



Santa Clara Valley Water District Board of Directors Meeting

Teleconference Zoom Meeting

***AMENDED/APPENDED CLOSED SESSION & REGULAR MEETING AGENDA**

**Tuesday, September 28, 2021
4:00 PM**

***ITEMS AMENDED AND/OR APPENDED SINCE THE ORIGINAL PUBLICATION OF THIS AGENDA
ARE IDENTIFIED BY AN ASTERISK (*) HEREIN**

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

DISTRICT BOARD OF DIRECTORS
Tony Estremera, Chair - District 6
Gary Kremen, Vice Chair - District 7
John Varela - District 1
Barbara Keegan - District 2
Richard P. Santos - District 3
Linda J. LeZotte - District 4
Nai Hsueh - District 5

During the COVID-19 restrictions, all public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body, will be available to the public through the legislative body agenda web page at the same time that the public records are distributed or made available to the legislative body, or through a link in the Zoom Chat Section during the respective meeting. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to participate in the legislative body's meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

RICK L. CALLENDER, ESQ.
Chief Executive Officer

MICHELE L KING, CMC
Clerk of the Board
(408) 265-2600
Fax (408) 266-0271
www.valleywater.org

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

Santa Clara Valley Water District

Board of Directors

***AMENDED/APPEDED AGENDA**

***ITEMS AMENDED AND/OR APPEDED SINCE THE ORIGINAL PUBLICATION OF THIS AGENDA
ARE IDENTIFIED BY AN ASTERISK (*) HEREIN**

Tuesday, September 28, 2021

4:00 PM

Teleconference Zoom Meeting

IMPORTANT NOTICES

This meeting is being held in accordance with the Brown Act as currently in effect under the State Emergency Services Act, the Governor's Emergency Declaration related to COVID-19, and the Governor's Executive Order N-08-21 issued on June 11, 2021 that allows attendance by members of the Board of Directors, District staff, and the public to participate and conduct the meeting by teleconference, videoconference, or both.

In accordance with the requirements of Gov. Code Section 54954.3(a), members of the public wishing to address the Board/Committee at a video conferenced meeting, during public comment or on any item listed on the agenda, should use the "Raise Hand" tool located in Zoom meeting link listed on the agenda, at the time the item is call. Speakers will be acknowledged by the Board Chair in the order requests are received and granted speaking access to address the Board.

Santa Clara Valley Water District (District), in complying with the Americans with Disabilities Act (ADA), requests individuals who require special accommodations to access and/or participate in District Board meetings to please contact the Clerk of the Board's office at (408) 630-2711, at least 3 business days before the scheduled District Board meeting to ensure that the District may assist you.

This agenda has been prepared as required by the applicable laws of the State of California, including but not limited to, Government Code Sections 54950 et. seq. and has not been prepared with a view to informing an investment decision in any of Valley Water's bonds, notes or other obligations. Any projections, plans or other forward-looking statements included in the information in this agenda are subject to a variety of uncertainties that could cause any actual plans or results to differ materially from any such statement. The information herein is not intended to be used by investors or potential investors in considering the purchase or sale of Valley Water's bonds, notes or other obligations and investors and potential investors should rely only on information filed by the District on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System for municipal securities disclosures and Valley Water's Investor Relations website, maintained on the World Wide Web at https://emmas.msrbo.org/ and <https://www.valleywater.org/how-we-operate/financebudget/investor-relations>, respectively.

Under the Brown Act, members of the public are not required to provide identifying information in order to attend public meetings. Through the link below, the Zoom webinar program requests entry of a name and email address, and Valley Water is unable to modify this requirement. Members of the public not wishing to provide such identifying information are encouraged to enter "Anonymous" or some other reference under name and to enter a fictional email address (e.g., attendee@valleywater.org) in lieu of their actual address. Inputting such values will not impact your ability to access the meeting through Zoom.

Join Zoom Meeting:

<https://valleywater.zoom.us/j/88549986572>

Meeting ID: 8854 998 6572

Join by Phone:

1 (669) 900-9128, 88549986572#

1. CALL TO ORDER:

1.1. Roll Call.

2. TIME CERTAIN:

4:00 PM

Notice to the Public: The Board of Directors meets in Closed Session in accordance with the Ralph M. Brown Act. Following the conclusion of Closed Session discussion, the Board will return for the remaining items on the regular meeting agenda.

2.1. CLOSED SESSION

[21-0973](#)

THREAT TO PUBLIC SERVICES OR FACILITIES

Pursuant to Government Code Section 54957(a)

Consultation with Alex Gordon, Assistant Officer

2.2. CLOSED SESSION

[21-1027](#)

CONFERENCE WITH LABOR NEGOTIATORS

Pursuant to Government Code Section 54957.6(a)

Agency Designated Representatives: Rick Callender, J. Carlos Orellana, Brian Hopper, Tina Yoke, Edward Kreisberg, Ingrid Bella, Bryant Welch, Laura Harbert, Emily Meeks

Employee Organizations: Employees Association, Engineers Society, Professional Managers

2.3. CLOSED SESSION

[21-1028](#)

CONFERENCE WITH LEGAL COUNSEL INITIATION OF LITIGATION

Government Code Section 54956.9(d)(4)

One Potential Case

Rejoin Zoom Meeting:

<https://valleywater.zoom.us/j/88549986572>

Meeting ID: 8854 998 6572

Join by Phone:

1 (669) 900-9128, 88549986572#

6:00 PM

2.4. District Counsel Report on Closed Session.

2.5. Pledge of Allegiance/National Anthem.

2.6. Orders of the Day.

A. *Approximate Discussion Time (Board); and*

B. *Adjustments to the Order of Agenda Items.*

2.7. Time Open for Public Comment on any Item not on the Agenda.

Notice to the public: Members of the public who wish to address the Board on any item not listed on the agenda should access the "Raise Hand" tool located in Zoom meeting link listed on the agenda. Speakers will be acknowledged by the Board Chair in order requests are received and granted speaking access to address the Board. Speakers comments should be limited to three minutes or as set by the Chair. The law does not permit Board action on, or extended discussion of, any item not on the agenda except under special circumstances. If Board action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Board may take action on any item of business appearing on the posted agenda.

- 2.8. Public Hearing on the Engineer's Report and CEQA Exemption Determination for the Santa Teresa Water Treatment Plant Filter Media Replacement Project, Project No. 93284013, (Santa Clara County, District 7).

[21-0937](#)

- Recommendation:
- A. Conduct a Public Hearing on the Engineer's Report and the CEQA Exemption Determination for the Santa Teresa Water Treatment Plant Filter Media Replacement Project (Project);
 - B. Close the Public Hearing;
 - C. Approve the CEQA Exemption Determination for the Project;
 - D. Adopt Resolution APPROVING THE ENGINEER'S REPORT FOR THE SANTA TERESA Water Treatment Plant FILTER MEDIA REPLACEMENT Project; and
 - E. Approve the Project.

Manager: Heath McMahon, 408-630-3126

Attachments: [Attachment 1: Notice of Exemption](#)
[Attachment 2: Engineer's Report](#)
[Attachment 3: Public Hearing Notice](#)
[Attachment 4: Resolution](#)
[Attachment 5: Project Delivery Process Chart](#)
[Attachment 6: PowerPoint](#)

Est. Staff Time: 5 Minutes

3. CONSENT CALENDAR: (3.1 -*3.2) (Est. Time: 5 Minutes)

Notice to the public: There is no separate discussion of individual consent calendar items. Recommended actions are voted on in one motion. If an item is approved on the consent vote, the specific action recommended by staff is adopted. Items listed in this section of the agenda are considered to be routine by the Board, or delegated to the Board Appointed Officers (BAOs) yet required by law or contract to be Board approved (EL-7.10). Any item may be removed for separate consideration at the request of a Board member. Whenever a resolution is on the consent calendar, a roll call vote will be taken on the entire calendar. Members of the public wishing to address the Board on any consent items should submit a request to speak to the Clerk of the Board.

- 3.1. Approve Recommended Positions on Federal Legislation: H.R. 1563 (Garcia) - To Extend the Authorities Under the Water Infrastructure Improvements for the Nation Act of 2016 Providing the Operational Flexibility, Drought Relief, and Other Benefits to the State of California; H.R. 2895 (Peters)/S. 1499 (Warner) - Reinventing Economic Partnerships And Infrastructure Redevelopment Act (REPAIR) Act; H.R. 3282 (McKinley) - Drinking Water Funding for the Future Act of 2021; H.R. 3228 (Velazquez) - National Coastal Resilience Data and Services Act; and Other Legislation That May Require Urgent Consideration for a Position by the Board. [21-0958](#)

Recommendation: A. Adopt a position of "Support" on H.R. 1563 (Garcia) - To extend the authorities under the Water Infrastructure Improvements for the Nation Act of 2016 providing the operational flexibility, drought relief, and other benefits to the State of California;
B. Adopt a position of "Support" on H.R. 2895 (Peters)/S. 1499 (Warner) - Reinventing Economic Partnerships And Infrastructure Redevelopment Act (REPAIR) Act;
C. Adopt a position of "Support" on H.R. 3282 (McKinley) - Drinking Water Funding for the Future Act of 2021; and
D. Adopt a position of "Support" on H.R. 3228 (Velazquez) - National Coastal Resilience Data and Services Act.

Manager: Don Rocha, 408-630-2338

- *3.2. Accept the CEO Bulletin for the Weeks of September 10 - 23, 2021. [21-1021](#)

Recommendation: Accept the CEO Bulletin.

Manager: Rick Callender, 408-630-2017

Attachments: [Attachment 1: 092321 CEO Bulletin](#)

REGULAR AGENDA:

4. BOARD OF DIRECTORS:

- 4.1. Review Fiscal Year 2022 Board Policy Planning Calendar. [21-0130](#)

Recommendation: Review, discuss and revise the Fiscal Year 2022 Board Policy Planning Calendar.

Manager: Michele King, 408-630-2711

Attachments: [Attachment 1: FY22 Board Calendar](#)

Est. Staff Time: 5 Minutes

- 4.2. Receive the Audit Report of the Water Utility Enterprise Funds for the Fiscal Year Ended June 30, 2020. [21-0852](#)

Recommendation: Receive the Audit Report of the Water Utility Enterprise Funds for the Fiscal Year ended June 30, 2020.

Manager: Darin Taylor, 408-630-3068

Attachments: [Attachment 1: Audit Report, FY Ending 2020 WUE Funds](#)

Est. Staff Time: 5 Minutes

- *4.3. Board Committee Reports. [21-1022](#)

Attachments: [*Handout 4.3-A: 090921 SPOC Summary](#)
[*Handout 4.3-B: 091521 RAC Summary](#)
[*Handout 4.3-C: 092221 RAC Summary](#)
[*Handout 4.3-D: 092721 WCDM Agenda](#)
[*Handout 4.3-E: 092921 RAC Agenda](#)

- 4.4. Proposed Future Board Member Agenda Items.

5. WATER UTILITY ENTERPRISE:

- 5.1. Approve the Agreement with Carollo Engineers, Inc. for Consulting Services, for the Water Treatment Plant Implementation Project, Project No. 93044001, CAS File No. 5144, for a Not-to-Exceed Fee of \$6,461,429. [21-0864](#)

Recommendation: Approve the Agreement with Carollo Engineers, Inc. for consulting services, for the Water Treatment Plant Implementation Project, for a Not-to-Exceed Fee of \$6,461,429.

Manager: Bhavani Yerrapotu, 408-630-2735

Attachments: [Attachment 1: Agreement](#)

Est. Staff Time: 5 Minutes

6. WATERSHEDS:

7. ASSISTANT CHIEF EXECUTIVE OFFICER:

- 7.1. Approve, and Authorize Staff to Finalize and Submit the Fiscal Year 2020-2021 (FY21) Safe, Clean Water and Natural Flood Protection Program Annual Report - Year 8 (Final 2012 Program Report), for Independent Monitoring Committee (IMC) Review. [21-1030](#)

Recommendation: A. Approve the FY21 Safe, Clean Water Program Annual Report - Year 8 with unaudited financials; and
 B. Authorize staff to finalize the FY21 Safe, Clean Water Program Annual Report - Year 8 (with audited financials) and submit the final report to the IMC for its review.

Manager: Melanie Richardson, 408-630-2035

Attachments: [Attachment 1: FY21 Safe, Clean Water Annual Report](#)
 [Attachment 2: PowerPoint](#)

8. EXTERNAL AFFAIRS:

9. CHIEF EXECUTIVE OFFICER:

- *9.1. CEO and Chiefs' Report. [21-1058](#)

Attachments: [*Handout 9.1-A: Office of Government Relations Update](#)
 [*Handout 9.1-B: Office of Civic Engagement Update](#)

10. ADMINISTRATION:

11. DISTRICT COUNSEL:

12. ADJOURN:

12.1. Board Member Reports/Announcements.

12.2. Clerk Review and Clarification of Board Requests.

*12.3. Adjourn to Special Joint Meeting with the City of Sunnyvale at 6:00 p.m., on October 6, 2021.



Santa Clara Valley Water District

File No.: 21-0973

Agenda Date: 9/28/2021
Item No.: 2.1.

NON-EXHIBIT/CLOSED SESSION ITEM

SUBJECT:

CLOSED SESSION

THREAT TO PUBLIC SERVICES OR FACILITIES

Pursuant to Government Code Section 54957(a)

Consultation with Alex Gordon, Assistant Officer



Santa Clara Valley Water District

File No.: 21-1027

Agenda Date: 9/28/2021
Item No.: 2.2.

NON-EXHIBIT/CLOSED SESSION ITEM

SUBJECT:

CLOSED SESSION

CONFERENCE WITH LABOR NEGOTIATORS

Pursuant to Government Code Section 54957.6(a)

Agency Designated Representatives: Rick Callender, J. Carlos Orellana, Brian Hopper, Tina Yoke, Edward Kreisberg, Ingrid Bella, Bryant Welch, Laura Harbert, Emily Meeks

Employee Organizations: Employees Association, Engineers Society, Professional Managers



Santa Clara Valley Water District

File No.: 21-1028

Agenda Date: 9/28/2021
Item No.: 2.3.

NON-EXHIBIT/CLOSED SESSION ITEM

SUBJECT:

CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL INITIATION OF LITIGATION

Government Code Section 54956.9(d)(4)

One Potential Case



Santa Clara Valley Water District

File No.: 21-0937

Agenda Date: 9/28/2021

Item No.: 2.8.

BOARD AGENDA MEMORANDUM

SUBJECT:

Public Hearing on the Engineer's Report and CEQA Exemption Determination for the Santa Teresa Water Treatment Plant Filter Media Replacement Project, Project No. 93284013, (Santa Clara County, District 7).

RECOMMENDATION:

- A. Conduct a Public Hearing on the Engineer's Report and the CEQA Exemption Determination for the Santa Teresa Water Treatment Plant Filter Media Replacement Project (Project);
- B. Close the Public Hearing;
- C. Approve the CEQA Exemption Determination for the Project;
- D. Adopt Resolution APPROVING THE ENGINEER'S REPORT FOR THE SANTA TERESA WATER TREATMENT PLANT FILTER MEDIA REPLACEMENT PROJECT; and
- E. Approve the Project.

SUMMARY:

On September 14, 2021, the Board adopted a resolution setting the time and place for the public hearing on the Engineer's Report to take place on September 28, 2021. Staff is recommending the Board hold this public hearing and consider adoption of the Resolution (Attachment 4) to approve the Engineer's Report, approve the CEQA exemption determination, and approve the Project.

Project Background

The Santa Teresa Water Treatment Plant (STWTP) was commissioned in 1989 and produces safe drinking water for most of South San Jose. As the largest of the three water treatment plants, STWTP can treat and deliver up to 100 million gallons of water per day.

The objective of the Santa Teresa Water Treatment Plant Filter Media Replacement Project is to extend the useful life of the treatment plant's existing filters. The Project will replace media, inlet valves, backwash valves, and other appurtenances within the filters which are beyond their useful life cycle. The estimated total cost to plan, design, and construct this Project is \$10.1 million.

Engineer's Report

Section 12 of the District Act requires the Board to conduct a public hearing to consider all written

and oral objections to a proposed project when: 1) the project is new construction; and 2) the project is funded by a single or joint zone of benefit. Staff prepared an Engineer's Report (Attachment 2) for the purpose of public disclosure. The Public Hearing Notice (Attachment 3) for the Engineer's Report was published in accordance with the District Act and posted outside Valley Water's Offices at 5700 Almaden Expressway, San Jose, California, 95118, and on Valley Water's website at <https://www.Valleywater.org/STWTP>

Next Steps

If the Board approves the proposed Project, the future milestones are:

1. Board adoption of plans and specifications, and authorization for construction bidding
2. Board award of construction contract

FINANCIAL IMPACT:

The proposed Project is included in the Five-Year 2022-26 Capital Improvement Program (CIP). The estimated cost to plan, design, and construct the Project is \$10.1 million. Funds are included in the FY2021-22 board adopted budget for the planned Project spending during the year. Funds to cover each subsequent fiscal year anticipated Project costs would be recommended by staff during each fiscal year budget process or through budget adjustment(s). The proposed Project would be funded by the Water Enterprise Fund, with 100% of the costs allocated to Zone W-2 (North County).

CEQA:

Staff has reviewed the proposed Project for CEQA compliance and concluded that it qualifies for a Categorical Exemption under CEQA Guidelines Section 15301; Existing Facilities [Class 1 - operation, repair, maintenance, minor alteration of existing structures and facilities]. A Notice of Exemption has been prepared (Attachment 1) and is ready to be filed with the County of Santa Clara, Office of the Clerk/Recorder upon Board approval of the Project.

ATTACHMENTS:

- Attachment 1: Notice of Exemption
- Attachment 2: Engineer's Report
- Attachment 3: Public Hearing Notice
- Attachment 4: Resolution
- Attachment 5: Project Delivery Process Chart
- Attachment 6: PowerPoint

UNCLASSIFIED MANAGER:

Heath McMahon, 408-630-3126

Public Notice
Notice of Exemption



To: Santa Clara County
Clerk-Recorder's Office, Business Division
70 West Hedding Street, First Floor, East Wing
San Jose, CA 95110

From: Valley Water
5750 Almaden Expressway
San Jose, CA 95118-3686
Telephone (408) 265 2600

Project Title: Filter Media Replacement Project at Santa Teresa Water Treatment Plant (STWTP)

Project Location-Specific: 7011 Graystone Lane, San Jose, CA 95120

Project Location-City: San Jose

Project Location-County: Santa Clara

Project Purpose: To perform service and maintenance on filter media basins at the STWTP.

