

# Agenda Report

April 13, 2009

**TO:** City Council

**THROUGH:** Municipal Services Committee (April 7, 2009)

**FROM:** City Manager

**SUBJECT: APPROVE THE COMPREHENSIVE WATER CONSERVATION PLAN;  
AND REPLACE THE CURRENT WATER SHORTAGE PROCEDURE  
ORDINANCE, PASADENA MUNICIPAL CODE SECTION 13.10 WITH A  
NEW WATER WASTE PROHIBITION AND WATER SHORTAGE PLAN  
ORDINANCE AS DESCRIBED HEREIN**

## **RECOMMENDATION:**

It is recommended that the City Council:

1. Find that the Comprehensive Water Conservation Plan, included as Attachment A, is exempt from the California Environmental Quality Act ("CEQA") pursuant to State CEQA Guidelines Section 15262 (Feasibility and Planning Studies); and find that the adoption of the ordinance to replace the current Water Shortage Procedure Ordinance is exempt from CEQA pursuant to State CEQA Guidelines Section 15061 (b) (3) (general rule);
2. Adopt the Comprehensive Water Conservation Plan ("Plan"); and,
3. Direct the City Attorney to draft an ordinance to replace the current Water Shortage Procedure Ordinance, Pasadena Municipal Code Section 13.10 with a new "Water Waste Prohibition and Water Shortage Plan" ordinance within 60 days consistent with the provisions set forth in Attachment B and as described herein.

## **ENVIRONMENTAL ADVISORY COMMISSION:**

On March 17, 2009, the Environmental Advisory Commission ("EAC") unanimously recommended that the City Council adopt the Plan ("Plan") and the recommended "Water Waste Prohibition and Water Shortage Plan" ordinance provisions.

## **EXECUTIVE SUMMARY:**

On September 22, 2008, the City Council directed staff to provide a comprehensive water conservation plan outline with conservation targets of 10%, 20% and 30% within 60 days, a status report on the plan within 120 days, and a complete plan within 180 days. This is the final report on the complete plan.

The Plan includes six water conservation approaches that will be pursued simultaneously to meet the City's water conservation targets:

1. Implement Water Conservation Rate Design;
2. Adopt Sustainable Water Supply Ordinances;

3. Provide Incentives for Use of Water Efficient Technology and Practices;
4. Provide Direct Installation and Distribution of Efficient Technologies;
5. Provide Water Use Audits; and
6. Provide Water Use Information, Education, and Outreach.

While each of these approaches will contribute significantly to long-term and/or short-term water conservation efforts, implementation of the proposed water conservation rate design is critical to the overall success of the Plan. The first phase of the rate redesign is the subject of a separate, contemporaneous agenda report.

Adoption of sustainable water supply ordinances, including the proposed "Water Waste Prohibition and Water Shortage Plan" ordinance as well as new water efficient landscape ordinance later this year, is another essential element of the Plan foundation. Such ordinances clearly establish the need and guidelines for efficient water use. Furthermore, they are a necessary prerequisite to obtain future state grants and MWD funding for water projects and conservation programs that comprise the Plan.

**BACKGROUND:**

Southern California is semi-arid and subject to recurring drought. While prudent planning by the Pasadena Water and Power Department ("PWP") and Metropolitan Water District ("MWD") can provide reliable supply throughout the duration of most occurrences, extended droughts combined with other supply disruptions can lead to short-term circumstances that demand immediate reductions in water use.

MWD is actively monitoring supply conditions and is likely to reduce water allocations for its member agencies due to continuing dry conditions and restrictions on water deliveries from its own supplies. While the details and timing of any restrictions have not yet been announced, PWP anticipates a 10-15% reduction in its MWD allocation. Based on the MWD Draft Water Supply Allocation Plan, any water supplied by MWD in excess of a member's allocation would cost approximately three to five times the cost of supplies below the allocation limit. Additional and urgent measures may be required if significant restrictions to PWP's water supply from MWD are implemented.

