



OFFICE OF THE CITY MANAGER

July 28, 2014

TO: Honorable Mayor and City Council

FROM: City Manager *MB*

SUBJECT: DETERMINE A WATER SUPPLY SHORTAGE EXISTS, ESTABLISH A 20% CONSERVATION TARGET AND IMPLEMENT LEVEL 1 WATER SUPPLY SHORTAGE MEASURES AS DESCRIBED IN PASADENA MUNICIPAL CODE ("PMC") SECTION 13.10.040

Municipal Services Committee Recommendation

On July 22, 2014, the Municipal Services Committee ("MSC") unanimously moved to recommend the City Council adopt staff's recommendations, with the additional clarification that the year 2013 be established as the baseline for the 20% water conservation target.

Discussion

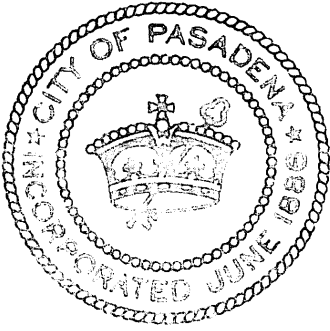
Staff believes that Pasadena Water and Power's water demand of 175 gallons per capita per day ("GPCD") in calendar year 2013 is an appropriate baseline for Pasadena's water conservation goal in lieu of clear direction or requirements from the State. This baseline is 20% lower than FY2007 water demand and about 6% lower than the ten-year average from FY2005-2014. However, to ensure consistent public messaging and reporting, this baseline should be amended to be consistent with any statewide standards that are recommended or required by the state. Staff would return to City Council for authorization to implement such a change in baseline. t further City Council action.

Attachment B of the report provided to the MSC included a draft of the proposed emergency regulations considered by the State Water Resources Control Board ("State Water Board") on July 15, 2014. The State Water Board has subsequently posted the adopted resolution and updated proposed text of the emergency regulations, which staff has now included as a revised Attachment B.

07/28/2014

Item 17

City Hall
100 N. Garfield Avenue, Room S228
Mailing Address: P.O. Box 7115 • Pasadena 91109-7215
(626) 744-4333 • Fax (626) 744-4774
mbeck@cityofpasadena.net



Agenda Report

July 28, 2014

TO: City Council

THROUGH: Municipal Services Committee (July 22, 2014)

FROM: City Manager

SUBJECT: DETERMINE A WATER SUPPLY SHORTAGE EXISTS, ESTABLISH A 20% CONSERVATION TARGET AND IMPLEMENT LEVEL 1 WATER SUPPLY SHORTAGE MEASURES AS DESCRIBED IN PASADENA MUNICIPAL CODE ("PMC") SECTION 13.10.040

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the determination of a water supply shortage and implementation of Level 1 Water Supply Shortage water conservation measures are categorically exempt from the California Environmental Quality Act ("CEQA") pursuant to State CEQA Guidelines Section 15307 (Actions by Regulatory Agencies for the Protection of Natural Resources); and
2. Determine that a water supply shortage exists pursuant to PMC 13.10.035; and
3. Determine that a water conservation target of 20% is necessary; and
4. Determine that the Level 1 Water Supply Shortage (PMC 13.10.040) water conservation measures are appropriate to address the water shortage; and
5. Adopt implementation of the Level 1 Water Supply Shortage measures by way of public proclamation (Attachment A).

EXECUTIVE SUMMARY:

As California is facing a severe drought, the State Water Resources Control Board ("State Water Board") made a determination on July 15, 2014 that an emergency exists due to severe drought conditions, and adopted emergency regulations it deemed necessary to address the emergency (see Attachment B). These regulations require that agencies within the state impose numerous conservation measures and water waste prohibitions, including the implementation of water shortage contingency plans that include mandatory restrictions on the number of watering days. While agencies without existing shortage contingency plans must implement two day per week watering

limits, the regulations provide greater flexibility to agencies with existing water shortage ordinances such as Pasadena.

Pasadena's existing permanent water waste prohibitions (PMC 13.10.032) already include the prohibitions on water waste imposed by the State Water Board, except for the limitations on watering days. The Level 1 Water Supply Shortage water conservation measures must be implemented by August 2014 to meet the daily watering restrictions required under the state's emergency regulations. The actions recommended herein are necessary to implement the Level 1 Water Supply measures and restrict watering to three days per week during the summer and one day per week during winter months.

