Potential Regional Recycled Water Supply Program

Engineering & Operations Committee
Item 8-3
March 7, 2016
Current Action

Authorize two professional services agreements for Metropolitan’s potential regional recycled water supply program:

- MWH Americas - $1.2 million for design of the demonstration plant
- Black & Veatch - $1.9 million to conduct feasibility studies of the recycled water delivery system

Adopt resolution supporting Metropolitan’s application for & acceptance of funding from the SWRCB’s Water Recycling Funding Program
Background

- September 2015 – Board information letter
- October 2015 – Board presentation
- November 2015 – Board action letter
  - Appropriated $15 million in capital funds
  - Authorized recycled water demonstration project
  - Authorized design of demonstration plant
  - Authorized agreement with LA County Sanitation District No. 2 for development of potential regional recycled water program
Demonstration Project

Three components
- Demonstration plant (1 MGD)
- Feasibility & environmental studies
- Financing plan
Preliminary Program Timeline

- Demonstration Plant
- Construction
- Operation
- Feasibility Studies
- Nov 2015
- Dec 2016
- Finance Plan
- Phased Full Scale Program

Legend:
- Demonstration Project
- Full Scale Program
- Const. & Operation
- Board Action/Info
Joint Water Pollution Control Plant
Example of Demonstration Plant
Agreement #1 – MWH Americas Demonstration Plant Design

Background
- 1-mgd demonstration plant at LACSD’s JWPCP
- Advanced treatment of secondary effluent

Purpose
- Provide water quality data for regulatory acceptance
- Optimize full-scale treatment process design
- Establish source water quality control criteria
- Confirm brine discharge constraints
- Establish cost clarity for advanced treatment
- Provide vehicle for public outreach & acceptance
Agreement #1 – Scope of Work

Consultant
- Develop advanced treatment process trains
- Perform conceptual & final design of demonstration testing & support facilities
- Establish source water quality control criteria
- Confirm brine discharge constraints
- Provide bid phase support

Metropolitan
- Provide technical oversight
- Integrate consultant’s work with overall project
Agreement #1 – Consultant Selection

- RFP No. 1116 issued December 1, 2015
- 10% SBE/DVBE participation
- 3 firms responded
- Recommended prime consultant - MWH Americas, Inc.
  - Total amount NTE $1.2 million

Subconsultants
- Trussell Tech, Inc.
- Carollo Engineers, Inc.
- DDB Engineering, Inc.
- Katz & Associates
- William R. Mills & Assoc.
Agreement #2 – Black & Veatch
Feasibility Studies of Recycled Water Delivery System

Purpose

- Evaluate delivery system to potential recharge basins in Los Angeles, Orange, & San Bernardino Cos.
- Develop program phasing & timing
- Coordinate GW modeling & operational assessments
- Conduct regulatory & facility investigations
- Provide basis for regulatory approval
- Assist with agency planning & coordination
**Agreement #2 – Scope of Work**

- **Consultant**
  - Conduct feasibility-level assessment of conveyance facilities
  - Develop recommendations for the conveyance system

- **Metropolitan**
  - Provide technical oversight
  - Integrate consultant’s work with overall project
  - Coordinate with regulatory agencies on Indirect Potable Reuse
Agreement #2 – Consultant Selection

- RFP No. 1126 issued December 17, 2015
- 25% SBE/DVBE participation
- 3 firms responded
- Recommended prime consultant - Black & Veatch
  - Total amount NTE $1.9 million

Subconsultants

- CDM Smith, Inc.
- DDB Engineering, Inc.
- GeoPentech, Inc.
- Melissa Blanton
- Mingar & Associates
- MWA Architects
- Project Line Tech Services
- Todd Groundwater
Adopt Resolution to Apply for and Accept Potential SWRCB Funding

**Background**

- State Water Resources Control Board’s Water Recycling Funding Program
- Up to $75,000 available for each planning project
- Total of $525,000 requested for 7 projects
- Board resolution required as part of application
No Requested Funds

- Funds previously appropriated/allocated
- Demonstration plant
  - Appropriated November 2015
  - Funds available within capital expenditure plan for FY 2015/16
- Feasibility studies will be completed with O&M funds during FY 2015/16 & FY 2016/17
- Funding from SWRCB’s Water Recycling Funding Program would help defray Metropolitan’s costs for the potential regional recycled water program
## Schedule

<table>
<thead>
<tr>
<th>Project</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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</thead>
<tbody>
<tr>
<td>Demonstration Plant Design</td>
<td><img src="image" alt="Design" /></td>
<td><img src="image" alt="Construction" /></td>
<td><img src="image" alt="Completion" /></td>
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<tr>
<td>Feasibility Studies</td>
<td><img src="image" alt="Studies" /></td>
<td><img src="image" alt="Studies" /></td>
<td></td>
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</tbody>
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*Legend:*
- **Design**: Green
- **Construction**: Orange
- **Studies**: Blue
- **Board Action/Info**: Yellow
- **Completion**: Yellow Diamond
Board Options

Option #1
- Adopt CEQA determination that the proposed action is categorically exempt
- Authorize two professional services agreements
- Adopt resolution for application & acceptance of potential SWRCB funding

Option #2
- Do not authorize the professional services agreements
- Do not adopt resolution for SWRCB funding
Staff Recommendation

- Option #1