

Purified Water Program Update

Board of Directors Meeting
October 10, 2017



Attachment 4
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March 27, 2017 Board Work Study Session: Board's Additional Information Requests

1. **Financial:** Does the District have sufficient capacity to publicly fund all the major capital programs under consideration? Would the District's bond rating be at risk?
2. **Cost:** How do we meaningfully compare costs between the Design-Build (DB) and the Public-Private Partnership (P3) delivery methods?
3. **Workload:** What District staffing levels would be required using a DB versus a P3 delivery method?

District's Financial Capacity/Credit Rating

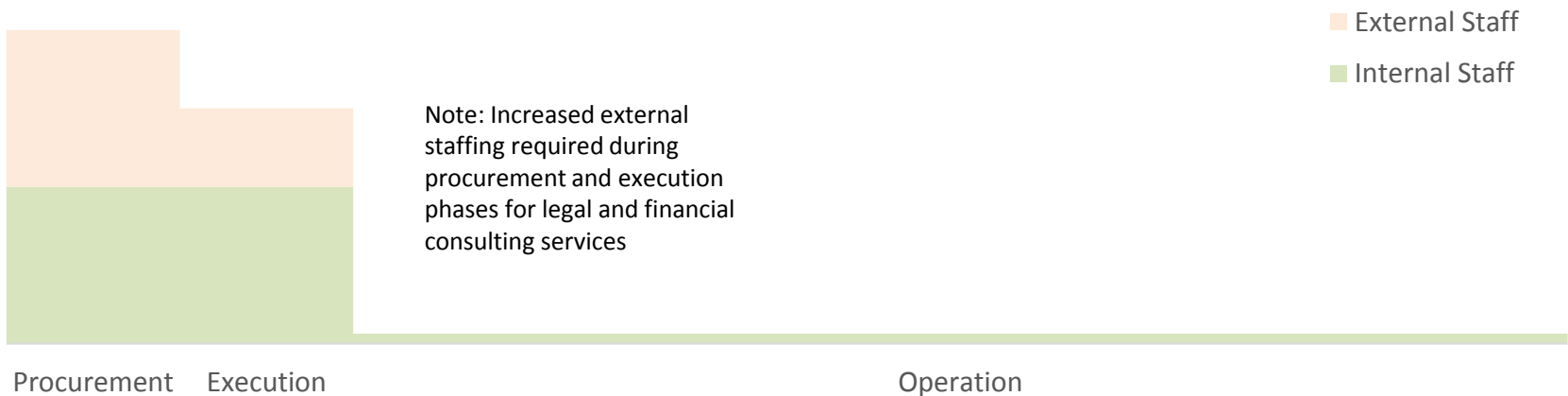
- Capacity to fund capital program subject to Board actions to raise water rates.
- March 2017 bond ratings are excellent (Moody's: Aa1; Fitch: AA+)
- Credit rating depends on current and future financial management.
 - Debt service coverage levels
 - Reserve levels
 - Available water supply
 - Diversity of revenues
 - Liquidity
- Rating agencies silent on choice of project delivery method.
- Purified Water Program viewed as “credit positive” subject to customer acceptance of rate increases.