BACKGROUND:

California statewide water supplies are suffering from serious drought conditions. By some indicators, 2013 was the driest year on record. The Los Angeles area received the lowest annual rainfall in 100 years. Many of the state's reservoirs are nearing depletion and the state's meager snowpack had nearly vanished by May. To avoid serious problems, the governor declared a statewide drought emergency in January and requested that consumers cut water use by 20 percent. The state has cut off nearly all deliveries of water from Northern California sources that represent approximately 18 percent of Pasadena's supply. Cities in Northern CA are banning, or considering banning, all outdoor watering, and agriculture water deliveries will be severely impacted.

Regional supplies have also been affected by ongoing drought. This week Lake Mead is expected to reach the lowest water level since it was first filled in 1937.

Thus far, the water supply situation for the Southern California agencies served by the Metropolitan Water District ("MWD") has been more secure due to investments in water storage, such as Diamond Valley Lake. While Pasadena Water and Power ("PWP") has local groundwater supplies that typically meet 35-40% of its customer demand, the remainder of the water necessary to serve its customers is provided by MWD. Currently, MWD water storage levels are near normal, and MWD has not indicated that water supply allocation plans (water rationing) will be implemented in the near future. However, there is growing concern about the situation that will be faced next year in the absence of significant precipitation.

Pasadena Water Demand and Conservation

For the last five years, Pasadena customers have reduced water usage and PWP continues to encourage and empower residents and business owners to conserve this precious resource. However, PWP's water demand has been trending higher since FY 2011 due in part to adverse weather and a recovering economy. The elimination of PWP's tier five water rates and weakening consumer response to conservation may also be contributing to increases in water use as drought conditions persist.

Pasadena has been very proactive in maximizing, protecting and conserving its supply. But it's absolutely vital that we work together to continue these efforts to avoid long-term problems.

- **Conservation Rate Design:** In 2009, the City Council approved a five-tier water rate that encourages customers to reduce water consumption. The fifth rate tier, which was priced to reflect penalty charges associated with MWD's water supply restrictions, was eliminated from PWP's rate schedule in June 2010 when it became clear that PWP's water demand was well below the allocation under MWD's water supply restrictions. PWP currently has a four-tier water rate schedule in place to encourage efficient use of water.
- On June 14, 2010, City Council approved adjustments to PWP's water rates to eliminate Tier 5 rates and reduce Tier 4 rates by 25%. This action was taken in response to conservation efforts by PWP customers that ensured that PWP did not exceed its reduced allocation from MWD
- **Water Supply Planning:** In 2011, the City Council approved the Integrated Resource Plan, which lays out many long-term projects to cut Pasadena's reliance on imported water. The 20-year plan provides a roadmap for boosting local supplies, increasing conservation and using recycled water to irrigate golf courses, parks and schools.
- **Rebates:** To make it as easy as possible for customers to conserve, PWP offers a long list of rebates on water-saving fixtures, plus a popular turf-replacement program that pays customers to replace their lawns with water-wise plants. PWP increased most of these rebates in March 2014, and again in July 2014.
- **Outreach:** PWP also runs an active citywide outreach campaign to encourage all of its customers to conserve, sharing the message through local newspapers, cable TV, bill inserts, bus shelter advertisements, special events, Facebook, Twitter, and even Pandora. PWP crews are also in the streets daily enforcing Pasadena's water waste prohibitions and distributing water saving kits to residents and businesses.
- **Information Resources:** PWP has also created a designated website, PWPweb.com/SaveWater, where customers can find rebate applications, conservation tips, water-smart gardening guides, free workshops, how-to videos and the list of permanent water-waste prohibitions.

Between FY2007 and FY2011, PWP's total water demand declined nearly 24% to the lowest number in over twenty years; however, water usage has been trending higher in recent years despite ongoing conservation messaging and incentives. PWP's FY2014 water consumption was approximately 3% higher than in FY2013, but it is still about 14% lower than FY2007 levels.

Water Emergency Determination

As a precursor to implementing a water shortage plan, the City Council must make a determination that a water shortage exists. The ongoing drought, dwindling storage, and

emergency finding by the State Water Board provide ample rationale for the City Council to make such a determination.

