

## Agenda Report

January 31, 2011

**To:** Honorable Mayor and City Council  
**Through:** Municipal Services Committee (January 25, 2011)  
**From:** City Manager  
**Subject:** **ADOPT THE WATER INTEGRATED RESOURCES PLAN**

### **RECOMMENDATION:**

It is recommended that the City Council:

1. Find that the Water Integrated Resources Plan ("WIRP") is exempt from the California Environmental Quality Act pursuant to State CEQA Guidelines Section 15262 (Feasibility and Planning Studies); and
2. Adopt the WIRP, included as Attachment A, prepared by the consultant, Camp, Dresser and McKee, Inc.

### **MUNICIPAL SERVICES COMMITTEE RECOMMENDATION:**

On January 25, 2011, the Municipal Services Committee ("MSC") concurred with staff's recommendation.

### **ENVIRONMENTAL ADVISORY COMMISSION RECOMMENDATION:**

On January 18, 2011, the Environmental Advisory Commission ("EAC") recommended that the City Council adopt the WIRP.

### **BACKGROUND:**

The WIRP establishes a new vision for Pasadena's future water supply portfolio, and will be used to provide policy guidance and a framework for evaluating investments for the City's water resources and conservation program over the next 25 years. Through an open and participatory planning process that included an active stakeholder Advisory Committee and several public meetings, the consultant evaluated many water conservation and supply alternatives in an effort to develop a comprehensive long-term strategy that achieves multiple goals. The recommended water resource portfolio provides a sustainable balance between environmental benefits, reliability, affordability, efficiency of water use, and maintaining Pasadena's quality of life.

The WIRP will form the basis for Pasadena’s 2010 Urban Water Management Plan (“UWMP”) which is a state-mandated document due to the California Department of Water Resources by July 1, 2011.

Figure 1, summarizes Pasadena’s actual and recommended water supply and conservation mix. The Urban Accords Baseline, shown for reference, reflects the five-year average of actual water supply used to establish metrics for Pasadena’s Urban Environmental Accords water conservation goals. The Demand Forecast for 2010 and 2035, shown as circles connected by dotted lines, reflects underlying trend-based demand forecast developed by the consultant for use in the WIRP. The dark blue bars depict actual or recommended water resources, and the lighter bars reflect demand met through conservation. The nearly 8,000 acre-feet (“AF”) of conservation shown for Year 2010 reflects a mix of permanent “programmatic” conservation achieved through incentive programs, appliance standards, and regulatory requirements as well as “short-term response” to drought conditions, favorable weather, and the economy. The conservation shown for Year 2035 reflects the 9,000 AF of permanent conservation measures recommended in the WIRP.

