PASADENA WATER AND POWER

MEMORANDUM

January 12, 2016

To: Municipal Services Committee

From: Eric Klinkner
Interim General Manager

Subject: Pasadena Non-Potable Water Project EIR Update

This item is for information only.

EXECUTIVE SUMMARY:

In 1993, the cities of Pasadena ("City") and Glendale ("Glendale") entered into the Reclaimed Water System Participation Agreement No. 15,075 ("Agreement") whereby Pasadena agreed to invest in the expansion of Glendale's recycled water system to Scholl Canyon. Glendale and the City of Los Angeles co-own the Los Angeles/ Glendale Water Reclamation Plant ("LAG Plant"), which is a 20 million gallon per day ("MGD") treatment plant located in the City of Los Angeles. Under the Agreement, the recycled water system in Glendale was enlarged and extended northerly to the borders of Glendale and Pasadena to enable deliveries of recycled water to Pasadena. The City has paid its $6.2 million share of the LAG Plant expansion capital costs, but has been unable to take deliveries of recycled water due to a lack of infrastructure to deliver and distribute the water to Pasadena Water and Power ("PWP") customers. Over the past six years, PWP has been evaluating and developing the Pasadena Non-Potable Water Project ("Proposed Project") as a means to convey this source of recycled water to PWP customers.

In 2011, the City Council adopted PWP's Water Integrated Resource Plan ("WIRP"), which established a long term strategy to meet the City's future demands with cost effective and reliable water supplies by developing alternative local water sources. The WIRP recommended six projects, two of which included use of treated recycled water produced at the LAG Plant for landscape irrigation of the Brookside Golf Course and surrounding park areas, and replenishment of groundwater with recycled water at the Eaton Canyon spreading grounds. Phase 1 of the Proposed Project will implement one of the recommendations identified in the WIRP.

The Proposed Project is part of the City's long-term strategy to reduce dependence on imported water by tapping into more reliable and energy-efficient local water sources. It will be implemented in six phases over the next 20 years, and when completed it will offset approximately 10% of PWP's potable water use by providing over 3,000 acre-feet

per year ("AFY") of non-potable supply. By reducing PWP's reliance on imported water supplies, the Proposed Project will benefit all PWP water customers.

PWP has prepared an Environmental Impact Report ("EIR") for the Proposed Project in compliance with the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"). The EIR concluded that all impacts resulting from the Proposed Project will be less than significant or less than significant with mitigation.

A February 1, 2016 hearing date has been set for the City Council to consider and adopt a resolution certifying the EIR. In conjunction with this action, staff will recommend that the City Council authorize staff to pursue a number of additional actions to facilitate further development of Phase 1 of the Proposed Project such as grant applications, securing an extension of the Agreement for recycled water from Glendale, and initiating a process to develop a mandatory non-potable water use ordinance. Additional EIR studies would be required prior to final design and construction of Phases 2 through 6 of the Proposed Project.

BACKGROUND:

The Proposed Project includes three local water sources available to the City under its existing rights and Agreement:

- Recycled water from the LAG Water Reclamation Plant
- Water from two existing subterranean tunnels in the vicinity of Devils Gate Dam
- Water from the Arroyo Seco stream

These resources are expected to be sufficient to meet the anticipated maximum demand of 3,060 AFY.

LAG has been in service since 1976. Approximately 600,000 gallons per day of the tertiary-treated recycled water is currently used for landscape irrigation, cooling water, and industrial uses at a number of facilities including parks, cemeteries, schools, and a power plant in Glendale and surrounding areas. The unused water flows into the Los Angeles River to support the river's riparian habitat.

Proposed Project EIR

The EIR evaluates Phase 1 in sufficient detail to allow the project to be constructed after the EIR is certified and the construction permits are obtained. Phases 2 through 6 will require additional environmental studies and public review before construction.