Water Conservation Target

It is recommended that the City Council adopt a 20% water conservation target, consistent with statewide objectives. Staff anticipates that per-capita water use during calendar year 2013 will likely be the benchmark for comparison, but will continue working with the state on developing reporting metrics.

Permanent Water Waste Prohibitions

Pasadena's Water Waste Prohibitions and Water Supply Shortage Plan Ordinance (PMC 13.10) became effective on July 4, 2009. It established thirteen permanent mandatory restrictions to prevent the wasteful use of potable water, including the following prohibitions and requirements:

- A. Prohibits landscape irrigation between 9:00 AM and 6:00 PM (with specified exceptions for hand watering);
- B. Prohibits landscape irrigation during periods of rain;
- C. Prohibits water from landscape irrigation to runoff onto streets, sidewalks, driveways, etc.;
- D. Prohibits washing paved or hard surfaces unless with a pre-approved device;
- E. Obligates water users to fix leaks and breaks in plumbing within seven (7) days;
- F. Requires water recirculating for fountains and decorative water features;
- G. Prohibits washing vehicles unless with a pre-approved device;
- H. Eating or drinking establishments may only serve water upon request;
- I. Requires restaurant to use water conserving dish wash spray valves;
- J. Commercial lodging establishments must offer guests the option to refuse linen service;
- K. Prohibits the installation of single-pass cooling systems;
- L. Prohibits the installation of non-recirculating equipment at car washes and laundromats; and,
- M. All commercial car washes must install recirculating water systems.

These mandatory measures reinforce the message that California faces ongoing water supply challenges, and therefore, water waste will not be tolerated regardless of whether or not a water shortage exists. The restrictions are also necessary to qualify for future state grants and MWD funding for water projects and conservation programs.

Additional Level 1 Water Waste Prohibitions

In addition to the permanent mandatory water waste restrictions previously described, staff also recommends implementation of the conservation measures described in Level 1 Water Supply Shortage (PMC 13.10.040). These water conservation measures would become effective immediately upon publication and remain in effect until such time as the City Council determines that a water supply shortage no longer exists or that another water supply shortage plan is necessary. The additional measures are:

1. Limits on Watering Days: Watering or irrigating of lawn, landscape or other vegetated area is limited to three (3) days per week from April 1 through October 31, and no more than one (1) day per week from November 1 through March 31, on a schedule established and posted by PWP. This subsection does not apply to landscape irrigation zones that exclusively use low flow drip type irrigation systems where no emitter produces more than two (2) gallons of water per hour. This subsection also does not apply to watering or irrigating by use of a hand-held bucket or similar container, or by use of a hand-held hose equipped with a water shut-off nozzle or device; for very short periods of time for the express purpose of adjusting or repairing an irrigation system; or for maintenance of vegetation, including fruit trees and shrubs, intended for consumption.

In previously implementing Level 1 water emergency plans, PWP has established the following schedule for watering or irrigating lawns:

- Tuesdays, Thursdays and Saturdays between April 1 and October 31; and
 - Saturdays only between November 1 and March 31; however, PWP may allow a customer to choose an alternate day under certain circumstances.
2. Obligation to Fix Leaks, Breaks or Malfunctions: Leaks, breaks or other malfunctions in the water user's plumbing or distribution system shall be repaired within seventy-two (72) hours of notification by PWP unless other arrangements are made with PWP.

Water Shortage Plan Outreach

To ensure that all customers are informed of the restrictions, PWP will direct mail a notification summarizing the restrictions to all PWP water service addresses. PWP will also utilize newspaper advertising, outdoor media, City newsletters, PWP's website, in-person notification, announcements on public radio stations, to notify customers of the water shortage. These outreach efforts are in addition to PWP's regular water conservation outreach campaign.

Enforcement

Although the primary goal of waste prohibitions is to promote consumer awareness, the Water Waste Prohibitions and Water Supply Shortage Plan Ordinance has enforcement provisions including notification and penalties for repeat offenders. It also provides

customers the option to attend PWP's water conservation classes or install water-efficient fixtures in lieu of fines.

PWP staff will patrol the city to help ensure residents and businesses are adhering to all Water Waste Prohibitions. If a resident or business is found in violation of the prohibitions, PWP will issue a courtesy reminder. If the waste continues PWP will issue formal violations.

