



PASADENA WATER AND POWER

MEMORANDUM

October 27, 2009

To: Environmental Advisory Commission
From: Eric R. Klinkner, Assistant General Manager
Subject: Comprehensive Water Conservation Plan Update

Executive Summary

This report is being provided to the Environmental Advisory Commission ("EAC") to provide an update on status and implementation of the Comprehensive Water Conservation Plan in the following areas:

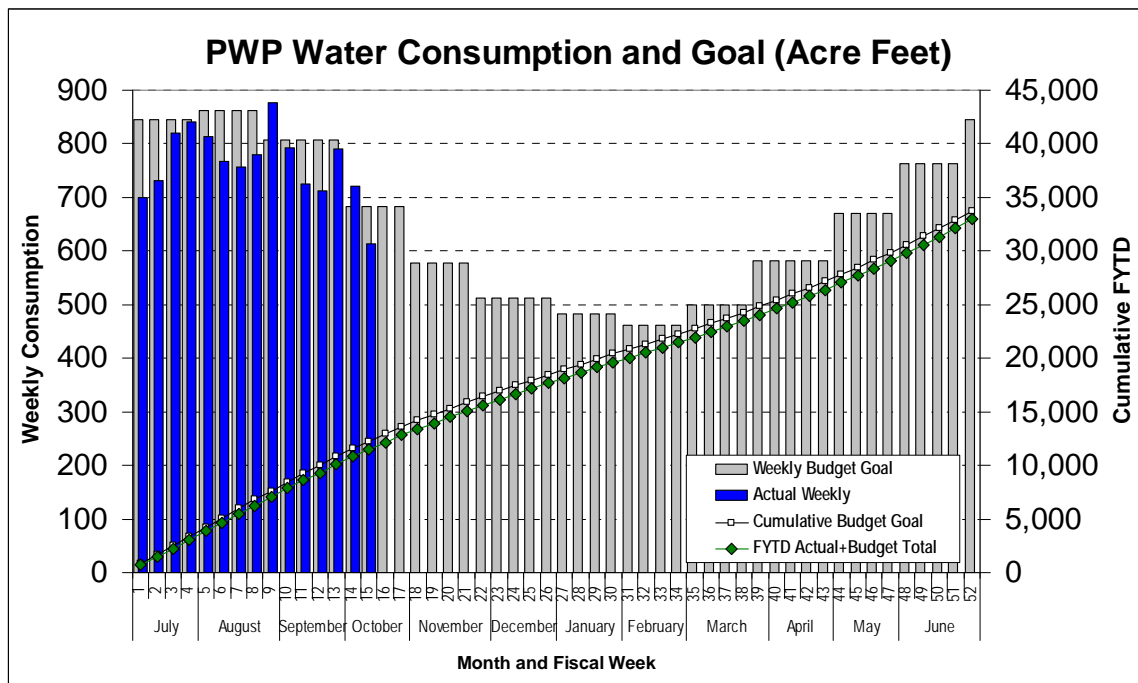
1. Status of Water Conservation
2. One Day Watering Schedule Implementation

The customers of Pasadena Water and Power ("PWP") have responded with enthusiasm to the call for conservation. As of October 19, 2009, fiscal year to date ("FYTD") water consumption is 13% below FY2009 and 19% below FY2008 levels. Penalties are unlikely at this time, but not beyond the realm possibility.

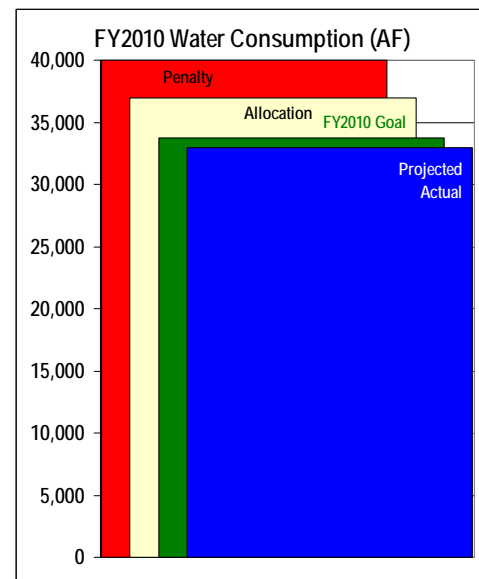
In implementing the forthcoming one-day per week watering schedule set to commence on November 1, 2009 under the current Level 1 Water Shortage, PWP will be directing its customers to select one of the currently allowed watering days, rather than restricting watering to Saturdays only, as previously planned. No changes in the water shortage status or ordinance are proposed and no Council action is required at this time.