Due to the significance of water supply issues to the Pasadena community, PWP will provide ongoing reporting of supply conditions and program results. Comprehensive annual reports on program results and expenses will be presented to the City Council, and periodic progress reports will be provided to the Municipal Services Committee and Environmental Advisory Commission. Updates on water supply conditions will be provided as conditions warrant and in conjunction with any actions related to the proposed Water Waste Prohibition and Water Shortage Plan ordinance this spring.

***Comprehensive Water Conservation Plan***

On February 2, 2009, staff presented the 120 day update to Council on the Plan, which was essentially complete, for the purposes of obtaining early review and feedback from City Council and EAC. The February 2, 2009 draft described the goals, approaches and action plans contained in PWP's comprehensive water conservation program.

The attached final draft of the Plan includes additional information and recommendations related to managing short-term water supply shortages, the estimated financial impacts of 10%, 20%, and 30% water sales reductions, some additional detail on plans related to landscape ordinance, gray water and rainwater use, and a summary of impacts on new development.

Whereas PWP's past water conservation programs relied heavily on indoor efficiency, the Plan reflects an emphasis on:

- Using price signals in rate design to encourage conservation;
- Increased emphasis on outdoor water efficiency; and
- Maximizing efficiencies related to new construction.

The Plan includes six water conservation approaches that will be pursued simultaneously to meet the City's water conservation targets:

1. Implement Water Conservation Rate Design:
  - Modified block rate structure with higher cost tiers for high water use
  - Develop a budget-based water rate proposal
2. Adopt Sustainable Water Supply Ordinances:
  - Establish a Permanent Water Waste Prohibition Ordinance
  - Modify existing Water Shortage Ordinance
  - Adopt a Water Efficient Landscape Ordinance
  - Evaluate potential effectiveness of a Fixture Replacement on Resale Ordinance, and adopt, if appropriate
  - Review the Gray Water Systems and Storm Water Capture Ordinances and update or modify, as appropriate
  - Adopt appropriate water use limitations and mitigation measures associated with new development
3. Provide Incentives for Use of Water Efficient Technology and Practices:
  - Indoor fixture incentives
  - Irrigation technology incentives
  - Water-efficient landscape and turf replacement incentives
4. Provide Direct Installation and Distribution of Efficient Technologies
5. Provide Water Use Audits
6. Provide Water Use Information, Education, and Outreach:
  - Usage data on bills
  - Appropriate water use standards or guidelines
  - Efficient indoor and outdoor water use practices

The feasibility and cost impacts of 10%, 20% and 30% water conservation goals will be further evaluated as part of the Water Integrated Resource Plan ("WIRP") study that staff will undertake over the next twelve months. The WIRP will include opportunities for input from policy makers and the public, and it will form the basis of the City's 2010

Urban Water Management Plan. Staff has developed a draft schedule for the WIRP process as follows:

- Three inter-departmental water issue workgroups were formed to develop recommendations related to:
  - Water Conservation Rate Design Alternatives
  - Landscape Water Reduction
  - Building Codes and New Development
- WIRP development and report draft through summer 2009
- Public review through January 2010

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

Adoption of permanent water waste prohibitions is essential for the City. First, it establishes a clear message that water waste is intolerable, clearly delineates what constitutes water waste, and sets forth penalties for violations. Additionally, it is a necessary prerequisite to obtain future state grants and MWD funding for water projects and conservation programs.

The proposed "Water Waste Prohibition and Water Shortage Plan" ordinance is consistent with the MWD Model Water Waste ordinance and is intended to address the shortcomings identified with the City's current Water Shortage Procedure Ordinance that it will replace. The proposed ordinance includes a number of permanent water waste prohibitions as well as procedures that would be initiated in the event of a water shortage.