Name of Public Agency Approving Project: Valley Water

Name of Agency or Person Carrying Out Project: Valley Water

Exempt Status: (*check one*)

- ☐ Ministerial [§21080(b)(1); 15268];
- ☐ Declared Emergency [§21080(b)(3); 15269(a)];
- ☐ Emergency Project [§21080(b)(c); 15269(b)(c)];
- ☒ Categorical Exemptions [§15301, Class 1 – Existing Facilities]
- ☐ Statutory Exemptions

Description of Project: The proposed project would involve routine servicing and maintenance of the west and east filter media basins at STWTP. The following components of the filter media basins would be removed and replaced: filter media, underdrain nozzles, influent deflectors, influent valves, and wash-water valves. Plumbing improvements would be made to prevent filter media loss and optimize filter performance. Work would occur in phases over the duration of approximately 18 months and is tentatively scheduled to begin in December 2021. All materials and equipment would be staged on-site in paved areas.

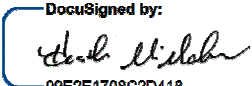
Reasons Why Project is Exempt: The proposed project is limited to routine servicing and maintenance of the west and east filter media basins at an existing water treatment plant. The project would not result in the construction of new or expansion of existing facilities. Water treatment capacity would not increase. All work and staging would be limited to the existing STWTP site. Therefore, the project meets the requirements of CEQA Guidelines §15301 and is eligible for a Class 1 categorical exemption (CE) for "Existing Facilities."

"Class 1, §15301, consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination."

The project does not include any factors that would preempt the project's eligibility for a CE per CEQA Guidelines §15300.2.

Lead Agency: Valley Water
Contact Person: Nick Mascarello

Area Code/Telephone/Extension:
(408) 630-3147

Signature: 
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Date: 7/6/2021

Title: Heath McMahon, P.E.
Deputy Operating Officer

cc: CEQA Administrative Record

Santa Teresa Water Treatment Plant Filter Media Replacement Project Project No. 93284013

Engineer's Report



July 2021

Water Utility Capital Division



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SANTA TERESA WATER TREATMENT PLANT FILTER MEDIA REPLACEMENT PROJECT

PROJECT NO. 93284013

ENGINEER'S REPORT

Prepared by:

Juan Fernando Lucen
Assistant Engineer II

Colin Smith, P.E.
Associate Engineer

Reviewed By:

Patrick Carter, P.E.
Senior Engineer

Under the Direction of:

Brandon Ponce, P.E.
Engineering Unit Manager

Heath McMahon, P.E.
Deputy Operating Officer

The Engineer's Report has been prepared under the direct supervision of the undersigned, who hereby certifies that he is a Registered Civil Engineer in the State of California



July 2021

DISTRICT BOARD OF DIRECTORS

John L. Varela
Barbara Keegan
Richard Santos,
Linda J. LeZotte

District 1
District 2
District 3
District 4

Nai Hsueh
Tony Estremera, Chair
Gary Kremen, Vice Chair

District 5
District 6
District 7

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**Santa Teresa Water Treatment Plant
Filter Media Replacement Project
No. 93284013
Engineer's Report – July 2021**

1. PROJECT DESCRIPTION

The proposed Project is located at the Santa Teresa Water Treatment Plant (STWTP) in San Jose, as shown in Figure 1. This treatment plant produces safe drinking water, both residentially and commercially, for most of South San Jose – Almaden Valley, Blossom Valley and Santa Teresa. As the largest of the three water treatment plants, Santa Teresa can treat and deliver up to 100 million gallons of water per day.

The STWTP first opened in 1989 and integrated the use of ozone into its water treatment process in 2006.

The Project will ensure that the STWTP Filters maintain operational capacity and provide the public with reliable, high-quality drinking water.

The Project will remove and replace Granular Activated Carbon (GAC) and sand filter media, remove and replace the influent valves and wash water valves, and remove and replace influent steel deflectors in 12 filters. This Project will remove and replace the underdrain nozzles in 10 filters (2 filters were completed in 2016), as well as inspect the filter basin concrete and metal coatings. This Project will also look at ways to prevent filter media loss and optimize filter performance as necessary. The plant will be operating at a slightly reduced capacity for the duration of the project construction.

2. ZONE BENEFITS

The proposed Project work will benefit the customers of Zone W-2 (North County).

3. PROJECT RIGHT OF WAY

The proposed Project would be constructed on District property.

4. MAPS AND FIGURES

Figure 1 - Project Location Map

5. PROJECT COSTS

The estimated cost for planning, design and construction of the proposed Project is \$10.1 million (in 2021 dollars). The proposed Project would be funded by the Water Utility Enterprise Fund.

6. PROJECT SCHEDULE

- Advertise for construction bids: November 2021
- Award construction contract: January 2022
- Complete construction: January 2024

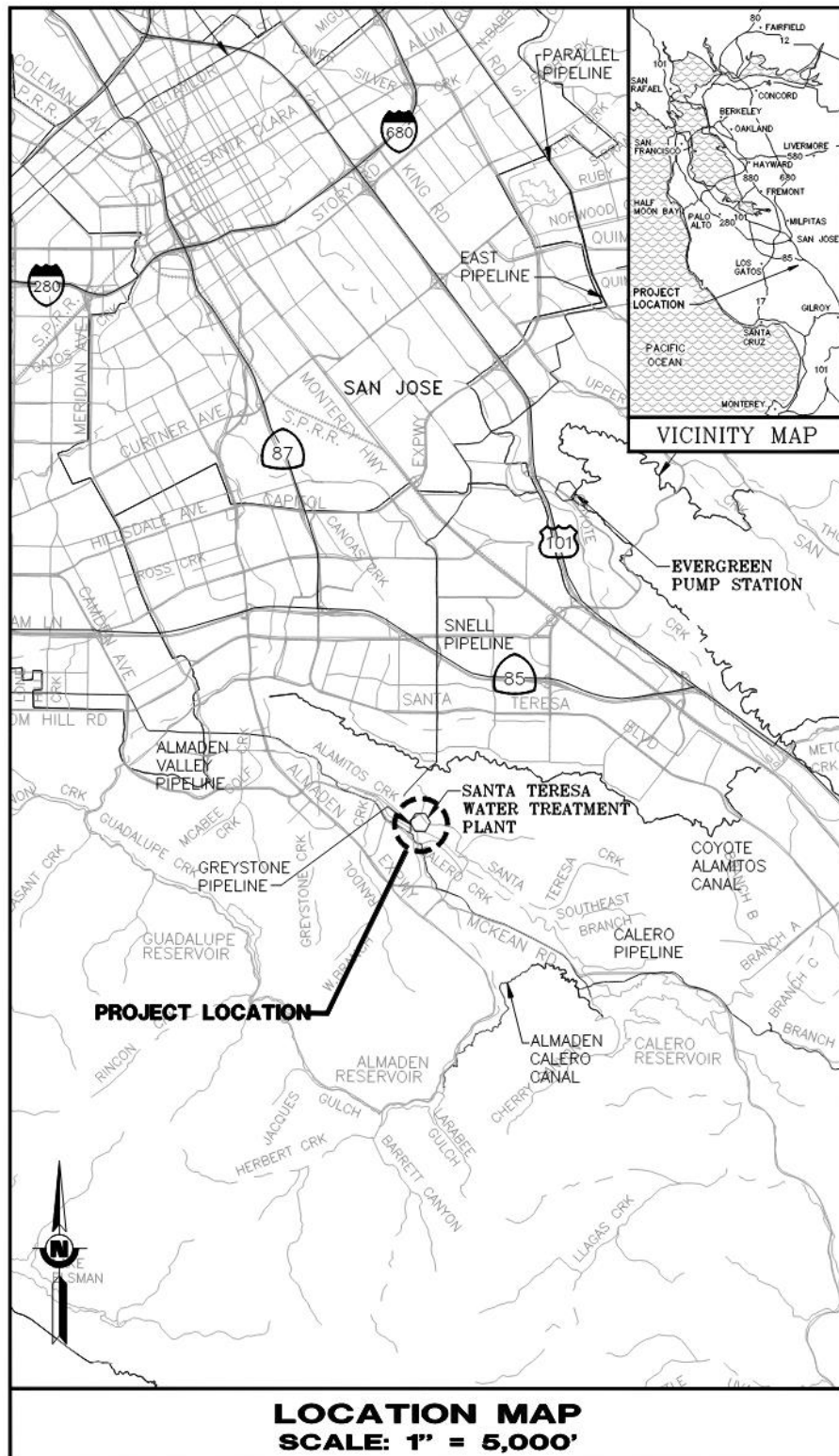


Figure 1 - Project Location Map

Topic: Santa Teresa Water Treatment Plant Filter Media Replacement Project

Who: Santa Clara Valley Water District

What: Public Hearing on Engineer's Report and CEQA Exemption Determination

When: Tuesday, September 28, 2021, 6:00 PM

Where: Zoom Teleconference

Why: The Santa Clara Valley Water District (Valley Water or District) invites you to a meeting regarding the Santa Teresa Water Treatment Plant Filter Media Replacement Project (Project). The proposed work of improvement is described in the Engineer's Report for the Santa Teresa Water Treatment Plant Filter Media Replacement Project (Project). The Report is available on Valley Water's website: <https://www.Valleywater.org/STWTP>
A copy of this Notice has been posted outside Valley Water's offices at 5700 Almaden Expressway, San Jose, CA 95118.

In compliance with the State Emergency Services Act, the Governor's Emergency Declaration related to the COVID-19 pandemic, the Governor's Executive Order N-29-20, and the Order of the County of Santa Clara Public Health Officer dated March 16, 2020, Valley Water's offices are closed to the public. Therefore, the Engineer's Report is unavailable for public inspection at Valley Water's offices and only available online.

The Project will take place inside the Santa Teresa Water Treatment Plant; all the proposed work will occur in or around the Treatment Plant Filters. The objective of the Project is to extend the useful life of the treatment plant's existing filters. The Project will replace media, inlet valves, backwash valves, and other appurtenances within the filters. The proposed works of improvement are described in the Engineer's Report for Santa Teresa Water Treatment Plant Filter Media Replacement.

At the time and place fixed for the public hearing, the Board of Directors will receive comments on the Engineer's Report and the CEQA exemption determination for the Project and consider approving the Project's CEQA exemption determination in accordance with the California Environmental Quality Act. After considering the comments on the Engineer's Report, the Board will decide whether or not to proceed with the Project.

For more information, contact Brandon Ponce at (408) 630-2787 and/or Patrick Carter at (408) 630-2984.

IMPORTANT NOTICES This meeting is being held in accordance with the Brown Act as currently in effect under the State Emergency Services Act, the Governor's Emergency Declaration related to the COVID-19, the Governor's Executive Order N-29-20, and Order of the

County of Santa Clara Public Health Officer dated March 17, 2020, that allows attendance by members of the Santa Clara Valley Water District Board of Directors, Valley Water staff, and the public to participate and conduct the meeting by teleconference, videoconference, or both.

Members of the public wishing to address the Board during a video conference meeting on this item listed on the agenda, should use the "Raise Hand" or "Chat" tools located in the Zoom meeting link listed on the agenda. Speakers will be acknowledged by the Board Chair in the order requests are received and granted speaking access to address the Board.

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AVISOS IMPORTANTES

Esta reunión se realiza bajo la Ley Brown actualmente en vigor según la Ley de Servicios de Emergencia del Estado, la Declaración de Emergencia del Gobernador relacionada con el COVID-19 y la Orden Ejecutiva del Gobernador N-29-20 emitida el 17 de marzo de 2020, que permite la asistencia de los miembros de la Junta Directiva de Valley Water, el personal de Valley Water y el público para participar y llevar a cabo la reunión por teleconferencia, videoconferencia o ambas. Valley Water, en cumplimiento con la Ley de Estadounidenses con Discapacidades (ADA), solicita que las personas que requieran adaptaciones especiales para acceder o participar en las reuniones de la Junta de Valley Water se comuniquen con el secretario de la oficina de la Junta al (408) 630-2711, al menos 3 días hábiles antes de la reunión programada de la Junta, para asegurarse de que el personal de Valley Water pueda ayudarles.

THÔNG BÁO QUAN TRONG

Cuộc họp này được tổ chức theo Đạo luật Brown, hiện có hiệu lực theo Đạo Luật Dịch Vụ Khẩn Cấp Của Tiểu Bang, Tuyên Bố Khẩn Cấp Của Thống Đốc liên quan đến COVID-19 và Sắc Lệnh Số N-29-20 Của Thống Đốc ban hành vào ngày 17 tháng 3 năm 2020, cho phép sự tham dự của các thành viên Hội Đồng Quản Trị Của Valley water, nhân viên của Valley Water, và công chúng để tham gia và tiến hành cuộc họp bằng hội nghị từ xa, hội nghị truyền hình, hoặc cả hai cách này. Theo Đạo Luật Người Mỹ Khuyết tật (ADA), Cục Nước Thung Lũng yêu cầu những cá nhân cần sự hỗ trợ đặc biệt để truy cập và/hoặc tham gia vào các Cuộc Họp Hội Đồng Quản Trị Của Valley Water xin hãy liên hệ với Thư ký văn phòng Hội Đồng Quản Trị theo số (408) 630-2711 ít nhất 3 ngày làm việc trước khi diễn ra cuộc họp hội đồng theo lịch để đảm bảo rằng nhân viên của Valley Water có thể hỗ trợ quý vị.

重要通知

此次会议依据《国家紧急服务法》、《与COVID-19相关的州长紧急声明》以及2020年3月17日发布的N-29-20号州长行政命令而现行的《布朗法案》举行。Valley Water理事会成员、Valley Water工作人员及社会公众可出席会议，并通过电话会议、电视会议或同时使用以上两种方式来参加该会议。按照《美国残疾人法案》（ADA）规定，Valley Water要求出席或参与Valley Water理事会会议的有特殊住宿需要的个人，在理事会会议之前至少3个工作日致电（408）630-2711，与理事会办公室工作人员联系，以确保Valley Water员工可以为您提供帮助。

**BOARD OF DIRECTORS
SANTA CLARA VALLEY WATER DISTRICT**

RESOLUTION NO. 21-

**APPROVING THE ENGINEER'S REPORT FOR THE
SANTA TERESA WATER TREATMENT PLANT FILTER MEDIA REPLACEMENT PROJECT**

WHEREAS, the Santa Clara Valley Water District (Valley Water) has been duly and regularly established and exists pursuant to the provisions of the Santa Clara Valley Water District Act; and

WHEREAS, the Santa Teresa Water Treatment Plant Filter Media Replacement Project (proposed Project) is included in the Board-approved fiscal years 2022-2026 Capital Improvement Program; and

WHEREAS, on the 14th day of September 2021, the Engineer's Report for the proposed Project prepared by Valley Water's Engineer, titled "Santa Teresa Water Treatment Plant Filter Media Replacement Project No. 93284013," dated July 2021, was made available to the Board of Directors; and

WHEREAS, on the 14th day of September 2021, this Board of Directors set a time and place for a public hearing on the Engineer's Report to take place on the 28th day of September 2021, at 6 p.m., by teleconference Zoom meeting; and

WHEREAS, notice of the time and place of said public hearing was duly given and published pursuant to law; and

WHEREAS, on the 28th day of September 2021, Valley Water's Engineer presented the Engineer's Report dated July 2021 to the Board of Directors containing:

1. A general description of the proposed Project; and
2. A general description of and map showing the location of the proposed Project and land, right of way, and easement required therefor; and
3. An estimate of the cost of the proposed Project and means of financing the cost.

WHEREAS, on said 28th day of September 2021, at the time and place as set by the Board of Directors a public hearing was duly held.

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Santa Clara Valley Water District:

SECTION 1

That all comments including all written and oral objections to the proposed Project have been heard and considered; and

Approving the Engineer's Report for the Santa Teresa Water Treatment Plant Filter Media Replacement Project; and

SECTION 2

That this Board hereby approves said Engineer's Report for a work of improvement for the Santa Teresa Water Treatment Plant Filter Media Replacement Project, Project No. 93284013; and

SECTION 3

That the Engineer of this District has estimated the current cost of the Santa Teresa Water Treatment Plant Filter Media Replacement Project is \$10.1 million and that this Board hereby determines that said Project is for the benefit of the North County (W-2) Zone and further determines that 100 percent of the costs thereof shall be borne by Zone W-2.

