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July 6, 2015 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject: Recycled Water Seasonal Storage Plan of Action: Approval

SUMMARY:

On November 3, 2014, the Board approved a proposal from MWH Global (MWH) to prepare a recycled water seasonal storage plan of action. The approach to develop the plan of action centered around conducting individual interviews with JPA Board Members and engaging a broad cross-section of stakeholders in three public workshops. Materials from the workshops are available on the LVMWD website at http://www.lvmwd.com/your-water/recycled-water/recycled-water-seasonal-storage.

Representatives of the following organizations actively participated in the workshops: Senator Fran Pavley's Office, Supervisor Sheila Kuehl's Office, Heal the Bay, Los Angeles Waterkeeper, National Park Service, California State Parks, cities of Calabasas and Thousand Oaks, Malibu Creek MS4 Watershed Management Committee, Mountains Restoration Trust, Santa Monica Mountains Conservancy, Resource Conservation District of the Santa Monica Mountains, Santa Monica Mountains Fund, Los Angeles Department of Water and Power (LADWP), and Calleguas Municipal Water District.

On April 6, 2015, the JPA Board considered stakeholder comments on six conceptual scenarios and directed staff to develop a plan of action focused on Scenario Nos. 4, the use of Las Virgenes Reservoir for indirect potable reuse, and 5, the re-purposing of Encino Reservoir for seasonal storage. The attached Plan of Action outlines the objectives, strategies and initial actions to move forward on a parallel path for both scenarios until a decision can be made to focus on one.

Staff has already initiated several of the actions such as meeting with LADWP executives to discuss Scenario No. 5. One of the more important next steps is to proceed with the Basis of Design Report/Feasibility Study to further detail the facilities, costs and schedules for implementation of the selected scenarios.

RECOMMENDATION(S):

Approve the Recycled Water Seasonal Storage Plan of Action and authorize staff to negotiate a scope of work and fee proposal with MWH Global to prepare a Basis of Design Report/Feasibility Study.

FISCAL IMPACT:

No

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is no financial impact associated with adoption of the plan of action. However, there will be future financial implications associated with implementation of the plan of action, particularly construction and operation of the facilities for Scenario Nos. 4 or 5.

DISCUSSION:

Background:

The JPA first started developing the recycled water system in the 1970s. Since the initial installation of the Las Virgenes Valley system, the recycled water system has grown to provide service in both Los Angeles and Ventura counties. Of the 10,000 acre-feet (AF) of recycled water produced at the Tapia Water Reclamation Facility each year, approximately 60% or 6,000 AF is beneficially reused. Approximately 4,500 AF is used in the Las Virgenes service area, accounting for 17% of total demand. Approximately 1,500 AF is delivered to Triunfo Sanitation District with 828 AF being used in the Oak Park Water Service's area, accounting for 26% of its total annual demands. The remaining 4,000 AF is disposed of either by discharging it to Malibu Creek and/or the Los Angeles River or via spray fields at Rancho. By 2035, wastewater flows are estimated to increase to 12 million gallons per day at Tapia. If there is little or only modest growth in recycled water demands, the volume of recycled water disposal will increase to 7,500 AF.

Recycled Water Seasonal Storage:

Seasonal storage of recycled water has been considered in many planning documents, beginning with the 1973 Recycled Water Master Plan. In the simplest terms, the concept is to store excess recycled water produced in the winter for use in the summer when demands are the highest and exceed production. This approach requires not only seasonal storage but also increased demands. Seasonal storage has little or no value unless it is matched with demands to empty the reservoir in the summer to make room for winter excess. The approach would significantly reduce the need to discharge but cannot eliminate discharges altogether because of high flows into Tapia during rain events and a shrinking market for traditional "purple pipe" recycled water use. However, non-traditional uses such as residential use or the emerging concept of indirect or direct potable reuse may expand the potential demand for recycled water, leveraging the value of seasonal storage.

Guiding Principles and Stakeholder Process:

On June 2, 2014, the Board approved the attached guiding principles, creating a framework for next steps in developing seasonal storage of recycled water for maximum beneficial reuse. Because of the complexity of the project, having a clear road map or plan of action was deemed necessary for the Board and staff. The plan of action would allow the JPA to make incremental steps towards maximizing beneficial reuse. To this end, a Request for Proposals was sent out and MWH was selected as the most qualified firm. MWH's approach was to develop a plan of action centered around conducting individual interviews with JPA Board Members and engaging a broad cross-section of stakeholders in three public workshops. The approach recognized the value of soliciting input from key stakeholders early in the process.

JPA Board Member Interviews:

MWH first conducted individual interviews with JPA Board Members. The key words and phrases from the interviews help to frame the context of the workshops that followed. Key words and phrases from the interviews were:

- Customers
- Cost effectiveness
- Using the most of existing resources
- Malibu Creek
- Expanding recycled water use
- Innovative forms of reuse
- Outreach

Stakeholder Workshops:

Workshop No. 1 consisted of developing context for the problem by using a broad scanning technique known as "PESTLE". P-E-S-T-L-E stands for political, economic, social, technical, legal and environmental, and is used as a means to categorize complex issues into “buckets” that can be ranked and prioritized by the participants. The group identified 26 issues in the political category, 45 in the economic category, 52 in the social category, 56 in the technical category, 13 in the legal category and 60 in the environmental category. These issues were then used in the second workshop.

Workshop No. 2 involved developing "convergence" on the issues using an assessment tool known as "BPAT" or blink prioritization assessment tool. BPAT relies on participants' first impressions and initial reactions to prioritize the issues through break-out groups and polling. The result was consensus on three primary issues for each of the PESTLE categories. These issues were then used in the third workshop.

Workshop No. 3 started the process of "affirmation". Six conceptual scenarios ranging from TMDL compliance with advanced nutrient removal to re-purposing an existing reservoir for indirect potable reuse were evaluated based on the PESTLE and BPAT assessments, construction costs and implementation schedules. The participants evaluated and commented on each scenario.

JPA Board Direction:

On April 6, 2015, the JPA Board considered stakeholder comments on six conceptual scenarios and directed staff to develop a plan of action focused on Scenario Nos. 4, the use of Las Virgenes Reservoir for indirect potable reuse, and 5, the re-purposing of Encino Reservoir for seasonal storage. The attached Plan of Action outlines the objectives, strategies and initial actions to move forward on a parallel path for both scenarios until a decision can be made to focus on one. The plan includes a table showing the planned activities for both scenarios over the next four fiscal quarters. Each action is then referenced in the one-year schedule, showing the sequence of events. An overall project schedule for both scenarios is also included. The Plan of Action should be considered a “living” document, so as actions are accomplished and Board decisions are made, the Plan will be updated.

Next Steps:

Staff has already initiated several of the actions such as meeting with LADWP executives to discuss Scenario No. 5. One of the more important next steps is to proceed with the Basis of Design Report/Feasibility Study to further detail the facilities, costs and schedules of the selected scenarios. Staff proposes to negotiate a scope of work and fee proposal with MWH to prepare the Basis of Design Report/Feasibility Study. The scope of work and fee proposal would be presented to the JPA Board at a future meeting for approval. The work is anticipated to cost $300,000 to $500,000. The proposed Fiscal Year 2015-16 JPA Budget includes sufficient funding for the work.

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ATTACHMENTS:

Recycled Water Seasonal Storage Project Guiding Principles

Recycled Water Seasonal Storage Plan of Action