

## **APPENDIX C**

---

### **City of Fresno Municipal Code Water Conservation Provisions**

Chapter 6 Municipal Services and Utilities: Article 5 Water Regulations

Section 6-519. Water Conservation Device Required

Section 6-520. Wastage of Water

Section 6-522. Water Efficient Landscape Standards

**SEC. 6-519. WATER CONSERVATION DEVICE REQUIRED.**

- (a) No person shall install or replace any system, including portable systems, on any premises unless such system is equipped with a water conservation device, and such device is properly maintained at all times, except as follows:
- (1) In a multi-story building, unconserved water-cooled refrigeration units used only for the commercial preservation of food may be installed, replaced or maintained provided that such unit has a capacity of less than one ton and that all such units on any one premises do not exceed a cumulative total capacity of two tons and do not consume more than 1.5 gallons of water per minute per ton of capacity per unit.
  - (2) Evaporative coolers may be installed, replaced, or maintained provided that no evaporative cooler or coolers on any premises shall have a cumulative total capacity of more than eighteen hundred cubic feet of air per minute.
  - (3) A system may be installed, replaced or maintained provided it is not connected to city water, and a source of water supply is developed on the same premises for the exclusive use of such system, and a drainage well, drilled pursuant to and in conformance with Article 4 (commencing with Section 6-401), Chapter 6, of this Code, is used as the sole means of disposing of water discharged from such system.
- (b) When a system is installed or maintained on any premises contrary to the provisions of this article, no city water service shall be granted to serve said premises, whether located in or out of the city limits.
- (c) No person shall sell or deliver any evaporative cooler which he knows or has reason to know is intended to use city water unless such cooler is, when sold and delivered, equipped with a water conservation device. (Added Ord. 73-120, § 5, eff. 8-16-73).

## **SEC. 6-520. WASTAGE OF WATER.**

- (a) In the use of water supplied by the city, no customer shall do or permit any of the following:
- (1) Water any lawn except by use of a hose held in the person's hand or a sprinkling device, or
  - (2) Keep, maintain, operate, or use any water connection, hose, faucet, hydrant, pipe, outlet, or plumbing fixture which is not tight and free from leakage, or
  - (3) Willfully or negligently waste water, or
  - (4) Flood any part of the premises of another, or
  - (5) Sprinkle the premises of another so as to prevent the normal use thereof or unreasonably wet objects thereon which should not be subjected to a spray of water except as naturally caused by the elements or by action of the owner of the object, or
  - (6) Sprinkle or irrigate any yard, ground, premise, or vegetation between the hours of twelve o'clock and five o'clock p.m. during the months of April through October, inclusive, or
  - (7) Sprinkle or irrigate any yard, ground, premise, or vegetation unless the watering device used is controlled by an automatic shut-off device, or a person is in immediate attendance of the hose or watering device, or
  - (8) Wash any privately owned motor vehicle, trailer, or boat except from a bucket or in a commercial car wash, provided a hose equipped with a shut-off nozzle may be used for a quick rinse, or
  - (9) Wash or rinse with a hose or watering device any sidewalk, driveway, parking area, tennis court, patio, or any other exterior paved area, except in a manner which prevents the bulk of the runoff water from entering the street and instead diverts such water to other productive purposes such as landscape irrigation.
- (b) Lawn sprinkling systems shall be properly designed, installed, maintained, and operated to prevent wastage of water.
- (c) The Council may implement any or all of the measures listed below, either city-wide or by specific zone, when any of the following conditions exist: (i) the California Department of Water Resources has declared a critically dry or drought year; or (ii) water levels decline below the pump intake; or (iii) water pressures drop below thirty-five pounds per square inch during peak demand periods more than three days in any calendar week or ten days in any calendar month; or (iv) degradation of water quality condition (i.e., exceeding the established maximum contaminant levels according to applicable state or federal law) decreases water quantity available for delivery to all or part of the geographic area, or the customers and other persons, for whom Water Division service was designed or intended to the extent extraordinary measures to reduce water use are necessary, as determined by the Council. Measures to be implemented include, but are not limited to, the following:

- (1) Odd/even address alternate day outdoor watering restrictions for all or a specific zone of the city (in addition to the time of day restrictions set forth in Section 6-520(a)(6)). The following properties shall water by using each irrigation valve no more frequently than every other day:
  - a. Properties with multiple addresses, and
  - b. Properties turfed or landscaped areas of three acres or larger, and
  - c. Properties without street addresses.