Phase 1 includes construction of the following:

- Approximately five miles of new distribution pipelines, installed below ground from Scholl Canyon to the west side of Pasadena and sized for the flow of all six phases
- Two reservoirs: one in Glendale at Scholl Canyon, and one in Pasadena on the Sheldon Reservoir site to deliver water by gravity to customers

- A pressure reducing station at the intersection of Washington Boulevard and West Drive with an option to build one micro turbine at the same site to generate electricity as recycled water is delivered from Glendale to Pasadena
- A tunnel water pump station at Brookside Golf Course
- Improvements to Glendale's pump system at various locations to accommodate deliveries of recycled water to Pasadena
- Connection of four customers with total demand of 700 AFY: Art Center College of Design, Brookside Golf Course, Rose Bowl Stadium, and Brookside Park

The proposed $50 million project for all six phases will include 22 miles of new non-potable pipelines, six reservoirs (two in Glendale, and four in Pasadena), two pressure reducing stations, one tunnel booster station, one micro turbine system, and other improvements that will supply more than 3,000 AFY to 51 customers for landscape irrigation, cooling towers, and industrial use.

The EIR analyzes the impacts of the Proposed Project on the environment and identifies possible ways to minimize those impacts.

A Notice of Preparation and Notice of Scoping Meetings ("NOP") for the EIR was released for 30-day public review which started on August 28, 2014. In addition to the required agencies, the NOP was mailed and e-mailed to 213 neighborhood associations, committees and individuals. The NOP was advertised in Pasadena Star News on August 28, 2014, and September 4, 2014, and in Pasadena/San Gabriel Journal on August 28, 2014. The NOP was posted on two of the City's webpages - Planning and PWP. Two public scoping meetings were held at Brookside Golf Course during the public review period – on Saturday, September 6, 2014, and Wednesday, September 10, 2014.

With input from both regulatory agencies and the general public during the scoping meetings, the Public Draft EIR was prepared and made available for public review from June 30, 2015, to September 14, 2015. Two public meetings were held during the public comment period – on August 13, 2015, and August 26, 2015.

During the public review period for the Draft EIR, 112 written and verbal comments were recorded. All comments are addressed in detail in the Final EIR. The comments stem mainly from concerns related to construction activities which will not have long-term effects on the environment or residents.

The EIR was finalized on December 23, 2015, and made available for public review on December 24, 2015, on the City's Planning and PWP websites. The EIR was made available in print at the following locations:

Pasadena Water and Power
150 S. Los Robles Avenue, Suite 200
Pasadena, CA 91101

Linda Vista Library
1281 Bryant Street
Pasadena, CA 91103

Pasadena Central Library
285 East Walnut Street
Pasadena, CA 91101

La Pintoresca Library
1355 North Raymond Avenue
Pasadena, CA 91103

The Notice of Final EIR and Public Hearing was mailed to regulatory agencies and emailed to residents, neighborhood associations, organizations, and interested individuals on December 23, December 24, December 28, 2015, and January 4, 2016.

On January 26, 2016, staff will seek MSC's recommendation to City Council for the certification of the Final EIR. The public hearing for the EIR certification is scheduled for February 1, 2016.

Funding Sources and Grant Application Authority

PWP is evaluating various financing options for Phase 1 of the Proposed Project including a combination grants, loans, bond funding, and equity contributions. The water rate design and impacts will be driven by the relative contribution from these various sources and the details are unknown at this time. Any grant funding agreements, bond issuances, or rate modifications will require future approval and authorization by the City Council.

PWP is pursuing federal funding from the United States Bureau of Reclamation Title XVI Program, state funding from the State Water Resources Control Board Proposition 1 and Clean Water State Revolving Fund programs, and local funding from the Metropolitan Water District of Southern California Local Resources Program. Most grants require a resolution authorizing the signatory on behalf of the applicant as part of the final grant approval by the funding agencies. Each source of funding will require an agreement between the City and the funding agency that will be authorized by the City Council at a later date.

Budget/Cost

The WIRP gave top ranking and recommended for implementation a Phase I recycled water system with an average yield of 1,130 AFY at a capital cost of $15.3 million and annual O&M costs of $300,000. The estimate for the currently defined Phase I system with a yield of 700 AFY is $18 million with annual costs of $150,000.