PASSED AND ADOPTED by the Board of Directors of the Santa Clara Valley Water District by the following vote on September 28, 2021:

AYES: Directors

NOES: Directors

ABSENT: Directors

ABSTAIN: Directors

SANTA CLARA VALLEY WATER DISTRICT

TONY ESTREMER
Chair, Board of Directors

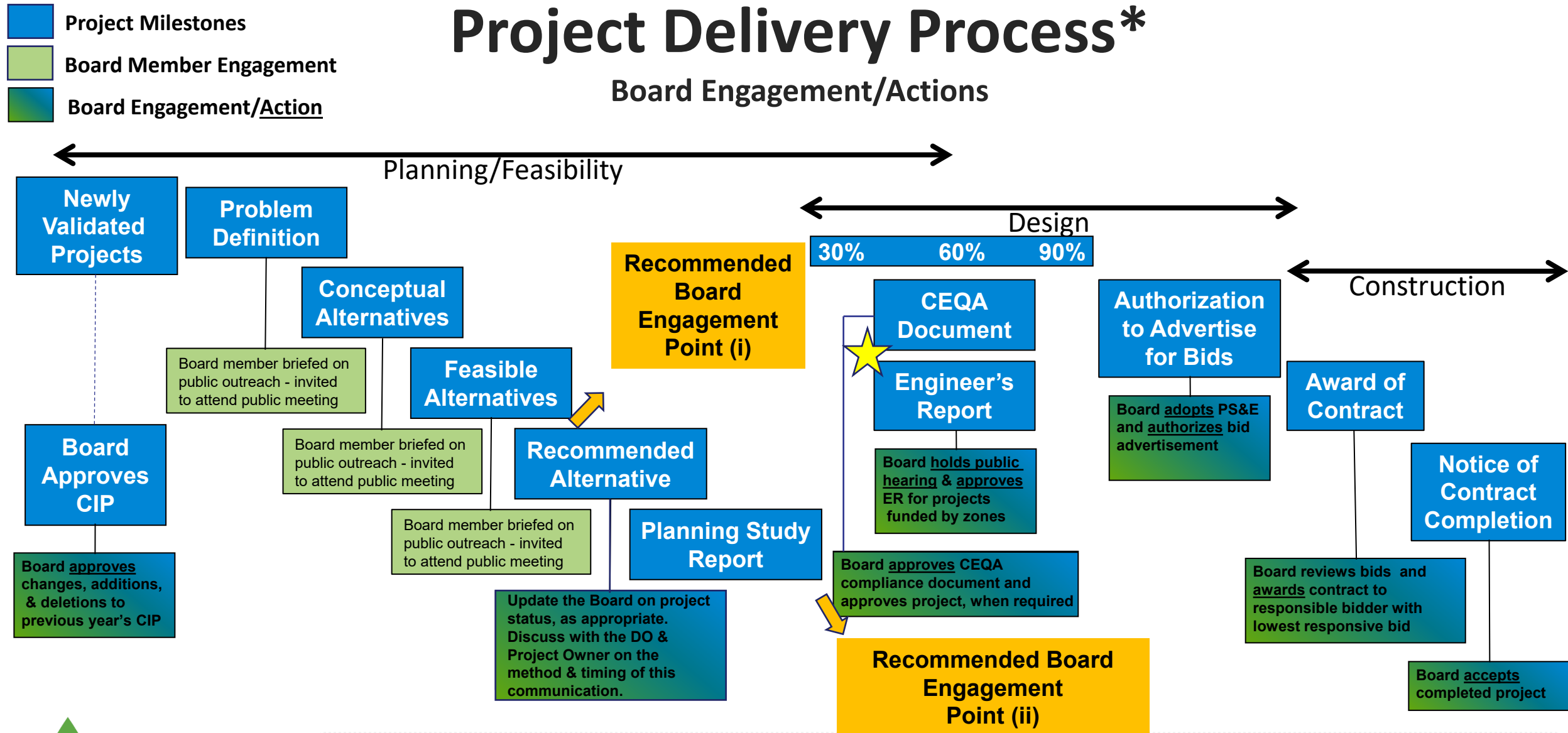
ATTEST: MICHELE L. KING, CMC

Clerk, Board of Directors

Capital Improvement Program (CIP)

Project Delivery Process*

Board Engagement/Actions



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Santa Teresa Water Treatment Plant Filter Media Replacement Project

Recommended Board Actions – September 28, 2021

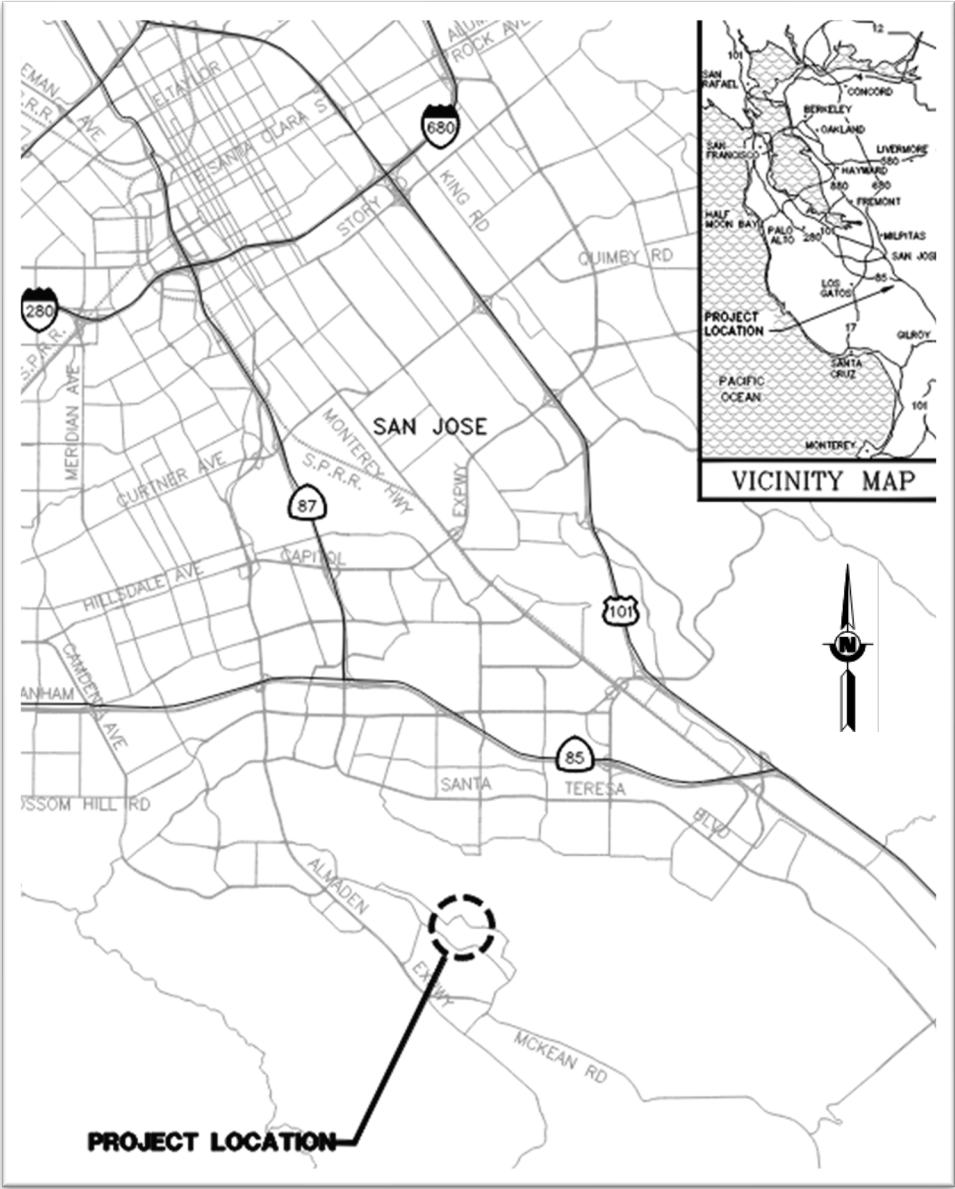
- Conduct Public Hearing on Engineer's Report and CEQA Exemption Determination
- Close Public Hearing
- Consider CEQA Exemption Determination
- Approve the Engineer's Report
- Approve the Project

Project Objectives

- Extend the service life of the Santa Teresa Water Treatment Plant filter system.



Project Location



Project Description

Filter system replacement and improvement will consist of:

- Remove and replace all filter media, inlet valves, and backwash valves in 12 filters.
- Remove and replace underdrain.
- Filter improvements to reduce filter media loss.

Project Right of Way

- Project is within the limits of the Santa Teresa Water Treatment Plant

Project CEQA

- Class 1 Categorical Exemption for Existing Facilities per CEQA Guidelines §15301

Project Cost / Zone Funding

- Estimated Total Cost: \$10.1M
- Zone of Benefit: W-2

Project Next Steps

- Advertise for Bids for Construction – November 2021
- Award Construction Contract – January 2022
- Issue Notice to Proceed – February 2022
- Complete Construction – January 2024



Santa Clara Valley Water District

File No.: 21-0958

Agenda Date: 9/28/2021

Item No.: 3.1.

BOARD AGENDA MEMORANDUM

SUBJECT:

Approve Recommended Positions on Federal Legislation: H.R. 1563 (Garcia) - To Extend the Authorities Under the Water Infrastructure Improvements for the Nation Act of 2016 Providing the Operational Flexibility, Drought Relief, and Other Benefits to the State of California; H.R. 2895 (Peters)/S. 1499 (Warner) - Reinventing Economic Partnerships And Infrastructure Redevelopment Act (REPAIR) Act; H.R. 3282 (McKinley) - Drinking Water Funding for the Future Act of 2021; H.R. 3228 (Velazquez) - National Coastal Resilience Data and Services Act; and Other Legislation That May Require Urgent Consideration for a Position by the Board.

RECOMMENDATION:

- A. Adopt a position of "Support" on H.R. 1563 (Garcia) - To extend the authorities under the Water Infrastructure Improvements for the Nation Act of 2016 providing the operational flexibility, drought relief, and other benefits to the State of California;
- B. Adopt a position of "Support" on H.R. 2895 (Peters)/S. 1499 (Warner) - Reinventing Economic Partnerships And Infrastructure Redevelopment Act (REPAIR) Act;
- C. Adopt a position of "Support" on H.R. 3282 (McKinley) - Drinking Water Funding for the Future Act of 2021; and
- D. Adopt a position of "Support" on H.R. 3228 (Velazquez) - National Coastal Resilience Data and Services Act.

SUMMARY:

A. H.R. 1563 (Garcia) - To extend the authorities under the Water Infrastructure Improvements for the Nation Act of 2016 providing the operational flexibility, drought relief, and other benefits to the State of California.

Recommended Position: Support

Priority Recommendation: 2

This bill would extend through 2028 the California Water Title (Subtitle J) of the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 (Public Law 114-322), which provides operational provisions for the Central Valley Project (CVP) and funding for storage, water recycling, desalination, and environmental restoration projects. This subtitle is currently set to expire on December 16, 2021.

The bill would also do the following:

- Extend the feasibility deadline for new storage projects. The WIIN Act currently stipulates that a new storage project must receive a determination of feasibility by the Secretary of the

Interior on or before January 1, 2021, to be eligible for WIIN Act funding. This bill would extend that deadline to January 1, 2028.

- Authorize \$134 million in each of fiscal years 2022 through 2028 for eligible storage projects.
- Authorize \$12 million in each of fiscal years 2022 through 2028 for eligible desalination projects.
- Authorize \$20 million in each of fiscal years 2022 through 2028 for eligible Title XVI water recycling projects.
- Extend through 2033 the consultation requirements concerning biological assessments and the coordinated operations of the Central Valley Project and the State Water Project in California.

Status:

H.R. 1563 was introduced in the House on March 3, 2021, and was referred to the Committee on Natural Resources and the Committee on Science, Space, and Technology.

Importance to Valley Water:

This bill would extend the California Water Title of the WIIN Act for seven years. This title of the WIIN Act has, since 2016, provided a framework for CVP operations in the state. The WIIN Act also outlines how new storage projects will be authorized and eligible for federal funding, including a requirement that the Secretary of the Interior must determine the feasibility of any new storage project by January 1, 2021. H.R. 1536 would extend that feasibility deadline to January 1, 2028, which would preserve this path to federal funding for new storage projects like the Pacheco Reservoir Expansion Project.

The bill would also extend the life of the Title XVI competitive grant program, which is an important source of funding for water recycling projects nationwide. This program is already oversubscribed, and demand is only expected to increase. Reauthorizing this program with additional funding will preserve this important source of federal funding for Valley Water recycled water projects coming online in the near future.

Pros:

- Extends the WIIN feasibility deadline for new storage projects for seven years, preserving a path to federal funding for the Pacheco Reservoir Expansion Project.
- Extends the consultation requirements for coordinated operations of the CVP and SWP in California, eliminating the uncertainty that is expected if the WIIN Act expires in December 2021.
- Extends the Title XVI competitive grant program and authorizes new funding, preserving a source of funding for recycled water projects that Valley Water brings online in the coming years.

Cons:

- None identified at this time.

B. H.R. 2895 (Peters)/S.1499 (Warner) - Reinventing Economic Partnerships And Infrastructure Redevelopment Act (REPAIR) Act**Recommendation:** Support**Priority Recommendation:** 3

This bill would establish a new Infrastructure Financing Authority (IFA) to fund large-scale and economically viable infrastructure projects nationwide. Eligible projects include airports, ports and waterways, water treatment facilities, stormwater management systems, dams, and levees, among others, that have an estimated cost of \$50 million or more (\$10 million for projects serving rural communities). Projects will be prioritized if they contribute to economic growth, contribute jobs, and mitigate environmental concerns. Like the Water Infrastructure Finance and Innovation Act (WIFIA) Program, this loan program would limit the federal contribution to 49% of the project costs. The bill would also create a funding mechanism to make the IFA a self-sustaining entity through fees and risk premiums on loans and loan guarantees. Public-private partnerships (P3s) would be eligible loan applicants if the project has received contributed capital or commitments equal to at least 10 percent of the total project cost.

Status:

H.R. 2895 was introduced in the House on April 28, 2021, and was referred to the Committee on Transportation and Infrastructure and the Committee on Ways and Means. S. 1499 was introduced in the Senate on April 29, 2021, and was referred to the Committee on Finance.

Importance to Valley Water:

This bill would allow Valley Water to apply for loans for the construction, alteration, or repair of many of its projects, including the Pacheco Reservoir project, the Purified Water project, the Anderson Dam Seismic Retrofit, and updates to the Rinconada Water Treatment Plant.

Pros:

- The IFA would provide a new source of much-needed funding for infrastructure projects, including water infrastructure projects.
- Valley Water could access this loan program to finance many of its different projects, including flood protection, recycled water, and dam retrofit projects.

Cons:

- Unlike the WIFIA Program, under the IFA water projects would have to compete with other kinds of non-water infrastructure projects for IFA funding.

C. H.R. 3282 (McKinley) - Drinking Water Funding for the Future Act of 2021**Recommendation:** Support**Priority Recommendation:** 3

This bill would extend for five years (through 2026) several drinking water and wastewater-related

grant programs at the Environmental Protection Agency (EPA) that have either already expired or are set to expire at the end of 2021. Among those included are:

- Water Infrastructure Finance and Innovation Act (WIFIA): This is an important low-interest loan program that finances large-scale water infrastructure projects.
- Water Infrastructure and Workforce Investment: First authorized in 2018, this program funds water workforce training programs to promote career opportunities in the water infrastructure sector and invest in a robust water workforce.
- Community Water System Risk and Resilience: This program requires community water systems to conduct a risk assessment (and certify with EPA that they have done such an assessment) to help identify any vulnerabilities that threaten the ability for a system to provide safe, reliable, clean drinking water to its customers. This bill would extend the authorization of funding to provide technical assistance to eligible water systems.
- Technical Assistance for Innovative Water Technologies: This program supports the deployment of innovative technologies that address drinking water quality, treatment, or security challenges at water utilities, private wells, and source waters.

Status:

This bill was introduced in the House on May 17, 2021, and was referred to the Committee on Energy and Commerce as well as the Committee on Transportation and Infrastructure.

Importance to Valley Water:

This bill would extend several funding programs that Valley Water has accessed or could access to support its work, most notably the WIFIA Program, which Valley Water is pursuing to fund several of its large flood protection and water supply projects. Other programs to be extended provide an important funding source for other water systems. For example, the Technical Assistance for Innovative Water Technologies would provide grants for the training and education of operators of water systems, and Valley Water could apply for grants to make the water system more resilient from both malevolent acts and natural hazards. This could include projects that improve water treatment and mitigate sources of drinking water contamination, among others.

Pros:

- Valley Water could seek funding under several of these programs to support its flood protection and water utility projects.
- The programs to be extended are important sources of funding for many water systems, and supporting their continued funding is in line with the Board-adopted Legislative Guiding Principles.

Cons:

- None identified at this time.

D. H.R. 3228 (Velazquez) - National Coastal Resilience Data and Services Act

Recommendation: Support

Priority Recommendation: 3

This bill would require the Secretary of Commerce and the National Oceanic and Atmospheric Administration (NOAA) to improve science, data, and services that enable sound decision making in response to coastal flood risk, including impacts of sea level rise, storm events, and land subsidence. It would also direct NOAA to improve its data collection, maps, and information services that allow coastal communities to plan for present and future coastal flood risk. To do this, NOAA will improve, create, and make investments in authoritative forecasts, predictions, projections, and services, mapping and geospatial services, modeling, product development and delivery, and providing engagement and technical assistance to all levels of government, tribal governments, and to vulnerable and historically marginalized and overburdened communities.

Status:

This bill was introduced in the House on May 13, 2021 and was referred to the Committee on Natural Resources and the Committee on Science, Space, and Technology. Committee Hearings were held on June 22, 2021.

Importance to Valley Water:

This bill would promote improved science and data collection on coastal resilience and land subsidence, allowing for a more thorough understanding of these issues nationwide and how they impact communities. This improved data could inform how Valley Water projects are managed. This bill aligns with Valley Water's Legislative Guiding Principle to support funding for new technologies that provide improved information for weather forecasts and flooding.

Pros:

- Improved science and data collection on coastal resilience and land subsidence would improve the national understanding of these phenomena.
- NOAA would create and maintain maps about our shoreline areas, which could better inform Valley Water operations.

Cons:

- None identified at this time.

FINANCIAL IMPACT:

There is no financial impact associated with this item.

CEQA:

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

ATTACHMENTS:

File No.: 21-0958

Agenda Date: 9/28/2021
Item No.: 3.1.

None.

UNCLASSIFIED MANAGER:

Don Rocha, 408-630-2338



Santa Clara Valley Water District

File No.: 21-1021

Agenda Date: 9/28/2021

Item No.: *3.2.

BOARD AGENDA MEMORANDUM

SUBJECT:

Accept the CEO Bulletin for the Weeks of September 10 - 23, 2021.

RECOMMENDATION:

Accept the CEO Bulletin.

SUMMARY:

The CEO Bulletin is a weekly communication for the CEO, to the Board of Directors, assuring compliance with Executive Limitations Policy EL-7: The BAOs inform and support the Board in its work. Further, a BAO shall: inform the Board of relevant trends, anticipated adverse media coverage, or material external and internal changes, particularly changes in the assumptions upon which any Board policy has previously been established; and report in a timely manner an actual or anticipated noncompliance with any policy of the Board.

CEO Bulletins are produced and distributed to the Board weekly as informational items, and then placed on the bimonthly, regular Board meeting agendas to allow opportunity for Board discussion on any of the matters contained therein.

FINANCIAL IMPACT:

There is no financial impact associated with this item.

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: 092321 CEO Bulletin

UNCLASSIFIED MANAGER:

Rick Callender, 408-630-2017

CEO BULLETIN



To: Board of Directors
From: Rick L. Callender, CEO

Weeks of September 10 – September 23, 2021

Board Executive Limitation Policy EL-7:

The Board Appointed Officers shall inform and support the Board in its work. Further, a BAO shall 1) inform the Board of relevant trends, anticipated adverse media coverage, or material external and internal changes, particularly changes in the assumptions upon which any Board policy has previously been established and 2) report in a timely manner an actual or anticipated noncompliance with any policy of the Board.