The owners of such properties may apply for an exemption from the established watering restrictions. The owners of such properties shall be required to submit a proposed watering schedule in writing to the Water Division for approval or modification. The Water Division may approve a watering schedule that may provide for more frequent watering than every other day. If it is determined that the property can be watered within the city's regular watering rules without significantly impacting water pressures in the service area, the proposed watering schedule will be denied. The Council may grant an exemption for new lawns not yet established.

- (2) Prohibition of all irrigation of turf for all or a specific zone of the city except during off-peak hours (twelve midnight to six a.m., eight a.m. to eleven a.m. and seven p.m. to twelve midnight). The Council may grant an exemption for new lawns not yet established.
- (3) Implementation of regulations on the filling of fountains in city facilities, as the Council determines appropriate.
- (4) Prohibition of installation of outdoor evaporative "mist coolers."
- (5) Prohibition of draining of swimming pools more than once every three years, except for structural repairs or to comply with public health standards determined by the County Health Officer. Any customer whose swimming pool is drained by order of the department of health for failure to maintain it properly will also be issued a notice of violation of the city of Fresno municipal code. The draining of pools for reasons of health and safety hazards as determined by the city of Fresno water division and/or the department of health is permitted. Residents with private swimming pools shall file a written application for a permit prior to draining their pools with the Water Division Manager. The application shall include the results of a pool water test conducted by an independent testing organization which shows a cyanuric acid level above 100 parts per million, total dissolved solids over 2,500 parts per million, or calcium over 450 parts per million, or stating the nature and duration of repairs to be made and the date on which the pool will be drained.
- (6) Prohibition of the filling or refilling of swimming pools during peak hours of 5:00 a.m. to 8:00 a.m. and 5:00 p.m. to 8:00 p.m., except that a standard hose up to 3/4" may be used to fill the pool and keep the tile and plaster wet during these hours.

The Director shall propose fees and promulgate guidelines for the implementation of this subsection which shall include criterion and a procedure for approval of applications or for exemption by the Director.

(d) The provisions of this section are conditions of service. Each use of water by a customer that is inconsistent with the provisions of this section is an incident of water wastage. If a customer has an incident of water wastage, the customer shall be charged the fee as described herein. The fee that customers shall be charged for each incident of water wastage described in this section shall not exceed the reasonable cost of service related to water wastage enforcement and the cost of the estimated additional water used and/or wasted. Such amount shall be a proprietary charge to cover the estimated costs of staff enforcement of the water conservation rules. Such charge shall be as determined by the Council and designated in the Master Fee Schedule.

(1) Such charge shall be levied as follows:

- (i) For the first incident of water wastage, the fee designated in the Master Fee Resolution shall be deferred for a period of two years conditioned upon the customer not having a fourth incident of water wastage within a two year period. If the customer does not have such fourth incident of water wastage within two years such deferral shall become permanent. However, such fee shall be due and owing by the customer if a fourth incident of water wastage occurs within two years.
  - (ii) The fee for the second incident of water wastage shall be deferred for customers who attend a course in water conservation. The deferral shall be conditioned upon the customer's successful completion of a water conservation course provided by the Department of Public Utilities and the customer not having a third incident of water wastage within a two year period. The deferred fee shall be collected if a third incident of water wastage occurs within a two year period.
  - (iii) The fee for the third incident of water wastage within a two year period shall be the fee designated in the Master Fee Resolution (plus any fee deferred from the second incident of water wastage. A customer shall have the option of submitting proof of implementation of retrofit measures of no less value than the fee imposed for such third incident of water wastage in lieu of that fee. Retrofit measures of a value less than that fee shall be credited toward payment of the fee.
  - (iv) The fee for the fourth incident of water wastage within a two year period shall include the amount as designated in the Master Fee Schedule together with all applicable amounts previously deferred as described above.
- (2) If a customer has more than four incidents of water wastage within a two year period, the city may implement any or all of the following measures:
- (i) Require the customer to get a landscape evaluation, lawn water audit, and water budget, as appropriate, in order to learn efficient water use. This

work would be completed at the customer expense by landscape irrigation auditors certified by the Irrigation Association.

