

# Agenda Report

July 13, 2009

**TO:** City Council

**THROUGH:** Municipal Services Committee (July 8, 2009)

**FROM:** City Manager

**SUBJECT:** DETERMINE A WATER SUPPLY SHORTAGE EXISTS, ESTABLISH A 10% 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 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);
2. Determine that a water supply shortage exists pursuant to PMC 13.10.035;
3. Determine that a water conservation target of 10% 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 Level 1 Water Supply Shortage by way of public proclamation (attached).

## BACKGROUND

Over the past several years, the city has been impacted by factors that are greatly restricting local and regional water supply. The City's pumping rights in the Raymond Basin groundwater basin are being reduced in order to mitigate groundwater depletion experienced over the last half century. With respect to imported supplies, a decade-long drought has reduced the ability to replenish regional groundwater supplies; drought conditions in the American southwest have reduced deliveries of water from the Colorado River; and a federal district court ruling has restricted pumping activities in the Sacramento-San Joaquin River Delta (Bay Delta), thereby, reducing water deliveries through the State Water Project. As a result, the Metropolitan Water District (MWD) has implemented its Water Supply Allocation Plan that requires Pasadena Water and Power (PWP) to reduce its total water consumption by approximately 10% effective July 1,

2009. MWD will charge significant penalties if PWP's total water use exceeds this allocation.

Various efforts have been made to reduce customer demand in order to mitigate the effects of water supply restrictions and to ensure adequate supply to meet basic needs. In July 2007, the Mayor and City Council called on Pasadena residents and businesses to reduce their water consumption by 10%. In December 2007, the City Council declared a water shortage and implemented Water Shortage Plan 1 of the former Water Shortage Procedure Ordinance. The plan called for customers to voluntarily refrain from nine water waste activities including hosing driveways and sidewalks, allowing water to runoff their property onto the street or sidewalk, and irrigating landscapes during daytime hours.

In September 2008, the City Council directed staff to develop a comprehensive water conservation plan with a variety of approaches and recommendations for achieving 10%, 20% and 30% reductions in water consumption, as well as an analysis of the financial impacts on the Water Fund if those conservation targets were achieved. On April 13, 2009, the City Council voted to approve the Comprehensive Water Conservation Plan and to replace the Water Shortage Procedure Ordinance with a new Water Waste Prohibition and Water Shortage Plan Ordinance (PMC 13.10). As part of the recommendation to replace the Ordinance, Council also stated its intention to declare a Level 1 Water Supply Shortage as soon as the ordinance change took effect, or as soon, thereafter, as legally permissible.

### ***Permanent Water Waste Prohibitions***

The new 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 dishwasher 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;

M. Effective July 1, 2011, 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.

PWP intends to establish 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 Rates***

The proposed water rate ordinance changes adopted by the City Council on June 22, 2009 included a provision for increasing water rates during a declared water supply shortage. Water allocations for Blocks 2 through 4 would be reduced by the same percentage as the declared Water Conservation Goal and the water commodity rates for Blocks 2 through 5 would be increased to recover additional water costs, MWD penalties, and further incentivize water conservation. The water shortage rate provisions will not be implemented at this time because the adopted water rate structure already incorporates a planned 10% reduction in Pasadena's water allocation and recovery of

associated MWD penalties for use in excess of this amount. If the City Council determines that a more aggressive Water Conservation Goal is necessary in the future, the water shortage rate mechanism could be reconsidered at that time.

### **Outreach**

To ensure that all customers are informed of the restrictions, PWP will mail a brochure summarizing the restrictions to all PWP water service addresses. The brochure will also offer conservation tips, explain the recent changes in PWP bills and provide estimates on how much water a typical customer uses while performing routine activities. The brochure will be printed in English and Spanish. PWP will also utilize newspaper advertising, outdoor media, City newsletters, PWP's website, in-person notification, announcements on public radio stations KPCC and KCRW and more, to notify customers of the water shortage. These outreach efforts are in addition to PWP's regular water conservation outreach campaign.

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 will implement enforcement activities to the extent feasible utilizing existing field staff and reassigning support staff on a short-term basis. The effectiveness and sustainability of this approach will be evaluated later this year.

### **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 10% will have no secondary environmental impacts due to the fact that a significant amount of current water consumption is used to over water landscaping. 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.

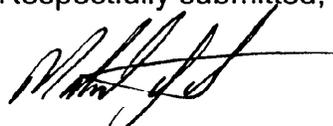
Reducing total water consumption, particularly for landscaping, will have no significant impact on groundwater recharge rates in the Raymond Basin. A significant amount of the water used to over water landscapes runs off the target area into storm sewers or evaporates before it can percolate into the ground; therefore, reducing such water consumption will have no affect on groundwater recharge. Some of the water conserved may have ultimately recharged the Raymond Basin, however excess irrigation is neither environmentally or fiscally responsible means of doing so. In general, 15-25% of water used for irrigation ultimately percolates into the groundwater basin. Assuming an average of 20% applies to Pasadena then approximately 5 acre-feet of water must be pumped from the Bay Delta or Colorado River, treated, and applied as unnecessary

irrigation for every 1 acre-foot of water that ultimately reaches the groundwater basin. 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 are expected to have little or no incremental impact on costs or revenues. The water rate structure approved by the City Council on June 22, 2009 pre-supposed achieving 10% conservation, and the FY 2010 revenue and expenditure projections approved in the FY 2010 Operating Budget factored in a 10% reduction in sales volume. If the conservation target is not achieved, revenue generated by Blocks 4 and 5 of the approved rate structure would be used to pay the penalty rate assessed by MWD to purchase water in excess of PWP's allocation. Furthermore, adopting the recommended 10% water conservation target at this time would not trigger any water rate increases or allocation changes pursuant to the water shortage rate structure. Lastly, implementing the additional Level 1 water waste prohibitions is not expected to increase enforcement costs or revenues.

Respectfully submitted,



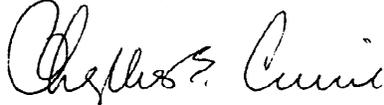
Michael J. Beck  
City Manager

Prepared by:



Tim Roe  
Management Analyst III  
Water and Power Department

Approved by:



Phyllis E. Currie  
General Manager  
Water and Power Department