Item	IN THIS ISSUE
<u>1</u>	Anderson Dam FERC Functional Exercise 2021
<u>2</u>	Memorandum of Agreement (MOA) with U.S. Army Corps of Engineers Staffing Service Agreement
<u>3</u>	New Hires required to be fully vaccinated
<u>4</u>	Room Integrity Test at Pacheco Pumping Plant and Motherboard Replacement on Two Line Valves
<u>5</u>	Safe, Clean Water Grant Closeout: Bay Area Older Adults' Watershed and Wildlife Education Project
<u>6</u>	Valley Water's Sustainable Landscape Guidelines Now Available Online

1. Anderson Dam FERC Functional Exercise 2021

On September 16, 2021, Valley Water's Office of Emergency Services (OES) conducted the Anderson Dam Federal Energy Regulatory Commission (FERC) Functional Exercise. FERC requires all agencies with power-producing dams, such as Anderson Dam, to conduct a functional exercise every five years to test and validate the dam's Emergency Action Plan (EAP). For the exercise, Valley Water activated an Emergency Operations Center (EOC) team to manage and support Valley Water's response to a large earthquake scenario where damage impacted Anderson Dam. Per the Anderson Dam EAP, notifications were made to downstream agencies of the escalating dam emergency. Within the scenario, EOC Action Planning processes were implemented, Public Information coordination and Policy Group updates were provided, and command and control structures were tested, all of which were synchronized to establish situational awareness during the early part of the large earthquake scenario.

Valley Water's Anderson Dam FERC Functional Exercise for 2021 was supported by the following agencies in exercise planning and Simulation Cell operations on exercise day: City of Morgan Hill, City of Gilroy, City of San José, County of Santa Clara, and National Weather Service. Within Valley Water, participants included: Dam Safety, Communications Unit, Hydraulics, Hydrology and Geomorphology, Security Office, Human Resources, Office of Emergency Services, Deputy Operating Officer for Dam Safety and Capital Delivery, Deputy Operating Officer for Watersheds Operations and Maintenance, and Assistant Officer for Emergency, Safety and Security.

The Valley Water EOC activated operations in a hybrid model, with OES and Security Office staff working on-site in the primary EOC facility while remaining EOC staff connected virtually through Zoom. This was the first time a hybrid model was used for the EOC, and multiple lessons learned were identified regarding managing situation status and information sharing. The exercise validated that upgrades to EOC facility audio/video systems successfully support a hybrid model, which OES will build into its standard operating procedures. Opportunities for improvement were also identified in the method of notification to the downstream agencies when a dam emergency occurs.

The Anderson Dam FERC Functional Exercise concludes a series of three exercises for Fiscal Year 2022. On August 5, 2021, Valley Water conducted its Damage Assessment Reporting Drill which focused on reporting earthquake damage via the California Common Operating Picture application. On August 19, 2021, Valley Water conducted the Anderson Dam FERC Tabletop exercise with its external agency partners. These exercises are valuable tools that support building capabilities in emergency preparedness and response.

For further information, please contact Alexander Gordon at (408) 630-2637.

2. Memorandum of Agreement (MOA) with U.S. Army Corps of Engineers Staffing Service Agreement

On September 20th, 2021, Valley Water entered into a 5-year Memorandum of Agreement (MOA) with the U.S. Army Corps of Engineers for qualified staffing resources. The agreement provides for the equivalent of 2.0 full time persons to expedite permit application evaluation for Valley Water projects requiring Corps approval pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. As with other staffing agreements that Valley Water has entered into for state and federal agency staffing, this agreement will provide dedicated staff person(s) that will work exclusively on Valley Water permit applications and other projects as requested and prioritized by Valley Water.

This MOA takes effect October 1, 2021 and replaces the previous 5-year MOA that provided similar services. Valley Water has identified several projects that will benefit from renewal of this MOA including Anderson Dam Seismic Retrofit, Stream Maintenance Program, and various capital flood protection projects.

Funding for the first year of this agreement was included in project budgets reviewed and adopted by the Board for Fiscal Year 2022. The agreement allows Valley Water to terminate at any time during the 5-year term.

For further information, please contact Jennifer Codianne (408) 630-3876.

3. New Hires required to be fully vaccinated

To protect Valley Water's most valuable assets, our employees and the community we serve, we are now requiring all new employees be fully vaccinated upon hire unless subject to approved reasonable accommodations for limited, legally allowable reasons. This new requirement is communicated on all job postings so that prospective candidates are aware of the requirement up front, and their start date is contingent upon providing proof of vaccination.

For further information, please contact Ingrid Bella at (408) 663-7078.

4. Room Integrity Test at Pacheco Pumping Plant and Motherboard Replacement on Two Line Valves

The Pacheco Pumping Plant (PPP) was shut down for five (5) hours on September 16, 2021, to test the adjustable speed drive gallery for any air leaks. This planned shutdown was necessary to perform a room integrity test required by code for the Clean Agent Suppression system. New fire smoke dampers had been installed by the contractor as part of the PPP Priority 1 Fire Alarm and Suppression System Improvements Project. The room integrity sealant test passed successfully, and Valley Water can now proceed with the remaining system tests and project close out phase.

While PPP was down, Valley Water took advantage of the shutdown window and replaced faulty motherboards at Bailey Line Valve and San Bruno Line Valve. For this work to be done, Valley Water had to isolate the Cross Valley Pipeline for half a day, which resulted in switching the raw water sources to Santa Teresa Water Treatment Plant (STWTP). With San Luis Reservoir water inaccessible, STWTP was fed by Calero Reservoir water.

With various specialties and across divisions, Valley Water collaborated on these two tasks that were accomplished during the shutdown window. The flawless operation of the pumps at PPP is essential to lift water from San Luis Reservoir and keep it flowing through the San Felipe Division system to Valley Water and San Benito County Water District. Regulating the line valves remotely is important for proper and safe operation of the raw water distribution system.

For further information, please contact Greg Williams at (408) 630-2867.

5. Safe, Clean Water Grant Closeout: Bay Area Older Adults' Watershed and Wildlife Education Project

In Fiscal Year 2020, Valley Water awarded Bay Area Older Adults (Grantee) a \$5,000 Safe, Clean Water Program D3 Mini-Grant for their Watershed and Wildlife Education Program (Project). The Grantee completed the Project on July 15, 2021, and staff submitted the final invoice items on August 31, 2021, allowing for grant closeout.

Bay Area Older Adults is a non-profit organization that aims to create communities of adults aged 50 and older to participate in healthy activities together. The grant funded in-person and virtual educational programs that engaged 316 adults, ages 50 and older, using first-hand experience in Valley Water watersheds to teach them about watershed stewardship. The Project consisted of a total of six programs that were held at Anderson Lake County Park in Morgan Hill, Almaden Quicksilver County Park in San Jose, Don Edwards Wildlife Refuge in San Jose, Stevens Creek County Park in Cupertino and Joseph D. Grant County Park in San Jose. The Grantee developed educational materials and videos related to each program that would serve as a lasting educational resource. The videos included an interactive component and a virtual tour of the parks and are available to view on the Grantee's website.

Key Outcomes:

- Conducted three in-person programs that engaged a total of 34 attendees.
- Conducted three virtual programs that engaged a total of 282 attendees.
- Engaged a total of 501 people virtually based on post-program views on YouTube.
- Surveyed 87 participants from the programs who indicated an average satisfaction rating of 1.2 (1 being very satisfied) and scored 78-100% on the post-knowledge surveys.

For further information, please contact Marta Lugo at (408) 630-2237.

6. Valley Water's Sustainable Landscape Guidelines Now Available Online

With the support of Valley Water's Landscape Committee, Valley Water recently completed the Sustainable Landscape Guidelines handbook, available as a flipbook and downloadable PDF on our Landscape Guides & Resources web page. Valley Water worked with a contractor, G3 Green Garden Group, and a Technical Advisory Committee comprised of local landscape professionals to customize the publication to fit Santa Clara County's local landscaping needs.

The handbook provides in-depth tips on improving soil health, capturing rainwater, selecting climate-appropriate plants, and designing gardens in Santa Clara County. In addition, the guide highlights the importance of managing each property as if it were a mini-watershed, creating landscapes that are truly resilient to the effects of a changing climate. The publication is also being translated into Spanish and Chinese. Valley Water will announce the publication on various platforms such as social media and it will also be featured on the SouthBayGreenGardens.org website.

Find the guide at: <https://www.valleywater.org/saving-water/outdoor-conservation/landscape-guides-resources>

For further information, please contact Kirsten Struve at (408) 630-3138.



Santa Clara Valley Water District

File No.: 21-0130

Agenda Date: 9/28/2021

Item No.: 4.1.

BOARD AGENDA MEMORANDUM

SUBJECT:

Review Fiscal Year 2022 Board Policy Planning Calendar.

RECOMMENDATION:

Review, discuss and revise the Fiscal Year 2022 Board Policy Planning Calendar.

SUMMARY:

This item provides the Board an opportunity to review, discuss and revise the Fiscal Year 2022 Board Policy Planning Calendar (FY22 Board Calendar) and identify appropriate items for Board Committee work plans for discussion and feedback to the Board.

The current FY22 Board Calendar is attached for Board review.

FINANCIAL IMPACT:

There is no financial impact associated with this item.

CEQA:

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

ATTACHMENTS:

Attachment 1: FY22 Board Calendar

UNCLASSIFIED MANAGER:

Michele King, 408-630-2711

Fiscal Year 2021-2022 VALLEY WATER BOARD POLICY PLANNING CALENDAR

Fiscal Year 2021-2022 Board Work Plan			Board Committee	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
1.	Protect and maintain existing assets and infrastructure.														
2.	Pursue opportunities to improve internal capacity to acquire regulatory permits.														
3.	Engage and Educate the Community, Elected Officials and Staff on Future Water Supply Strategies in Santa Clara County.	• Drought Response and Water Supply Update	Water Conservation & Demand Management Committee	R	R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R
4.	Actively Pursue Water Storage Opportunities.	• Pacheco Funding Resolution (75% of non-state benefits)						R							
5.	Actively Participate in Decisions Regarding the CA Delta Conveyance.														
6.	Lead Recycled and Purified Water Efforts with Committed Partners.	• Purified Water Project – City of San José Partnership	Recycled Water Committee	R/C			C/R								
		• Public-Private Partnership (P3)	Recycled Water Committee	C	C	C	C/R	C	C/R	C/R	C/R	C	C	C	C
		• Countywide Recycled Water Master Plan	Recycled Water Committee		R										
7.	Advance Anderson Dam Seismic Retrofit Project.														
8.	Promote Making Water Conservation a California Way of Life in Santa Clara County.	• Drought Response and Water Supply Update	Water Conservation & Demand Management Committee	R	R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R
9.	Plan, design and maintain flood protection projects with multiple benefits, including protecting ecosystem functions and enhancing habitat.	• Ends Policy E-3: Flood Protection	Board Policy and Planning Committee		C	C	C	R							

Board Meetings

R = Regular

S = Special

C = Committee

X = Closed

Fiscal Year 2021-2022 VALLEY WATER BOARD POLICY PLANNING CALENDAR

Fiscal Year 2021-2022 Board Work Plan			Board Committee	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
10.	Provide flood protection equitably in all regions of the County, prioritizing disadvantaged communities.	• Ends Policy E-3: Flood Protection	Board Policy and Planning Committee		C	C	C	R							
11.	Attain net positive impact on the environment when implementing flood protection and water supply projects.	• One Water Countywide Framework and Coyote Creek Watershed Plan	Board Policy and Planning Committee						R						
12.	Promote the protection of creeks, bay and other aquatic ecosystems from threats of pollution and degradation.	• Water Resources Protection Ordinance	Board Policy and Planning Committee			C									
		• Public Trails on Valley Water Lands Policy	Board Policy and Planning Committee		R	R									
13.	Continue the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE).	• Draft FAHCE Environmental Impact Report	Stream Planning and Operations Committee												
14.	Advance racial equity, diversity and inclusion.	• Recognize Juneteenth as an Annual Valley Water Observed Holiday		R											
		• Affirm Support for Voting Rights for All			R										
15.	Maintain appropriate staffing levels and expertise and ensure the safety of our staff.	• Project Labor Agreement	PLA Working Group		R										
		• Long-Term Staffing Master Plan	D&I Ad Hoc Committee	C											
16.	Provide affordable and cost-effective level of services.	• Low-Income Residential Water Rate Assistance Program		R											
		• Central Fiscal Year 2020-21 Year-End and Fiscal Year 2021-22 Budget Adjustments			R										
17.	Address future impacts of climate change to Valley Water's mission and operations.	• Ends Policy E-5: Climate Change Mitigation and Adaptation	Board Policy and Planning Committee	R											
		• Climate Change Action Plan	Board Policy and Planning Committee	R											

Board Meetings

R = Regular

S = Special

C = Committee

X = Closed

Fiscal Year 2021-2022 VALLEY WATER BOARD POLICY PLANNING CALENDAR

Fiscal Year 2021-2022 Board Work Plan			Board Committee	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
18.	Other Notable Policy and Board Actions	• Office of Government Relations Annual Legislative and Policy Proposals							R						
		• Redistricting: Adoption of adjusted maps									R	R			

Items Regularly Monitored by Board		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
1.	BAO Performance				X			X			X		
2.	BAO Compensation	R											
3.	Board Expense Report				R				R				R
4.	Board Performance Report		R										

Board Meetings
R = Regular
S = Special
C = Committee
X = Closed

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Santa Clara Valley Water District

File No.: 21-0852

Agenda Date: 9/28/2021

Item No.: 4.2.

BOARD AGENDA MEMORANDUM

SUBJECT:

Receive the Audit Report of the Water Utility Enterprise Funds for the Fiscal Year Ended June 30, 2020.

RECOMMENDATION:

Receive the Audit Report of the Water Utility Enterprise Funds for the Fiscal Year ended June 30, 2020.

SUMMARY:

In 2006, Valley Water began conducting an annual Water Utility Fund Audit to assess the reasonableness of the direct and indirect cost allocations between the North County (Zone W-2) and South County (Zone W-5) zones. The audit was initiated to respond to water retailers' and constituents' inquiries on groundwater production charges.

As part of Valley Water's core water supply function, two major water utility zones form the basis for establishing Valley Water's water charges. Water charges are set separately for each zone, reflecting Valley Water activities carried out in each.

Zone W-2 encompassed the Santa Clara Valley groundwater basin north of Metcalf Road. It included those groundwater producing facilities that benefit from recharge with local and imported water. Zone W-5 encompassed the entire Llagas groundwater basin from Metcalf Road south to the Pajaro River.

On April 28, 2020 the Board adopted changes to the boundaries of the existing Zones of Benefit that took effect on July 1, 2020. The 2021 WUE audit will reflect the new Zones of Benefit.

The report entitled "Water Utility Enterprise Funds of the Santa Clara Valley Water District - Annual Financial Report for the Fiscal Year Ended June 30, 2020," which encompasses the Water Utility Fund financial statements and independent auditor's opinion, is provided as Attachment 1. The report is presented in the format prescribed under Generally Accepted Accounting Principles. The report and accompanying audit opinion indicate that the Water Utility fund financial statements are fairly stated in all material respects and that there were no findings. In addition, Attachment 1 includes a Schedule of Revenues and Expenses by Zone, which is also fairly stated, in all material respects, in relation to the basic financial statements as a whole according to the report.

The report may be viewed by the public on Valley Water's website at:
<https://www.valleywater.org/how-we-operate/financebudget/water-utility-enterprise-fund>

FINANCIAL IMPACT:

The cost of this audit was budgeted in FY 2020-21. There is no cost impact associated with presenting this audit report.

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: Audit Report, FY Ending 2020 WUE Funds

UNCLASSIFIED MANAGER:

Darin Taylor, 408-630-3068

**WATER UTILITY ENTERPRISE FUNDS
OF THE
Santa Clara Valley Water District
San Jose, California**

Annual Financial Report
For the Fiscal Year Ended June 30, 2020

**WATER UTILITY ENTERPRISE FUNDS
OF THE
SANTA CLARA VALLEY WATER DISTRICT
Annual Financial Report
For the Year Ended June 30, 2020**

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INDEPENDENT AUDITORS' REPORT

Board of Directors
Santa Clara Valley Water District
San Jose, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Water Enterprise Fund and State Water Projects Fund (Funds) of the Santa Clara Valley Water District (District), as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the Funds basic financial statements as listed in the Table of Contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the District's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Funds as of June 30, 2020, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 14, the District restated the net position of the Water Enterprise Fund related to the accounting for water inventory. The emphasis of this matter does not constitute a modification to our opinions.

Other Matters***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis and other Required Supplementary Information as listed in the Table of Contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.


Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements as a whole. The Schedule of Revenue and Expenses by Zone, as listed in the Table of Contents are presented for purposes of additional analysis and are not required parts of the basic financial statements.

The Schedule of Revenue and Expenses by Zone is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Revenue and Expenses by Zone is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 13, 2021, on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.



Pleasant Hill, California
August 16, 2021

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WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Management's Discussion and Analysis

Our discussion and analysis of the financial performance of the Valley Water's Water Utility Enterprise Funds (the "Funds") provide an overview of the Funds financial activities for the fiscal year ended June 30, 2020. This information is presented in conjunction with the audited financial statements that follow this section.

The Funds account for the management and supply of wholesale treated water, groundwater, recycled water, and surface water for the residents of Santa Clara County. The Funds are separate enterprise funds of the Valley Water (District) that were established to account for the water utility transactions of the District. The Funds are comprised of two funds – Water Enterprise Fund and State Water Project Fund. The Water Enterprise Fund is used to record ongoing water utility operations, with revenues comprised primarily of charges to the District's groundwater and treated water customers. The State Water Project Fund is used to account for state water project tax revenue and state water project contractual costs.

Because service needs are different in the northern and southern portions of the county, operations and expenditures are tracked separately based on the relative benefits to the North County and South County zones. Likewise, the District's water charges between the two zones are set independently.

The District engaged Maze and Associates to conduct the audit of the District's Funds for the fiscal year ended June 30, 2020. The purpose of the audit was to analyze the reasonableness of the allocations of cost and revenue between the two groundwater charge zones within the Funds, the North County zone, and the South County zone.

Overview of the Financial Statements

The accounting policies of the Funds of the Valley Water conform to accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB).

The financial statements of the Funds, as presented here, are for the District's Water Enterprise Funds activities only and do not reflect the financial position of the Valley Water as a whole. The Funds are accounted for as proprietary-type funds, where the cost of providing goods and services to the general public are financed and recovered primarily through user charges.

The following items comprise the statements of the Funds:

- *The Statement of Net Position* presents information on the Funds' assets, deferred outflow of resources, deferred inflow of resources and liabilities, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Funds is improving or deteriorating.
- *The Statement of Revenues, Expenses and Changes in Net Position* provides information about the Funds' revenues and expenses on an accrual basis.