The proposed permanent water waste prohibitions include:

- Watering with potable water (i.e., drinking water) is prohibited between the hours of 9:00 a.m. and 6:00 p.m. on any day, except by use of a hand-held container, a hand-held hose equipped with a water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system;
- No watering during periods of rain;
- No excessive water flow or runoff;
- No washing down hard or paved surfaces except where necessary to alleviate safety or sanitary hazards and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a water shut-off nozzle or device, a low-volume, high-pressure cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom;
- Obligation to fix leaks, breaks or malfunctions when discovered or within seven days of receiving notice from PWP;
- Recirculating water systems are required for fountains and decorative water features;
- Using potable water to wash a vehicle is prohibited, except by use of a hand-held bucket or a hand-held hose equipped with a water shut-off nozzle or device. This subsection does not apply to any commercial car washing facility;
- Drinking water may be served in restaurants only upon request by a customer;

- Restaurants are required to use water conserving dish wash spray valves;
- Commercial lodging establishments must provide guests option to decline daily linen services;
- Installation of single pass cooling systems is prohibited in buildings requesting new water service;
- Installation of non-recirculating water systems is prohibited in new commercial conveyor car wash and new commercial laundry systems; and
- Effective on July 1, 2010, commercial conveyor car wash systems must have installed operational recirculating water systems or secured a waiver of this requirement from the City of Pasadena.

The proposed ordinance establishes the following penalty schedule for violations:

<b>Violation</b>	<b>Meters less than 1-1/2"</b>	<b>Meters 1-1/2" or larger</b>
First	Written Notice	Written Notice
Second	\$100	\$200
Third	\$200	\$400
Fourth	\$350	\$700
Fifth and subsequent	\$500	\$1,000

The proposed fines are meant to be deterrents rather than revenue sources for PWP. While they are significant from the perspective of a residential customer, customers with larger meters are typically associated with commercial accounts that use a larger amount of water, thus PWP has proposed doubling fines for these customers to maintain their deterrent effect and reflect the greater impact that wasteful use by these customers could have on PWP's overall water conservation effort.

In addition to fines, PWP may install a water flow restrictor device on or after the fifth violation, or disconnect a customer's water service for willful violations of mandatory restrictions.

### ***Water Shortage Plan***

In the event that a water shortage threatens PWP's ability to meet its customers' water demand, the City Council would find there is a Water Shortage, establish the appropriate Level of the Water Shortage Plan to invoke, and establishes a target for overall demand reduction ("Water Conservation Goal"). Declaring the Water Shortage Level would determine which set of prohibitions go into effect, and establishing a Water Conservation Goal under the proposed Water Shortage Plan would invoke Water Shortage Rate provisions that are the subject of a concurrent agenda report.

The proposed Water Shortage Plan ordinance includes four progressively restrictive levels of waste prohibitions, but does not include water rationing allocations. Each level of the Water Shortage Plan would include the permanent water waste prohibitions, plus incremental prohibitions from the prior Water Shortage Level.

The key incremental prohibitions with Water Shortage Levels 1 through 4 are as follows:

Level	1	2	3	4
<b>Allowed Watering Days Per Week</b>	3 Summer 1 Winter	2 Summer 1 Winter	1 Summer 1 Winter	No Irrigation
<b>Obligation to Fix Leaks, Breaks or Malfunctions</b>	72 hours after notification	48 hours after notification	36 hours after notification	24 hours after notification
<b>Additional Limitations/ Prohibitions</b>	N/A	Filling ornamental lakes or ponds; washing vehicles		Filling residential pools and spas; no new potable water service

The proposed Water Waste Prohibitions and Water Shortage Plan ordinance includes various general exceptions for the following water uses:

- Water necessary to protect public health and safety or for essential government services, such as police, fire and other similar emergency services;
- The use of recycled water, gray water, and rainwater;
- Use of water by commercial nurseries and commercial growers to sustain plants, trees, shrubs, crops or other vegetation intended for commercial use;
- Maintenance of vegetation including trees and shrubs, or vegetation intended for consumption, that are watered using a hand-held bucket or similar container, hand-held hose equipped with a self-closing shut-off nozzle or device;
- Maintenance of existing landscape necessary for fire protection and soil erosion control;
- Maintenance of plant materials identified to be rare or essential to the well-being of protected species;
- Maintenance of landscape within active public parks and playing fields, school grounds, golf course green and day care centers, provided that such irrigation does not exceed two days per week; and
- Actively irrigated environmental mitigation projects.

