outdoor Water Use Efficiency Checklist
15.32.070	Water Budget Calculations
15.32.080	Landscape and Irrigation Design Plans
15.32.090	Landscape Audit Report
15.32.100	Landscape and Irrigation Maintenance Schedule
15.32.110	Stormwater Management
15.32.120	Provisions for Existing Landscapes Over One Acre in Size
15.32.130	Penalties

15.32.010 Applicability

- A. The provisions of this Ordinance shall apply to all of the following landscape projects:
 - i. <u>Tier 1 Landscapes</u>: All new construction and rehabilitated landscapes with irrigated landscape areas between 1,000 square feet and 2,500 square feet requiring a building or landscape permit, plan check or design review, or requiring new or expanded water service.
 - ii. <u>Tier 2 Landscapes</u>: All new construction and rehabilitated landscapes with irrigated landscape areas equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check or design review or requiring new or expanded water service.
 - iii. Existing landscapes, including existing cemeteries, shall only be subject to the provisions for existing landscapes provided for in Section XIII "Provisions for Existing Landscapes Over One Acre in Size;" and
 - iv. New and rehabilitated cemeteries shall only be subject to the provisions of Section VIII "Water Budget Calculations", Section X "Landscape Audit Report", and Section XI "Landscape and Irrigation Maintenance Schedule."

- B. The provisions of this Ordinance shall not apply to:
 - New construction and rehabilitated landscapes with irrigated landscape areas less than 1,000 square feet or that do not require a building or landscape permit, plan check or design review, or new or expanded water service;
 - ii. Landscapes, or portions of landscapes, that are only irrigated for an establishment period;
 - iii. Registered local, state or federal historical sites where landscaping establishes a historical landscape style, as determined by a public board or commission responsible for architectural review or historic preservation;
 - iv. Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system; or
 - v. Community gardens or plant collections, as part of botanical gardens and arboretums open to the public, agricultural uses, commercial nurseries and sod farms.

15.32.20 Definitions

- A. "Applied water" means the portion of water supplied by the irrigation system to the landscape.
- B. "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.
- 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. "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 U.S. Environmental Protection Agency's WaterSense irrigation designer certification program and Irrigation Association's Certified Irrigation Designer program.
- E. "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 U.S. Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's Certified Landscape Irrigation Auditor program.

- F. "Certified professional" means a certified irrigation designer, a certified landscape irrigation auditor, a licensed landscape architect, a licensed landscape contractor, a licensed professional engineer, or any other person authorized by the state to design a landscape.
- G. "Conversion factor (0.62)" means the number that converts inches per square foot to gallons. This conversion factor represents the amount of water that will fill one square-foot, to 1 inch of depth.
- H. "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.
- I. "Ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- J. "Effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth.
- K. "Establishment period" 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.
- L. "Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in Section VIII "Water Budget Calculations."
- M. "ET adjustment factor" (ETAF) means a factor of 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. ETAF for a Special Landscape Area shall not exceed 1.0. ETAF for existing non-rehabilitated landscapes shall not exceed 0.8.
- N. "Evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.
- O. "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.
- P. "Hardscapes" means any durable material (pervious and non-pervious).
- Q. "Hydrozone" means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.
- R. "Invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.
- S. "Irrigation audit" means an in-depth evaluation of the performance of an irrigation system. 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.
- T. "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 Ordinance is 70%. Greater irrigation efficiency can be expected from well-designed and maintained systems.
- U. "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.
- V. "Irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.
- W. "Landscape architect" means a person who holds a license to practice landscape architecture in California as further defined by the California Business and Professions Code, Section 5615.
- X. "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, other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation), agricultural uses, commercial nurseries and sod farms.
- Y. "Landscape contractor" means a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
- Z. "Landscape project" means the total area comprising the landscape area, as defined in this Ordinance.
- AA. "Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- BB. "Local water purveyor" means any entity, including a public agency, city, county, district or private water company that provides retail water service.
- CC. "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.
- DD. "Low water use plant" means a plant species whose water needs are compatible with local climate and soil conditions. Species classified as "very low water use" and "low water use" by *WUCOLS*, having a regionally adjusted *plant factor* of 0.0 through 0.3, shall be considered low water use plants.