Management Discussion and Analysis (continued)

- *The Statement of Cash Flows* provides relevant information on the Funds' cash receipts and cash payments during the period. This statement presents changes in the Funds' cash and cash equivalents resulting from operating, noncapital financing, capital and related financing, and investing activities.
- *The Notes to Basic Financial Statements* provide additional information that is essential to a better understanding of the data provided in the Funds' financial statements.

The Funds record the financial transactions in a manner similar to a private business enterprise. Operations are recorded at full accrual and accounted for to show net income or loss. The Funds are intended to be entirely or predominantly self-supported by user charges.

Financial Highlights

Water Utility Enterprise Funds Net Position (Dollars in Millions)

	2020	2019
Current and other assets	\$ 468.3	\$ 300.3
Capital assets	1,266.3	1,163.9
Other non current assets	0.1	0.3
Total assets	<u>1,734.7</u>	<u>1,464.5</u>
Deferred outflow of resources		
Deferred amount on refunding	0.6	0.4
Pension activities	20.8	20.9
OPEB activities	4.6	4.4
Total deferred outflow of resources	<u>26.0</u>	<u>25.7</u>
Current liabilities	130.3	74.4
Long-term liabilities outstanding	620.5	635.1
Total liabilities	<u>750.8</u>	<u>709.5</u>
Deferred inflow of resources		
Pension activities	4.0	4.4
OPEB activities	5.0	1.0
Total deferred inflow of resources	<u>9.0</u>	<u>5.4</u>
Net position:		
Net investment in capital assets	689.2	625.3
Restricted	84.7	71.5
Unrestricted	227.0	78.5
Total net position	<u><u>\$ 1,000.9</u></u>	<u><u>\$ 775.3</u></u>

The total net position of the Funds amounted to \$1,000.9 million at June 30, 2020. The largest portion of the Funds' net position (68.9% or \$689.2 million) reflects investment in

Management Discussion and Analysis (continued)

capital assets (e.g., land, buildings, infrastructure, machinery, equipment, and contract water rights) less any related debt outstanding used to acquire the capital assets. These capital assets are used to provide services to citizens and consumers. Consequently, these assets are not available for future spending. Although the Funds' investment in its capital assets is reported net of related debts, it should be noted that the resources needed to repay this debt must be provided from other sources since, in general, the capital assets themselves cannot be used to liquidate these liabilities.

Investment in capital assets, net of related debt, increased by \$63.9 million or 10.2% from the previous fiscal year. Capital assets, net of depreciation and amortization, increased by \$102.4 million. Long term liabilities, which include related debt outstanding, went down by \$14.6 million.

New construction in progress amounted to \$122.2 million for the Funds. There were 50 in progress and completed projects during the fiscal year, with major projects listed below (in millions):

- \$59.6 - Rinconada Water Treatment Plant Reliability Improvement
- \$19.0 - 10-year Pipeline and Rehabilitation
- \$17.3 - Pacheco Reservoir Expansion Project
- \$11.6 - Anderson Dam Seismic Retrofit
- \$6.3 - Coyote Pumping Plant Warehouse
- \$3.1 - Rinconada Water Treatment Plant Residuals Remediation
- \$1.0 - Dam Safety Seismic Stability

Net position categorized as "unrestricted" may be used to meet ongoing obligations to citizens, customers, and creditors. The Funds' unrestricted net position of \$227.0 million represents an increase of \$148.5 million or 189.2% when compared to the prior fiscal year.

Starting fiscal year 2020, the Valley Water's Board of Directors decided to record stored water as inventory. The \$148.5 million increase in unrestricted net position in fiscal year 2020 was mainly from the \$134.4 million of water inventory recognized at fiscal year-end.

Management Discussion and Analysis (continued)

Water Utility Enterprise Funds Change in Net Position (Dollars in Millions)

	<u>2020</u>	<u>2019</u>
Revenues:		
Ground water charges	\$ 112.6	\$ 81.9
Treated water charges	152.6	144.0
Surface and recycled water charges	1.7	1.8
Operating grants	3.7	2.7
Capital grants and contributions	4.3	1.1
Property taxes	30.2	30.5
Investment income	8.8	8.1
Miscellaneous	2.7	1.9
Total revenues	<u>316.6</u>	<u>272.0</u>
Expenses:		
Operating expenses	203.3	198.0
Nonoperating and other expenses	19.4	18.6
Total expenses	<u>222.7</u>	<u>216.6</u>
Change in net position before transfers	93.9	55.4
Transfers	<u>(1.5)</u>	<u>(2.7)</u>
Change in net position	92.4	52.7
Net position, beginning	775.3	722.6
Prior period adjustment - beg. water inventory	133.2	-
Net position, ending	<u>\$ 1,000.9</u>	<u>\$ 775.3</u>

Net position of the Funds of \$1,000.9 million increased by \$225.6 million when compared to the prior fiscal year. Total revenues and expenses of \$316.6 million and \$222.7 million, respectively, less net transfers out of \$1.5 million, added \$92.4 million to net position. A prior period adjustment to recognize water inventory starting fiscal year 2020 added \$133.2 million to the final net position balance.

Compared to the prior fiscal year, total revenues and expenses increased by \$44.6 million and \$6.1 million, respectively. Key elements of the changes in revenues and expenses from prior year are as follows:

- Total water charge revenues were \$39.2 million or 17.2% higher than last fiscal year. Groundwater and treated water revenues were up \$30.7 million and \$8.6 million, respectively. Groundwater volume was up versus prior year, and both revenue sources experienced higher water rates.
- Operating grants and contributions increased \$1.0 million over the prior fiscal year as more reimbursements were received from the City of San Jose for its cost share payment of the Advanced Water Treatment Facility Integration agreement.
- Capital grants and contributions increased \$3.2 million compared to the last fiscal year as more capital costs reimbursements from the Department of Water Resources and the California Water Commission were received for flood management programs.

Management Discussion and Analysis (continued)

- Water enterprise expenses increased by \$5.3 million or 2.7% over the prior fiscal year due to increased costs for purchased water, equipment repair and replacement, utilities, and other technical services.

Water Utility Enterprise Funds Schedule of Revenues and Expenses

(Budgetary Basis)

(Dollars in Millions)

	North County		South County		Total	
	2020	2019	2020	2019	2020	2019
Operating revenues:						
Ground water charges	97.4	69.2	15.2	12.7	112.6	81.9
Treated water charges	152.6	144.0	-	-	152.6	144.0
Surfaced and recycled water charges	1.1	1.1	0.7	0.7	1.8	1.8
Total water charges	251.1	214.3	15.9	13.4	267.0	227.7
Other	0.2	-	-	-	0.2	-
Total operating revenues	251.3	214.3	15.9	13.4	267.2	227.7
Operating expenses:						
Source of supply	77.4	73.9	10.7	9.2	88.1	83.1
Water treatment	37.4	37.6	0.3	0.4	37.7	38.0
Transmission and distribution:						
Raw water	9.8	12.7	3.3	4.4	13.1	17.1
Treated water	1.7	1.5	-	-	1.7	1.5
Cost of goods sold	126.3	125.7	14.3	14.0	140.6	139.7
Administration and general	20.5	20.8	4.2	4.2	24.7	25.0
Capital cost recovery	(5.6)	(5.5)	5.6	5.5	-	-
Total operating expenses	141.2	141.0	24.1	23.7	165.3	164.7
Operating income (loss)	110.1	73.3	(8.2)	(10.3)	101.9	63.0
Non-operating income (expenses):						
Property taxes	27.1	27.4	3.1	3.0	30.2	30.4
Investment income	8.8	8.1	-	-	8.8	8.1
Operating grants	3.7	2.8	-	-	3.7	2.8
Rental income	0.1	-	-	-	0.1	-
Other	2.2	1.6	0.2	0.2	2.4	1.8
Interest/fiscal agent fees	(19.4)	(18.6)	-	-	(19.4)	(18.6)
Open space credit transfer	(7.0)	(7.4)	7.0	7.4	-	-
Interest earned credit	(0.3)	(0.3)	0.3	0.3	-	-
Net non-operating income	15.2	13.6	10.6	10.9	25.8	24.5
Net income (loss)	125.3	86.9	2.4	0.6	127.7	87.5

Management Discussion and Analysis (continued)

Budgetary basis discussion:

- The Funds' total operating revenues were \$267.2 million during the current fiscal year. 94.0 percent of those revenues, or \$251.3 million were related to the North County, while the remaining 6.0 percent or \$15.9 million were related to the South County.
- Operating expenses for the North County include \$126.3 million in cost of goods sold, or 50.3 percent of its total operating revenues. For the South County, cost of goods sold is \$14.3 million or 89.9 percent of its total operating revenues.
- Administration and general expenses were \$20.5 million or 8.2 percent of total operating revenues for the North County and \$4.2 million or 26.4 percent of total operating revenues for the South County.
- Total operating revenues of \$267.2 million, less total operating expenses of \$165.3 million, netted \$101.9 million of income from operations. The North County registered a net operating gain of \$110.1 million, while the South County incurred a loss of \$8.2 million.

Income from operations was supplemented with property tax, operating grants, and investment earnings totaling \$42.7 million.

- Property taxes collected in the North County amounted to \$27.1 million, while \$3.1 million were collected in South County for a total of \$30.2 million. These are comprised of the voter approved obligations for State Water Project and the water utility's allocated share of the countywide 1 percent ad valorem taxes.
- Operating grants applied for and received amounted to \$3.7 million, all coming from the North County. These grants helped to fund water conservation, landscape water efficiency, raw water field maintenance and operations, and recycled/reclaimed water programs.
- Current fiscal year investment earnings of \$8.8 million were up by \$0.7 million when compared to the \$8.1 million earned during the previous fiscal year.

Management Discussion and Analysis (continued)

The following table shows the rates for water services for fiscal year 2020

Water Utility Enterprise Funds Rate Summary

	Rate
<u>Groundwater</u>	
North County – Agricultural	\$ 28.86
North County – Non-Agricultural	1,374.00
South County – Agricultural	28.86
South County – Non-Agricultural	481.00
<u>Treated Water</u>	
Contract (Scheduled) ⁽²⁾	1,474.00
Non-Contract ⁽³⁾	1,574.00
<u>Surface Water (Basic User Charge)</u>	
North County – Agricultural	28.86
North County – Non-Agricultural	1,374.00
South County – Agricultural	28.86
South County – Non-Agricultural	481.00
Water Master ⁽¹⁾	37.50
<u>Minimum Surface Water Charge</u>	
North County – Non-Agricultural	1,030.50
South County – Non-Agricultural	360.75
North County – Agricultural	21.65
South County – Agricultural	21.65
<u>Reclaimed Water</u>	
Gilroy Reclamation Facility – Agricultural	56.25
Gilroy Reclamation Facility – Non-Agricultural	461.00

(1) The surface water charge is the sum of the basic user charge (which equals the groundwater production charge) plus the water master charge.

(2) The total treated water contract charge is the sum of the basic user charge (which equals the groundwater production charge) plus the contract surcharge.

(3) The total treated water non-contract charge is the sum of the basic user charge (which equals the groundwater production charge) plus the non-contract surcharge.

Capital Assets

The Funds' capital asset balance, net of accumulated depreciation, amounts to \$1.26 billion at June 30, 2020. Capital asset composition includes land, intangible rights, buildings, structures and improvements, machinery and equipment, and construction in progress. Capital assets for the current fiscal year went up \$102.4 million or 8.8%.

Management Discussion and Analysis (continued)

A fiscal year comparative breakdown of the categories of capital assets for the Funds is shown below.

Water Utility Enterprise Funds Capital Assets
(Net of Accumulated Depreciation)
(Dollars in Millions)

	2020	2019
Land	\$ 20.0	\$ 19.2
Easements	0.2	0.2
Contract water and storage rights	38.5	40.9
Buildings	84.9	80.8
Structures and improvements	623.8	618.4
Equipment	5.0	4.7
Intangible software	0.1	0.1
Construction in progress	493.8	399.6
Total	<u>\$ 1,266.3</u>	<u>\$ 1,163.9</u>

Additional information on the Funds capital assets activity for the current fiscal year is shown in Note 6 of this report.

Debt Administration

The Funds' total long-term debts at June 30, 2020 amount to \$637.6 million. A comparative breakdown of its long-term debts is shown below:

Water Utility Enterprise Funds Outstanding Debt Obligations
(Dollars in Millions)

	2020	2019
Bonds payable	\$ 458.0	\$ 470.8
Compensated absences	6.3	5.3
Net pension liability	100.6	94.5
Semitropic water banking	10.0	10.0
Other post employment benefits	25.7	32.0
Bond discount	-	(0.1)
Premium on bond issue	37.0	38.6
Total	<u>\$ 637.6</u>	<u>\$ 651.1</u>

Total long-term debts decreased by \$13.5 million during the current fiscal year. Bonds payable, inclusive of premium and discounts, went down \$14.3 million with the refunding of the 2007B certificate of participation bonds. Liabilities related to compensated absences went up by \$1.0.

Management Discussion and Analysis (continued)

The increase in pension liability of \$6.1 million was offset by the decrease in other post-employment (OPEB) liabilities of \$6.3 million.

Additional information on the Funds' long-term liabilities can be found in Note 7(b) of this report.

Next Year's Budgets

Valley Water's \$609.5 million budget for fiscal year 2021 will focus on the following work plan strategies:

- Actively pursue new water storage opportunities
- Actively participate in decisions regarding the California Delta Conveyance
- Lead Recycled and Purified Water Efforts with committed partners
- Engage and educate the community, elected officials and staff on future water supply strategies in Santa Clara County
- Advance Anderson Dam Seismic Retrofit Project
- Protect and maintain existing assets and infrastructure
- Pursue opportunities to improve internal capacity to acquire regulatory permits
- Attain net positive impact on the environment when implementing flood protection and water supply projects
- Promote the protection of creeks, bay, and other aquatic ecosystems from threats of pollution and degradation
- Continue the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE)
- Address future impacts of climate change to Valley Water's mission and operations
- Advance diversity and inclusion
- Maintain appropriate staffing levels and expertise
- Provide affordable and cost-effective level of services

Requests for Information

This financial report is designed to provide citizens, taxpayers, customers, investors, and creditors of the North and South Counties with a general overview of the Funds' finances and to demonstrate accountability for the money that the Funds receive. If you have any questions about this report or need any additional information, contact the General Accounting Unit at 5750 Almaden Expressway, San Jose, CA 95118, or call (408) 265-2600.

Basic Financial Statements

**WATER UTILITY ENTERPRISE FUNDS
OF THE
SANTA CLARA VALLEY WATER DISTRICT**

Statement of Net Position
June 30, 2020
(Dollars in Millions)

	Water Enterprise Fund	State Water Project Fund	Total
ASSETS			
Current assets:			
Cash and investments (Note 3)	\$ 271.2	\$ 17.0	\$ 288.2
Receivables:			
Accounts	38.6	-	38.6
Taxes	-	0.1	0.1
Inventory - water (Note 1(d))	134.4	-	134.4
Deposits and other assets	7.0	-	7.0
Total current assets	<u>451.2</u>	<u>17.1</u>	<u>468.3</u>
Non current assets:			
Restricted cash and investments (Note 3)	0.1	-	0.1
Capital assets: (Note 6)			
Contract water rights, net	23.4	15.1	38.5
Depreciable, net	713.8	-	713.8
Nondepreciable	514.0	-	514.0
Total non current assets	<u>1,251.3</u>	<u>15.1</u>	<u>1,266.4</u>
Total assets	<u>1,702.5</u>	<u>32.2</u>	<u>1,734.7</u>
DEFERRED OUTFLOWS OF RESOURCES			
Deferred amount on refunding	0.6	-	0.6
Deferred outflows of resources - pension activities (Note 10)	20.8	-	20.8
Deferred outflows of resources - OPEB (Note 11)	4.6	-	4.6
Total deferred outflows of resources	<u>26.0</u>	<u>-</u>	<u>26.0</u>
LIABILITIES			
Current liabilities:			
Accounts payable	31.7	0.3	32.0
Accrued liabilities	1.8	-	1.8
Commercial paper (Note 7)	72.7	-	72.7
Deposits payable	6.7	-	6.7
Bonds payable - current (Note 7)	15.7	-	15.7
Compensated absence	1.4	-	1.4
Total current liabilities	<u>130.0</u>	<u>0.3</u>	<u>130.3</u>
Non current liabilities:			
Bonds payable - net of discounts and premiums (Note 7)	479.4	-	479.4
Compensated absence	4.9	-	4.9
Net pension liability (Note 10)	100.6	-	100.6
Other post employment benefits liability (Note 11)	25.6	-	25.6
Other Debt	10.0	-	10.0
Total non current liabilities	<u>620.5</u>	<u>-</u>	<u>620.5</u>
Total liabilities	<u>750.5</u>	<u>0.3</u>	<u>750.8</u>
DEFERRED INFLOWS OF RESOURCES			
Deferred inflows of resources - pension activities (Note 10)	4.0	-	4.0
Deferred inflows of resources - OPEB (Note 11)	5.0	-	5.0
Total deferred inflows of resources	<u>9.0</u>	<u>-</u>	<u>9.0</u>
NET POSITION (Note 9)			
Net investment in capital assets	674.1	15.1	689.2
Restricted			
Cash with fiscal agents	0.1	-	0.1
San Felipe operations	3.3	-	3.3
GP5 reserve	6.6	-	6.6
State water projects	-	16.8	16.8
Rate stabilization	23.5	-	23.5
Public-private partnership	8.0	-	8.0
Advance water purification	1.3	-	1.3
Supplemental water supply	15.1	-	15.1
Drought reserve	10.0	-	10.0
Unrestricted	<u>227.0</u>	<u>-</u>	<u>227.0</u>
Total net position	<u>\$ 969.0</u>	<u>\$ 31.9</u>	<u>\$ 1,000.9</u>

See accompanying notes to basic financial statements.

