Emergency Water Regulations Adopted by State Water Resources Control Board

On May 5, 2015, the State Water Board adopted additional emergency waters regulations intended to reduce urban water use in California by an average of 25%. The emergency regulation identified different targets ("Conservation Standards") for how much water communities must conserve based on their average residential water use in gallons per person per day ("R-GPCD) during the months of July through September of 2014, as shown in the following table. Agencies with lower R-GPCD values (typically those with higher density housing) were given a lower Conservation Standard than those with higher R-GPCD values (typically those with more large residential properties).

Tier	R-GPCD Range		No. of Suppliers	Conservation
	From	To	in Range	Standard
1			None	4%
2	0	64.99	23	8%
3	65	79.99	21	12%
4	80	94.99	42	16%
5	95	109.99	41	20%
6	110	129.99	51	24%
7*	130	169.99	73	28%
8	170	214.99	66	32%
9	215	612	94	36%

*PWP's Residential water use reported for this period was 139 R-GPCD

The full text of the regulations adopted May 5, 2015 follows.

Additional information may be found on the State Water Board website at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/emergency_regulations_waterconservation.shtml

ADOPTED TEXT OF EMERGENCY REGULATION

Article 22.5. Drought Emergency Water Conservation.

Sec. 863. Findings of Drought Emergency.

- (a) The State Water Resources Control Board finds as follows:
- (1) On January 17, 2014, the Governor issued a proclamation of a state of emergency under the California Emergency Services Act based on drought conditions;
- (2) On April 25, 2014, the Governor issued a proclamation of a continued state of emergency under the California Emergency Services Act based on continued drought conditions;
- (3) On April 1, 2015, the Governor issued an Executive Order that, in part, directs the State Board to impose restrictions on water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February, 2016; require commercial, industrial, and institutional users to implement water efficiency measures; prohibit irrigation with potable water of ornamental turf in public street medians; and prohibit irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems;
- (4) The drought conditions that formed the basis of the Governor's emergency proclamations continue to exist;
- (5) The present year is critically dry and has been immediately preceded by two or more consecutive below normal, dry, or critically dry years; and
- (6) The drought conditions will likely continue for the foreseeable future and additional action by both the State Water Resources Control Board and local water suppliers will likely be necessary to prevent waste and unreasonable use of water and to further promote conservation.

Authority: Section 1058.5, Water Code.

References: Cal. Const., Art., X § 2; Sections 102, 104, 105, and 275, Water Code; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463.

Sec. 864. End-User Requirements in Promotion of Water Conservation.

- (a) To prevent the waste and unreasonable use of water and to promote water conservation, each of the following actions is prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:
- (1) The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;
- (2) The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;
 - (3) The application of potable water to driveways and sidewalks; and
- (4) The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system;

- (5) The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall;
- (6) The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased;
 - (7) The irrigation with potable water of ornamental turf on public street medians;

and

(8) The irrigation with potable water of landscapes outside of newly constructed

homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

- (b) To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.
- (c) Immediately upon this subdivision taking effect, all commercial, industrial and institutional properties that use a water supply, any portion of which is from a source other than a water supplier subject to section 865, shall either:
- (1) Limit outdoor irrigation of ornamental landscapes or turf with potable water to no more than two days per week; or
- (2) Reduce potable water usage supplied by sources other than a water supplier by 25 percent for the months of June 2015 through February 2016 as compared to the amount used from those sources for the same months in 2013.
- (d) The taking of any action prohibited in subdivision (a) or the failure to take any action required in subdivisions (b) or (c), is an infraction, punishable by a fine of up to five hundred dollars (\$500) for each day in which the violation occurs. The fine for the infraction is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

Authority: Section 1058.5, Water Code.

References: Cal. Const., Art., X § 2; Sections 102, 104, 105, 275, 350, and 10617, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 865. Mandatory Actions by Water

Suppliers. (a) As used in this section:

- (1) "Distributor of a public water supply" has the same meaning as under section 350 of the Water Code, except it does not refer to such distributors when they are functioning solely in a wholesale capacity, but does apply to distributors when they are functioning in a retail capacity.
- (2) "R-GPCD" means residential gallons per capita per day.

- (3) "Total potable water production" means all potable water that enters into a water supplier's distribution system, excluding water placed into storage and not withdrawn for use during the reporting period, or water exported outsider the supplier's service area.