**Figure 1 - Actual/Forecast Water Supply & Demand (AF)**

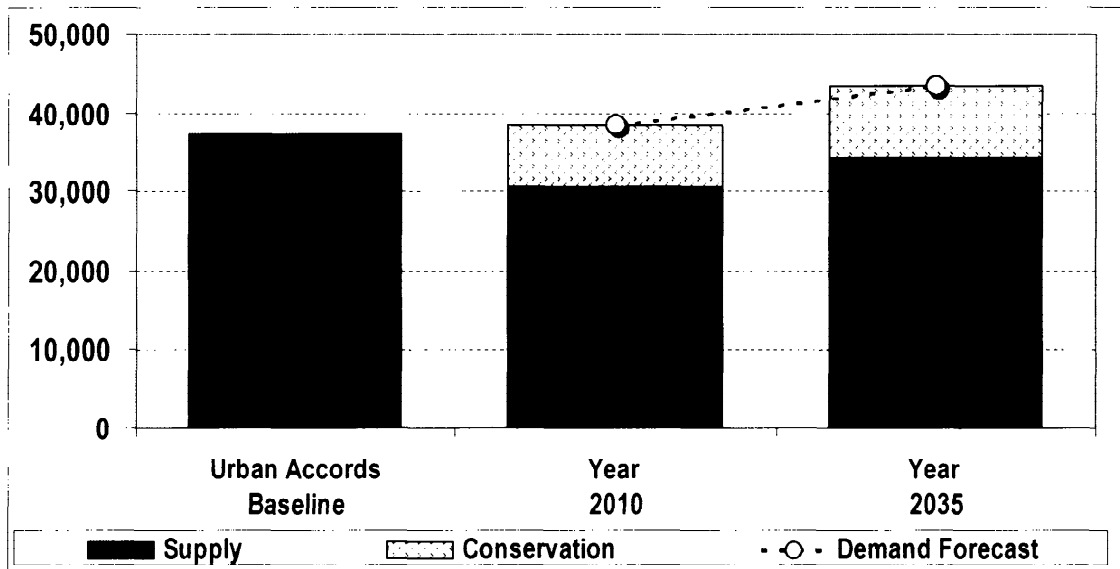
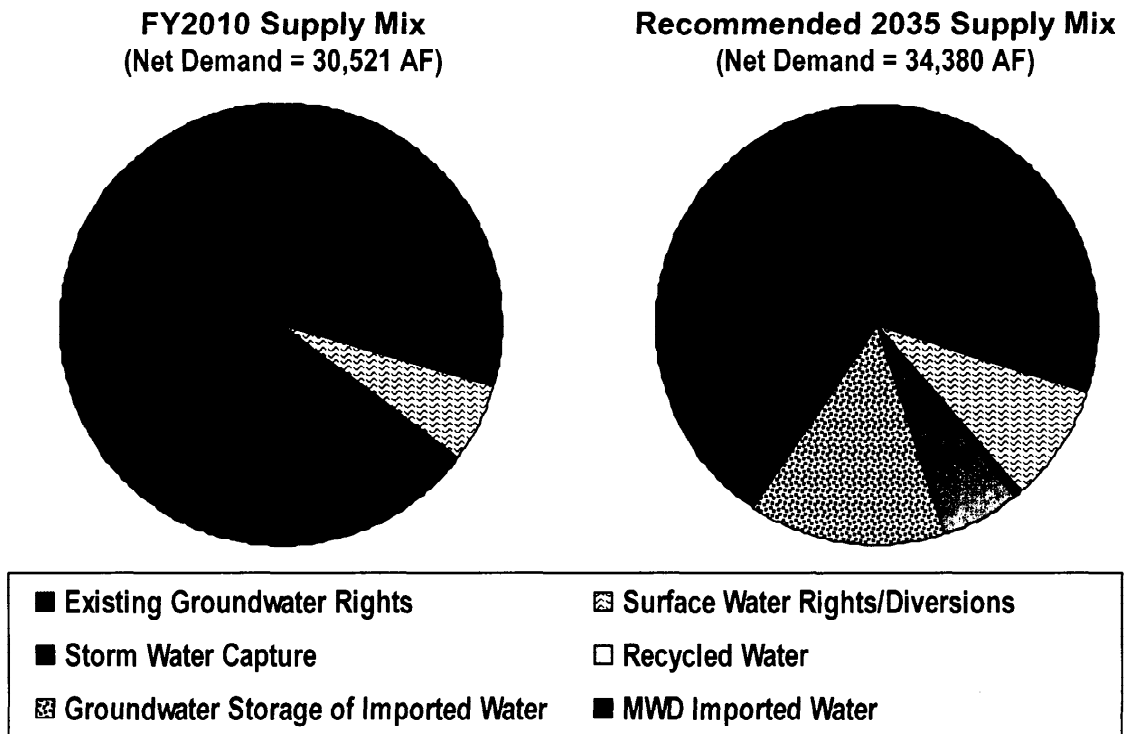


Figure 2 depicts the current and recommended water supply portfolio used to meet trend water demand net of conservation (the “Supply” amounts shown in Figure 1). The recommended water supply portfolio represents a shift from Pasadena’s historic reliance on the Metropolitan Water District of Southern California (“MWD”) to provide the majority of the City’s water supply and future growth in demand. The increased use of local supplies will improve reliability, groundwater basin levels, surface water quality, and the City’s ability to adapt to climate change. It is also consistent with MWD’s 2010 Integrated Resource Plan.

**Figure 2 - Current and Future Water Supply Portfolio (net of conservation)**



The recommended 2035 supply mix includes the following capital projects: recycled water for irrigation and groundwater recharge, building a pipeline to carry water from Devil's Gate Dam to Eaton Canyon for spreading and groundwater recharge, storing excess MWD water in the local groundwater basin when the water is available, and capturing and using stormwater. A phased implementation strategy is recommended to adapt to uncertain future conditions. The phased strategy prioritizes cost-effective elements in the near term with other elements coming on-line when needed based on triggers outlined in the WIRP.