Pursuant to PMC 13.10.065, penalties for customers with water meters less than 1½ inches are as follows:

1. First Violation: A written notice of violation shall be sent via mail.
2. Second Violation: One hundred dollars (\$100)
3. Third Violation: Two hundred dollars (\$200)
4. Fourth Violation: Three hundred and fifty dollars (\$350)
5. Fifth and Subsequent Violations: Five hundred dollars (\$500)

Fines are doubled for customers with water meters 1½ inches or larger in accordance with PMC 13.10.067.

Enforcement activities will be implemented utilizing existing City field staff and reassigning support staff on a short-term basis.

Monitoring and Future Actions

Given that most of the water conservation measures have been in place for over five years, and PWP's water use is still well below historical norms, it will be challenging to achieve the 20% reduction goal. Staff will monitor water consumption monthly and report results to the City Council and the state. Additional measures will likely be required to achieve deep conservation. In addition, reductions in water use will adversely impact PWP's net income and Capital Improvement Charge ("CIC") revenues for infrastructure projects.

PWP staff will be assessing the need to secure additional resources, implement additional water conservation incentive programs or increase funding for existing ones. Recommendations may be forthcoming at a later date through the Finance Committee budget process.

As price signals through water rates have proven to be very effective, staff will assess options to reinstate the block 5 water rate and/or impose a drought or conservation surcharge on high usage to encourage conservation. Furthermore, rate measures to maintain CIC revenues may be considered as necessary to maintain funding at budgeted levels. Any water rate actions would be subject to public notice and hearings consistent with Proposition 218 and City Charter requirements.

COUNCIL POLICY CONSIDERATION:

The proposed additional water waste prohibitions will be implemented in accordance with Chapter 13.10 of the Pasadena Municipal Code. It will help PWP conserve water and stretch available supplies to meet customer needs.

ENVIRONMENTAL DETERMINATION:

The project has been determined to be exempt per Section 15307 of the CEQA Guidelines, Actions by Regulatory Agencies for Protection of Natural Resources. This exemption consists of actions by regulatory agencies as authorized by State law or local ordinance to assure maintenance of a natural resource (such as water) where the regulatory process involves procedures for protection of the resource. It has been determined that achieving the water conservation target of 20% will have no secondary environmental impacts because a significant amount of current water consumption is used to over water landscaping and runs off the target area into storm sewers or evaporates before it can percolate into the ground. It is estimated that many customers over water by as much as 50%. It is possible that reducing water consumption among those customers may actually improve the health of their landscaping. Furthermore, the Raymond Basin Management Board has already mitigated recharge issues by restricting pumping rights from the Raymond Basin effective July 1, 2009.

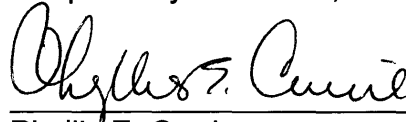
FISCAL IMPACT:

The recommended actions will result in reduced water consumption, Water Fund revenues and expenses, Water Fund net income, and General Fund revenues from the Utility Users Tax. While the degree of water conservation cannot be predicted with certainty, the following table summarizes the impacts assuming both a 10% and 20% reduction in water sales compared to the budgeted amounts for FY2014:

Budget Item	10% Sales Reduction	20% Sales Reduction
Water Commodity Revenues	(\$3 to 3.6 million)	(\$6.1 to 7.3 million)
Water CIC Revenues	(\$0.84 million)	(\$1.7 million)
Water Cost Reduction	\$2.9 million	\$5.8 million
Water Fund Net Income	(\$1 to 1.6 million)	(\$2 to 3.2 million)
UUT Reduction	(\$0.3 to 0.35 million)	(\$0.6 to 0.7 million)

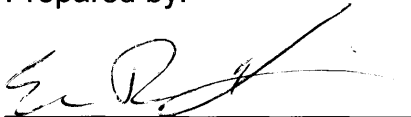
Implementing the additional Level 1 water waste prohibitions will result in administrative and marketing costs of \$50,000-100,000, but is not expected to result in significant revenues from violations.

Respectfully submitted,



Phyllis E. Currie
General Manager
Water and Power Department

Prepared by:



Eric R. Klinkner
Assistant General Manager

Approved by:



MICHAEL J. BECK
City Manager

Attachment A – Proclamation
Attachment B – State Water Board Action