



Santa Clara Valley Water District

File No.: 18-0367

Agenda Date: 5/23/2018

Item No.: 2.4.

BOARD AGENDA MEMORANDUM

SUBJECT:

Draft 5-Year Implementation Plan for Fiscal Years 2019-2023 for the Safe, Clean Water and Natural Flood Protection Program.

RECOMMENDATION:

- A. Approve the proposed schedule adjustment to one project in the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water);
- B. Approve the proposed text adjustments to specific projects in the Safe, Clean Water Program;
- C. Approve the Flood Protection Key Performance Indicator (KPI) Selection Process; and
- D. Provide direction to staff on the draft 5-Year Implementation Plan (draft 5-Year Plan) for Fiscal Years 2019-2023 (FYs 19-23) for the Safe, Clean Water Program.

SUMMARY:

On November 6, 2012, voters approved the Safe, Clean Water program as a countywide special parcel tax for 15 years with a sunset date of June 30, 2028. This program replaced the District's Clean, Safe Creeks and Natural Flood Protection Plan, which was a special parcel tax approved in November 2000. Remaining funds collected during the first measure were transferred to the new parcel tax fund for projects in the Safe, Clean Water program. The Program addresses the following needs, values, and priorities as identified by Santa Clara County stakeholders:

Priority A: Ensure a safe, reliable water supply

Priority B: Reduce toxins, hazards and contaminants in our waterways

Priority C: Protect our water supply from earthquakes and natural disasters

Priority D: Restore wildlife habitat and provide open space

Priority E: Provide flood protection to homes, businesses, schools,
and highways

Safe, Clean Water Program Project Schedule Adjustment

As per the Safe, Clean Water Program's Change Control Process (approved by the Board on April 26, 2016), the Board may approve adjustments to the project schedules. Staff recommends approval of the proposed schedule adjustment shown below, which is incorporated into the draft 5-Year Plan for FYs 19-23. The draft 5-Year Plan also includes the project schedule adjustments approved by the Board on April 10, 2018, during the agenda item to discuss the annual Capital Improvement Program

Progress Report and Budget Adjustment and Adoption processes.

Clean, Safe Creeks Grants Projects

During the Clean, Safe Creeks tenure, 22 projects were awarded grants. Pursuant to the grant agreements, all were to have been completed by the end of FY18, however, two agreements were amended to extend their terms until the end of calendar year 2018. To allow staff to manage and close-out these two extended grant agreements, staff recommends adjusting the Clean, Safe Creeks Grants Project completion date from FY18 to FY19.

Safe, Clean Water Program Text Adjustments

As per the Safe, Clean Water Program's Change Control Process, staff recommends approval of the proposed text adjustments to several projects as shown in red font below, which are incorporated into the draft 5-Year Plan for FYs 19-23.

Project B1: Impaired Water Bodies Improvement

Sections: Benefits

Justification: Text adjustments to clarify the project benefits.

Adjusted text:

- Reduces contamination in creeks and reservoirs
- Improves water quality, including water going to drinking water treatment plants
- **Aims to r**Reduces **methy**lmercury in reservoirs to prevent its entry into the food web
- **Aims to i**mproves **fisheries ecosystem health** by reducing mercury contamination **in fish and other biota**
- Supports regulatory compliance of TMDL standards affecting District operations

Project E1: Vegetation Control and Sediment Removal for Flood Protection

Section: Project description

Justification: Text adjustments to clarify the type of tree removal work and type of maintenance activities.

Adjusted text: This project supports the District's ongoing vegetation control and sediment removal activities that reduce flood risk by maintaining design **flow** conveyance capacity of flood protection projects. These activities also provide access for maintenance personnel and equipment. The project includes: controlling in-stream vegetation growth, removing sediment at appropriate intervals, removing **hazardous** trees, and performing weed abatement and pruning to provide **maintenance** access and establish firebreaks. Before carrying out **in-stream** maintenance **activities**, District personnel perform biological pre-construction surveys to minimize environmental impacts. Allocations for Project E1 also helps fund future maintenance of flood protection projects completed under the Safe, Clean Water program.