**WATER UTILITY ENTERPRISE FUNDS
OF THE
SANTA CLARA VALLEY WATER DISTRICT**

Statement of Revenues, Expenses and Changes in Net Position

For the Year Ended June 30, 2020

(Dollars in Millions)

	Water Enterprise Fund	State Water Project Fund	Total
Operating revenues:			
Ground water production charges	\$ 112.6	\$ -	\$ 112.6
Treated water charges	152.6	-	152.6
Surface and recycled water revenue	1.7	-	1.7
Other	0.2	-	0.2
Total operating revenues	<u>267.1</u>	<u>-</u>	<u>267.1</u>
Operating expenses:			
Sources of supply	64.1	21.8	85.9
Water treatment	38.5	-	38.5
Transmission and distribution:			
Raw water	14.0	-	14.0
Treated water	1.7	-	1.7
Administration and general	32.0	-	32.0
Depreciation and amortization	30.3	0.9	31.2
Total operating expenses	<u>180.6</u>	<u>22.7</u>	<u>203.3</u>
Operating income (loss)	<u>86.5</u>	<u>(22.7)</u>	<u>63.8</u>
Nonoperating revenues (expenses):			
Property taxes (Note 8)	8.4	21.8	30.2
Investment income (Note 5)	8.8	-	8.8
Operating grants	3.7	-	3.7
Rental income	0.1	-	0.1
Other	1.0	1.4	2.4
Interest and fiscal agent fees	(19.4)	-	(19.4)
Net nonoperating revenues	<u>2.6</u>	<u>23.2</u>	<u>25.8</u>
Income before capital contributions and transfers	89.1	0.5	89.6
Capital contributions (Note 4)	4.3	-	4.3
Transfers in from District (Note 13)	1.1	-	1.1
Transfers out to District (Note 13)	(2.6)	-	(2.6)
Change in net position	<u>91.9</u>	<u>0.5</u>	<u>92.4</u>
Net position, beginning of year	743.9	31.4	775.3
Prior period adjustment			
Inventory, beginning of the year	133.2	-	133.2
Net position, beginning of year, as restated (Note 14)	<u>877.1</u>	<u>31.4</u>	<u>908.5</u>
Net position, end of year	<u><u>\$ 969.0</u></u>	<u><u>\$ 31.9</u></u>	<u><u>\$ 1,000.9</u></u>

See accompanying notes to basic financial statements.

**WATER UTILITY ENTERPRISE FUNDS
OF THE
SANTA CLARA VALLEY WATER DISTRICT**

Statement of Cash Flows
For the Year Ended June 30, 2020
(Dollars in Millions)

	Water Enterprise Fund	State Water Project Fund	Total
Cash flows from operating activities:			
Receipts from customers and users	\$ 252.9	\$ -	\$ 252.9
Payments to suppliers	(48.2)	(26.3)	(74.5)
Payments to employees	(88.3)	-	(88.3)
Net cash provided by (used for) operating activities	116.4	(26.3)	90.1
Cash flows from noncapital financing activities:			
Property taxes received	8.7	22.4	31.1
Operating grants	3.7	-	3.7
Other receipts	1.0	1.4	2.4
Transfers in from other funds	1.1	-	1.1
Net cash provided by noncapital financing activities	14.5	23.8	38.3
Cash flows from capital and related financing activities:			
Issuances/(payments) of COP/revenue bonds	(14.4)	-	(14.4)
Issuances/(payments) of commercial papers	52.7	-	52.7
Capital grants	4.3	-	4.3
Interest and fiscal agent fees paid	(19.4)	-	(19.4)
Payment for contract water rights	(10.0)	-	(10.0)
Acquisition and construction of capital assets	(123.6)	-	(123.6)
Transfers out - capital project reimbursements	(2.6)	-	(2.6)
Net cash used by capital and related financing activities	(113.0)	-	(113.0)
Cash flows from investing activities:			
Proceeds from sale/(purchase) of investments	0.1	-	0.1
Rental income received	0.1	-	0.1
Interest received on cash and investments	8.8	-	8.8
Net cash provided by investing activities	9.0	-	9.0
Net increase/(decrease) in cash and cash equivalents	26.9	(2.5)	24.4
Cash and cash equivalents, beginning of year	244.3	19.5	263.8
Cash and cash equivalents, end of year	\$ 271.2	\$ 17.0	\$ 288.2
Cash and cash equivalents are reported on the Statement of Net Position:			
Cash and investments	\$ 271.2	\$ 17.0	\$ 288.2
Restricted cash and investments	0.1	-	0.1
Less cash and investments not meeting the definition of cash equivalents	(0.1)	-	(0.1)
Cash and cash equivalents, end of year	\$ 271.2	\$ 17.0	\$ 288.2
Reconciliation of operating income (loss) to net cash provided by operating activities:			
Operating income (loss)	\$ 86.5	\$ (22.7)	\$ 63.8
Adjustments to reconcile operating income (loss) to net cash provided (used) by operating activities:			
Depreciation, amortization and asset deletion	30.3	0.9	31.2
Change in operating assets and liabilities:			
(Increase)/decrease in deposits and other assets	2.8	-	2.8
(Increase)/decrease in inventory - water	(1.2)	-	(1.2)
(Increase)/decrease in accounts receivable	(13.0)	-	(13.0)
Increase/(decrease) in accounts payable	14.7	(4.5)	10.2
Increase/(decrease) in accrued liabilities	(3.7)	-	(3.7)
Increase/(decrease) in deferred revenues	(1.2)	-	(1.2)
Increase/(decrease) in compensated absences	0.9	-	0.9
Increase/(decrease) in deposits payable	(2.8)	-	(2.8)
Increase/(decrease) in other post employment benefits payable	(6.3)	-	(6.3)
Increase/(decrease) in deferred outflow/inflow of resources	3.4	-	3.4
Increase/(decrease) in pension liabilities	6.0	-	6.0
Net cash provided (used) by operating activities	\$ 116.4	\$ (26.3)	\$ 90.1

See accompanying notes to basic financial statements.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements
For the Year Ended June 30, 2020

NOTE 1 - THE FINANCIAL REPORTING ENTITY

(a) Description of the Reporting Entity

Valley Water is a special district created by an act of the legislature of the State of California (State) in 1951 and as amended. Valley Water encompasses all of Santa Clara County.

Valley Water is governed by a seven-member Board of Directors (District Board). Each member is elected from equally divided districts drawn through a formal process. The term of office of a director is four years.

On October 12, 2009, Assembly Bill 466 was signed by the Governor of California revising the composition of the board of Valley Water by requiring the board to transition to an all-elected board that, on or after noon on December 3, 2010, consists of seven directors who are elected pursuant to specified requirements. The board also would be required to adopt a resolution establishing boundaries of the seven electoral districts. On May 14, 2010, the Board of Directors adopted a resolution that officially set the boundaries of the seven electoral districts. In November 2010, two directors were elected to represent the new electoral districts constituting a new board of seven members. As required by state law, Valley Water must redraw its boundaries to reflect 2010 Census results. On October 11, 2011, the Board of Directors adopted Resolution No. 11-63 selecting the Redistricting Plan, known as the Current Adjusted Map.

Valley Water has broad powers relating to all aspects of flood control and storm waters within Valley Water, whether or not such waters have their sources within Valley Water. It is also authorized to store and distribute water for use within its jurisdictional boundaries and authorized to provide sufficient water for present or future beneficial use of the lands and inhabitants of Valley Water. Valley Water acquires, stores, and distributes water for irrigation, residential, fire protection, municipal, commercial, industrial, and all other uses. Valley Water also directly supports the caring for the environment and the community through careful stewardship.

The Water Utility Enterprise Funds (the "Funds") are separate enterprise funds that were established to account for the water utility related transactions of Valley Water. The Funds supply wholesale treated water, ground water, recycled water, and surface water for the residents of the Santa Clara County. The Funds are comprised of two accounting funds – the Water Enterprise Fund and the State Water Project Fund. The Water Enterprise Fund accounts for ongoing water utility operations, with revenues comprised primarily of charges to Valley Water's groundwater and treated water customers. The State Water Project Fund accounts for the state water project tax revenue and state water project contractual costs.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of Presentation

Fund Financial Statements

The Water Enterprise Fund and the State Water Project Fund (the Funds) financial statements are prepared in conformity with the generally accepted accounting principles (GAAP) in the United States of America. The Government Accounting Standards Board (GASB) is the acknowledged standard setting body for establishing accounting and financial reporting standards followed by governmental entities in the United States of America. The Funds are included as part of Valley Water's Comprehensive Annual Financial Report. Therefore, the financial statements of the Funds do not purport to represent the financial position and changes in financial position of Valley Water as a whole.

The Funds account for operations that are financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the costs (including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges.

(b) Basis of Accounting

The Funds financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place. Nonexchange transactions, in which the Funds give (or receives) value without directly receiving (or giving) equal value in exchange, include property taxes, benefit assessments and grants. On an accrual basis, revenues from property taxes and benefit assessments are recognized in the fiscal year for which the taxes and assessments are levied; revenue from grants is recognized in the fiscal year in which all eligibility requirements have been satisfied; and revenue from investments is recognized when earned.

The Funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in connection with the Funds' principal ongoing operations. The principal operating revenue of the Funds is the sale of water to outside customers. Operating expenses for the Funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. *Operating* revenues, such as charges for services, result from the exchange transactions associated with the principal activity of the Funds. Exchange transactions are those in which each party receives and gives up essentially equal value. *Non-operating* revenues, such as subsidies and investment earnings, result from non-exchange transactions or ancillary activities.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

(c) Cash and Investments

While maintaining safety and liquidity, Valley Water maximizes its investment return by pooling its available cash for investment purposes. Interest earnings are apportioned among funds based upon the average monthly cash balance of each fund and are allocated to each fund on a monthly basis.

Valley Water reported investments in nonparticipating interest earnings contracts (including guaranteed investment contracts) at cost, and all other investments at fair value. The fair value of investments is based on current market prices.

For purposes of the Statement of Cash Flows, the Funds consider all highly liquid investments with a maturity of three months or less when purchased (including restricted investments), and their equity in the cash and investment pool to be cash equivalents.

(d) Inventory

Inventory consists of materials and supplies held for consumption. The cost of all inventory acquired is recorded as an expense at the time of purchase. At the end of the accounting period, the inventory values of materials and supplies on hand are determined using a current cost method which approximates market value. For financial statement purposes inventories are presented under deposits and other assets.

Starting fiscal year 2020, the Valley Water's Board of Directors decided to record stored water as inventory. Water inventory is listed as a separate line item on the financial statements.

The component of water inventory as of the end of the current fiscal year is shown below. Water inventory is valued based on the rolling average of imported water purchase cost.

<u>Type</u>	<u>Acre Feet</u>		<u>Total (in millions)</u>
	<u>Unit Cost</u>	<u>Volume</u>	
Semitropic ground water bank reserves	\$331	344,662	\$ 114.1
Local reservoir storage	331	61,462	20.3
Total			<u>\$ 134.4</u>

(e) Capital Assets

Capital assets (including infrastructure) are recorded at historical cost or at estimated historical cost if actual historical cost is not available. Contributed capital assets are valued at their estimated acquisition value on the date contributed. Valley Water defines capital assets as assets with an initial, individual cost of more than \$5,000 and an estimated useful life in excess of one year. Capital assets including assets under capital leases used in operations are depreciated or amortized using the straight-line method over the lesser of the capital lease period or their estimated useful lives.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

The estimated useful lives are as follows:

Water treatment facilities	50 Years
Buildings, structures, and trailers	25 – 50 Years
Flood control projects	30 – 100 Years
Dams	80 Years
Office furniture, fixtures, and equipment	5 - 20 Years
Automobiles and trucks	6 - 12 Years
Computer equipment	5 Years

Maintenance and repairs are charged to operations when incurred. Betterments and major improvements which significantly increase values, change capacities or extend useful lives are capitalized. Upon sale or retirement of capital assets, the cost and related accumulated depreciation are removed from the respective accounts and any resulting gain or loss is included in the results of operations.

(f) Amortization of Contract Water Rights

Valley Water has contracted with the State for water deliveries from the State Water Project through calendar year 2035. A portion of the payments under this contract represent reimbursement of capital costs for transportation facilities (the capital cost component). The Funds capitalize the capital cost component and amortizes such component, using the straight-line method, over the remaining entitlement period.

(g) Amortization of Water Banking Rights

Valley Water has contracted with the Semitropic Water Storage District and its Improvement Districts for the water banking and exchange program. The program is in effect through calendar year 2035. Participation in the program provides Valley Water a 35% allocation for storage rights at the Semitropic Water Storage District facility, totaling 350,000 acre-feet. The Funds have capitalized the cost of the program and amortizes the cost over the 40-year entitlement period using the straight-line method.

(h) Amortization of Water Delivery Rights

Valley Water has contracted with the United States Department of the Interior Bureau of Reclamation for water deliveries from Central Valley through calendar year 2027. A portion of this contract represents reimbursement of capital costs for general construction in the San Felipe Division facilities. The Funds capitalized the capital cost component and amortize such component, using the straight-line method, over the remaining entitlement period.

(i) Receivables

Receivables include amounts due from water utility customers, as well as from other miscellaneous revenue sources. All receivables are shown net of an allowance for doubtful accounts. For the current fiscal year, the allowance balance was \$5.9 million. At the end of every fiscal year, a review of outstanding receivables results in the recalculation of the bad debt allowance where delinquent balances greater than 3 years are assigned a weight of

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

75%, up to 3 years a weight of 50%, up to 2 years a weight of 20%, and up to 1 year a weight of 5%. The totals of each of these amounts are then combined to determine the fiscal year's ending bad debt allowance.

(j) Accrued Vacation and Sick Leave Pay

It is the policy of Valley Water to permit employees to accumulate earned but unused vacation and sick leave benefits. Vested or accumulated vacation and sick leave are reported as noncurrent liabilities on the statement of net position.

Maximum vacation accruals may not exceed three times the employee's annual accrual rate, per employee. All regular full-time employees are eligible for twelve (12) days of sick leave per fiscal year. Unused sick leave may be carried forward to the following fiscal year without limitation. Upon retirement, up to 480 hours of accrued sick leave shall be paid to the eligible employee at the rate of 50% of the equivalent cash value. Upon resignation with ten or more years of service, or upon separation by layoff regardless of service, up to 480 hours of accrued sick leave shall be paid off at the rate of 25% of the cash value.

(k) Bond Premiums, Discounts and Issuance Costs

The Funds' bond premiums and discounts are deferred and amortized over the life of the bonds. Bonds payable are reported net of the applicable bond discounts. Refunding costs associated with debt refinancing are reported as deferred outflows of resources. Issuance costs are recorded as an expense of the current period.

On the statement of net position and the statement of revenues, expenses, and changes in net position, premiums and discounts related to outstanding debt are deferred and amortized over the life of the debt obligation. Debt payable are reported net of the applicable bond premiums or discounts. Prepaid insurance associated with the issuance of debts are reported as prepaid expenses.

(l) Accounting for Encumbrances

Valley Water employs encumbrance accounting as a significant aspect of budgetary control. Under encumbrance accounting, purchase orders, contracts and other expenditure commitments are recorded as assignment of net position since they are not treated as current expenditures or outstanding liabilities at year end for GAAP financial reporting.

(m) Net Position

The net position of the Funds is classified based primarily to the extent to which Valley Water is bound to observe constraints imposed upon the use of the resources. When both restricted and unrestricted resources are available for expenses, Valley Water expends the restricted funds and then the unrestricted funds.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

(n) Estimates

The preparation of the basic financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

(o) Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of Valley Water's California Public Employees' Retirement System (CalPERS) plans (Plans) and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Generally accepted accounting principles require that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Valuation Date	June 30, 2018
Measurement Date	June 30, 2019

(p) Other Post Employment Benefits (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows/inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of Valley Water's plan (OPEB) Plan) and additions to/deductions from the OPEB's Plan's fiduciary net position have been determined on the same basis as reported by CalPERS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Generally accepted accounting principles require that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Valuation Date	June 30, 2019
Measurement Date	June 30, 2019

(q) Fair Value Measurement

Valley Water has applied Governmental Accounting Standards Board ("GASB") Statement No. 72, Fair Value Measurement and Application. GASB Statement No. 72 provides guidance for determining a fair value measurement for reporting purposes and applying fair value to certain investments and disclosures related to all fair value measurements. Valley Water categorizes

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

the fair value measurements of its investments based on the hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are observable inputs (other than quoted marked prices) using matrix pricing based on the securities relationship to benchmark quoted prices; and Level 3 inputs are significant unobservable inputs.

(r) Deferred Outflows and Inflows of Resources

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. Deferred outflows of resources represent a consumption of net position that applies to future period(s) and so will not be recognized as an outflow of resources (expense) until then.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. Deferred inflows of resources represent an acquisition of net position that applies to future period(s) and so will not be recognized as an inflow or resources (revenues) until such time.

(s) New Pronouncements

The Governmental Accounting Standards Board (GASB) releases new accounting and financial reporting standards which may have a significant impact on Valley Water's financial reporting process. Current and future new standards which may impact Valley Water include the following:

Current Accounting Pronouncement:

GASB Statement No. 90 – In August 2018, GASB issued Statement No. 90, *Majority Equity Interest, an amendment of GASB statement No. 14 and No. 61*. The objective of this Statement is to improve how majority equity interest is reported. The Statement specifies that a majority equity interest in a legally separate organization should be reported as an investment using the equity method if a government's holding of the equity interest meets the definition of an investment and for all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018, or fiscal year 2020. This pronouncement is not applicable to Valley Water.

Future Accounting Pronouncements:

GASB Statement No. 84 – In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018, or fiscal year 2020. Valley Water has implemented this GASB standard.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

GASB Statement No. 87 – In June 2017, GASB issued Statement No. 87, *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The Statement is effective for the reporting periods beginning after December 15, 2019, or fiscal year 2021. Valley Water has not determined the impact of this pronouncement on the financial statements.

GASB Statement No. 89 – In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*. The objective of this Statement is to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (b) to simplify accounting for certain interest costs. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in the financial statements. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019, or fiscal year 2021. Valley Water has not determined the impact of this pronouncement on the financial statements.