- EE. "Maximum Applied Water Allowance" (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section VIII "Water Budget Calculations."
- FF. "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.
- GG. "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.
- HH. "Native plant" means a plant indigenous to a specific area of consideration. For the purposes of these guidelines, the term shall refer to plants indigenous to the coastal ranges of Central and Northern California, and more specifically to such plants that are suited to the ecology of the present or historic natural community(ies) of the project's vicinity.
- II. "New construction" means the construction of a new building or structure containing a landscape or other new land improvement, such as a park, playground, or greenbelt without an associated building.
- JJ. "No-water using plant" means a plant species with water needs that are compatible with local climate and soil conditions such that regular supplemental irrigation is not required to sustain the plant after it has become established.
- KK. "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.
- LL. "Operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.
- MM. "Overhead sprinkler irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors).
- NN. "Overspray" means the irrigation water which is delivered beyond the target area.
- OO. "Permit" means an authorizing document issued by the Town for new construction or rehabilitated landscapes.
- PP. "Pervious" means any surface or material that allows the passage of water through the material and into the underlying soil.
- QQ. "Plant factor" or "plant water use factor" is a factor, when multiplied by ETo, estimates the amount of water needed by plants.
- RR. "Precipitation rate" means the rate of application of water measured in inches per hour.

- SS. "Project applicant" means the individual or entity submitting a Project Landscape Application required under Section VI, to request a permit, plan check, or design review from the Town or requesting new or expanded water service from the water district. A project applicant may be the property owner or his or her designee.
- TT. "Rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains.
- UU. "Recreational area" means areas dedicated to active play such as parks, sports fields, and golf courses where turf provides a playing surface.
- VV. "Reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants.
- WW. "Rehabilitated landscape" means any re-landscaping project that requires a permit, plan check, design review, or requires a new or expanded water service application.
- XX. "Runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area.
- YY. "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.
- ZZ. "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.
- AAA. "Sprinkler head" means a device which delivers water through a nozzle.
- BBB. "Station" means an area served by one valve or by a set of valves that operate simultaneously.
- CCC. "Turf" means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are coolseason grasses. Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Augustine grass, Zoysia grass, and Buffalo grass are warm-season grasses.
- DDD. "Valve" means a device used to control the flow of water in the irrigation system.
- EEE. "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).
- FFF. "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.

15.32.030 Water Conservation in Landscaping Requirements

- A. All owners of new construction and rehabilitated landscapes of applicable sizes shall: (1) complete the Landscape Project Application and (2) comply with the Landscape and Irrigation Maintenance Schedule requirements of this Ordinance.
- B. All owners of existing landscapes over one acre in size, even if installed before enactment of this Ordinance, shall: (1) comply with Town programs that may be instituted relating to irrigation audits, surveys and water use analysis, and (2) shall maintain landscape irrigation facilities to prevent water waste and runoff.

15.32.040 Compliance with Ordinance

A. The Town shall:

- i. Provide the project applicant with the Landscape Project Application requirements and the procedures for permits, plan checks, design reviews, or new or expanded water service;
- ii. Review the Landscape Project Application submitted by the project applicant;
- iii. Approve or deny the project applicant's Landscape Project Application submittal;
- iv. Issue or approve a permit, plan check or design review that complies with the approved Landscape Project Application or approve a new or expanded water service application that complies with the approved Landscape Project Application;
- v. Submit a copy of the complete Landscape Project Application to the local water purveyor or land use authority, as the case may be.

B. The project applicant shall:

- i. Prior to construction, submit all portions of the Landscape Project Application, except the Landscape Audit Report, to the Town; and
- ii. After construction, submit the Landscape Audit Report portion of the Landscape Project Application to the Town.