- (ii) Require a customer to repair any defects in the watering system of such customers within fourteen days of notice by the city to repair.
  - (iii) Installation by the city of flow restrictors or termination of water service for exterior use.
  - (iv) Termination of all water service to a customer unless in the opinion of the Director such termination would result in an unreasonable risk to the health and safety of persons.
  - (v) Require that restoration of water service after termination be contingent on an agreement by the customer to adhere to the provisions of this section.
- (e) The Director shall prepare and present a rationing plan to Council for approval. Such plan shall be adopted by resolution passed by Council. (Orig. Ord. 4481; Am. Ord. 6486, 1964; Am. Ord. 73-120, § 6, eff. 8-16-73; Am. Ord. 77-99, § 1, eff. 9-23-77; Am. Ord. 78-74, §§ 1, 2, eff. 5-26-78; Am. Ord. 80-115, § 149, eff. 8-8-80; Am. Ord. 89-48, §§ 1, 2, eff. 4-18-89; Am. Ord. 89-77, § 1, eff. 6-7-89; Am. Ord. 89-102, § 1, eff. 9-22-89; Am. Ord. 90-72, § 1, eff. 8-24-90; Am. Ord. 90-97, § 1, eff. 10-12-90; Am. Ord. 91-104, § 1, eff. 10-18-91; Am. Ord. 91-112, § 1, eff. 11-22-91; Am. Ord. 93-14, § 1, eff. 2-23-93; Am. Ord. 93-20, § 2, eff. 4-30-93).

**SEC. 6-521. VIOLATION OF AFFIDAVIT.**

Any customer who develops or irrigates any portion of any premises for which a reduced water charge has been computed pursuant to Section 6-505(a)(3), and who fails to notify the controller of such development or irrigation within 30 days of the date same is commenced, shall be presumed to have used or irrigated such area for a period of twelve months prior to the date such use or irrigation first came to the Controller's attention, and shall pay the total fee prescribed for the use or irrigation of such area for said twelve-month period, together with interest and penalties thereon calculated pursuant to Section 6-106 as if such usage had been billed in the customer's regular billing cycle but had not been paid for by him, unless he establishes to the satisfaction of the Controller that such use or irrigation was maintained for a shorter period of time. (Added Ord. 73-154, § 3, eff. 10-18-73).

## **SEC. 6-522. WATER EFFICIENT LANDSCAPE STANDARDS.**

- (a) Water used for irrigation shall be minimized to the amount needed to maintain adequate plant health and growth with a minimum of waste or over spray on adjoining areas.
- (b) Operation of Efficient Irrigation Systems. All persons who have installed completely new replacement irrigation systems on existing residential units are required to file irrigation plans pursuant to the Code Section 12-306-N.23 and 24, and shall use the City of Fresno Monthly Lawn Watering Chart to determine lawn water times. Longer watering times are permitted provided it can be shown necessary by calculations based on the evapotranspiration rate and sprinkler precipitation rates. For persons who use the City of Fresno Monthly Lawn Watering Chart, each area of the lawn shall receive no more than the maximum number of minutes per week for any one area of lawn.
- (c) Irrigation system operation shall comply with Code Section 6-520.
- (d) The "water customer" shall modify watering duration and frequency schedules so that the sprinkler's application does not exceed the irrigated area's absorption rate and generate surface runoff.
- (e) Maintenance. It is the owner's responsibility to maintain the irrigation system by checking, adjusting sprinklers, repairing or replacing defective equipment and modifying the watering times to ensure efficient use of water. The customer is responsible for any wastage of water which originates on the customer's property.
- (f) Existing Irrigation Systems (Manual/Automatic). On resale of existing property, the new owner shall certify in writing prior to obtaining water service from the City of Fresno that:
  - (1) The irrigation system has been checked and that all broken or defective irrigation equipment has been repaired or replaced.
  - (2) That all the system's components are functioning properly.
  - (3) No leaks exist.
- (g) Enforcement. If a person violates any of the provisions of this section the city may implement any or all of the following measures:
  - (1) Require a customer to get a landscape evaluation, lawn water audit, and water budget, as appropriate, in order to learn efficient water use. This work shall be completed at customer expense by Landscape Irrigation Auditors certified by the Irrigation Association.
  - (2) Require a customer to repair any defects in the watering system of such person within fourteen days of notice by the city to repair.
  - (3) Installation by the city of flow restrictors or termination of water service for exterior use.
  - (4) Termination of all water service to a customer unless in the opinion of the Director of Public Utilities such termination would result in an unreasonable risk to the health and safety of persons.



(5) Require that restoration of water service after termination be contingent on an agreement by the customer to adhere to the provisions of this section.

A. If a water customer objects to the previously mentioned enforcement measures the following appeal process may be used.

Step 1. The customer may call the Water Conservation Program in order to discuss the incident with the staff person who initiated the enforcement measures.