This project is comprised of 4 sub-projects that support the District's ongoing vegetation control and sediment removal activities. Reference Appendix B in the 5-Year Implementation Plan for project descriptions.

These sub-projects are:

E1.1 Vegetation Control for Capacity

E1.2 Sediment Removal for Capacity

E1.3 Maintenance of Newly Improved Creeks

E1.4 Vegetation Management for Access

Project E2: Emergency Response Planning

Section: Project description

Justification: Text adjustments to clarify the District's role and clarify the term "flood-fighting strategies."

Adjusted text: This project allows the District to work with local municipalities to clearly identify roles and responsibilities for floodplain management and flood emergency management **and increase awareness of the District's flood response procedures**. The project supports countywide emergency response and preparedness activities, develops communication procedures and disseminates web-based flood forecasting information developed under Project C2, Emergency Response Upgrades. Collaborators also develop formal, site-specific **flood response procedures or action plans** (flood-fighting strategies), and coordinate outreach throughout the county so that the public receives uniform flood warning messages.

This project is comprised of 2 sub-projects that support the District's ongoing emergency response planning. Refer to Appendix B in the 5-Year Implementation Plan for project descriptions. These sub-projects are:

E2.1 Coordination with Local Municipalities on Flood Communication

E2.2 Flood-Fighting Action Plans

Project E3: Flood Risk Reduction Studies

Sections: Project description and Geographic Area of Benefit

Justification: Text adjustments to update the reaches that will be studied and update the Geographic Area of Benefit accordingly. In the first five years of the Program, staff was able to identify 2 additional reaches to study, listed below. This brings the total identified reaches to 6 out of the 7 reaches

Adjusted text:

required to meet KPI #1.

Description:

This project develops engineering studies to understand the actual flood risk in high priority flood-prone areas and develops options for managing the flood risks.

Studies will focus on the following reaches:

- Alamitos Creek upstream of Almaden Lake in San José
- Rock Springs neighborhood along Coyote Creek in San José
- Calera Creek near Milpitas High School to Interstate 680 in Milpitas
- Tributaries to Lower Silver Creek (Ruby, Norwood, Quimby and Fowler creeks) in San José
- **Ross Creek in San Jose, from Guadalupe River to Blossom Hill Road**
- **Adobe and Barron Creeks in Palo Alto, between Highway 101 and Middlefield Rd.**

The study includes hydrology, hydraulics, geotechnical and remapping work of the floodplain areas. If appropriate, updated maps will be submitted to Federal Emergency Management Agency (FEMA) to provide a more accurate reflection of the floodplain.

Geographic Area of Benefit: ~~Milpitas and San José~~ **Countywide**

Coyote Creek Flood Protection**Section:**

Benefits

Justification:

Text adjustment to clarify the recreational benefit.

Adjusted text:

- Implements short-term flood relief solutions
- Provides flood risk reduction for approximately 1,000 parcels from the level of flooding that occurred on February 21, 2017, approximately a 20 to 25 year flood event, when the entire project from Montague Expressway to Tully Road is constructed
- Improves water quality, enhances stream habitat and **provides for**

recreational opportunities

- Incorporates revegetation and aesthetic elements of the Coyote Creek park chain in the project

Priority E: Provide Flood Protection to Homes, Businesses, Schools and Highways

Section: Priority description

Justification: Text adjustment to incorporate the IMC recommendation from their FY17 report to highlight the multi-benefit approach to flood protection projects.

Adjusted text: Flood protection measures under Priority E include capital construction projects, studies of flood prone areas, maintenance of existing flood protection channels and improvements to emergency planning for flood response.