15.32.050 Landscape Project Application

- A. The elements of a landscape must be designed to achieve water efficiency and will comply with the criteria described in this Ordinance. In completing the Landscape Project Application, project applicants may choose one of two options to demonstrate that the landscape meets the Ordinance's water efficiency goals. Regardless of which option is selected, the applicant must complete and comply with all other elements of the Ordinance. The options include:
 - i. Planting restrictions:
 - a. 1,000 square feet maximum of irrigated lawn area. Only drought resistant varieties shall be used: and
 - b. 1,000 square feet maximum of ornamental planting including flower and vegetable gardens. All planting in this area shall be watered by drip irrigation.
 - ii. Water Budget Calculation option.
- B. The Landscape Project Application shall include the following elements:
 - i. Project Information;
 - ii. Outdoor Water Use Efficiency Checklist;
 - iii. Water Budget Calculations, if applicant selects to use a water budget approach rather than comply with the turf area limitations or specified plant type restrictions;
 - iv. Landscape and Irrigation System Design Plans; and
 - v. Landscape Audit Report.

15.32.060 Outdoor Water Use Efficiency Checklist

The Town will develop an Outdoor Water Use Efficiency Checklist ("Checklist"), based on the criteria described below. For Tier 1 projects, either the project applicant or a landscape professional shall complete the Checklist and submit it to the Town along with the Landscape and Irrigation Design Plan. For Tier 2 projects, the Checklist shall be completed by a landscape professional and submit it to the Town along with the Landscape and Irrigation Design Plan.

A. Plant Material

i. Each hydrozone shall have plant materials with similar water use that are selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site.

- ii. The turf area shall not be more than 25% of the landscape area, unless the project applicant develops a site-specific water budget and the ETWU of the landscape area does not exceed the MAWA.
- iii. Turf shall not be planted on slopes greater than 25% or in areas that are less than eight feet wide, unless irrigated with subsurface irrigation or a low volume irrigation system.
- iv. At least 80% of the plants in non-turf landscape areas shall be native plants, low-water using plants, or no-water using plants, unless the project applicant develops a site-specific water budget and the ETWU of the landscaped area does not exceed the MAWA.
- v. Fire-prone plant materials and highly flammable mulches should be avoided.
- vi. The use of invasive and/or noxious plant species is strongly discouraged.
- vii. The architectural guidelines of a common interest development shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

B. Mulch

A minimum two-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas, although a three-inch layer is recommended.

C. Irrigation System

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.

- i. Dedicated landscape water meters shall be required for landscape areas greater than 5,000 square feet and are highly recommended for landscape areas greater than 2,500 square feet.
- ii. <u>Tier 2 Landscapes</u> are required to have automatic irrigation controllers that utilize either evapotranspiration or soil moisture sensor data for irrigation scheduling.
- iii. 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.
- iv. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions.
- v. Low volume irrigation required in mulched areas, in areas with slope greater than 25%, and within 24-inches of a non-permeable surface, or in

- narrow or irregularly shaped areas that are less than eight feet in width in any direction.
- vi. Average irrigation efficiency is assumed to be 70%. Irrigation systems shall be designed, maintained, and managed to meet or exceed an average landscape irrigation efficiency of 70%.
- vii. Irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m., unless unfavorable weather prevents it or otherwise renders irrigation unnecessary.

D. Hydrozone

- 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 with different water uses may be allowed if a water budget is performed, and the plant factor calculation is based on the proportion of the respective plant water uses or the plant factor of the higher water using plant is used.

E. Water Features

- i. Recirculating water systems will be used for water features.
- ii. The surface area of a water feature will not exceed 10% of the landscape area and will be counted as a high-water using plant for purposes of a water budget calculation.
- iii. Pool and spa covers are highly recommended.

F. Soil Amendments

Soil amendments, such as compost, shall be incorporated according to the soil conditions at the project site and based on what is appropriate for the selected plants.

15.32.070 Water Budget Calculations

Project applicant may elect to complete a water budget calculation for the landscape project. A Tier 1 water budget may be developed and completed by the project applicant. A Tier 2 water budget calculation must be completed by a certified professional who is authorized to complete a water budget. Water budget calculations, if prepared, shall adhere to the following requirements:

- A. The plant factor used shall be from WUCOLS. The plant factor ranges from 0.0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.
- B. All water features shall be included in the high water use hydrozone.
- C. All Special Landscape Areas ("SLA") shall be identified and their water use included in the water budget calculations.
- D. The reference evapotranspiration adjustment factor (ETAF) for SLA shall not exceed 1.0. The ETAF for all other landscaped areas shall not exceed 0.7.
- E. Irrigation system efficiency shall be greater than or equal to 70%.
- F. Maximum Applied Water Allowance (MAWA) shall be calculated using the equation below:

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

Where:

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons)

0.7 = Reference Evapotranspiration Adjustment Factor (ETAF)

LA = Landscape Area including SLA (square feet)

0.3 = Additional Water Allowance for SLA

SLA = Special Landscape Area (square feet)

G. The Town or project applicant may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate the MAWA:

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

H. Estimated Total Water Use (ETWU) will be calculated using the equation below. The sum of the ETWU calculated for all hydrozones will not exceed the MAWA.

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

Where:

ETWU = Estimated Total Water Use per year (gallons)

ETo = Reference Evapotranspiration (inches)

PF = Plant Factor from WUCOLS (see Section 491)

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 0.70)

15.32.80 Landscape and Irrigation Design Plans

- A. <u>Tier 1 Landscapes</u>: The Landscape and Irrigation Design Plan may be prepared by, and bear the signature of, the project applicant, or that of a certified professional.
- B. <u>Tier 2 L'andscapes</u>: The components of the Landscape and Irrigation Design Plan shall be prepared as follows:
 - The landscape design portion shall be prepared by, and bear the signature of, a licensed landscape architect, licensed landscape contractor, or that of a certified professional who is authorized to design a landscape; and
 - ii. The irrigation design portion shall be prepared by, and bear the signature of, a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or that of a certified professional who is authorized to design an irrigation system.
- C. The landscape design portion of the Landscape and Irrigation Design Plan, at a minimum, shall:
 - i. Delineate and label each hydrozone;
 - ii. Identify each hydrozone as low, moderate, high water, or mixed water use;
 - iii. Identify Special Landscape Areas (i.e., recreational areas; areas permanently and solely dedicated to edible plants; areas irrigated with recycled water);
 - iv. Identify type of mulch and application depth;
 - Identify type and surface area of water features;
 - vi. Identify hardscapes (pervious and non-pervious); and
 - vii. Contain the following statement: "I have complied with the criteria of the Water Conservation in Landscaping Ordinance and applied them for the efficient use of water in the Landscape and Irrigation Design Plan."
- D. The irrigation design portion of the Landscape and Irrigation Design Plan, at a minimum, shall contain:
 - i. Location and size of separate water meters for landscape:
 - ii. 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;
- iii. Static water pressure at the point of connection to the public water supply;
- iv. Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
- v. Irrigation schedule;
- vi. The following statement: "I have complied with the criteria of the Water Conservation in Landscaping Ordinance and applied them accordingly for the efficient use of water in the Landscape and Irrigation Design Plan."

E. Grading

If the Landscape Project will be graded, then the grading shall be designed to minimize soil erosion, runoff, and water waste. All grading should be conducted to:

- i. Maintain all irrigation and normal rainfall within property lines and avoid drainage on to non-permeable hardscapes;
- ii. Avoid disruption of natural drainage patterns and undisturbed soil;
- iii. Avoid soil compaction in landscape areas; and
- iv. Be consistent with city and county grading requirements.

15.32.090 Landscape Audit Report

- A. <u>Tier 1 Landscapes</u>: Landscape irrigation audits for new or rehabilitated landscapes installed after the effective date of this Ordinance shall be conducted after the landscaping and irrigation systems have been installed. The audit may be conducted by the project applicant or by a certified landscape irrigation auditor.
- B. <u>Tier 2 Landscapes</u>: Landscape irrigation audits for new or rehabilitated landscapes installed after the effective date of this Ordinance shall be conducted by a certified landscape irrigation auditor after the landscaping and irrigation system have been installed.
- C. The Landscape Audit Report shall include, but is not limited to: inspection to confirm that the landscaping and irrigation system were installed as specified in the Landscape and Irrigation Design Plan, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule.
- D. The Landscape Audit Report shall include the following statement: "The landscape and irrigation system has been installed as specified in the Landscape and Irrigation Design Plan and complies with the criteria of the Ordinance and the permit".

