



# Santa Clara Valley Water District

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**File No.:** 21-1188

**Agenda Date:** 1/25/2022

**Item No.:** 6.1.

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## BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Adopt the One Water - Santa Clara Countywide Framework and the One Water - Coyote Creek Watershed Plan, and Direct Staff to Provide a One Water Monitoring Update in 2027.

### **RECOMMENDATION:**

- A. Adopt the One Water - Santa Clara Countywide Framework;
- B. Adopt the One Water - Coyote Creek Watershed Plan; and
- C. Direct staff to provide a One Water monitoring update in 2027.

### **SUMMARY:**

One Water is Santa Clara Valley Water District's (Valley Water) comprehensive, long-range planning process for watershed management, implementing Board Governance Ends Policy E-1.1: *An integrated, socially equitable, and balanced approach in managing a sustainable water supply, effective natural flood protection, and healthy watersheds is essential to the future of all communities served.*

#### One Water - Santa Clara Countywide Framework

The One Water Santa Clara Countywide Framework (Framework) defines a decision-making process to strategically allocate limited resources to actions that best achieve Valley Water's mission and service to the community. The Framework (Attachment 2, Framework executive summary, and Attachment 3, Framework full report) provides a standardized approach to compare competing and complementary water resources functions, measure watershed habitat and flood risk reduction levels of service, and incorporate future water utility level of service goals. The Framework was developed with extensive stakeholder input from local agencies, organizations, and community groups, as well as state and federal input from resources agencies. It provides guidance to be applied at the watershed scale, and establishes a vision, goals, and measurable objectives.

The One Water vision is to *Manage Santa Clara County water resources holistically and sustainably to benefit people and the environment in a way that is informed by community values.* Aligning with Valley Water's three mission areas, three goals are identified to accomplish this vision: Reliable Water Supply, Improved Flood Protection, and Healthy and Resilient Ecosystems. Five measurable objectives covering the major aspects of Valley Water's work, each with a series of attributes and corresponding metrics, provide a data-driven approach to prioritizing projects to achieve the three

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goals. Metrics are based on best available science and link to existing and ongoing monitoring protocols for water supply, water quality, flood risk reduction, ecological health, and climate change mitigation/adaptation. For each metric, a baseline condition is determined, and a target is established. Priority actions are then identified and recommended (through operations planning or the capital improvement program processes) to ensure progress towards established targets. Progress towards the One Water Objectives is measured primarily on a watershed scale or more broadly if appropriate, such as for water supply, groundwater, and some climate change metrics.

#### Integrated Approach to Flood and Stewardship Improvements

The One Water Countywide Framework incorporates existing water supply planning and updated flood risk and habitat health assessments, guiding the development of individual watershed plans which will function as integrated flood management and stream stewardship master plans for each major watershed.

#### Updated Flood Risk Reduction Approach

Since 1984, flood protection projects have been prioritized based on Valley Water's Waterways Management Model, a computer model for managing facilities and streams for flood damage reduction. This model primarily emphasizes the economic benefits of reduced flood damages plus additional factors such as protecting developed areas, rehabilitating previously constructed facilities, protecting historical flood areas, reducing flood insurance costs, encouraging multi-purpose use of lands, and reducing maintenance costs. While these are important factors, community input, lessons learned over the past few decades of watershed operations, newly available tools for hydrologic and hydraulic modeling, and recent flood impacts to the community, have brought to light additional important factors to consider when prioritizing flood management activities.

The updated approach to flood risk assessment, which aligns with the revised Board Governance Ends Policy E-3, Natural Flood Protection, continues to include the economic benefits of reduced flood risks, but it incorporates new factors:

- Maintenance-first approach (ensuring that existing infrastructure continues to provide the designed level of service)
- Community health and safety based on risk factors like depth and velocity of flooding
- Actual flood frequency (areas of repeated flooding or "hot spots") over the period of record
- Social vulnerability (e.g. disadvantaged communities) of the community at elevated flood risk
- Number of buildings and critical infrastructure subject to flooding (rather than solely the number of parcels)

Considering these additional factors will create a flood management program that better serves all communities. For example, this updated approach is anticipated to prioritize creek reaches in need of improvement based on frequency and severity of flood risk, with less emphasis purely on economic damages based on a 1% flood. Flood concerns that may have previously been considered a lower priority have a higher likelihood of being investigated, modeled and potentially recommended for further action. These priorities will be evaluated

per watershed and will be compared across the county once all five watershed plans are complete.

#### Updated Stewardship Approach

One Water also includes new direction for prioritizing environmental stewardship actions by shifting a focus from single species to habitats, or natural communities. Using natural communities as the basis for identifying and prioritizing stewardship projects will lead to more resilient improvements for all species, including special-status species. One Water also incorporates new studies (e.g. Stevens Creek Fish passage study and county-wide gravel and large wood augmentation studies), new plans (e.g. Stevens Creek Stream Corridor Priority Plan, Coyote Valley Water Resource Investment Strategy), and new tool development (e.g., Coyote Creek Native Ecosystem Enhancement Tool) to improve our understanding of resources and more effectively prioritize investments to further Valley Water's stewardship mission.