Flood protection capital projects are prioritized to protect the largest number of people, homes and businesses, as well as safeguard the highways, streets, public transportation and business centers that people depend on for their livelihoods. **At every opportunity, the District takes a multi-benefit approach to flood protection projects, which includes incorporating water quality, water supply, environmental stewardship, and recreational enhancement benefits.**

All the construction projects under Priority E are undertaken in partnership with the federal government, and will require federal funding in addition to local funding to complete the preferred scope. Should federal funding become scarce, a reduced scope would be implemented, as described in the individual project summaries.

Whenever possible, the District also leverages funds from the state, local municipalities and other stakeholders.

Flood Protection Key Performance Indicator (KPI) Selection Process

Staff recommends approval of the Flood Protection KPI Selection Process described below, which is incorporated into the draft 5-Year Plan. This process updates and clarifies the Federal and State Partnerships description in the original Program Report, as shown in red font below. As per the Safe, Clean Water Program's Change Control Process, staff recommends approval of the adjusted text in the Federal and State Partnerships description.

Flood Protection KPI Selection Process

As described in the original Program Report, the Safe, Clean Water Program leverages state and federal dollars to complete work that local funding alone cannot support. Capital projects for flood protection and infrastructure upgrades are expected to leverage more than \$400 million in state and federal funds to supplement local funding from the renewed tax. State and federal participation are critical for the full implementation of the following capital projects:

- Project E4: Upper Penitencia Creek Flood Protection
- Project E5: San Francisquito Creek Flood Protection
- Project E6: Upper Llagas Creek Flood Protection
- Project E7: San Francisco Bay Shoreline Protection
- Project E8: Upper Guadalupe River Flood Protection
- Berryessa Creek Flood Protection

With the exception of Project E7, ~~for which the District is a minor partner in a larger state/federal project,~~ the Program defines 2 15-year KPIs for each of these capital projects: one for the preferred federally-funded project, and another for the local-only option. ~~Descriptions of both options are provided in section four of this report.~~ (Note, for Project E7, the 2 KPIs focus on the different Economic Impact Areas rather than the different levels of flood protection based upon funding sources.)

~~To address a recommendation from the Independent Monitoring Committee (IMC), a process was developed for the Board to decide if/when a project proceeds without federal funding when the local-funding-only option has become a more viable choice.~~

~~In summary, the Flood Protection KPI Selection Process is triggered at the point when the U.S. Army Corps of Engineers (USACE) determines there is no longer a Federal interest in the project. Once this determination is made, District staff will prepare an item for a Board agenda meeting presenting the Board with the USACE's rationale for why they are no longer interested in the project and requesting authorization to move forward with the local-funding-only project KPI. The District will inform project stakeholders about the recommended action in advance of the Board meeting and of the Board's decision after the Board meeting.~~

~~Each year, the District Board would review the status of anticipated federal and state funding and decide if the local-only option has become a more viable choice.~~

~~Because funding from federal and state sources has not been as reliable in recent years compared to previous decades, this Program will strategically assess progress and forecasts regarding continued partnerships and funding. Any changes made to the Safe, Clean Water pP program will be evaluated and approved by the Board following the Change Control Process. would take place in publicly noticed, open hearings.~~ As state and federal partnerships continue to evolve, each 5-Year Plan would include updated strategic direction for these partnered projects that depend on outside funding.

Draft 5-Year Implementation Plan (draft 5-Year Plan) for Fiscal Years 2019-2023 (FYs 19-23) for the Safe, Clean Water Program

The draft 5-Year Plan for FYs 19-23 is the second of three consecutive 5-Year Plans required by the Safe, Clean Water Program. The 5-Year Plan is a planning document that describes the work to be accomplished, as well as clarifies roles and responsibilities for implementing, measuring, monitoring and directing the Safe, Clean Water projects. To keep the commitment made to voters, the 5-Year

Plan is prepared consistent with ballot language and the original Program Report. The 5-Year Plan is a living document that is updated each year to include project adjustments and modifications, and incorporate recommendations from the IMC, Board of Directors and independent performance audits.

