

Agenda Report

June 6, 2011

To: Honorable Mayor and City Council
Through: Municipal Services Committee (May 24, 2011)
From: Water and Power Department
Subject: **ADOPTION OF THE 2010 URBAN WATER MANAGEMENT PLAN**

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the 2010 Urban Water Management Plan ("UWMP") is exempt from the California Environmental Quality Act pursuant to State CEQA Guidelines Section 15282(v), which exempts from CEQA the preparation and adoption of urban water management plans pursuant to the Water Code.
2. Hold a public hearing on June 6, 2011 to receive comments on the UWMP; and
3. Adopt a resolution approving the UWMP prepared by the consultant, Camp, Dresser and McKee, Inc., immediately following the public hearing and incorporating any changes the Council deems necessary.

MUNICIPAL SERVICES COMMITTEE RECOMMENDATION:

On May 24, 2011, the Municipal Services Committee ("MSC") was presented with information on the UWMP.

ENVIRONMENTAL ADVISORY COMMISSION RECOMMENDATION:

On May 17, 2011, the Environmental Advisory Commission ("EAC") recommended that the Council adopt the City of Pasadena's 2010 Urban Water Management Plan, taking into consideration the public comments made during the meeting.

BACKGROUND:

Requirements

To ensure adequate water supply planning, the Urban Water Management Planning Act (California Water Code, Sections 10608 through 10656) 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 (UWMP) every five years. After adoption, the plan will then be submitted to the State Department of Water Resources.

The UWMP must contain information describing the supply service area, water supply and demand comparison, water conservation best management practices, demand management measures, water supply reliability, water shortage contingency plan and climate change impacts over a twenty-year planning horizon.

The California Water Code requires that urban water suppliers make the UWMP available for public inspection and hold a public hearing prior to its adoption.

In addition, Senate Bill X7 - 7 of 2009 ("Water Conservation Bill") requires each urban retail water supplier to develop water use targets to help meet the statewide goal to reduce California's urban per capita water use 20 percent by December 31, 2020, including an interim urban water reduction target by 2015.

Since the City is an "urban water supplier" under the definition of the Urban Water Management Planning Act, the City Council must adopt the UWMP on behalf of the City after conducting the public hearing and incorporating into the plan any changes the Council deems necessary.

Summary of the UWMP

Pasadena's 2010 UWMP is a compliance document based on the Water Integrated Resources Plan ("WIRP") adopted by City Council on January 31, 2011. The UWMP restates and refines the WIRP's broad policy goals and preferred water resource portfolio in order to comply with the statutory requirements described above. It does not include additional capital projects or conservation program objectives that were not included in the adopted WIRP. The WIRP remains the City's guidance document with recommendations for a water resource portfolio that provides a sustainable balance between environmental benefits, reliability, affordability, efficiency of water use, and maintaining Pasadena's quality of life.

The UWMP expands on information presented in the WIRP to include daily per capita water use targets in compliance with the Water Conservation Bill shown in Table I, projections for low-income household water demand, and supply reliability planning. The UWMP also describes Pasadena's water shortage contingency plans and demand management measures.

Table I: UWMP Potable Water Use Goals

Year	Per-capita Demand (gpcd)	Reduction from Baseline
Baseline (1995-2004 average)	210	0
2105 Goal	189	10%
2020 Goal	168	20%

The Water Demand section of the UWMP details the development of Pasadena's baseline daily per capita water use and then calculates compliance water use targets. The targets required by law are an interim 10% reduction in daily per capita water use by the year 2015 and a total 20% by 2020. The UWMP finds that the additional water conservation and the use of recycled water contemplated in the WIRP will enable Pasadena to achieve its target water use goal.

The UWMP also projects that there will be no shortage of supply for Pasadena during various hydrologic conditions. The projections are based on unconstrained purchase of imported water. However, if water purchases are curtailed during dry years, Pasadena's Groundwater Storage Program is planned to compensate for the shortfall. Pasadena can also place into effect its Water Waste Prohibitions for emergency water demand management.

Public Notice, Review, and Hearing

The UWMP is based on the WIRP, a comprehensive long-term water resources strategy that was developed through an open and participatory planning process. The process included input from an active stakeholder Advisory Committee and the public at large through several public meetings.

Copies of the draft plan have been made available for public inspection online at www.pwpweb.com/UWMP since April 29, 2011. An Executive Summary of the UWMP is included as Attachment A. Notice of the time and place of the June 6, 2011 public hearing was published in the Pasadena Star News on April 6, 2011 and April 13, 2011.