 (4) "Urban water supplier" means a supplier that meets the definition set forth in Water Code section 10617, except it does not refer to suppliers when they are functioning solely in a wholesale capacity, but does apply to suppliers when they are functioning in a retail capacity.
- (b) In furtherance of the promotion of water conservation each urban water supplier shall:
- (1) Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-user's exclusive control.
- (2) Prepare and submit to the State Water Resources Control Board by the 15th of each month a monitoring report on forms provided by the Board. The monitoring report shall include the amount of potable water the urban water supplier produced, including water provided by a wholesaler, in the preceding calendar month and shall compare that amount to the amount produced in the same calendar month in 2013. The monitoring report shall specify the population served by the urban water supplier, the percentage of water produced that is used for the residential sector, descriptive statistics on water conservation compliance and enforcement efforts, and the number of days that outdoor irrigation is allowed, and monthly commercial, industrial and institutional sector use. The monitoring report shall also estimate the gallons of water per person per day used by the residential customers it serves.
- (c)(1) To prevent the waste and unreasonable use of water and to meet the requirements of the Governor's April 1, 2015 Executive Order, each urban water supplier shall reduce its total potable water production by the percentage identified as its conservation standard in this subdivision. Each urban water supplier's conservation standard considers its service area's relative per capita water usage.
- (2) Each urban water supplier whose source of supply does not include groundwater or water imported from outside the hydrologic region in which the water supplier is located, and that has a minimum of four years' reserved supply available may, submit to the Executive Director for approval a request that, in lieu of the reduction that would otherwise be required under paragraphs (3) through (10), the urban water supplier shall reduce its total potable water production by 4 percent for each month as compared to the amount used in the same month in 2013. Any such request shall be accompanied by information showing that the supplier's sources of supply do not include groundwater or water imported from outside the hydrologic region and that the supplier has a minimum of four years' reserved supply available.
- (3) Each urban water supplier whose average July-September 2014 R-GPCD was less than 65 shall reduce its total potable water production by 8 percent for each month as compared to the amount used in the same month in 2013.
- (4) Each urban water supplier whose average July-September 2014 R-GPCD was 65 or more but less than 80 shall reduce its total potable water production by 12 percent for each month as compared to the amount used in the same month in 2013.

- (5) Each urban water supplier whose average July-September 2014 R-GPCD was 80 or more but less than 95 shall reduce its total potable water production by 16 percent for each month as compared to the amount used in the same month in 2013.
- (6) Each urban water supplier whose average July-September 2014 R-GPCD was 95 or more but less than 110 shall reduce its total potable water production by 20 percent for each month as compared to the amount used in the same month in 2013.
- (7) Each urban water supplier whose average July-September 2014 R-GPCD was 110 or more but less than 130 shall reduce its total potable water production by 24 percent for each month as compared to the amount used in the same month in 2013. (8) Each urban water supplier whose average July-September 2014 R-GPCD was
- 130 or more but less than 170 shall reduce its total potable water production by 28 percent for each month as compared to the amount used in the same month in 2013. (9) Each urban water supplier whose average July-September 2014 R-GPCD was
- 170 or more but less than 215 shall reduce its total potable water production by 32 percent for each month as compared to the amount used in the same month in 2013. (10) Each urban water supplier whose average July-September 2014 R-GPCD
- was 215 or more shall reduce its total potable water production by 36 percent for each month as compared to the amount used in the same month in 2013.
- (d)(1) Beginning June 1, 2015, each urban water supplier shall comply with the conservation standard specified in subdivision (c).
- (2) Compliance with the requirements of this subdivision shall be measured monthly and assessed on a cumulative basis.
- (e)(1) Each urban water supplier that provides potable water for commercial agricultural use meeting the definition of Government Code section 51201, subdivision (b), may subtract the amount of water provided for commercial agricultural use from its potable water production total, provided that any urban water supplier that subtracts any water provided for commercial agricultural use from its total potable water production shall:
- (A) Impose reductions determined locally appropriate by the urban water supplier, after considering the applicable urban water supplier conservation standard specified in subdivision (c), for commercial agricultural users meeting the definition of Government Code section 51201, subdivision (b) served by the supplier;
- (B) Report its total potable water production pursuant to subdivision (b)(2) of this section, the total amount of water supplied for commercial agricultural use, and shall identify the reduction imposed on its commercial agricultural users and each recipient of potable water for commercial agricultural use;
- (C) Certify that the agricultural uses it serves meet the definition of Government Code section 51201, subdivision (b); and
- (D) Comply with the Agricultural Water Management Plan requirement of paragraph 12 of the April 1, 2015 Executive Order for all commercial agricultural water served by the supplier that is subtracted from its total potable water production.