While the 5-Year Plan is a forward-looking document for the Program, the annual reports capture the Program activities from each previous year, including each year's accomplishments and further details about each project. The draft 5-Year Plan includes placeholders for the Program's financial information. The financial information will be included in the final version of the 5-Year Plan which will be presented to the Board on June 26, 2018.

The 5-Year Plan for FYs 19-23 includes:

- Adjustments and modifications approved by the Board through the Change Control Process to date.
- Recommendations and management responses from the FY17 Independent Performance Audit and the IMC to date.
- Improved 5-Year Targets for each project to reflect key deliverables required over the next 5 years to meet the 15-year KPIs.
- Two new appendices (H and I), which show the projects by organization structure and by District mission areas, respectively.
- Enhanced and refined Implementation Strategies and Roles and Responsibilities sections to reflect the processes and practices of the first 5 years of the Program.
- Addition of financial tables for each project and tabs throughout.

Project Highlights

This Program combines the main operational areas of the District in water supply, flood protection, and stewardship and represents an integrated approach to project delivery. Many of the Safe, Clean Water projects are inter-related and are designed to work together to maximize the benefit to the community.

In FY14-18, the District completed one of its capital flood protection projects (Calabazas Creek Flood Protection) and began constructing four more (San Francisquito Creek, Permanente Creek, Berryessa Creek, and Upper Guadalupe River). The 8 projects with annual KPIs continue to be on target and deliver the services promised to the community each year (Impaired Water Bodies Improvement, Interagency Urban Runoff Program, Encampment Cleanup, Hazardous Materials Management and Response, Remove Graffiti and Litter, Support Volunteer Cleanup Efforts and Education, Management of Revegetation Projects, and Vegetation Control and Sediment Removal for Flood Protection).

Key highlights from the Safe, Clean Water Program's FY14-18 accomplishments consistent with the District's core mission areas include:

Water Supply

- *Main Avenue and Madrone Pipelines Restoration:* Construction began in FY18 and is scheduled to be completed in FY19. Once completed, this project will increase our groundwater recharge by about 2,000 acre feet per year and maximize the delivery of imported water to treatment plants supplying drinking water to North County.
- *Water to Go (Hydration Station) Grant Program:* Completed KPI #2 of the Safe, Clean Water Partnerships and Grants project in FY18 by funding grants for 50 bottle filling stations to help schools provide safe, clean drinking water to students and comply with the state mandate, SB 1413, and the Healthy Hunger-Free Kids Act. KPIs #1 and #3 (Water Conservation Grants and Nitrate Treatment System Rebate Program) will be completed in the next 5 years.

Flood Protection

- *Calabazas Creek Flood Protection Project:* In 2014, the District completed this project, which provides 1% flood protection to more than 2,400 parcels in Saratoga, San José and Cupertino.
- *San Francisquito Creek Flood Protection Project:* Construction of the San Francisco Bay to Highway 101 reach of the project began in FY16 and is targeted for completion in FY19. The reach upstream of Highway 101 is in the planning and design phase, with construction of the local-state-funding only project planned for completion by FY21. Once completed, this reach will protect approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record.
- *Permanente Creek Flood Protection Project:* Construction of the Rancho San Antonio and McKelvey Park detention sites and channel improvements began in FY17 and are on target for completion by FY19. Once completed, this project will provide 1% flood protection to approximately 1,664 parcels in Mountain View and Los Altos.
- *Berryessa Creek Flood Protection Project:* Channel construction work was completed in FY18 and the final phase of the bridge replacement project is scheduled for completion in FY19, one year ahead of the current project schedule. Once completed, this project will provide 1% flood protection to approximately 1,662 parcels in Milpitas and San José.
- *Coyote Creek Flood Protection Project:* After the project was modified in FY17 to extend the project reach to Tully Road, the District identified and constructed a short-term flood relief solution for the Rock Springs neighborhood prior to the 2017-2018 winter season. Once completed, the preferred project will provide flood protection for approximately 1,000 parcels in San José from the level of flooding that occurred on February 21, 2017.