E. The Town shall administer on-going programs that may include, but not be limited to, post-installation landscape inspection, irrigation water use analysis, irrigation audits, irrigation surveys and water budget calculations to evaluate compliance with the MAWA.

15.32.100 Landscape and Irrigation Maintenance Schedule

- A. Landscapes shall be maintained to ensure water use efficiency.
- 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 obstructions to emission devices.
- 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.

15.32.110 Stormwater Management

Stormwater best management practices should be implemented into the landscape and grading design plans to minimize runoff and to increase on-site retention and infiltration and should be consistent with Town and county stormwater management requirements.

15.32.120 Provisions for Existing Landscapes Over One Acre in Size

This section shall apply to all existing landscapes that were installed before the effective date of this Ordinance and are over one acre in size.

- A. Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.
 - i. For landscapes that have a water meter, the Town 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 MAWA for existing landscapes. The MAWA for existing landscapes shall be calculated as:

$$MAWA = (0.8) (ETo)(LA)(0.62).$$

ii. For landscapes that do not have a meter, the Town 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.

- iii. All landscape irrigation audits for existing landscapes that are greater than one acre in size shall be conducted by a certified landscape irrigation auditor.
- B. Water Waste Prevention.

The Town 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.

15.32.130 Penalties

Compliance with this Ordinance shall be conducted in accordance with Chapter 1.12 of the Town's Municipal Code.

- 2. <u>Environmental Review</u>. This Ordinance is not subject to the California Environmental Quality Act (Public Resources Code Section 2100 et seq.) ("CEQA") pursuant to Section 15307 and Section 15378(b)(2) of the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, since it makes and implements policies and procedures to ensure that water resources are conserved by reducing water consumption through the establishment of a structure for planning, designing, installing, maintaining and managing water-efficient landscapes.
- 3. <u>Severability</u>. If any section, subsection, provision or part of this Ordinance, or its application to any person or circumstance, is held to be unconstitutional or otherwise invalid, the remainder of this Ordinance, and the application of such provision to other person or circumstances, shall not be affected thereby and shall remain in full force and effect and, to that end, the provisions of this Ordinance are severable.
- 4. <u>Effective Date</u>. This Ordinance shall become effective thirty (30) days from the date of its passage, and shall be posted within the Town in three (3) public places.

INTRODUCED:

February 24, 2010

PASSED:

March 10, 2010

AYES:

Councilmember Derwin, Vice Mayor Driscoll, Councilmember

Richards, Mayor Toben and Councilmember Wengert

NOES:

None

ABSTENTIONS:

None

ABSENT:

None

Мауог

ATTEST

Town Clerk

APPROVED AS TO FORM:

Town Attorney

ORDINANCE NO. 2010-384

ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF PORTOLA VALLEY ADDING CHAPTER 15.30 [INDOOR WATER CONSERVATION] TO TITLE 15 [BUILDINGS AND CONSTRUCTION] OF THE PORTOLA VALLEY MUNICIPAL CODE

WHEREAS, the Town of Portola Valley ("Town") desires to add Chapter 15.30 [Indoor Water Conservation] to Title 15 [Buildings and Construction] of the Portola Valley Municipal Code to establish indoor water conservation regulations.

WHEREAS, a reliable minimum supply of potable water is essential to the public health, safety and welfare of the people and economy of the Town. The adoption and enforcement of this Ordinance is necessary to manage the Town's potable water supply in the short- and long-term and to avoid or minimize the effects of drought and shortage within the Town.

WHEREAS, San Mateo County, in which the Town is located, is a semi-arid region and is largely dependent upon imported water supplies. Factors, such as drought, a growing population, climate change, and environmental and regulatory concerns affect the region's water reliability and make it highly susceptible to water supply challenges.

WHEREAS, the more restrictive building standards for water conserving fixtures provided for in this Ordinance are reasonably necessary because of local climatic, geological or topographical conditions.

WHEREAS, careful water management requires active water conservation measures, not only in times of drought but at all times, in order to ensure a reliable minimum supply of water to meet current and future water supply needs.

WHEREAS, current supply and demand projections for the Bay Area Water Supply and Conservation Agency ("BAWSCA") member agencies, including the Town, indicate that, in the absence of increased water conservation, water demands will exceed available water supplies in 2015 and implementation of water conserving ordinances is one mechanism by which agencies can reduce future water demands and remain within existing supplies.