- (2) Submitting any information pursuant to subdivision (e)(1)(B) or (C) of this section that is found to be materially false by the board is a violation of this regulation, punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.
- (f)(1) To prevent waste and unreasonable use of water and to promote water conservation, each distributor of a public water supply that is not an urban water supplier shall take one or more of the following actions:
- (A) Limit outdoor irrigation of ornamental landscapes or turf with potable water by the persons it serves to no more than two days per week; or
- (B) Reduce by 25 percent reduction its total potable water production relative to the amount produced in 2013.
- (2) Each distributor of a public water supply that is not an urban water supplier shall submit a report by December 15, 2015, on a form provided by the Board, that either confirms compliance with subdivision (f)(1)(A) or identifies total potable water production, by month, from June through November, 2015, and total potable water production, by month, for June through November 2013.

Authority: Section 1058.5, Water Code.

References: Cal. Const., Art., X § 2; Sections 102, 104, 105, 275, 350, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 866. Additional Conservation Tools.

- (a)(1) To prevent the waste and unreasonable use of water and to promote conservation, when a water supplier does not meet its conservation standard required by section 865 the Executive Director, or the Executive Director's designee, may issue conservation orders requiring additional actions by the supplier to come into compliance with its conservation standard.
- (2) A decision or order issued under this article by the board or an officer or employee of the board is subject to reconsideration under article 2 (commencing with section 1122) of chapter 4 of part 1 of division 2 of the California Water Code.
- (b) The Executive Director, or his designee, may issue an informational order requiring water suppliers, or commercial, industrial or institutional properties that receive any portion of their supply from a source other than a water supplier subject to section 865, to submit additional information relating to water production, water use or water conservation. The failure to provide the information requested within 30 days or any additional time extension granted is a violation subject to civil liability of up to \$500 per day for each day the violation continues pursuant to Water Code section 1846.

Authority: Section 1058.5, Water Code.

References: Cal. Const., Art., X § 2; Sections 100, 102, 104, 105, 174, 186, 187, 275, 350, 1051, 1122, 1123, 1825, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

New Water Supply Connections and Development In Pasadena

PWP's 2011 WIRP, 2010 UWMP, and the Pasadena General Plan Draft Environmental Impact Report (2015) include detailed analysis of future water demand and supply reliability. The City of Pasadena has also adopted long term development plans and aggressive sustainable mandates for all new development.

Planning Process

The City's General Plan incorporates plans for City growth, housing, transportation, neighborhood improvement, and service delivery. The General Plan update assumes an increase of 12,312 net-new housing units, 10,988,959 net-new square feet of nonresidential development, and an increase of 27,473 residents. The Planning Department's Building and Safety, Planning, and Permit Centers ensure all new development projects adhere to City zoning, design, historic preservation, sustainability, and building regulations.

Pasadena Sustainable Building Goals and Policies

Pasadena has established rigorous goals and policies related to water conservation in new development and existing buildings.

- Green City Action Plan, adopted in 2006, includes actions to reduce per capita water consumption, protect local water supply sources, and adopt wastewater management guidelines.
- Pasadena's Water Waste Prohibitions and Water Supply Shortage Plans Ordinance, adopted in 2009, established permanent water waste restrictions and four stages of Water Supply Shortage plans to reduce water consumption within the City during periods of drought. Stage Four of the Water Supply Shortage Plan prohibits new water connections in the City of Pasadena.
- Water Efficient Landscape Ordinance, adopted in 2010, requires public and private developments to implement water efficient landscaping.
- California Green Building Code, adopted by Pasadena in 2010, requires water efficiency measures for all new development.

Senate Bill 610

Water supply and conservation are an important component of planning for additional growth. Senate Bill 610 promotes collaborative planning between water suppliers and cities, and requires detailed information regarding water availability to be provided to City decision-makers prior to approval of specified large development projects.

Under SB 610, a Water Supply Assessment ("WSA") would be required for any project if it is any of the following:

- A residential development of 500 units or more;
- A shopping center or business establishment project employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- An industrial, manufacturing, or processing plant or industrial park having more than 250,000 square feet of floor space;
- An industrial, manufacturing, processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

Since 2002, two projects in Pasadena have triggered a WSA. Based on analysis of PWP's long term water supply plans and the expected water demands associated with these projects, each have successfully determined that the City has adequate supply to meet the additional water demand.

Impacts of New Development

New development and population growth in Pasadena has positive effects on the City both socially and economically. New development and population positively effects business retention, job opportunities, consumer spending, school attendance, attraction of quality businesses, and City revenue from sales tax, property tax and permitting fees.

Water supply and demand related to growth are regional issues. When cities such as Pasadena plan for additional growth in more urban-type settings it provides for housing that is more water efficient, and eliminates the need for new water facilities and extensive infrastructure for water delivery. By comparison, if growth is targeted to cities that are lower density, there is less water efficiency and a greater burden is placed on regional water supply. Water use and increasing water efficiency is both a factor of aggressive water conservation planning, targeting growth in high density areas, and ensuring that new development meets the standards of the California Green Building Code.