Grant funding is provided on a reimbursement basis for actual costs, up the maximum amount in the grant agreement. For most state grants once the grant agreements are signed, the funding amount cannot be increased. In order to reserve the maximum grant

funding potential, the estimated project cost includes a $7 million contingency, yielding an estimated Phase 1 project budget of $25 million for use in grant funding applications.

Based on the $25 million estimate for Phase I of the Proposed Project, the average cost of water is estimated to range from $1,250 to $2,100/AF depending on the level of grant funding and loans awarded to the project, as summarized in Table 1. The low cost estimate assumes the project will be fully financed through a combination of grant funding the lowest interest loans available and a subsidy from the Metropolitan Water District ("MWD") Local Resources Program. The high cost estimate assumes that there will not be any grant funding and only a subsidy from MWD Local Resources Program and a low (but not the lowest) interest loan available to finance a portion of the project.

Table 1
Estimated Range for Funding and Water Costs for
Pasadena Non-Potable Water Project Phase 1

Assumptions/Information	Best Case: Lowest Supply Cost	Worst Case: Highest Supply Cost
Project Capital Cost	$25M	$25M
Grant/Low-Interest Loan-Funded Portion	$25M	$12.25M
Revenue Bond-Funded Portion	$0M	$12.75M
Amortized Capital Cost (30 years)	$475K	$1.1M
Annual O&M Cost	$150K	$150K
Total Annual Cost	$625K	$1.25M
Unit Cost (Annual Cost/700 AFY)	$890/AF	$1,740/AF
Purchase Cost of Recyled Water from Glendale	$700/AF	$700/AF
MWD LRP Subsidy	<$340/AF>	<$340/AF>
Average Cost of the Non-Potable Supply	$1,250/AF	$2,100/AF

For comparison, MWD's Tier 2 full service treated volumetric cost for imported water is $1,076/AF as of January 1, 2016.

Reclaimed Water Participation Agreement Extension

The Agreement that entitles PWP to a portion of the recycled water produced by the LAG expires on December 31, 2017. The Agreement includes the option for the City to extend the term for an additional 25 years; however, the City and Glendale are negotiating a new contract intended to supersede the existing agreement. The PWP Interim General Manager has provided notice to Glendale of the City's intent to exercise the extension provisions of the Agreement in order to secure the recycled water supply in the event that a replacement agreement is not executed before December 2017.

Although the Agreement includes provisions for the General Manager to provide such notice to exercise the 25 year extension, staff will include a recommendation that the

City Council explicitly authorize the exercise of this option as part of the agenda report recommending adoption of the EIR.

Mandatory Use Ordinance

Due to the unprecedented water crisis in California the State Water Resources Control Board ("State Water Board") established a Recycled Water Policy which mandates increased use of recycled water in California by year 2030. To support this policy the State Water Board requires the local agency to adopt a Mandatory Recycled Water Use Ordinance prior to obtaining state grants and loans. Such an ordinance would establish a policy requiring the use of non-potable water for landscape irrigation, cooling, dust control, industrial applications and other non-potable uses, where practical and appropriate consistent with Pasadena's long term sustainability goals. The ordinance will ensure that the state funds are not wasted and the project will create a drought-proof, reliable local water source which will offset potable water and can be sustained over the long term.

As part of the agenda report for the EIR certification, staff will recommend City Council to direct the City Attorney to draft a Mandatory Recycled Water Use Ordinance.

Project Schedule/Timeline

- City Council Action: Adopt EIR for the Proposed Project – February 2016
- City Council Action: Adopt Mandatory Use Ordinance – March 2016
- Complete Phase I Design – summer 2016
- City Council Approval: Project Grant/Loan Funding Agreements and Reimbursement Resolutions – summer 2016
- Obtain Permits – fall 2016
- City Council Approval: Phase I Construction Contract– early 2017
- Phase I Construction Complete – fall 2018