The staff person has no authority to rescind the enforcement measures. However, upon being contacted by the customer, the staff person shall gather the facts about the incident and explain them to the Water Conservation Program Supervisor, who may decide whether or not to rescind the enforcement measure.

Step 2. If the customer is not satisfied with the decision of the Water Conservation Program Supervisor, he/she may appeal to the Water Systems Manager who shall review such appeal and render a written decision within thirty days after such appeal.

Step 3. If the customer is not satisfied with the decision of the Water Systems Manager he/she may appeal to the Director of Public Utilities who shall review such appeal and render a written decision within thirty days after receiving such appeal.

Step 4. The customer may make a final appeal directly to the City Council if still not satisfied.

The appeal listed in step 2 above shall be filed in writing within thirty days of the date of the notice outlining the enforcement measure. Each subsequent appeal shall be filed in writing within 30 days from the date of the written decision being appealed.

(Added Ord. 94-86, § 3, eff. 10-21-94).

## **SEC. 6-523. DEFINITIONS FOR WATER EFFICIENT LANDSCAPE STANDARDS.**

- (a) Unless the particular provision or the context otherwise requires, the definitions and provisions contained in this section shall govern the construction, meaning, and application of words and phrases used in this article, and, except to the extent that a particular word or phrase is otherwise specifically defined in this section, the definitions and provisions contained in Article 3 of Chapter 1 of this Code shall also govern the construction, meaning, and application of words and phrases used in this article. The definition of each word or phrase shall constitute, to the extent applicable, the definition of each word or phrase which is derivative from it, or from which it is a derivative, as the case may be.
- (b) "Absorption rate" or "infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).
- (c) "Air Inlet Valve" means a port open to the atmosphere which permits air to enter a backflow assembly under a no water flow condition. These air inlets are utilized in atmospheric and pressure type vacuum breakers.
- (d) "Application rate" means the depth of water applied to a given area, usually measured in inches per hour.
- (e) "Atmospheric vacuum breaker" means an assembly containing a float-check seat and an air inlet port. The flow of water into the body causes the float to close the air inlet port. When the flow of water stops the float falls and forms a check valve against backsiphonage and at the same time opens the air inlet port to allow air to enter and satisfy the vacuum.
- (f) "Automatic controller" means a mechanical or solid state timer, capable of operating valve stations to set the days, hours and length of time of water application.
- (g) "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.
- (h) "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.
- (i) "Chemical injection" means the act of automatically or manually adding chemicals (usually fertilizer) to the irrigation system where it mixes with water and is subsequently applied to the landscape.
- (j) "City of Fresno Monthly Lawn Watering Chart" means the chart of approximate lawn watering time (in minutes per week) published by the City of Fresno.
- (k) "Cool season turf" means Annual bluegrass, Perennial rye grass, Red fescue, Tall fescue and other turf that is not dormant in winter.
- (l) "Cross connection control" means any unprotected actual or potential physical connection or arrangement of piping or fixtures between two otherwise separate piping systems one of which contains potable water and the other non-potable water. This would include any temporary connections, such as swing connections,

removable sections, four way plug valves, spools, dummy section of pipe, swivel or change-over devices or sliding multiport tube.

- (m) "Downstream" means in the direction of the flow of a stream.
- (n) "Emitter" means drip irrigation fittings that deliver water slowly from the system to the soil.
- (o) "Evapotranspiration rate" means the inches of water per day.
- (p) "Evaporation rate" means the inches of water per day.
- (q) "Flex riser" means flexible material that allows a sprinkler head to bend if struck and come back into alignment.
- (r) "Infiltration rate" means the rate at which water is absorbed into the soil expressed as a depth of water in inches.
- (s) "Irrigation system" means the water delivery pipelines that supply water from the water source to the valve or outlet and to the emitters or sprinklers from the valve. An automatic controller is part of all new irrigation systems. See Section 6-501(z).
- (t) "Irrigation valve circuit" means a system composed of piping, valves, pumps, controllers and outlets to distribute water to lawns, trees, shrubs, plants and other landscape facilities.
- (u) "Landscaped area" means the parcel area, including the right-of-way area and any easements, less building pad(s), driveway(s) and parking areas. This includes planted areas, water bodies, and natural areas.
- (v) "Landscape modification" means any change to a landscape on site or on the landscape plan.
- (w) "Landscape plan" means a plan to scale of not less than one inch equals 40 feet which shall show the location, size and variety of all plantings, water supply, contours and similar designations as the Director may require for sufficient clarity to indicate the nature and extent of the work proposed.
- (x) "Micro irrigation" means sprinkler heads that put out less than 16 gallons of water per hour used.
- (y) "Mulch" means any material such as leaves, bark, straw or other materials left loose and applied to the solid surface to reduce evaporation.
- (z) "New development" means any development for which a Development Plan is filed upon or after the effective date of this ordinance.
- (aa) "Overspray" means water which is delivered beyond the landscaped area, wetting pavements, walks, structures, or other non-landscaped areas.
- (bb) "Pedestrian parkway" mean those median islands or pathways which are greater than eight feet wide and used as pedestrian pathways.
- (cc) "Plumbing permits" means a form obtained at the public counter of the Development Department which allows for a fee, certain plumbing related modifications or installations to occur on a structure or to landscaping.