COUNCIL POLICY CONSIDERATION:

The proposed resolution is consistent with the City's Urban Accords goals with respect to adequate access to safe drinking water, reduction in consumption by 10 percent by 2015, and ecological integrity of Pasadena's primary drinking water sources. It is also consistent with the General Plan Land Use Element and the City Council's Strategic Planning Goals. It will provide a mechanism to help Pasadena Water and Power achieve regulatory compliance as well as City Council goals in a cost-effective manner.

ENVIRONMENTAL ANALYSIS:

State CEQA Guidelines Section 15282(v) sets forth a statutory exemption that specifically exempts from environmental review “the preparation and adoption of urban water management plans pursuant to the provisions of section 10652 of the Water Code.” In turn, section 10652 of the Water Code refers back to urban water management plans prepared pursuant to section 10632 of the Water Code. The UWMP is prepared pursuant to these sections of the Water Code, and therefore falls under this exemption.

FISCAL IMPACT:

Approval of the UWMP will have no incremental fiscal impact on the Water Fund beyond those contemplated under the Council-approved WIRP.

Respectfully submitted,




Phyllis E. Currie
General Manager
Water and Power Department

Prepared by:



Elisa Ventura
Engineer
Water and Power Department

Approved by:



Michael J. Beck
City Manager

Executive Summary

ES.1 Urban Water Management Planning Act

All urban water suppliers within the State of California are required to prepare Urban Water Management Plans. California Water Code Sections 10610 through 10657 detail the information that must be included in these plans as well as who must file them. This Urban Water Management Plan satisfies the requirements of the Urban Water Management Planning Act (the Act) of 1983 and the subsequent amendments to the Act. According to the Act, an urban water supplier is defined as a supplier, either publicly or privately owned, that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually.

This report constitutes the Pasadena Water & Power (PWP) 2010 Urban Water Management Plan (UWMP). Urban water suppliers are required to update their UWMPs at least once every five years on or before December 31, in years ending in five and zero. This plan shall be adopted by the City of Pasadena (City) and submitted to the California Department of Water Resources (DWR). The UWMP requires analyses of management tools and options that will maximize resources and minimize the need to import water from other regions. An analysis of total projected water use compared to water supply sources over the next 20 years in five-year increments is required. Water quality, as it affects water management strategies and supply reliability, is addressed in this UWMP. Water demand and supply information is compared for single dry year and multiple dry year scenarios.

There have been several important changes in the Act since 2005, which include:

- Clarifies that every urban water supplier preparing a plan must give at least 60 days advance notice to any city or county prior to the public hearing on the UWMP within which the supplier provides water supplies to allow opportunity for consultation on the proposed plan (Water Code § 10621(b)).
- Requires urban retail water suppliers to include baseline daily per capita water use, urban water use targets, interim urban water use targets, and compliance daily per capita water use, along with the basis for determining those estimates, including references to supporting data.
- Requires plan by retail water suppliers to include water use projections for single-family and multi-family residential housing needed for lower income and affordable households to assist with compliance with the existing requirement under Section 65589.7 of the Government Code that suppliers grant a priority for the provision of service to housing units affordable to lower income households (Water Code § 10631.1).

- Conditions eligibility for a water management grant or loan made to an urban water supplier and awarded or administered by DWR, the State Water Resources Control Board, or the California Bay-Delta Authority or its successor agency on the implementation of water demand management measures, including consideration of the extent of compliance with the conservation measures described in the California Urban Water Conservation Council's (CUWCC) Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California (Water Code § 10631.5).
- Exempts projects funded by the American Recovery and Reinvestment Act of 2009 from the conditions placed on state funding for water management to urban water suppliers (Water Code § 10631.5(a)(2)).
- Requires DWR, in consultation with the State Water Resources Control Board and the California Bay-Delta Authority or its successor agency, to develop eligibility requirements to implement the foregoing grant and loan conditions (Water Code § 10631.5(b)). And repeals existing grant funding conditions of state water management grants or loans on July 1, 2016 if the UWMP is not extended or altered prior to this date (Water Code § 10631.5(f)).

Senate Bill 7

In addition to changes to the Act, the State Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session, referred to as SBX7-7, on November 10, 2009, which became effective February 3, 2010. This new law was the water conservation component to the historic Delta legislative package, and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. This implements similar 2008 water use reduction goals. The law will require each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim urban water reduction target by 2015.

