

**File No.:** 18-0385

**Agenda Date:** 6/12/2018

**Item No.:** \*5.1.

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## SUPPLEMENTAL BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Water Supply Master Plan Update.

### **REASON FOR SUPPLEMENTAL MEMORANDUM:**

This report conveys additional information received after the initial report was released, consistent with Executive Limitations Policy EL-7-10-5.

### **RECOMMENDATION:**

- A. Receive and discuss information on alternative water supply strategies;
- B. Receive and discuss stakeholder input on water supply projects and alternative water supply strategies; and
- C. Receive and discuss preliminary cost of shortage analysis as it pertains to the District's water supply reliability level of service goal.

### **SUMMARY:**

This supplemental memorandum provides additional information on capturing Uvas Watershed storm flows in response to Board direction on April 24, 2018, provides an update on Water Conservation and Demand Management Committee input regarding the level of service goal received on April 30, 2018, and discusses how staff plans to address the Board's May 8, 2018 California WaterFix decisions in the water supply planning process.

### **Uvas Watershed Storm Flow Capture**

Staff presented information to the Board on April 24, 2018 regarding the capture of stormflows in the Uvas and Llagas watersheds in response to Board Member Request R-18-0005. Previous studies did not recommend expanding Uvas Reservoir and/or constructing a pipeline for transferring spills from Uvas reservoir to recharge facilities or the Santa Clara Conduit because other options for achieving water supply reliability goals were less expensive and/or more effective. However, the Board's interest extends beyond countywide water supply reliability objectives, so the Board directed staff to return with more information on alternatives for capturing storm flows in the Uvas Watershed. It should be noted that prior studies did not evaluate potential expansion of Chesbro Reservoir due to the frequency and volume of spills at this reservoir being much lower compared to Uvas Reservoir.

The volume of spills that can be captured by non-reservoir facilities is limited by the availability of land in suitable areas. The volume of water that spilled in the Uvas watershed in 2017 (about 103,000 acre-feet) is more than double the combined capacity of Uvas Reservoir, Chesbro Reservoir, and all the South County recharge ponds. It is important to recognize that it takes a lot of land in the right place to capture that volume of stormwater, especially when reservoirs are spilling at high flow rates.

Staff has identified two additional options for capturing storm flows in the Uvas Watershed - headwaters enhancement and agricultural land flooding. Headwaters enhancement involves working with land managers and owners above the reservoir to improve forest and grazing management practices. Potential partners include the Loma Prieta Resource Conservation District and Santa Clara Valley Open Space Authority. The benefits would include increased infiltration and storage of water in soils above the reservoir, enhanced habitat, reduced fire risk, and improved water quality. The improved land management practices may slow the flow of water into the reservoir, helping to reduce spills. Staff plans to propose a pilot project to improve grazing practices in the Coyote Watershed as part of the One Water Plan. This proposal, whose benefits go beyond water supply, could be extended to the Uvas Watershed.

The second additional option would be to focus the agricultural land recharge project in the “No Regrets” package on the Uvas watershed. In this option, storm flows from Uvas Creek would be allowed to flood agricultural lands of willing partners, providing additional recharge and reducing storm flows in the creek. Some of the considerations with this option include:

- Land compatibility: Not all agricultural lands downstream of Uvas Reservoir are suitable for flooding. Crop type and slope are two considerations related to land compatibility.
- Water quality: Storm flows have high turbidity and may require some settling or treatment prior to recharge, which may reduce the net recharge area. An additional, and important, consideration is ensuring adequate groundwater protection since agricultural production often involves the use of fertilizer and/or pesticides that could be conveyed into the groundwater.
- Groundwater conditions: Stormwater recharge needs to be located in areas that provide high water supply benefits. Also, in evaluating potential sites, local groundwater conditions must be considered to avoid creating problems in areas that are subject to shallow groundwater. If groundwater levels are already high, recharge may not be feasible.
- Available acreage: A large piece of land would need to be available in proximity to Uvas Creek.
- Fishery protection: Uvas Creek provides good quality habitat for steelhead. Any stormwater diversions from the creek need to avoid or mitigate for impacts.

Staff recommended the agricultural land recharge project and other stormwater projects in the No Regrets Package in recognition of the multiple benefits that can be associated with slowing and sinking stormwater. While the water supply benefits associated with individual stormwater projects are generally small, the cumulative benefits over time will contribute to water supply reliability and sustainability.

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**Level of Service Goal**

Staff provided the Water Conservation and Demand Management Committee with additional information on the costs and benefits of different levels of service on April 30, 2018. In addition to the information provided in the Board Agenda Memorandum for today's meeting, staff explained to the Committee that the incremental costs of adding projects to the scenarios that meet the interim level of service goal would exceed the benefits of adding additional projects. The Committee observed that a level of service goal in the range of meeting 80 to 85 percent of demands in a drought would strike a balance between stakeholder interests in having a reliable water supply and concerns about overinvesting and rate increases. The Committee also noted that the level of service goal is a policy that directs long-term planning, not an absolute number to which the District must adhere in all conditions.

Staff plans to bring a recommended level of service goal to the full Board in Summer 2018.

**California WaterFix**

The District Board voted to participate in the California WaterFix project on May 8, 2018. The May 8, 2018 decision does not alter the relevance of modeling results presented in the April 10, 2018 Water Supply Master Plan Update Board Agenda Memorandum; in the Water Supply Master Plan Update, scenarios that included California WaterFix assumed project deliveries similar to those used in the analysis of California WaterFix considered by the Board on May 8, 2018.

Moving forward, staff will continue to evaluate different potential outcomes of California WaterFix and other projects, develop a recommended water supply strategy for Board consideration, and develop a monitoring and contingency plan for managing the uncertainty associated with project implementation, demands, climate change, and other risks.

**FINANCIAL IMPACT:**

There is no financial impact associated with discussing the options under consideration.

**CEQA:**

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

**ATTACHMENTS:**

None

**UNCLASSIFIED MANAGER:**

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