- (dd) "Pop-up spray heads" means a water pressure activated head which pops up and sprays water through a nozzle.
- (ee) "Precipitation rate" means the rate at which water is applied to the plants.
- (ff) "Pressure vacuum breaker" means an assembly containing an independently operating loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with properly located resilient seating test cocks and tightly closing resilient seating shut-off valves located at each end of the assembly. The entire assembly shall meet the design and performance specifications as determined by a laboratory and field evaluation program resulting in an approval by a recognized testing agency for backflow prevention assemblies. To be approved, these assemblies must be readily accessible for in-line testing and maintenance. The assembly must be installed a minimum of 12 inches above the highest water outlet, i.e. sprinkler head or tank fill.
- (gg) "Rain gauge" means a system which automatically shuts off the irrigation system when it rains.
- (hh) "Reduced pressure backflow preventer" means an assembly of two independently acting approved check valves together with a hydraulically operating mechanically independent pressure relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located resilient seating test cocks and tightly closing resilient seating shut-off valves at each end of the assembly. The entire assembly shall meet the design and performance specifications as determined by a laboratory and a field evaluation program resulting in an approval by a recognized testing agency for backflow prevention assemblies. The assembly shall operate to prevent backflow. The assembly shall operate to maintain the pressure in the zone between the two check valves at an acceptable level less than the pressure on the public water supply side of the assembly. At cessation of a normal flow the pressure between the two check valves shall be less than the pressure on the public water supply side of the device. In case of leakage either of the check valves, the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves by discharging to the atmosphere. To be approved, these assemblies must be readily accessible for in-line testing and maintenance and be installed in a location where no part of the assembly will be submerged.
- (ii) "Separately metered automatic irrigation system" means a system composed of pipes, valves, pumps, controllers and outlets to distribute water for landscape purposes. This system is not connected to the domestic water supply, but has a separate, metered, connection to the public water supply system.
- (jj) "Shut off device" means a mechanical or electrically operated device used to terminate the flow of liquids in a piping system. These devices could be gate valves, ball valves, electrical solenoid valves, butterfly valves or globe valves.
- (kk) "Slope irrigation" means applying water to vegetation on a slope.
- (ll) "Soil moisture sensors" means a device which activate and deactivate irrigation valves watering shrubs and lawns.

- (mm) "Sprinkler head" means a device which sprays water through a nozzle.
- (nn) "Sprinkler precipitation rate" means the depth of water applied to a given area by an irrigation sprinkler, usually measured in inches per hour.
- (oo) "Subsurface emitters" means a buried drip irrigation fittings that deliver water slowly from the system to the soil.
- (pp) "Swing joint" means a series of elbows and nipples that allow the sprinkler to move and turn in any direction while maintaining grade.
- (qq) "Turf" means a surface layer of earth containing grass with its roots.
- (rr) "Turf allowance" means the amount or percentage of turn area permitted in relation to the entire landscaped area.
- (ss) "Turf area" means the amount of turf included within a set of lines, specifically, the number of unit squares of turf equal in measure to the surface.
- (tt) "Valve" means a device used to control the flow of water in the irrigation system.
- (uu) "Warm season turf" means Bermuda grass, Hybrid Bermuda, Kikuyu grass, Seashore paspalum, St. Augustine grass, Zoysia grass and Buffalo grass and other turf that is dormant in winter.
- (vv) "Water area" means that part of a landscape composed of water features such as pools, fountains and ponds.
- (ww) "Water efficient practice" means the application of a method of landscaping which conserves the water.
- (xx) "Watering zones" 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 watering zone may be irrigated or non-irrigated. For example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a non-irrigated watering zone. (Added Ord. 94-108, § 3, eff. 12-30-94).