GASB Statement No. 91 – In May 2019, GASB issued Statement No. 91, *Conduit Debt Obligations*. The objective of this Statement is to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. This Statement requires issuers to disclose general information about their conduit debt obligations, organized by type of commitment, including the aggregate outstanding principal amount of the issuers' conduit debt obligations and a description of each type of commitment. Issuers that recognize liabilities related to supporting the debt service of conduit debt obligations also should disclose information about the amount recognized and how the liabilities changed during the reporting period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020, or fiscal year 2022. Valley Water has not determined the impact of this pronouncement on the financial statements.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

NOTE 3 - CASH AND INVESTMENTS

The Funds pool their cash and investments with Valley Water. The pool balance at June 30, 2020 is as follows (in millions):

Statement of Net Position:	
Cash and investments	\$ 716.0
Restricted cash and investments	5.6
Statement of Fiduciary Net Position:	
Cash and investments	0.2
	<u>\$ 721.8</u>

Investments

At June 30, 2020, cash and investments based on fair market value consist of the following (in millions):

U.S. Government Agencies	\$ 300.7
U.S. Treasury Obligations	25.9
Medium Term Notes	18.6
Local Agency Investment Fund	75.0
Mutual Funds	0.1
Supranational Obligations	10.3
Municipal Bonds	65.5
Negotiable Certificates of Deposit	1.2
Time Certificates of Deposit	172.5
Money Market Funds	47.7
Total Investments	<u>\$ 717.5</u>
Carrying amount of cash	4.3
Total Cash and Investments	<u>\$ 721.8</u>

As of June 30, 2020, the fair value of Valley Water's investment in the State investment pool (LAIF) was \$75.0 million in non-restricted cash. The Local Investment Advisory Board (Board) has oversight responsibility for LAIF. The Board consists of five members as designated by State Statute. Valley Water is a voluntary participant in the pool. The value of the pool shares in LAIF, which may be withdrawn, is determined on an amortized cost basis, which is different than the fair value of Valley Water's position in LAIF. The pool is not registered with the Securities Exchange Commission.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Authorized Investments by Valley Water

Valley Water's Investment Policy and the California Government Code allow Valley Water to invest in the following types of investments, provided the credit ratings of the issuers are acceptable to Valley Water. The following items also identify certain provisions of Valley Water and California Government Code that address interest rate risk, credit risk, and concentration of credit risk. This list does not address Valley Water's investments of debt proceeds held by fiscal agents that are governed by the provisions of debt agreements of Valley Water, rather than the general provisions of the California Government Code or Valley Water's investment policy, when more restrictive.

<u>Authorized Investment Type</u>	<u>Maximum Maturity</u>	<u>Minimum Credit Quality</u>	<u>Maximum Percentage of Portfolio</u>	<u>Maximum Investment in One Issuer</u>
U.S. Treasury Obligations	5 years	(Exempt from disclosure)	None	None
U.S. Government Agency Issues (A)	5 years	(Exempt from disclosure)	None	None
Bankers Acceptances	180 days	AA-	40%	4.8%
Commercial Paper	90 days	AA-	15%	1.8%
Negotiable Certificates of Deposit	5 years	AA-	30%	3.6%
Time Certificates of Deposit (B)	5 years	Satisfactory CRA	5%	\$250,000 & FDIC Membership
Collateralized Repurchase Agreements	30 days	AA-	None	None
Medium Term Notes	5 years	AA-	15%	1.8%
Municipal Obligations	5 years	AA-	15%	1.8%
California Local Agency Investment Fund (C)	N/A	N/A	(B)	(B)
Mutual Funds	N/A	AAA	10%	- -
Supranational Obligations	5 years	AA	15%	1.8%

(A) Securities issued by agencies of the federal government such as the Federal Farm Credit Bank (FFCB), the Federal Home Loan Bank (FHLB), the Federal National Mortgage Association (FNMA), the Federal Home Loan Mortgage Corporation (FHLMC), the Federal Agricultural Mortgage Corporation of America and the Tennessee Valley Authority.

(B) Valley Water Board of Directors approved investments in California based local banks with a threshold of a minimum of 4% invested in banks with up to \$10 billion in assets and 1% in banks with up to \$2 billion in assets for a limit of 5 years in the form of collateralized deposits, FDIC/NCUA insured CDs, CDARS, or any legally allowable deposits.

(C) LAIF will accept no more than \$75 million of an agency's unrestricted funds while placing no constraints on funds relating to unspent bond proceeds.

Restricted Cash and Investments for Bond Interest and Redemption

Under the provisions of Valley Water's revenue bond resolutions and Installment Purchase Agreement for the 2012A, 2016C, 2016D, and 2017A Certificates of Participations (COPs) and Water Utility Revenue and Refunding Bonds 2006B, 2016A, 2016B, 2017A, 2019A, 2019B and 2019C, a portion of the proceeds from these debt issuances is required to be held in custody accounts by a fiscal agent as trustee.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

As of June 30, 2020, the amount invested in assets held by fiscal agent amounted to \$5.4 million and was equal to or in excess of the amount required at that date.

Restricted Cash and Investments for Capital Projects

Valley Water, through the PFFC, has also issued commercial paper to provide for any Valley Water purposes, including but not limited to, capital expenditure, investment and reinvestment, and the discharge of any obligation or indebtedness of Valley Water. At June 30, 2020, the total balance of the taxable and the tax-exempt commercial paper certificate accounts held by fiscal agent is \$0.1 million. Both account balances were cash transfers from Valley Water to fiscal agent to fund maturing interest payments on commercial papers outstanding.

Authorized Investments by Debt Agreements

Valley Water must maintain required amounts of cash and investments with trustees or fiscal agents under the terms of certain debt issues. These funds are unexpended bond proceeds or are pledged reserves to be used if Valley Water fails to meet its obligations under these debt issues. The California Government Code requires these funds to be invested in instruments which, at the time of such investment, are legal investments under the laws of the State of California, Valley Water ordinances, policies, and bond indentures. The following table identifies the investment types that are authorized for investments held by fiscal agents. The table also identifies certain provisions of these debt agreements.

Authorized Investment Type	Maximum Maturity	Minimum Credit Quality
U.S. Treasury Obligations ^(A)	N/A	N/A
U.S. Agency Securities ^(B)	N/A	N/A
State Obligations ^(C)	N/A	A
Commercial Paper	270 days	A1
Unsecured CD's, deposit accounts, time deposits, and bankers acceptances	365 days	A-1
FDIC Insured Deposit ^(D)	N/A	N/A
Money Market Funds	N/A	AAAm
Collateralized Repurchase Agreements ^(E)	N/A	A-1
Investment Agreements ^(F)	N/A	AA-
Investment Approved in Writing by the Certificate Insurer ^(G)	N/A	N/A
Local Agency Investment Fund of the State of CA	N/A	N/A
Supranational Obligations	N/A	AA

(A) Direct obligations of the United States of America and securities fully and unconditionally guaranteed as to the timely payment of principal and interest by the United States of America, provided that the full faith and credit of the United States of America must be pledged to any such direct obligation or guarantee.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

(B) Direct obligations and fully guaranteed certificates of beneficial interest of the Export-Import Bank of the United States; consolidated debt obligations and letter of credit-backed issues of the Federal Home Loan Banks; participation certificates and senior debt obligations of the Federal Home Loan Mortgage Corporation ("FHLMCs"); debentures of the Federal Housing Administration; mortgage-backed securities (except stripped mortgage securities which are valued greater than par on the portion of unpaid principal) and senior debt obligations of the Federal National Mortgage Association ("FNMAs"); participation certificates of the General Services Administration; guaranteed mortgage-backed securities and guaranteed participation certificates of the Government National Mortgage Association ("GNMAs"); guaranteed participation certificates and guaranteed pool certificates of the Small Business Administration; local authority Certificates of the U.S. Department of Housing & Urban Development; guaranteed Title XI financings of the U.S. Maritime Administration; guaranteed transit Certificates of the Washington Metropolitan Area Transit Authority; Resolution Funding Corporation securities.

(C) Direct obligations of any state of the United States of America or any subdivision or agency thereof whose unsecured, uninsured and unguaranteed general obligation debt is rated, at the time of purchase, "A" or better by Moody's and "A" or better by S&P.

(D) Deposits of any bank or savings and loan association which has combined capital, surplus and undivided profits of not less than \$3 million, provided such deposits are continuously and fully insured by the Bank Insurance Fund or the Savings Association Insurance Fund of the Federal Deposit Insurance Corporation.

(E) Repurchase agreements collateralized by Direct Obligations, GNMAs, FNMAs or FHLMCs with any registered broker/dealer subject to the Securities Investors' Protection Corporation jurisdiction or any commercial bank insured by the FDIC, if such broker/dealer or bank has an uninsured, unsecured and unguaranteed obligation rated "P-1" or "A3" or better by Moody's and "A-1" or "A-" or better by S&P, provided: (1) a master repurchase agreement or specific written repurchase agreement governs the transaction; and (2) the securities are held free and clear of any lien by the Trustee or an independent third party acting solely as agent ("Agent") for the Trustee, and such third party is (i) a Federal Reserve Bank, or (ii) a bank which is a member of the Federal Deposit Insurance Corporation and which has combined capital, surplus and undivided profits of not less than \$50 million or (iii) a bank approved in writing for such purpose by the Certificate Insurer, and the Trustee shall have received written confirmation from such third party that it holds such securities, free and clear of any lien, as agent for the Trustee; and (3) a perfected first security interest under the Uniform Commercial Code, or book entry procedures prescribed at 31 C.F.R. 306.1 et seq. or 31 C.F.R. 350.0 et seq. if such securities is created for the benefit of the Trustee; and (4) the repurchase agreement has a term of 180 days or less, and the Trustee or the agent will value the collateral securities no less frequently than weekly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within two business days of such valuation; and (5) the fair value of the securities in relation to the amount of the repurchase obligation, including principal and interest, is equal to at least 103%.

(F) Investment agreements, guaranteed investment contracts, funding agreement, or any other form of corporate note representing the unconditional obligations of entities or agencies with the unsecured long-term debt obligations or claims-paying ability rated in one of the top two rating categories by Moody's and S&P.

(G) Any investment approved in writing by the Certificate Insurer.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Interest Rate Risk

Interest Rate Risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. Valley Water generally manages its own interest rate risk by holding investments to maturity.

Information about the sensitivity of the fair value of Valley Water's investments to market interest rate fluctuations is provided by the following table that shows the distribution to Valley Water's investments by maturity or earliest call date (in millions).

	Total	12 Months or less	13 to 24 Months	25 to 60 Months
U.S. Government Agencies	\$ 238.9	\$ 65.1	\$ 57.9	\$ 115.9
U.S. Government Agencies - Callable	61.8	-	-	61.8
U.S. Treasury Obligations	25.9	8.1	9.3	8.5
Medium Term Notes	6.1	3.0	-	3.1
Medium Term Notes - Callable	12.4	2.0	3.1	7.3
Local Agency Investment Fund	75.0	75.0	-	-
Mutual Funds	0.1	0.1	-	-
Supranational Obligations	10.4	7.1	-	3.3
Municipal Bonds	64.1	9.2	7.8	47.1
Municipal Bonds - Callable	1.5	-	-	1.5
Negotiable Certificates of Deposit	1.2	0.7	-	0.5
Time Certificate of Deposit	172.4	172.4	-	-
Money Market Funds	47.7	47.7	-	-
Total Investments	<u>\$ 717.5</u>	<u>\$ 390.4</u>	<u>\$ 78.1</u>	<u>\$ 249.0</u>

Credit Risk

Credit Risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

The following table shows the minimum rating required by the California Government Code, Valley Water's investment policy, or debt agreements and the actual rating as of June 30, 2020 for each investment type as provided by Standard and Poor's (in millions):

	Total	Minimum Legal Rating	Exempt from Disclosure	Rating as of Year-end				Not Rated
				AAA	AA+	AA	AA-	
U.S. Government Agencies	\$ 300.7	AA-	\$ 300.7	\$ -	\$ -	\$ -	\$ -	\$ -
U.S. Treasury Obligations	25.9	AA-	25.9	-	-	-	-	-
Medium Term Notes	18.6	AA-	-	10.3	5.2	-	-	3.1
Local Agency Investment Fund	75.0	N/A	-	-	-	-	-	75.0
Mutual Funds	0.1	AAA	-	0.1	-	-	-	-
Supranational Obligations	10.4	AA	-	10.4	-	-	-	-
Municipal Bonds	65.5	AA-	-	9.2	22.0	31.1	3.2	-
Negotiable Certificates of Deposit	1.2	AA-	-	-	-	-	-	1.2
Time Certificates of Deposit	172.4	N/A	-	-	-	-	-	172.4
Money Market Funds	47.7	N/A	-	-	-	-	-	47.7
Total Investments	<u>\$ 717.5</u>		<u>\$ 326.6</u>	<u>\$30.0</u>	<u>\$ 27.2</u>	<u>\$ 31.1</u>	<u>\$ 3.2</u>	<u>\$ 299.4</u>

Concentration of Credit Risk

Valley Water's investment policy regarding the amount that can be invested in any one issuer is stipulated by the California Government Code and Valley Water's investment policy, whichever is more restrictive. However, Valley Water is required to disclose investments that represent a concentration of five percent or more of investments in any one issuer, held by individual Valley Water Funds in the securities of issuers other than U.S. Treasury securities, mutual funds and external investments pools. At June 30, 2020, those investments consisted of the following (in millions):

Issuer	Investment Type	Reported Amount
Government-wide		
Federal Home Loan Bank	U.S. Government Agency	\$ 105.6
Federal Farm Credit Bank	U.S. Government Agency	107.9
Federal Home Loan Mortgage Corp.	U.S. Government Agency	40.9
Federal National Mortgage Association	U.S. Government Agency	42.3

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, Valley Water will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

Under California Government Code Section 53651, depending on specific types of eligible securities, a bank must deposit eligible securities posted as collateral with its Agent having a fair market value of 105% to 150% of public agencies' cash on deposit. All of Valley Water's deposits are either insured by the Federal Depositary Insurance Corporation (FDIC) or collateralized with pledged securities held in trust department of the financial institutions but not in Valley Water's name.

Fair Market Value Measurement and Application

Valley Water measures and records its investments using fair value measurement guidelines established by generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy as shown below:

- Level 1: Quoted prices for identical investments in active markets;
- Level 2: Observable inputs (other than quoted marked prices) using matrix pricing based on the securities relationship to benchmark quoted prices; and
- Level 3: Unobservable inputs (not applicable to Valley Water).

Shown below is a summary of the fair value hierarchy of Valley Water's investment at fair value on June 30, 2020 (in millions):

	6/30/2020	Level 1	Level 2	Uncategorized
Investments by Fair Value Level				
U.S. Government Agencies	\$ 300.7	\$ 300.7	\$ -	\$ -
U.S. Treasury Obligations	25.9	25.9	-	-
Medium Term Notes	18.6	-	18.6	-
Mutual Funds	0.1	-	0.1	-
Supranational Obligations	10.4	-	10.4	-
Municipal Bonds	65.5	-	65.5	-
Negotiable Certificates of Deposit	1.2	-	1.2	-
Time Certificates of Deposit	172.4	-	172.4	-
Subtotal - Leveled Investments	<u>594.8</u>	<u>326.6</u>	<u>268.2</u>	<u>-</u>
Local Agency Investment Fund	75.0	-	-	75.0
Money Market Funds	47.7	-	-	47.7
Subtotal - Uncategorized	<u>122.7</u>	<u>-</u>	<u>-</u>	<u>122.7</u>
Total Investments	<u>\$ 717.5</u>	<u>\$ 326.6</u>	<u>\$ 268.2</u>	<u>\$ 122.7</u>

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Deposits and withdrawals in the State Investment Pool are made on the basis of \$1 and are not using fair value. Accordingly, Valley Water's investments of \$75.0 million in LAIF at June 30, 2020 are classified as uncategorized input (not classified as Level 1, Level 2, or Level 3).

NOTE 4 - REIMBURSEMENT OF CAPITAL COSTS

The Funds derive certain revenues from reimbursements of capital costs by local, state, federal agencies and other outside sources. The following table is a summary of the reimbursements made during fiscal year 2020 (in millions):

Local Agencies:	<u>Amount</u>
San Benito County Water District	\$ 0.3
State Agencies:	
Department of Water Resources	2.8
California Water Commission	0.7
Other:	
Apple	0.5
Total	<u>\$ 4.3</u>

NOTE 5 - INVESTMENT INCOME

Valley Water earns interest income from the investment of cash. Generally accepted accounting principles, as discussed in GASB 31, require reporting investment at fair value in the financial statements. Because of this requirement, interest income earned from investing activity during the current fiscal year is adjusted upwards or downwards to reflect the change in fair value of investment.

The following represents the investment income as reported in the financial statements of the Funds, the current year GASB 31 fair value adjustment, and the unadjusted investment income at June 30, 2020 (in millions):

Investment Income as Reported	Current Year GASB 31 Fair Value Adjustment	Investment Income Before Adjustment
<u>\$ 8.8</u>	<u>\$ 3.3</u>	<u>\$ 5.5</u>

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

NOTE 6 - CAPITAL ASSETS

Capital assets activity for the year ended June 30, 2020 was as follows (in millions):

	Beginning Balance	Additions	Deletions	Transfers / Reclassified	Ending Balance
Nondepreciable capital assets:					
Land	19.2	0.8	-	-	20.0
Intangible - Easement	0.2	-	-	-	0.2
Construction in progress	399.6	122.2	-	(28.0)	493.8
Total nondepreciable capital assets	419.0	123.0	-	(28.0)	514.0
Depreciable capital assets:					
Contract water and storage rights	216.6	10.0	-	-	226.6
Buildings	91.0	-	-	6.2	97.2
Structures and improvements	918.7	-	-	20.8	939.5
Equipment	28.3	0.6	-	1.0	29.9
Total depreciable capital assets	1,254.6	10.6	-	28.0	1,293.2
Less accumulated depreciation and amortization					
Contract water and storage rights	(175.7)	(12.4)	-	-	(188.1)
Buildings	(10.2)	(2.1)	-	-	(12.3)
Structures and improvements	(300.3)	(15.5)	-	-	(315.8)
Equipment:	(23.5)	(1.2)	-	-	(24.7)
Total accumulated depreciation and amortization	(509.7)	(31.2)	-	-	(540.9)
Net depreciable capital assets	744.9	(20.6)	-	28.0	752.3
Total capital assets, net	1,163.9	102.4	-	-	1,266.3

New construction in progress amounted to \$122.2 million. There were 50 in progress and completed projects during the fiscal year, with the major projects listed below (in millions):

- \$59.6 - Rinconada Water Treatment Plant Reliability Improvement
- \$19.0 - 10-year Pipeline and Rehabilitation
- \$17.3 - Pacheco Reservoir Expansion Project
- \$11.6 - Anderson Dam Seismic Retrofit
- \$6.3 - Coyote Pumping Plant Warehouse
- \$3.1 - Rinconada Water Treatment Plant Residuals Remediation
- \$1.0 - Dam Safety Seismic Stability

Depreciation and amortization expense for the fiscal year amounted to \$ 31.2 million.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

NOTE 7 - SHORT-TERM AND LONG-TERM LIABILITIES

(a) Short-term debt

On December 17, 2002, the Valley Water Board authorized a commercial paper program, through the PFFC. The commercial paper program allows Valley Water to finance capital acquisitions while taking advantage of short-term rates, and Valley Water issues tax and revenue anticipation notes on an annual basis to secure the commercial paper program. This program is used in conjunction with issuing long-term liabilities to obtain the least expensive financing for Valley Water.

On May 15, 2012, the Valley Water Board authorized the execution and delivery of certain agreements in connection with the commercial paper program in an aggregate principal amount not to exceed \$100.0 million.