The bill states that the legislative intent is to require all water suppliers to increase the efficiency of use of water resources and to establish a framework to meet the state targets for urban water conservation. The bill establishes methods for urban retail water suppliers to determine targets to help achieve increased water use efficiency by the year 2020. To give retail urban water suppliers time to conduct the additional required analyses, SBX7-7 grants an extension for adoption of UWMPs due in 2010 to July 1, 2011 (Water Code § 10608.20(j)). Urban retail water suppliers, such as the City, are to prepare a plan for implementing the Water Conservation Bill requirements and discuss this implementation plan at a public meeting (Water Code § 10608.26).

ES.2 PWP Service Area Background and Water Supplies

PWP's service area is located within the northwestern portion of the San Gabriel Valley in Los Angeles County, encompassing approximately 23 square miles, and is slightly larger than the legal boundary of the City of Pasadena. PWP serves portions of unincorporated areas of Altadena, East Pasadena, and San Gabriel. The service area is bordered on the north by unincorporated Altadena and the Angeles National Forest, on the east by Arcadia and Sierra Madre, on the south by South Pasadena and San Marino, and the west by Los Angeles, Glendale, and La Canada Flintridge.

Pasadena's weather is characterized as a Mediterranean climate. Temperatures are mild in winter, spring and fall, and hot and dry during summer months. Total precipitation in Pasadena averages about 20 inches per year and approximately 71% falls between January and March. Typically, August is the hottest months of the year with an average daily maximum temperature of 89°F. The average daily maximum temperature in winter months is approximately 68°F.

PWP's historical water demands have varied from year to year, mainly attributed to annual variations in weather, but also due to economic activity and droughts. When normalized for these conditions, water demands in the service area have increased approximately 0.5% per year. Currently, water demands are approximately 30,000 AFY, which is about 22% lower than in 2007. This significant reduction in demand is due to mandatory restrictions in water use that PWP implemented in response to a multi-year drought that began in 2008 and ended in 2010, as well as a severe economic recession during this same time. It is estimated that if these two events did not occur, current water demands would be approximately 38,000 AFY. Based on projected demographics (housing and employment) forecasted by the Southern California Association of Governments (SCAG), normal water demands for PWP are projected to be about 43,000 AFY by 2035. This demand forecast assumes current levels of active water conservation as well as future water use efficiency from compliance with California's plumbing codes.

PWP's current water supplies include local groundwater from the Raymond Basin, surface water diversions, and purchases of imported water. In average hydrologic conditions, PWP is currently pumping approximately 12,000 acre-feet per year (AFY) from the Raymond Basin. However, due to declining groundwater levels, the Raymond Basin Management Board (RBMB) has implemented a resolution to all pumpers in the basin that reduces groundwater rights over a five year period. For PWP, this resolution results in a groundwater pumping right of approximately 10,300 AFY. Surface water diversions in the Arroyo Seco and Eaton Canyon are used to augment local groundwater, and now average approximately 2,380 AFY.

To meet the remaining water needs for PWP imported water is purchased from the Metropolitan Water District of Southern California (MWD). MWD is the regional water wholesaler and is comprised of 26 public member agencies. Pasadena is one of these member agencies, and was one of the founding member cities of MWD. Since 1990, historical purchases of MWD water have ranged from a low of 13,000 AFY to a high of 32,000 AFY. MWD obtains its primary water supplies from the State Water Project (SWP) and Colorado River Aqueduct (CRA). Both of these sources of water have become more unreliable since the early 1990's as a result of significant droughts, water rights issues, and environmental restrictions. The SWP supply must pass through California's Sacramento-San Joaquin Delta (Delta), which is the largest estuary in the state and the source of many conflicts between urban, agriculture and environmental interests. Due to endangered species act requirements, Delta water exports were significantly curtailed in recent years. The issues in the Delta are expected to continue unless a comprehensive solution is implemented restoring the Delta's ecosystem and providing additional conveyance and storage to reduce impacts of water exports on fisheries and habitats.

ES.3 Water Integrated Resources Plan

In January 2011 PWP completed a Water Integrated Resources Plan (WIRP) providing an overall long-term water resources strategy through the year 2035. The WIRP serves as the primary source document for preparation of this UWMP. The WIRP was developed using participatory process, with input from a dedicated stakeholder Advisory Committee and the public at large. Planning objectives were developed by the Advisory Committee and evaluation criteria or metrics were established in order to evaluate various alternatives to meet future water demands. Approximately 50 water supply and conservation options were considered in the WIRP. After extensive evaluation, a recommended supply portfolio that increases water conservation and local water supplies was determined to be the best strategy.