WHEREAS, this Ordinance is consistent with the provisions requiring high efficiency water conserving fixtures and reductions in indoor water use in the 2007 California Plumbing Code and the California Green Building Standards Code, respectively, as such provisions will be implemented in the coming years. Implementation of this Ordinance is necessary to expedite the use of high efficiency water conserving fixtures and assist BAWSCA member agencies in achieving water savings.

WHEREAS, the State Legislature has identified the provision of a more reliable water supply and the protection, restoration and enhancement of the Delta ecosystem as a high priority for the State. Pursuant to this, in November 2009, the State Legislature passed Senate Bill 7 requiring certain urban water suppliers to reduce per capita urban water use by 20% by the year 2020. Implementation of this Ordinance is consistent with the policies and goals established by the State Legislature in enacting Senate Bill 7.

WHEREAS, the State Legislature has identified urban water conservation as a cost-effective approach to addressing water supply needs and determined that there are many water conservation practices that produce significant energy and water resource savings that should be encouraged as a matter of state policy. Pursuant to this finding, the State Legislature passed Senate Bill 407, requiring all residential and commercial property owners to replace existing plumbing fixtures with water-conserving fixtures by 2017 and 2019, respectively, and to upgrade existing plumbing fixtures upon any remodel initiated after January 1, 2014. Senate Bill 407 further authorizes the Town to enact local ordinances that promote compliant use of water efficient plumbing fixtures or which will result in a greater amount of water savings than those provided for in Senate Bill 407. This Ordinance is consistent with the mandates of Senate Bill 407 and will result in water savings.

WHEREAS, the Town's local water purveyor, California Water Service Company has a long-standing policy of promoting efficient water management measures and practices and will work cooperatively with the Town to maximize effectiveness of the Ordinance.

NOW, THEREFORE, THE COUNCIL DOES ORDAIN AS FOLLOWS:

1. Addition to Code. Chapter 15.30 [Indoor Water Conservation] of Title 15 [Buildings and Construction] of the Portola Valley Municipal Code is hereby added to read as follows:

CHAPTER 15.30 INDOOR WATER CONSERVATION

15.30.010	Applicability
15.30.020	Definitions
15.30.030	Minimum Indoor Fixture Requirements
15.30.040	Application Requirements
15.30.050	Enforcement

15.30.010 Applicability

- A. The provisions of this Ordinance shall apply to the following projects:
- 1. All new construction, regardless of building classification, requiring a building permit, plan check or design review, or requiring new or expanded water service.

- 2. All kitchen and bathroom remodels requiring a building permit, plan check, design review, new or expanded water service, except that the provisions of this Ordinance will only apply to the fixtures normally included in the kitchen or bathroom, as the case may be, to be remodeled.
- B. This provisions of this Ordinance shall not apply to:
- 1. Existing buildings not requiring a building permit, plan check or design review.
 - 2. Registered local, state or federal historical sites.

15.30.020 **Definitions**

- A. "Certified professional" means a licensed contractor, architect or professional engineer.
- B. "Energy Star Qualified" means that a given fixture meets the United States Environmental Protection Agency standard for an energy efficient product.
- C. "LSI" means Langlier Saturation Index providing an indication of the degree of saturation of water with respect to calcium carbonate related to cooling tower efficiency.
- D. "Local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.
- E. "Project applicant" means the individual or entity submitting a project application which requires an Indoor Water Use Efficiency Checklist pursuant to this chapter.
- F. "Water factor" means the number of gallons per cycle per cubic foot that a clothes washer uses.

15.30.030 Minimum Indoor Fixture Requirements

All new construction and applicable remodels will have, at a minimum, fixtures that comply with the efficiency standards listed below in the Indoor Water Use Efficiency Table.