**Staffing and Resource Needs**

PWP will include additional staffing and funding, listed in Attachment C, to support implementation of the Water Waste Prohibition and Water Shortage Plan Ordinance in the fiscal year 2010 budget request. The budget request will include a new Water Conservation Group consisting of five full time staff plus one additional full time staff position to support the Call Center. Pro bono legal services or contract resources would be required to conduct administrative appeals hearings. Additional staffing and budget will be requested at a later date in order to support a change to budget-based water rates.

**ENVIRONMENTAL ANALYSIS:**

With regard to the Comprehensive Water Conservation Plan, CEQA exempts from its application those projects that involve “only feasibility or planning studies for possible future actions, which the agency, board or commission has not approved, adopted, or funded...” and which do not have a legally binding effect on later activities. (State CEQA Guidelines § 15262). To fall under this exemption, however, the lead agency is required to consider environmental factors.

The Comprehensive Water Conservation Plan and proposed Water Waste Prohibition and Water Shortage Plan ordinance provisions are guidance documents, which do not commit the City to undertaking any particular project. Further, they do not serve as legally binding plans with which subsequent activities must be consistent or adhere.

The Plan and proposed ordinance provisions are drafted, in part, with environmental considerations in mind. The primary objective of these plans is to ensure sufficient and sustainable water supplies are available to meet the needs of water customers in Pasadena and adjacent communities served by PWP. The plans and proposed ordinance take into consideration the short- and long-term uncertainty in water resource availability, the climate and legal factors driving that uncertainty. The plans further consider uncertainty in water demand as a result of population growth, development, and trends in water usage including behavior as well as the implementation of water-efficient landscaping and fixtures. The end goal is to rethink how the City and its residents use water resources and reduce the per-capita consumption of water by 10 to 20 percent.

The proposed Water Shortage Plan ordinance does not prohibit refilling of pools or require draining of pools, thus avoiding associated stagnation, wastewater, and other related health and safety impacts. This ordinance contains general exemptions to mitigate potential health, safety, and environmental impacts.

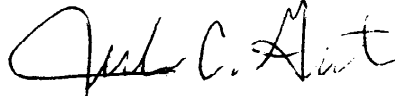
The policies discussed herein are not intended to lead to large construction projects. While they may lead to retrofitting of some structures, these will generally be very small projects with no significant environmental effects. While the Plan contemplates that the completion of a pipeline project to convey recycled water to Pasadena will contribute to the potable water demand reduction goals, neither this nor any other particular project is being approved herein. In any event, any such project will go through the CEQA process, if and when it goes forward.

With regard to the proposed ordinance, CEQA only applies to projects that have the potential for causing a significant effect on the environment. These code amendments will not be detrimental to the public interest, health, safety, convenience, or general welfare of the City nor do they have the potential for causing a significant effect on the environment, and are therefore exempt from CEQA review pursuant to State CEQA Guidelines Section 15061(b)(3).

**FISCAL IMPACT:**

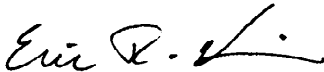
Each of the initiatives and policy considerations included in this report has fiscal impacts to the Water Fund and other City operations. Those impacts become more significant as the conservation goals become more aggressive. Revenue requirements of the Water Fund to cover fixed obligations, including debt service, existing contracts and the general fund transfer must be preserved while various options are considered. The cost of staffing and resources necessary to support the Plan and proposed ordinances are estimated at \$810,000 for FY2010, which includes approximately \$180,000 for equipment and contract resources. Staff is evaluating potential efficiencies and alternatives to reduce the impact of these cost increases. Potential revisions to water rate design must be measured within the requirements of Proposition 218 and the economic impact on various ratepayer categories. Fiscal impacts will be prepared for specific initiatives and policy considerations as directed by City Council.

Respectfully submitted,



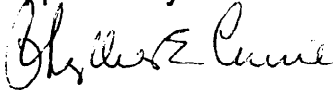
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