In conjunction with the WIRP, PWP has been developing a recycled water master plan (RWMP) to identify potential demands and projects that could be developed. The information from the RWMP was incorporated into the WIRP and this UWMP. The other source document for this UWMP is MWD's 2010 Regional Urban Water Management Plan, which provides information regarding the reliability of imported water from SWP and CRA, as well as MWD's water storage, banking and transfer programs.

ES.4 Water Reliability Summary

This UWMP details the required information regarding water supply sources (current and projected), water quality issues that may affect supplies, conservation practices implemented, shortage contingency planning, and overall supply reliability. Tables ES-1 and ES-2 show the supply reliability based on the preferred strategy developed in the WIRP for an average and single dry year weather condition.

Table ES-1. Water Supply and Demand Comparison for a Normal Hydrologic Condition

Supply / Demand (AFY)	2010	2015	2020	2025	2030	2035
Existing Groundwater	12,056	10,304	10,304	10,304	10,304	10,304
Existing Surface Water Diversion	2,380	2,380	2,380	2,380	2,380	2,380
Imported Water from MWD	24,024	23,626	21,149	21,149	21,149	21,149
Planned Recycled Water	0	1,130	2,050	2,050	2,050	2,050
Planned Stormwater Harvesting	0	0	627	627	627	627
Planned Groundwater Storage Program	0	0	0	0	0	0
Total Supply	38,460	37,440	36,510	36,510	36,510	36,510
Demand Projection w/o New Conservation	38,460	39,940	41,510	42,490	43,010	43,380
Planned Water Conservation	0	2,500	5,000	5,980	6,500	6,870
Total Demand	38,460	37,440	36,510	36,510	36,510	36,510
Surplus/Shortage	0	0	0	0	0	0
Surplus/Shortage as % of Supply	0%	0%	0%	0%	0%	0%
Surplus/Shortage as % of Demand	0%	0%	0%	0%	0%	0%

Table ES-2. Water Supply and Demand Comparison for a Single-Year Dry Hydrologic Condition

Supply / Demand (AFY)	2010	2015	2020	2025	2030	2035
Existing Groundwater	12,056	10,304	10,304	10,304	10,304	10,304
Existing Surface Water Diversion	660	660	660	660	660	660
Imported Water from MWD	25,744	25,346	20,306	20,306	20,306	20,306
Planned Recycled Water	0	1,130	2,050	2,050	2,050	2,050
Planned Stormwater Harvesting	0	0	190	190	190	190
Planned Groundwater Storage Program	0	0	3,000	3,000	3,000	3,000
Total Supply	38,460	37,440	36,510	36,510	36,510	36,510
Demand Projection w/o New Conservation	38,460	39,940	41,510	42,490	43,010	43,380
Planned Water Conservation	0	2,500	5,000	5,980	6,500	6,870
Total Demand	38,460	37,440	36,510	36,510	36,510	36,510
Surplus/Shortage	0	0	0	0	0	0
Surplus/Shortage as % of Supply	0%	0%	0%	0%	0%	0%
Surplus/Shortage as % of Demand	0%	0%	0%	0%	0%	0%

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASADENA
ADOPTING THE 2010 URBAN WATER MANAGEMENT PLAN

WHEREAS, the California Legislature enacted the Urban Water Management Planning Act (California Water Code, Section 10608 through 10656) 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 175,957; and

WHEREAS, the City's Urban Water Management Plan (UWMP) must be adopted by July 1, 2011, 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 UWMP, and a properly noticed public hearing regarding said UWMP was held by the City Council on June 6, 2011; and

WHEREAS, the City did prepare and shall file said UWMP with the California Department of Water Resources by July 6, 2011;

NOW, THEREFORE, BE IT RESOLVED as follows:

1. The 2010 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 2010 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 his signature and affix the corporate seal of the City to said UWMP.

Adopted at the regular meeting of the City Council of the City of Pasadena on the _____ day of _____, 2011, by the following vote:

AYES:


NOES:

ABSENT:

ABSTAIN:

Mark Jomsky, CMC
City Clerk

APPROVED AS TO FORM:



Scott D. Rasmussen
Assistant City Attorney