Realization of the recommended water portfolio will require substantial capital investment and increased annual expenditures for operations and conservation program funding. Conversely, annual expenses for purchased water imports will decline. On balance, the consultant concluded that the total cost of water to PWP consumers will be slightly lower than it would otherwise be under "status quo" operations.

Migration from today's water portfolio to the recommended one will take many years and face a number of significant hurdles. Furthermore, assumed future conditions including baseline water demand, MWD water availability and costs, capital costs of various local supply projects and regulatory requirements governing the use of proposed supplies are likely to change over time. Therefore, the consultant has recommended an adaptive approach to implementing the WIRP.

In the near term, PWP anticipates the following activities:

- Continue current conservation programs, subject to an annual assessment of progress towards meeting water conservation goals and California's 20x2020 requirements;
- Propose ordinances and/or incentive programs to facilitate or require stormwater capture for new development, installation of individual meters at all new multifamily developments, and plumbing retrofits on resale of residential and commercial properties;
- Prepare CEQA documentation and design report for a recycled water system;
- Initiate discussions with various governing bodies to increase groundwater recharge operations and use groundwater storage capacities;
- Development of a financing plan that will include water rate restructuring proposals to provide fixed revenues needed to fund capital projects and increased funding for conservation programs; and
- Development of a more detailed WIRP implementation plan.

Ultimately, the recommended portfolio calls for doubling Pasadena's current level of water conservation program results in order to meet California's 20x2020 conservation requirements and achieve the 9,000 AF per year of additional conservation needed to reduce forecast water demand for year 2035 from 43,380 AF to 34,380 AF. This will be achieved through a combination of new ordinances and incentive programs, expanded outreach and education, and increased rebate levels. The consultant concluded that depending upon the success of water rate restructuring, incentive programs, and near-term ordinance revisions, the following actions may be necessary to achieve the goal:

- Convert about 70 percent of existing single family homes to comply with the California Model Landscape Ordinance (requires a combination of irrigation efficiency measures and turf replacement to warm season grass);
- Require that all new single family homes shall have drought tolerant landscaped front yards, and warm season grass (model landscape compliant) back yards;
- Convert 60-70 percent of existing multifamily and commercial landscapes to comply with California Model Landscape Ordinance.

#### **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 PWP achieve regulatory compliance as well as City Council goals in a cost-effective manner.

**ENVIRONMENTAL ANALYSIS:**

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.

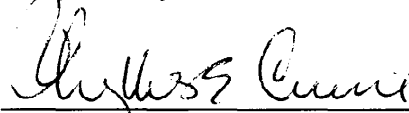
The WIRP is a guidance document, which does not commit the City to undertake any particular project. The WIRP is drafted, in part, with environmental considerations in mind. The purpose of the WIRP, as stated above, is to provide policy guidance and a framework for evaluating investments for the City's water resources and conservation program over the next 25 years. By appropriately managing its supply, the City could reduce incremental environmental impacts associated with water waste or with having to rely on additional purchases of imported water from outside entities (purchases which tend to incrementally contribute to among other environmental factors, greenhouse gases). At this time the City anticipates that there may be some environmental effects if any of the recommendations in the WIRP are implemented; for example there may be air quality impacts during construction if a recycled water system is implemented. The City anticipates, however, that implementation of the WIRP will result in a net environmental benefit. In any event, any project undertaken pursuant to the WIRP will be subject to full CEQA review at the appropriate time.

**FISCAL IMPACT:**

Approval of the WIRP will have no immediate fiscal impact on the Water Fund; however, implementation of the recommended water supply portfolio will require substantial capital investments and increased operating and water conservation expenses over time. Water rate structure modifications will be required to support the stated conservation goals, fund a higher proportion of fixed capital costs and additional water conservation expenses. A portion of the capital spending will be addressed in the FY2012 CIP budget request. As part of developing a detailed WIRP implementation plan, PWP will present a financing plan and water rate proposals to the City Council.

The total cost of water to PWP customers under the recommendations of the WIRP is expected to be less than continued "status quo" reliance on purchased water imports over the duration of the plan; however, Pasadena's water rates are projected to increase in future years to fund the WIRP recommendations and increased rates for water purchased from MWD.

Respectfully submitted,



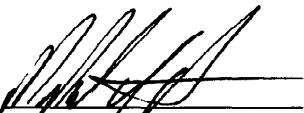
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