



MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors

SUBJECT: Santa Clara Valley Water Commission
Meeting Summary for July 25, 2018

FROM: Santa Clara Valley Water
Commission

DATE: August 14, 2018

This memorandum summarizes agenda items from the meeting of the Santa Clara Valley Water Commission held on July 25, 2018

ACTION ITEMS:

4.1 CLIMATE CHANGE AND SEA LEVEL RISE ADAPTATION – WATER SUPPLY, FLOOD PROTECTION, ECOSYSTEMS

Ms. Rechelle Blank and Ms. Cris Tulloch reviewed the materials as per the agenda item from the following:

SUMMARY:

This item is being presented at the request of the Committee.

BACKGROUND:

As the primary water resources agency for Santa Clara County, the District manages an integrated water resources system that includes the supply of clean, safe water, natural flood protection, and stewardship of streams on behalf of Santa Clara County's 1.9 million residents.

The District's ability to provide those services is challenged by the potential of increasing temperatures, changing precipitation and runoff patterns, increases in extremes, reduced snow pack, and rising sea levels. Managing climate change related uncertainties, vulnerabilities, and risks to water resource management is critical to fulfill the District's mission.

This item updates the Committee on adaptation activities such as: promoting and supporting a resilient and adaptable water supply, reducing flood risks and flood damages, improving ecosystem resiliency, and the development of a Climate Change Action Plan. Staff are presenting an overview of these activities (Attachment 1 Presentation). Attachment 2 provides a detailed list of the adaptive measures, including schedule and status.

1. Activities Related to Water Supply

To address the challenges of an uncertain future and potential risks to water supplies, the District relies on its long-term planning efforts. Long-term planning efforts strive to develop and improve resilient and adaptable water supplies and strategies, while considering changing conditions. The District is currently updating its Water Supply Master Plan. The plan is reviewed annually and updated every five years to evolve to changing conditions. The Water Supply Master Plan Update 2018 builds on Board approved strategies to secure and optimize the use of existing supplies and infrastructure, and to meet future increases in demands with conservation and recycling. Water supply adaptation strategies in the plan include: reducing demand through conservation, increasing potable and nonpotable supplies, securing imported water, and increasing system flexibility. The Water Supply Master Plan will continue to develop elements that adapt well to future climate changes.

In addition to the District's long-term strategies, we are also continually adjusting our water supply and treatment operations to ensure a high quality reliable water supply in the face of near term challenges. These ongoing operations efforts will also be useful in the face of a changing climate. These efforts support water quality, reliability, emergency preparedness, and coordination with municipalities, water retailers and other regional water agencies.

2. Activities Related to Fluvial and Tidal Flood Protection

The District completed coastal flood mapping for various sea level rise (SLR) scenarios and it has been shared with the Cities to help quantify flooding risk. Several projects have already utilized this data in planning and design.

The District continues to participate on the San Francisco Bay Shoreline Project Efforts with the Army Corps of Engineers (Corps). This project is a partnership with the California State Coastal Conservancy, the U.S. Army Corps of Engineers (Corps), and regional stakeholders to provide tidal flood protection, restore and enhance tidal marsh and related habitats, and provide recreational and public access opportunities.

The District also partnered with Colorado State University and NOAA as a part of the Advanced Quantitative Precipitation Information project, funded by State and Federal grants, to expand the national weather radar coverage by installing the first X-Band Radar in the Bay Area on District property. The data will improve real-time precipitation forecasting for use in the District's Flood Forecast and Warning System.

3. Activities Related to Ecosystem Resiliency

The District has multiple restoration and enhancement projects that strive to improve vegetative communities for local wildlife and native plant diversity, increase native canopy cover and carbon dioxide (CO₂) sequestration to reduce climate change effects, increase in-stream shading to lower water temperatures for fish, and enhance habitat connectivity for wildlife migration. These projects utilize adaptive management strategies to more readily address changing climatic conditions in the future.

Current projects that support ecosystem resiliency include the South Bay Salt Pond Restoration Project that will minimize bayfront impacts from sea level rise by providing a wetland buffer and attenuation of high tides.

In addition, the San Francisco Bay Shoreline Project will not only enhance flood protection for our bayfront communities, but also provide improved ecotones and habitat connectivity for wildlife.

The District recently completed all required land preservation for its Stream and Watershed Preservation Program. Over 3,600 acres of upper watershed lands in various parts of Santa Clara County have been protected as a part of this program. Ongoing monitoring and land management activities continue to ensure that the conservation values of the preserved land are maintained.

4. Climate Change Action Plan Development

The District is developing a comprehensive Climate Change Action Plan (CCAP). The CCAP will be a framework and plan to adapt to a changing climate and to further reduce greenhouse gas (GHG) emissions. The adaptation component will look for ways to reduce risks associated with a changing climate, and the GHG reduction element will document and add to existing GHG reduction and carbon neutrality efforts. These two areas will be combined to find strategies that are synergistic between the two and look for conflicts. The CCAP will include proposed and budgeted strategies, and an implementation and monitoring framework, which includes periodic review and updates to the CCAP. The CCAP is scheduled to be complete by June 30, 2019.

No action was taken.

If you have any questions or concerns, you may contact me at, gbrambill@valleywater.org or 1.408.630.2408.

Thank you.

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