1. Status of Water Conservation

Since July, PWP’s customers have consistently exceeded conservation goals set for this fiscal year. As of October 18, 2009, PWP’s 2010 FYTD water consumption is 13% below FY2009 and 19% below FY2008. A combination of outreach, ordinances, economic conditions and rate increases are all components of accomplishing our goals to date. The figure below depicts actual weekly consumption (dark blue bar) against a fixed weekly budget for each month (grey bar) designed to achieve a 10% savings versus FY2008 usage. Actual and budgeted cumulative FYTD consumption is depicted as line graphs read on the right hand scale.



While the FYTD percentage reductions already achieved by PWP’s customers will be difficult to maintain through the winter months, PWP’s FY2010 forecast water consumption (assuming normal weather and “budgeted” conservation levels) will be the lowest since 1995 and well below levels under which PWP would be subject to penalty charges from the Metropolitan Water District (“MWD”), as shown on the figure to the right. If the region experiences the most adverse weather conditions for the balance of the fiscal year, about 5% of PWP’s usage could still be subject to MWD’s penalty rates.



2. Water Shortage Ordinance

On July 13, 2009 the City Council proclaimed that a Level 1 Water Supply Shortage exists pursuant to PMC 13.10.040. This action was taken in order to meet the 10% reduction in water consumption as mandated by the Metropolitan Water District's Water Supply Allocation Plan effective July 1, 2009.

Ongoing Level 1 Water Shortage

Despite the high degree of water conservation PWP's customers have achieved, California still faces both immediate and ongoing "structural" water supply shortages that require continuing vigilance to ensure efficient permanent behavioral changes in our water use habits. At this time, PWP is not recommending any change to the Level 1 Water Shortage declaration for the following reasons:

- It is still early in the year, and adverse weather could cause our water consumption to increase and potentially hit penalty levels;
- California still has a "structural water deficit" and therefore we still need to encourage permanent habit changes; and,
- It would send the wrong message to our customers and may lead to a relaxing in their ongoing efforts to conserve.

Implementation of One Day per Week Watering Restrictions

As part of the Level 1 Water Shortage ordinance; watering lawns, landscape or other vegetated area is limited to a maximum of three (3) days per week from April 1 through October 31 and no more than one (1) day per week between November 1 and March 31 on a schedule to be posted by PWP. PWP has previously established and advertised a Tuesday, Thursday, Saturday schedule for three day watering, and Saturdays only for one day watering.

During the winter months, landscaping and most vegetation will thrive on one day per week watering. The days are generally cool, with fewer hours of sunlight resulting in less evaporation and many plants are dormant during the winter months requiring very little water. Generally, rainfall provides a great percentage of water needs during winter seasons with normal precipitation.

However, staff recognizes that there is no one single watering day that works best for all customers. In particular, Saturday is very challenging for commercial and government customers that do not staff their facilities on Saturday. Also, many athletic fields cannot be watered on Saturday. In addition, weather-based "smart" irrigation controllers could not effectively operate with a prescribed one day operation.

In recognition of these circumstances and the commendable water conservation already exhibited by PWP's customers, ***PWP will post a one day watering schedule that allows customers to select the one day of the week that best meets their schedules from among the three days that watering is currently allowed: Tuesday, Thursday, or Saturday.*** Not only does this approach provide necessary flexibility for customers with significant constraints (such as no staffing to operate

systems on Saturday), it also rewards the accomplishment of exceeding our water consumption goals while continuing the practice of using water efficiently.

An additional benefit of staggered watering days, is avoiding the possibility of placing undue stress on the water delivery infrastructure, whether actual or perceived.

PWP recognizes that providing customers with the flexibility to choose which day of the week that they water will make enforcement of the ordinance much more difficult. PWP will continue with strong outreach efforts to educate customers about the importance of water conservation and the necessity to avoid water waste, and rely on customers' enthusiasm to conserve water by limiting their irrigation to one day per week.

PWP will continue the practice of allowing additional irrigation for a limited period of time following the planting of new landscaping (about two-thirds of relief requests received thus far have been related to new landscaping and sod).

Future Water Shortage Ordinance Amendments

PWP has identified a number of potential water shortage ordinance "clean up" items, and expects that a few more are likely to crop up with additional experience. Thus, PWP anticipates bringing forth recommendations to amend the ordinance by early spring of 2010.

Some of the potential changes identified thus far include:

- Allow 3 days per week watering year round under Level 1 Supply Shortage
- Allow 2 days per week watering year round under Level 2 Supply Shortage
- Exempt weather-based irrigation controllers