Stewardship

- *Evelyn Bridge Fish Passage Project:* As part of KPI #3 of the Fish Habitat and Passage Improvement Project (Project D4), the District completed construction of the Evelyn Bridge Fish Passage Project within Stevens Creek in FY16. The Project removed 2 drop structures,

thereby increasing the sediment transport rates through the series of bridges and creating a sustainable low flow channel for fish passage. In the next 5 years, multiple milestones for Project D4 are expected, including the Almaden Lake creek/lake separation project and Bolsa Fish Passage Improvements, which are scheduled to complete design and be ready for construction.

- *Trash Removal Projects:* Of the 7 projects in Priority B, five include trash removal components, with the goal of reducing and removing contaminants in our local creeks, streams and bay. This work is accomplished not only by the District, but with the help of volunteers and grantees alike. In the first four years of the Safe, Clean Water Program, the District recorded that approximately 4,182 tons of trash were removed from our waterways.
- *Safe, Clean Water Stewardship Grants:* In the first four years of the Safe, Clean Water Program, through Priorities A, B and D, the District awarded more than \$7.6 million in grant funding toward project costs exceeding \$14 million. These dollars went to local grantees for projects addressing issues such as water conservation, water quality, green initiatives, storm water pollution reduction, storm water quality, trash removal and reduction along our waterways, restoring wildlife habitat, and providing access to trails. The Board of Directors also approved \$200,000 for a Pilot Mini-Grant Program that launched in FY18.

Along with the projects listed above, these projects are scheduled to be completed in the next 5 years: Emergency Response Upgrades, Creek Restoration and Stabilization, Flood Risk Reduction Studies, Upper Llagas Creek Flood Protection, Sunnyvale East and Sunnyvale West Channels Flood Protection, and the Clean, Safe Creeks Grants Projects.

Program Implementation Highlights

In addition to the multiple project milestones the District accomplished during the first 5 years of the Program, from FY14-18, the District also improved the Safe, Clean Water Program implementation to ensure transparency and accountability to the community we serve. The Program implementation improvements included the following:

- *Change Control Process:* A process was developed to track and approve adjustments to project text and schedules, and modifications to any project key performance indicator (KPI).
- *Flood Protection KPI Selection Process:* The flood protection capital projects include KPIs that allow for local-funding-only and preferred projects, which require federal funding. To address a recommendation from the IMC, a process was developed to decide if/when a project proceeds without federal funding.
- *Independent Performance Audit Recommendations:* In FY17, the District completed the first of 2 independent performance audits of the Program and provided recommendations for the District's consideration. The District Management Response document addressed each recommendation. The audit recommendations and management response can be accessed at

<https://www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection->

- *Independent Monitoring Committee (IMC) Recommendations:* Each year, the IMC reviews the Program annual report and makes recommendations to the Board of Directors. Of the Board-approved IMC recommendations, 100% were incorporated into the Program. The IMC recommendations can be accessed at <https://www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection->
- *Office of External Affairs:* The Board of Directors approved the creation of the Office of External Affairs in FY16 to centralize the management of the Safe, Clean Water Program's grant funding opportunities and volunteer programs. This reorganization increased the efficiency of project implementation and improved customer service to our community.

Next Steps

Staff plans to present the final 5-Year Plan to the Board on June 26, 2018. Once approved by the Board and finalized, the 5-Year Plan will be made available to the public on the District's website at <https://www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program/safe-clean-water-program-archive>.

FINANCIAL IMPACT:

The draft 5-Year Implementation Plan is produced and printed internally and budgeted to the Safe, Clean Water Implementation Project (26061012).

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: Draft 5-Year Implementation Plan, FYs 19-23
Attachment 2: PowerPoint

UNCLASSIFIED MANAGER:

Ngoc Nguyen, 408-630-2632