

# Agenda Report

December 12, 2005

**TO:** CITY COUNCIL  
**FROM:** CITY MANAGER  
**SUBJECT:** ADOPTION OF THE CITY OF PASADENA'S 2005 URBAN WATER MANAGEMENT PLAN

## RECOMMENDATION

It is recommended that the City Council:

1. Hold a public hearing on December 12, 2005 to receive comments on the City of Pasadena's 2005 Urban Water Management Plan (Plan);
2. Adopt the City's Plan immediately following the public hearing and incorporating any changes the Council deems necessary; and
3. Declare the Plan to be categorically exempt from the California Environmental Quality Act (CEQA) and the "Environmental Guidelines and Procedures for the City of Pasadena" pursuant to Section 15308 of the State CEQA Guidelines (actions by regulatory agencies for protection of the environment).

## BACKGROUND

The Urban Water Management Planning Act (California Water Code, Sections 10610 through 10657) requires that every urban water supplier that provides water to more than 3,000 customers or supplies more than 3,000 acre-feet of water annually shall prepare and adopt an urban water management plan every five years. After adoption, the Plan will then be submitted to the State Department of Water Resources.

The Plan must contain information as listed in Water Code Sections 10630 through 10634. The required information includes Supply Service Area, Water Supply and Demand Comparison, Demand Management and Conservation, Water Supply Reliability, Water Quality Impacts on Reliability, Wastewater and Recycled Water, and Water Shortage Contingency Plan.

The Utility Advisory Commission hosted a public meeting on October 18, 2005. An overview of the Plan was presented and discussed at this meeting. This was also an opportunity to answer any questions the public had regarding the issues addressed in the Plan. Attendees were appreciative of the presentation, which provided insight to the City's water issues and for the opportunity to ask questions.

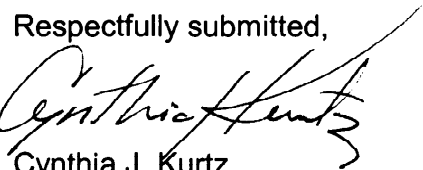
Section 10642 of the Water Code requires that prior to adoption of the Plan, the urban water supplier shall make the Plan available for public inspection and shall hold a public hearing. Since the City of Pasadena is an “urban water supplier” under the definition of the Urban Water Management Planning Act, the City Council must, therefore, adopt the Plan on behalf of the City after conducting the public hearing and incorporating into the Plan any changes the Council deems necessary.

Notice of the time and place of the public hearing was published in the Pasadena Star News on November 28, 2005 and December 5, 2005 as required by Section 10642 of the California Water Code. Copies of the draft plan have been made available for public inspection at the Central Library and online at [www.pwpweb.com](http://www.pwpweb.com) since October 10, 2005. The executive summary is attached.

The City’s 2005 Urban Water Management Plan is categorically exempt from the California Environmental Quality Act and the “Environmental Guidelines and Procedures for the City of Pasadena” as a Class 8 exemption (Section 15308 of the State CEQA Guidelines) an action by a regulatory agency for the protection of the environment.

**FISCAL IMPACT**

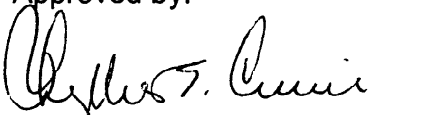
There is no fiscal impact to the City upon adoption of this plan. Further fiscal impact will be determined as UWMP measures are implemented.

Respectfully submitted,  
  
Cynthia J. Kurtz  
City Manager

Prepared by:

  
Brad Boman  
Engineering Manager  
Water and Power Department

Approved by:

  
Phyllis E. Currie  
General Manager  
Water and Power Department

## EXECUTIVE SUMMARY

The City of Pasadena Water and Power Department (PWP) has prepared this 2005 Urban Water Management Plan (UWMP) to comply with the Urban Water Management Planning Act, California Water Code Sections 10610 through 10657. This UWMP updates the last Urban Water Management Plan submitted in 2000. Updates are required every five years by Section 10621 of the California Water Code. This UWMP documents the planning that has been accomplished by PWP staff. It includes an overview of current and projected water supplies and demands, and a description of the local water system. The UWMP also includes a description of water conservation and water management activities that PWP currently conducts or has planned for the next five years. It also addresses the topics of reliability and impacts of water quality considerations on water supply. Where possible, the UWMP has been integrated with other regional and inter-city planning efforts to ensure a coordinated approach to water management.

PWP serves water to approximately 167,000 persons through 37,500 service connections. Normalized annual production is approximately 38,000 acre-feet, which includes water served to customers within the City of Pasadena, in unincorporated areas outside the city, and water that is primarily used for municipal purposes. Approximately 15% of PWP's customers live outside of City limits. It is forecasted that overall customer (meter count) growth will be approximately 0.14% per year and weather normalized water demand growth will be 0.65% per year.

PWP's water is obtained from three sources: surface water, local groundwater derived from the Raymond Basin (40%) and imported water (60%) purchased from the Metropolitan Water District of Southern California (MWD). For groundwater production, PWP owns and operates 17 wells. Currently, there are 27 interconnections with neighboring water agencies to enhance the reliability of the water system and for use in case of an emergency. The water distribution system consists of 500 miles of various sizes of pipeline ranging from two inches to 42 inches in diameter, 20 booster stations, 23 zones, and 22 storage reservoirs with a total capacity of 110 million gallons. MWD has five service connections to PWP's system.

