Potential Regional Recycled Water Supply Program

Water Planning & Stewardship Committee
Item 8-3
November 9, 2015
Need for Resource Development

2010 IRP goals

- 150 TAF remaining to meet water use efficiency and local supply targets

Projected groundwater production has dropped

- Reduction of as much as ~250 TAF in a year
- Focus on improving sustainable yield

Diverse resource mix important for reliability
Agencies Are Projecting Lower Groundwater Production

Historical Production
2010 IRP Forecast
2015 IRP Forecast

Calendar Year

Million Acre-Feet

Unique Opportunity

Regional Approach Meets Resource Needs

- Significant, reliable new supply
  - Up to 150 MGD
- Favorably located to meet multiple member agency needs
- Importance of timing

Addresses Uncertainty

- Climate change
- Variations in existing supplies
- Demographic & economic change
- Emergency & seismic events
Location Map

Joint Water Pollution Control Plant
Approach to the Program

- Demonstration Project
- Phased approach to full scale facilities
- Provisions for off-ramps, if necessary
Purpose of Demonstration Project

- Provide proof of concept:
  - Will provide for timely and cost effective implementation
- Provide for regulatory acceptance of program
Demonstration Project

Components
- Demonstration Plant (1 MGD)
- Feasibility & environmental studies
- Financing Plan

Duration
- November 2015 to December 2016
Demonstration Plant

Purpose

To ensure quality of purified water for groundwater recharge

Anticipated Activities

Provide water quality data for regulatory acceptance

Coordinate operations with LACSD to ensure source quality/treatment & brine/waste disposal

Optimize full-scale treatment process design

Establish cost clarity for treatment

Provide vehicle for public outreach & acceptance
Joint Water Pollution Control Plant
Feasibility Studies

Purpose
- Evaluate delivery system capability to recharge basins in Los Angeles, Orange and San Bernardino Counties

Anticipated Activities
- Develop program phasing and timing
- Coordinated groundwater modeling and operational assessments
- Regulatory and facility investigations
- Environmental studies
- Agency planning & coordination
Potential Full Program (up to 150 MGD)
Purpose
- Assess economic viability of program

Anticipated Activities
- Secure grant & loan opportunities
- Determine cost-sharing opportunities
- Determine approach to funding & rate impacts
- Develop refined capital and O&M estimates
- Develop overall financing plan
Term Sheet Summary: Demonstration Plant

**LACSD Responsibility:**
- Deliver secondary-treated water to demo plant
- Provide land & utilities
- Dispose of waste streams
- Perform influent lab analyses & maintain source quality control program

**Metropolitan Responsibility:**
- Fund, design, construct, operate & maintain 1 MGD AWT demo plant
- Conduct Feasibility Studies
Framework for Development of a Full-Scale Program

(if desired to proceed)

Objectives

- Pursue full-scale program per Board direction
- Fairly divide costs and investments
- Avoid conflicts with other recycled water plans
- Codify responsibilities of each agency
Additional Considerations

- Potential Funding Participation
  - Avoided capital costs, if any

- Potential State Funding
  - Grant funds & SRF low interest loans
  - Joint funding application
  - Phasing of requests to match progress of program

- CEQA Compliance for Full Scale Phase 1
  - AWT plant
  - Delivery system
Demonstration Plant

Feasibility Studies

Finance Plan

Construction

Operation

Phased Full Scale Program (if desired to proceed)

Legend

- Demonstration Program
- Full Scale Program
- Const. & Operation
- Board Action/info

November 9, 2015
## Requested Funds

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Construction Contract</td>
<td>$7,500,000</td>
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<tr>
<td>Labor</td>
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<tr>
<td>PM, permitting, bidding</td>
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<td>Submittals review, record drwgs</td>
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<td>Construction inspection</td>
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<td>Metropolitan Force Construction</td>
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<td>Start up, operational testing and reporting</td>
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<td>Professional/Technical services</td>
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<td>Materials and Supplies</td>
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<td>Incidental Expenses</td>
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<td>Remaining Budget</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>$15,000,000</strong></td>
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Board Options

Option #1
- Adopt CEQA determination that the proposed action is categorically exempt
- Authorize agreement with County Sanitation District No. 2 to develop demonstration-scale recycled water plant
- Appropriate $15,000,000

Option #2
- Do not proceed with the project at this time
Staff Recommendation

Option # 1