#### One Water - Coyote Creek Watershed Plan

The Framework's vision, goals, and measurable objectives are being applied first to Coyote Creek (Attachment 4, Coyote Creek executive summary, and Attachment 5, Coyote Creek full report). The resulting Watershed Plan will be followed for the Guadalupe, Upper Pajaro, West Valley, and Lower Peninsula watershed areas. The watershed plans follow a clear development path that includes the following seven steps: 1) consider watershed history; 2) establish a baseline of current water resources services; 3) analyze challenges and constraints in the context of One Water goals and objectives; 4) identify opportunities with related metrics; 5) set priorities to best achieve targets; 6) take action; and 7) report and monitor activities and conditions along with progress toward meeting targets.

#### Coyote Creek Watershed Priority Actions

To identify priority actions for the 350 square-mile Coyote Creek Watershed, six subwatersheds were differentiated to highlight the differences in land use, topography, and water resource challenges. Focused planning, or case studies, was conducted to meet the most immediate challenges in three subwatersheds: Upper Penitencia Creek, Upper Coyote Valley, and Coyote Creek mainstem. The Upper Penitencia Creek Case Study was developed through a stakeholder visioning process in partnership with the San Francisco Estuary Institute, and identifies actions to reduce flood risk and enhance aquatic and riparian habitat. The Coyote Valley Case Study was conducted as a partnership with Santa Clara Valley Open Space Authority and identified potential water supply, flood, and stewardship actions. To address habitat degradation in the mainstem of Coyote Creek, the Coyote Creek Native Ecosystem Enhancement Tool (CCNEET) was developed. CCNEET is GIS-based tool that integrates many different data layers to identify aquatic and riparian habitat enhancement actions at a fine scale.

Over 300 potential actions were identified through focused planning and internal and external stakeholder input. Through a process of review, compilation, and vetting, this list was reduced to approximately 100 actions and finally prioritized to 29 current, short term and long-term actions which best address the Coyote Creek watershed's management objectives; improve community health,

safety, and flood readiness; and benefit environmental justice/disadvantaged communities.

Coyote Creek Watershed priority actions (Attachment 6) include 17 actions with multiple benefits, 5 benefiting water supply, 11 benefiting water quality, 18 benefiting flood protection, 19 benefiting environmental stewardship, and 2 benefiting climate change mitigation and adaptation. Six projects are currently underway, 15 are considered short term actions (will or could be completed in next 5 to 10 years), and 8 are considered long term actions (could be completed in the next 10 to 50 years, with some interim improvements possible). Key projects include the Anderson Dam Seismic Retrofit Project, Upper Penitencia Flood Protection Project - Coyote Confluence up to Hwy 680, Upper Penitencia Creek Flood Protection Project - Hwy 680 to Dorel Drive (including options for areas upstream of Alum Rock Park), Coyote Valley protection, enhancement, and restoration, and Enhance Riparian and Aquatic Habitat along Middle and Upper Coyote Creek.

#### Next Steps

Upon Board adoption of the One Water Countywide Framework and Coyote Creek Watershed Plan, staff would begin tracking actions already underway against identified targets, incorporating new priority actions into operating and capital improvement project planning, seeking grant funding, and enter into partnerships to implement additional priority actions. In addition, staff would continue watershed planning for Upper Pajaro River Watershed and Guadalupe River Watershed in Fiscal Year 2022, followed by West Valley and Lower Peninsula Watershed plans in Fiscal Year 2023.

The One Water watershed plans will be considered living documents. As such, staff plan to update them on a five-year rolling cycle. Since the Coyote Watershed Plan is the first to be completed in 2022, the first monitoring update will be presented in 2027. Through this process, staff will work to ensure consistency and incorporation of relevant updates from other regularly updated plans such as Safe, Clean Water and Natural Flood Protection Program, 5-year Operations and Maintenance Plan, 5-year Capital Improvement Plan, and Water supply Master Plan.

#### **ENVIRONMENTAL JUSTICE IMPACT:**

Staff has identified the following potential impacts and benefits of the One Water - Santa Clara Countywide Framework and One Water - Coyote Creek Watershed Plan:

- Santa Clara County residents: Benefits to all residents in Santa Clara County, including those in disadvantaged or underrepresented communities, include a more transparent process for how priority actions are identified and selected for implementation.
- Coyote Creek Watershed residents: Benefits to residents of Coyote Creek Watershed have included an extensive stakeholder engagement process, a transparent process for identifying priority actions, and a new way to conduct flood risk reduction assessments, with a focus on health and safety and equitable flood protection.

#### **FINANCIAL IMPACT:**

Sufficient funding for future One Water planning is included in the FY2022 budget and will be

included in future year budgets. There is no financial impact associated with adopting the Framework and Coyote Creek Watershed Plan, as funding for priority actions would be approved as a part of appropriate capital or operating budget processes.

**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:**

Attachment 1: PowerPoint  
Attachment 2: One Water - Countywide Framework Exec Summary  
Attachment 3: One Water - Countywide Framework  
Attachment 4: One Water - Coyote Creek Watershed Exec Summary  
Attachment 5: One Water - Coyote Creek Watershed Plan  
Attachment 6: One Water - Coyote Creek Watershed Priority Actions

**UNCLASSIFIED MANAGER:**

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