The Raymond Basin, which underlies the City of Pasadena, is the most important local resource for PWP. It is an adjudicated groundwater basin with an annual groundwater production of about 30,000 acre-feet per year. The Raymond Basin has significant potential to store imported water to protect against seasonal and long-term drought conditions. Currently, it is estimated that the Raymond Basin contains 1,000,000 acre-feet of groundwater storage, which is approximately 16 times the annual water demand of residents living over the Basin. The unused storage capacity of the Basin is estimated at 400,000 acre-feet, 1/4 to 1/2 of which is anticipated to be usable for conjunctive use (storing imported water for later retrieval). Local water demand from all Basin residents is approximately 60,000 acre-feet per year.

There have been a number of important developments since 2000. In January 2002, the California Department of Health Services reduced the notification level for perchlorate, prompting PWP to close 7 production wells. This is in addition to another well that had been closed in 1997 for high perchlorate levels. Although two wells have since been constructed, there have been some difficulties extracting the full complement of allowed groundwater. In the near future, it is expected that two treatment plants will become operable, which will allow at least 8 wells to resume groundwater production. With the 2 additional wells now in place, the reopening of the offline wells would create redundancy and increase system reliability.

A critical component of PWP's future water management plans is the Raymond Basin Conjunctive Use Program (RBCUP). PWP is moving forward in reviewing plans for the RBCUP, which is a conjunctive use partnership with MWD and Foothill Municipal Water District. When implemented, this would provide increased reliability by allowing PWP to withdraw stored water in the Raymond Basin to replace imported water during periods of MWD delivery curtailment. The

RBCUP would provide critical capital improvement upgrades to PWP facilities needed to carry out the requirements of the program.

A general plan for expansion of spreading basins in the Arroyo Seco was completed and incorporated into the 2002 Hahamongna Watershed Park Master Plan. This plan would increase the spreading area by over 60%, allowing more groundwater production through recharge and recovery. A recent agreement was finalized with the Raymond Basin Management Board which will increase the amount of pumping rights available from spreading surface water in the Arroyo Seco basins beginning in Fiscal Year 2006.

In recent dry years, the water conservation program has received renewed focus and has proven its value in garnering substantial water savings via education and outreach, direct install programs, rebates, and pilot programs.

PWP has described its water supply and demand situation in the UWMP. PWP plans to continue undertaking the following activities over the next five years to enhance the reliability of its water system:

- Ongoing rehabilitation of reservoirs and booster stations. Conduct seismic analysis for reservoirs to determine their compliance with current design codes for earthquake loads.
- Replace and upgrade water system infrastructure such as water mains, domestic and fire services, and fire hydrant installations.
- Enhance waterworks planning and design through distribution system computer modeling.
- Monitor and provide high quality water to customers through perchlorate and VOC treatment plants.
- Upgrade and enhance the water system's reliability through both working and emergency interconnections with neighboring water agencies.
- Manage in an efficient and prudent manner, Pasadena's surface and subsurface Basin water -rights to effectively utilize the capacity of the Raymond Basin.
- Continue to investigate the expansion of local groundwater storage capacity via participation in the RBCUP.
- Explore the potential of providing reclaimed water for further non-potable uses
- Monitor and maintain high levels of pumping efficiency at booster pump stations and wells.
- Continue energetic efforts towards promoting water conservation practices through water conservation programs that involve low water-use technologies and programs to maximize the efficient use of limited water resources.
- Expand the Supervisory Control and Data Acquisition (SCADA) system.
- Upgrade and enhance security of facilities and infrastructure.

In summary, the City of Pasadena and the PWP is committed to the efficient use of water resources. The City Council has adopted as a strategic goal that "Pasadena be a City that responsibly manages its environmental resources and utilizes technology to improve the quality of life, focusing on such areas as water quality, water and energy conservation, and waste management." This UWMP directly supports this goal.

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASADENA ADOPTING  
THE 2005 URBAN WATER MANAGEMENT PLAN

WHEREAS, the California Legislature enacted the Urban Water Management Planning Act (California Water Code, Sections 10610 through 10657) during the 1983-1984 Regular Session, and as amended subsequently, which requires that every urban water supplier that provides water to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually shall prepare and adopt an urban water management plan; and

WHEREAS, the City of Pasadena (City) is an urban supplier of water providing water to a population of 167,000; and

WHEREAS, the Plan shall be periodically reviewed at least once every five years, and that the City shall make any amendments or changes to its Plan which are indicated by the review; and

WHEREAS, the Plan must be adopted by December 31, 2005, after public review and hearing, and filed with the California Department of Water Resources within thirty days of adoption; and

WHEREAS, the City has therefore, prepared and circulated for public review a draft Urban Water Management Plan, and a properly noticed public hearing regarding said Plan was held by the City Council on December 12, 2005; and

WHEREAS, the City did prepare and shall file said Plan with the California Department of Water Resources by December 23, 2005;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Pasadena that:

1. The 2005 Urban Water Management Plan submitted concurrently herewith is hereby adopted and ordered filed with the City Clerk;
2. The City Manager is hereby authorized and directed to file the 2005 Urban Water Management Plan with the California Department of Water Resources within 30 days after this date on behalf of the City; and
3. The City Clerk is directed to attest her signature and affix the corporate seal of the City to said Plan.

Adopted at the \_\_\_\_\_ meeting of the City Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2005 by the following vote:

AYES:


NOES:

ABSENT:

ABSTAIN:

\_\_\_\_\_  
JANE RODRIGUEZ, CITY CLERK

Approved as to form:

  
\_\_\_\_\_  
Scott D. Rasmussen  
Assistant City Attorney