INDOOR WATER USE EFFICIENCY TABLE

Fixture	Residential	Non-Residential
Toilets	≤ 1.28 gpf, and ≥ 350 grams	≤ 1.28 gpf, and ≥ 350 grams
Urinals	≤ 0.5 gpf	≤ 0.5 gpf
Showers	≤ 2.0 gpm	≤ 2.0 gpm
Bathroom faucets	≤ 1.5 gpm	≤ 0.5 gpm
Kitchen faucets	≤ 2.2 gpm	≤ 2.2 gpm
Clothes washers	≤ 6.0 Water Factor	≤ 6.0 Water Factor
Dishwashers	≤ 6.5 gal/cycle, or Energy Star Qualified	Energy Star Qualified
Cooling towers	≥ 5 - 10 cycles, or ≥ 2.5 LSI	≥ 5 - 10 cycles, or ≥ 2.5 LSI
Food steamers		Boiler less, or Self-contained
Ice machines		≤ 25 gal/100 lbs ice, or Air-cooled
Pre-rinse spray valves		≤ 1.15 gpm
Automatic vehicle wash facilities		≥ 50% of water that is recycled on site
Commercial refrigeration		Closed loop, or Air-cooled
Water Meters	Submeters for RMF, and Separate meter for outdoor if landscape >5000 sq. ft.	Submeters, and Separate meter for outdoor if landscape >5000 sq. ft.

[&]quot;gal/cycle" means gallons per cycle; "gal/100 lbs ice" means gallons per hundred pounds of ice; "gpf" means gallons per flush; "gpm" means gallons per minute

15.30.040 Application Requirements

A. The Town shall:

- 1. Provide the project applicant with the Indoor Water Use Efficiency Checklist when it provides project applicant with the procedures for permits, plan checks, design reviews or new or expanded water service applications;
- 2. Review the Indoor Water Use Efficiency Checklist submitted by the project applicant;

- 3. Approve or deny the project applicant's Indoor Water Use Efficiency Checklist submittal;
- 4. Only upon approval of the Indoor Water Use Efficiency Checklist, issue a permit or approve the plan check, design review or new or expanded water service application;
- 5. Inspect the installation of the water efficient fixtures and appliances to verify that they have been installed and are performing at the required use levels; and
- 6. Submit a copy of the complete Indoor Water Use Efficiency Checklist to the local water purveyor.

B. The Project Applicant shall:

- 1. Meet the minimum water use efficiency standards for indoor fixtures and appliances provided for in the Indoor Water Use Efficiency Table and Checklist.
- 2. Submit all portions of the Indoor Water Use Efficiency Checklist to the local agency for approval that includes, at a minimum:
 - a. Project information;
 - b. Quantity and unit water use factors of all indoor fixtures and appliances relative to the standards listed in the Indoor Water Use Efficiency Table and Checklist;
 - c. Contains the following statement to be completed by the Project Applicant: "I certify that the subject project meets the specified requirements of the Indoor Water Use Efficiency Ordinance"; and
 - d. Bears the signature of the project applicant, or that of a certified professional.

15.30.050 Enforcement

Compliance with this chapter shall be conducted in accordance with chapter 1.12.

- 2. <u>Environmental Review</u>. This Ordinance is not subject to the California Environmental Quality Act (Public Resources Code Section 2100 et seq.) ("CEQA") pursuant to Section 15307 and Section 15378(b)(2) of the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because it makes and implements policies and procedures for ensuring that water resources are conserved by reducing water consumption through the use of water efficient indoor plumbing fixtures.
- 3. <u>Severability</u>. If any section, subsection, provision or part of this Ordinance, or its application to any person or circumstance, is held to be unconstitutional or otherwise invalid, the remainder of this Ordinance, and the application of such provision to other person or circumstances, shall not be affected

thereby and shall remain in full force and effect and, to that end, the provisions of this Ordinance are severable.

4. <u>Effective Date; Posting</u>. This Ordinance shall become effective thirty (30) days after the date of its adoption and shall be posted within the Town in three (3) public places.

INTRODUCED:

February 24, 2010

PASSED:

March 10, 2010

AYES:

Councilmember Derwin, Vice Mayor Driscoll, Councilmember Richards,

Mayor Toben and Councilmember Wengert

NOES:

None

ABSTENTIONS:

None

ABSENT:

None

ATTEST:

By:

Mayor

ATTEST:

Town Clerk

APPROVED AS TO FORM:

Diar Ottenten

Town Attorney