P3 vs. DB Cost Comparison

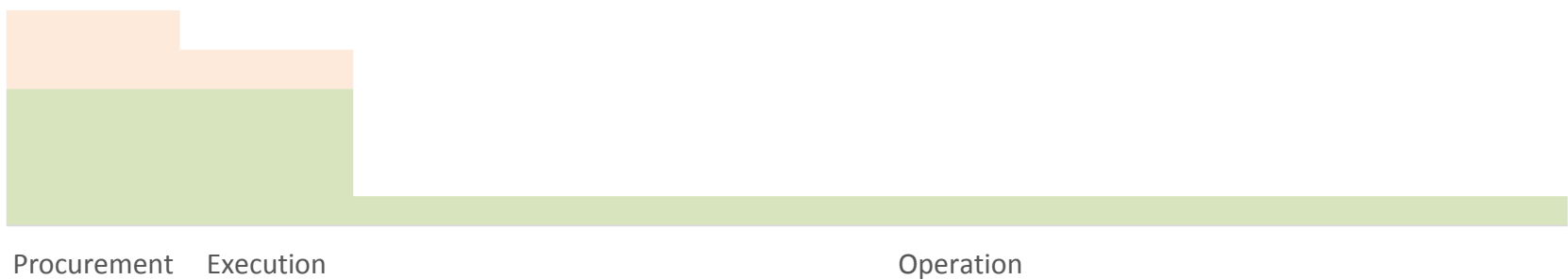
- Either P3 or DB may reduce costs over traditional design-bid-build.
- Cost savings highly dependent on unique project nuances and specifics of agreements:
 - DB: collaboration can save time and reduce construction change orders.
 - P3: can accelerate delivery and reduce costs w/ life-cycle management innovations. Will also incur cost for financing, procurement and oversight.
- Definitive cost comparison cannot be made at this time.

District Staffing Over Time:

P3 Staffing



DB Staffing



Program Status – Results of Key Studies

1. Water Supply Master Plan update shows at least 24,000 AFY of purified water would be beneficial by 2025, particularly to meet dry year demands.
2. Any purified water project commitments should be made in the context of alternative supply sources in the Water Supply Master Plan.
3. Anticipated annual utilization rate of purified water for indirect potable reuse is approximately 75%.
4. Purified water recharged to the groundwater basin has a very low potential of leaching naturally-occurring metals from the soil.

Program Status – Steps Towards Agreement with City of San Jose

Memorandum of Understanding (MOU) to Expand Water Purification Facility

Issue	District Request or Proposal
Land	~ 25 acres
Treated wastewater quantity	~ 30 MGD initial*
RO Concentrate	~ 6 MGD
Regulatory Compliance Risks	Risk-sharing?

* 30 MGD inflow yields approx. 24 MGD purified water

MOU Item – Treated Wastewater Quantity

- City of San Jose (City) - Expansion of non-potable reuse (NPR) may be a higher priority for City's tributary wastewater agencies than potable reuse.
- City – Downward trend in wastewater inflows to Regional Wastewater Facility (RWF). Will future be different?
- City – After meeting NPR future demands:
 - Is there enough treated wastewater for potable reuse?
 - How much will remain for outfall discharge to Bay?
 - Outfall discharge must have adequate dilution cushion if RO concentrate sent to outfall.

MOU Item – RO Concentrate Management

- District - Discharge via RWF outfall expected to be the most streamlined, cost-effective option for RO concentrate.
- District - Toxicity study results: 6 MGD of RO concentrate would comply with NPDES permit limits.
- City – Key concerns: regulatory risks, South Bay ecosystem impacts.
- City – Awaits District evaluation of other alternatives (i.e., separate/deep outfall, evaporation ponds, engineered wetlands).

District Activities to Support MOU Resolution

- Executed Master Funding Agreement allows City staff to participate and help resolve key issues.
- RO Concentrate Management Study to be completed by end of 2018.
- Countywide Water Reuse Master Plan
 - Broader analysis of treated wastewater availability
 - Optimal allocation between potable and non-potable reuse
 - Plan completion by December 2018.
- Engaging concurrently with Sunnyvale and Palo Alto/Mt. View on potable reuse options.

MOU completion timeframe is uncertain

- Program Schedule Implications of Delay
 - Allows full evaluation of options to resolve key MOU issues;
 - Provides additional time to refine Program development.
 - Provides Board opportunity to make decisions on other water supply alternatives.
 - Continued water supply vulnerability.
- Program Cost Implications of Delay
 - Costs will escalate:
 - Inflation
 - Potentially higher interest rates
 - Allows resolution of RO concentrate solution and its costs
 - CIP cost shift—may have smaller annual rate increases for delay period

Reaching Agreement with City – Next Steps

- October 19, 2017 Joint Recycled Water Policy Advisory Committee Meeting
 - Elected officials' discussion of MOU status
 - Is there political will to move forward with purified water expansion at Zanker Road?
- RO concentrate studies and Countywide Master plan to be completed Dec. 2018.