More importantly, despite significant development and population growth, PWP's total water use is about the same as in 1960. As shown in Figure 1, water consumption has had ups and downs over the last 50 years due to weather effects, the economy, and conservation efforts amongst other factors; however, it has not been increasing consistently with population. Adding higher density housing has not resulted in increased water demand.

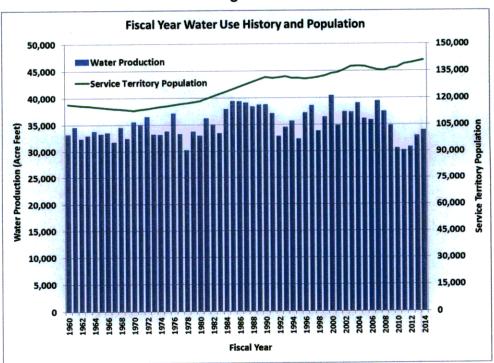


Figure 1

Attachment 3

Future PWP Water Conservation Programs (In Development Phase)

Equipment Purchases and Capital Projects	% Saved*	Est. Timeline
Discharge Capturing System – "NO DES"	Less than 1%	July 2015
Arroyo Seco Ground Water Spreading Project	2%	2017
Recycled Water Project	9%	2018
Recycled Water Phase 1	2%	
Recycled Water Phase 2	1%	
Recycled Water Phase 3	3%	
Recycled Water Phase 4	1%	
Recycled Water Phase 5	1%	
Recycled Water Phase 6	1%	

Efficiency Programs	% Saved*	Est. Timeline
Multi Family Direct Install of High Efficiency Toilets; Aerators and Showerheads	Less than 1%	July 2015
Advanced Automation Program for Evaporative Condensers and Cooling Towers	Less than 1%	August 2015
Laundry to Landscape Graywater Program	Less than 1%	August 2015
Increased Incentives for Turf Removal Irrigation Projects	Less than 1%	August 2015
Streamlined Turf Removal Process for City Facilities	Less than 1%	August 2015
MASH Turf Removal Program	Less than 1%	September 2015
Water Efficiency Behavioral Software	2%	6-12 Months

^{*} Potential program savings as a percent PWP's annual water consumption

Public Works Water Conservation Projects Underway or Under Consideration

Public Works Water Conservation Projects for Discussion

Create irrigation retrofitting program to deliver irrigation to trees in parks and medians that are currently located in turf. This allows trees to continue to grow but the turf will brown out.

Continue the non-essential turf removal program in parks and adjacent parkways

Eliminate one (1) quarterly Casting Pond draining and cleaning per year

Retrofit water handles on public drinking fountains in parks and libraries to allow automatic shut off when manually activated

Retrofit spray head irrigation in medians to drip and bubbler irrigation

Remove all turf in Alice Frost Dog Park

Install only drip irrigation and bubblers in any new planting projects

Limit new plantings in parks since they require additional water to establish

Eliminate use of water on tennis courts for washing down (unless health or safety issues require)

Eliminate all turf in Citywide medians and install trees, drought tolerant plants, mulch, decomposed granite and boulders

Reduce or eliminate water play time at non recycling water amenities in parks – La Pintoresca, Memorial, Brenner and Brookside (Reese's Retreat)

Install additional rain sensors in all City maintained irrigation systems, all parks and facilities with Calsense controller are 100% but other controllers are only 30% have rain sensors

Additional Water Conservation Measures for Discussion

Potential Future Water Conservation Programs and Waste Prohibitions
Prohibit the use of outdoor evaporative cooling devices (for example, misters)
Require that all swimming pools, wading pools, or spas be covered when not in use with acceptable protection designed to decrease water evaporation
Require that businesses with evaporative air conditioning equipment set thermostats to no less than 78° for cooling
Complete ban on spray irrigation of all non-functional turf
Mandate landscape irrigation surveys for large residential customers
Mandatory retrofits of indoor plumbing fixtures on all multi-family properties
Mandatory retrofits of indoor plumbing fixtures upon resale of properties
Move to Level 3 Water Supply Shortage Plan
Move to Level 4 Water Supply Shortage Plan
Require all multi-family properties to have individual meters
Require all new properties to install dual piping to use recycled water
Require compostable toilets for new construction
Work with local Plumbers to provide 10%-20% coupons to go toward the cost of repairing water leaks or adjust a customer's irrigation controller

Develop on site storm water capture/bio swale program