On January 13, 2015, the Valley Water Board took certain actions to support an increase in the commercial paper program to \$150.0 million. The proceeds of the commercial paper may be used for any Valley Water purposes, including but not limited to, capital expenditure, investment and reinvestment, and the discharge of any obligation or indebtedness of Valley Water.

On April 22, 2020, Valley Water issued \$17.7 million of Tax Exempt and \$25.0 million of Taxable commercial paper to reimburse Water Utility capital project costs incurred between May 2019 and February 2020. On June 25, 2020, Valley Water issued \$10.0 million of Taxable commercial paper to prefund Water Utility costs incurred in March 2020 and in the future.

As of June 30, 2020, outstanding commercial paper was \$102.7 million, consisting of \$30.0 million issued through the PFFC for the benefit of the Safe, Clean Water Program and \$72.7 million issued through the PFFC for the benefit of the Water Utility Enterprise.

Commercial paper activity for the year ended June 30, 2020 was as follows (in millions):

Commercial Paper Program	Authorized	Outstanding Amount
Beginning balance	\$ 150.0	\$ 50.0
Additions	-	52.7
Ending balance	<u>\$ 150.0</u>	<u>\$ 102.7</u>

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

(b) Long-term liabilities

The long-term liabilities outstanding at the end of current fiscal year for the Funds consisted of the following (in millions):

<u>Type of indebtedness</u>	<u>Maturity</u>	<u>All-in True Interest Cost*</u>	<u>Authorized and Issued</u>	<u>June 30, 2020</u>	<u>Due Within One Year</u>
2006B Water revenue bond	2035	5.39%	\$ 25.6	\$ 17.3	\$ 0.9
2016A Water revenue bond	2046	3.25%	106.3	106.3	-
2016B Water revenue bond	2046	4.32%	75.2	75.2	-
2017A Water revenue bond	2037	3.13%	54.7	49.6	1.9
2019A Water revenue bond	2049	3.75%	15.2	15.0	0.2
2019B Water revenue bond	2049	3.81%	80.0	78.4	1.7
2019C Water revenue bond	2036	2.76%	38.3	37.0	1.9
2016C Water revenue COP bond	2029	2.13%	43.1	34.9	3.3
2016D Water revenue COP bond	2029	3.14%	55.0	44.3	4.2
Bond premium				37.0	1.6
Compensated absences				6.3	1.4
Net pension liability				100.6	-
Other post employment liability				25.7	-
Semitropic water banking agreement	2035		46.9	10.0	-
Total enterprise funds debt				<u>\$ 637.6</u>	<u>\$ 17.1</u>

* All-in true interest cost represents the total cost of a bond financing, taking account any accrued interest, original issue premium or discount and costs of issuance.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

The following is a summary of changes in long-term liabilities for the current fiscal year (in millions):

	Balance 7/1/2019	Additions	Reductions	Balance 6/30/2020	Due Within One Year
2006B Water revenue bonds	\$ 18.1	\$ -	\$ (0.8)	\$ 17.3	\$ 0.9
2016A Water revenue bonds	106.3	-	-	106.3	-
2016B Water revenue bonds	75.2	-	-	75.2	-
2017A Water revenue bonds	51.4	-	(1.8)	49.6	1.9
2019A Water revenue bonds	15.2	-	(0.2)	15.0	0.2
2019B Water revenue bonds	80.0	-	(1.6)	78.4	1.7
2019C Water revenue bonds	-	38.3	(1.3)	37.0	1.9
2007B Water revenue COP	38.0	-	(38.0)	-	-
2016C Water revenue COP	38.0	-	(3.1)	34.9	3.3
2016D Water revenue COP	48.4	-	(4.1)	44.3	4.2
Bond discount on refunding	(0.1)	0.1	-	-	-
Premium on debt issuance	38.6	-	(1.6)	37.0	1.6
Compensated absences	5.4	4.6	(3.7)	6.3	1.4
Net pension liability (See Note 11)	94.6	6.0	-	100.6	-
Other post employment benefits (See Note 12)	32.0	-	(6.3)	25.7	-
Semitropic water banking agreement (See Note 15)	10.0	-	-	10.0	-
Total business-type activity long-term liabilities	<u>\$ 651.1</u>	<u>\$ 49.0</u>	<u>\$ (62.5)</u>	<u>\$ 637.6</u>	<u>\$ 17.1</u>

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

The aggregate maturities of long-term debt are as follows (in millions):

Description	Year Ending June 30	Principal	Interest and amortization
Bonds payable	2021	\$ 14.1	\$ 19.5
	2022	14.8	19.1
	2023	15.3	18.5
	2024	15.9	18.0
	2025	16.4	17.4
	2026 - 2030	93.9	76.6
	2031 - 2035	95.4	55.7
	2036 - 2040	76.2	35.7
	2041 - 2045	82.1	18.8
	2046 - 2050	33.9	2.7
Total bonds payable requirements		458.0	\$ 282.0
Compensated absence		6.3	
Premium		37.0	
OPEB		25.7	
Pension		100.6	
Semitropic water banking agreement		10.0	
Total outstanding non-current at June 30, 2020		\$ 637.6	

The following provides a brief description of the Funds' outstanding debt and long-term liabilities as of June 30, 2020:

2006B Water Utility System Refunding Revenue Bonds

In December 2006, Valley Water issued \$99.8 million of Water Utility System Refunding Revenue Bonds, Series 2006A and Taxable Series 2006B, pursuant to the Water Utility Senior System Master Resolution (94-58, as amended by 06-80). The proceeds of \$57.4 million of the 2006A and 2006B Bonds were used to refinance \$55.3 million of the remaining 2000A and 2000B and the proceeds of \$42.4 million of 2006A and 2006B were used to repay approximately \$40.9 million of commercial paper notes. In March 2016, Valley Water issued Series 2016A Water System Refunding Revenue Bonds to refund all 2006A outstanding principal.

2016A/B Water Systems Refunding Revenue Bonds

In March 2016, Valley Water issued \$181.5 million of Water Systems Refunding Revenue Bonds comprising of Series 2016A for \$106.3 million and Taxable Series B for \$75.2 million, pursuant to the Water Utility Parity System Master Resolution (16-10) approved by the Board in February 2016. Proceeds of the 2016A Revenue Bonds, along with the original issue premium, were used to refinance all the currently outstanding Water Utility System Refunding Revenue Bonds Series 2006A and repay \$73.0 million of outstanding tax-exempt commercial paper notes and costs of issuance. Proceeds of the 2016B Revenue Bonds were used to

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

repay \$75.0 million of the balance of the outstanding taxable commercial paper notes and costs of issuance. The obligation of Valley Water to pay principal and interest of the 2016A/B Water Systems Refunding Revenue Bonds is secured by a pledge of and lien on Valley Water's Water Utility System Revenues.

2017A Water System Refunding Revenue Bonds

In May 2017, Valley Water issued \$54.7 million of Water Systems Refunding Revenue Bonds to refund the \$64.8 million outstanding balance of the Water Utility System Revenue Certificates of Participation Series 2007A and pay costs of issuance of the 2017A Bonds. The obligation of Valley Water to pay principal and interest on the 2017A Bonds is secured by a pledge of and lien on Valley Water's Water Utility System Revenues and are payable from the Net Water Utility System Revenues pursuant to the Water Utility System Parity Master Resolution (16-10).

2019A/B Water Systems Refunding Revenue Bonds

In April 2019, Valley Water issued \$95.3 million of Water System Refunding Revenue Bonds to repay the outstanding Commercial Paper Certificates to free up capacity in Valley Water's commercial paper program to finance on-going capital costs and costs of issuance. The obligation of Valley Water to pay principal and interest on the 2019A/B Bonds is secured by a pledge of and lien on Water Utility System Revenues and are payable from the Net Water Utility System Revenues pursuant to the Parity Master Resolution (16-10).

2019C Water Systems Refunding Revenue Bonds

In November 2019, Valley Water issued \$38.3 million of Water System Refunding Revenue Bonds to refinance all the currently outstanding Water Utility Revenue Certifications of Participation Taxable Series 2007B and fund costs of issuance. The obligation of Valley Water to pay principal and interest on the 2019C Bonds is secured by a pledge of and lien on Water Utility System Revenues and are payable from the Net Water Utility System Revenues pursuant to the Parity Master Resolution (16-10).

2007B Water Utility Revenue Certificates of Participation

In October 2007, Valley Water issued \$131.0 million of Water Utility Revenue Certificates of Participation, Series 2007A and Taxable Series 2007B, to be executed and delivered through the PFFC. The proceeds of the 2007A and 2007B COPs were used to finance capital construction projects in the Water Utility Enterprise. A 2007A Debt Service Reserve Fund was funded for the 2007A and 2007B COPs by purchasing a surety. The 2007A issuance was \$77.3 million fixed rate COPs with a 30-year maturity. The 2007B issuance of \$53.7 million are floating rate COPs based on the three-month LIBOR rate plus 32 basis points with a 30-year maturity. The 2007A and 2007B COPs are payable from 2007 Installment Payments which are payable by Valley Water from and secured by a pledge and lien on water utility revenues pursuant to the Water Utility Senior System Master Resolution (94-58, as amended by 06-80). The 2007A COPs were refunded by the 2017A Water System Refunding Revenue Bonds in May 2017. The 2007B COPs were refunded by the 2019C Water System Refunding Revenue Bonds in November 2019.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

2016C/D Water Utility Revenue Certificates of Participation

In March 2016, Valley Water issued \$98.0 million of Water Utility Systems Improvement Projects Revenue Certification of Participation, Series 2016C for \$43.4 million and Taxable Series 2016D for \$55.0 million, to be executed and delivered through the PFFC. Proceeds of the 2016C and 2016D COPs, along with the original issue premium will be used to finance capital construction projects in the Water Utility Enterprise and costs of issuance. The 2016C and 2016D COPs are payable from 2016 Installment Payments which are payable by Valley Water from and secured by a pledge and lien on water utility revenues pursuant to the Water Utility Parity System Master Resolution (16-10).

Semitropic Water Banking Agreement

In December 1995, Valley Water entered into a water banking and exchange program with Semitropic Water Storage District and its Improvement Districts that entitles Valley Water to storage, withdrawal, and exchange rights for Valley Water's State Water Project supplies. Valley Water's share of the total program capital costs is \$46.9 million based on a 35 percent vesting in the program. Valley Water pays the program capital costs when storing and recovering water. At June 30, 2020, Valley Water has \$10.0 million outstanding liability related to water storage and banking rights.

Compensated Absences

Compensated absences are paid out of the general fund as an employee benefit expense in the year the expense is realized and are charged to the different funds as part of the direct benefit rate. The compensated absences liability for the year is recognized in Valley Water's various enterprise funds and on the governmental activities column in the statement of net position.

(c) Other Debt Related Information

Valley Water has adopted master resolutions with respect to its water utility which contain certain events of default and remedies as described therein. Valley Water has also issued various bonds, notes or other obligations secured by such master resolutions or other revenues of Valley Water and which contain certain events of default and remedies as described therein. Valley Water has also entered into various reimbursement agreements or other financial contracts which contain certain events of default and remedies as described therein. Certain of these master resolutions, bonds, notes and other obligations and reimbursement agreement and other financial contracts contain provisions concerning the application of applicable Valley Water revenues if certain of the following conditions occur: default on debt service payments; the failure of Valley Water to observe or perform the conditions, covenants, or other agreement with respect thereto; bankruptcy filing by Valley Water; or if any court or competent jurisdiction shall assume custody or control of Valley Water, among other defaults. Certain of such master resolutions, bonds, notes and other obligations and reimbursement agreement and other financial contract contain acceleration provisions that allows a trustee, owners of bonds, notes or other obligations or the parties to

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

such reimbursement agreements or other financial contracts to accelerate payments thereunder to the extent and as provided therein.

Resolutions and other financing agreements associated with Valley Water's and PFFC's bonds and certificates of participation contain a number of covenants, limitations, and restrictions. Valley Water believes it is in compliance with all significant covenants, limitations, and restrictions.

Financial obligations incurred under the commercial paper program, issued through the PFFC, currently include the obligations to reimburse the bank issuing direct pay letter of credit supporting the commercial paper program and to pay letter of credit fees to the bank. Valley Water's failure to comply with certain such obligations could result in an event of default. If an event of default occurs, the bank may exercise one or more rights and remedies. In addition to rights and remedies provided for under the law, the bank can declare all financial obligations with respect to such letter of credit to be immediately due and payable, cause the issuance of commercial paper to be temporarily ceased, or terminate the letter of credit which would cause the issuance of commercial paper to be permanently ceased. Commercial paper certificates are not subject to acceleration.

Valley Water has pledged water utility system revenues, net of specified maintenance and operating expenses, to repay \$458.0 million in long-term debt outstanding as of June 30, 2020, that was issued to finance the cost of capital construction projects for the water utility enterprise. The secured debt includes revenue bonds and COPs. The revenue bonds are payable from net water utility system revenues and the revenue COPs are payable from installments that are secured by net water utility system revenues. The long-term debt is payable through fiscal year 2049. Total principal outstanding and interest costs remaining to be paid on the combined debt is \$740.0 million.

NOTE 8 - PROPERTY TAXES AND BENEFIT ASSESSMENTS

The Funds derive certain revenues from the assessment of property tax parcel levies. The property tax levy is composed of two categories: (1) an allocation of the County of Santa Clara's 1 percent tax; and (2) voter approved levy to repay capital and operating costs related to imported water from the State Water Project.

Property tax revenues recorded for the year ended June 30, 2020 are as follow (in millions):

	<u>Amount</u>
Property taxes:	
1% tax allocation	\$ 8.4
Voter approved indebtedness:	
State Water Project Fund	<u>21.8</u>
Total property taxes	<u><u>\$ 30.2</u></u>

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

The County of Santa Clara (County) is responsible for the assessment, collection, and apportionment of property taxes for Valley Water. The amount of property tax levies is restricted by Article 13A of the California State Constitution (commonly referred to as Proposition 13). Valley Water is responsible for determining the amount of benefit assessment, special parcel tax, and State Water Project Debt Service. Secured property taxes and benefit assessments are each payable in equal installments, November 1 and February 1, and become delinquent on December 10 and April 10, respectively. The lien date is January 1 of each year. Property taxes on the unsecured roll are due on the March 1 lien date and become delinquent if still unpaid on August 31.

Valley Water has elected to participate in the "Teeter Plan" offered by the County whereby Valley Water receives 100 percent of secured property and supplemental property taxes levied in exchange for foregoing any interest and penalties collected on the related delinquent taxes.

NOTE 9 - NET POSITION

The Funds financial statements utilize a net position presentation. Net position is categorized as follows:

Net Investment in Capital Assets - This category groups all capital assets, including infrastructure, into one component of net position. Accumulated depreciation and the outstanding balances of debt that are attributable to the acquisition, construction or improvement of these assets reduce the balance in this category.

Restricted Net position – This category presents external restrictions imposed by creditors, grantors, contributors, laws, or regulations of other governments and restrictions imposed by law through constitutional provisions or enabling legislation.

Unrestricted Net position – This category represents net position of Valley Water, not restricted for any project or other purpose.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

The following table shows the breakdown of the Funds' net position at June 30, 2020 (in millions):

	Water Enterprise Fund	State Water Projects Fund	Total
Net investment in capital assets	\$ 674.1	\$ 15.1	\$ 689.2
Restricted Net Position			
San Felipe Emergency Reserve	3.3	-	3.3
Cash on hand with fiscal agent	0.1	-	0.1
GP5 reserve	6.6	-	6.6
Rate Stabilization	23.5	-	23.5
Public-private partnership	8.0	-	8.0
WUE SVAWPC reserve	1.3	-	1.3
Supplemental Water Supply Reserve	15.1	-	15.1
Drought Reserve	10.0	-	10.0
State Water Projects	-	16.8	16.8
Total restricted net position	67.9	16.8	84.7
Unrestricted Net Position			
Operating & Capital Contingencies	48.7	-	48.7
Water inventory	134.4	-	134.4
Currently Authorized Projects	39.2	-	39.2
Market Valuation	4.9	-	4.9
Encumbrances	108.5	-	108.5
Net Pension Liability	(76.5)	-	(76.5)
Net Other Post Employment Benefit Liability	(32.2)	-	(32.2)
Total unrestricted net position	227.0	-	227.0
Net Position	<u>\$ 969.0</u>	<u>\$ 31.9</u>	<u>\$ 1,000.9</u>

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

NOTE 10 - EMPLOYEES' RETIREMENT PLAN

Plan Description

All qualified permanent and probationary employees are eligible to participate in the agent multiple-employer defined benefit pension plan (the Plan) administered by the California Public Employees' Retirement System (CalPERS), which acts as a common investment and administrative agent for its participating member employers. Benefit provisions under the Plans are established by State statute and Valley Water's resolution. CalPERS issues publicly available reports that include a full description of the pension plans regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website.

Benefits Provided

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full-time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for each plan are applied as specified by the California Public Employees' Retirement Law. Benefit provisions and all other requirements are established by State statutes and may be amended by Valley Water's governing board.

The Plan's provisions and benefits in effect at June 30, 2020, are summarized as follows:

	Prior to	3/19/2012 to	On or after
Hire date	3/19/2012	12/31/2012	1/1/2013
Benefit formula	2.5% @ 55	2% @ 60	2% @ 62
Benefit vesting schedule	5 years service	5 years service	5 years service
Benefit payments	monthly for life	monthly for life	monthly for life
Minimum Retirement age	50	50	52
Monthly benefits, as a % of eligible compensation	2.0% to 2.5%	1.1% to 2.4%	1.0% to 2.5%
Required employee contribution rates	8.0% + 2.0%*	7.0% + 3.0%*	6.75% + 1.0%
Required employer contribution rates	10.276% plus \$15.3 million prepayment for prior unfunded service cost		

* Member additional contribution towards Valley Water's CalPERS cost per negotiated agreement with the bargaining units

Employees Covered – As of the most recent CalPERS annual valuation report, dated June 30, 2020, the following employees were covered by the benefit terms of the Plan:

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Inactive employees or beneficiaries currently receiving	814
Active employees	752

Contributions

Section 20814(c) of the California Public Employees' Retirement Law requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in the rate. Funding contributions for the Plan is determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability.

For the year ended June 30, 2020, contributions to the plan were \$28.3 million. Valley Water is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. All funds with payroll charges contribute to the actuarially determined contribution.

Net Pension Liability

Valley Water's net pension liability for the Plan is measured as the total pension liability, less the pension plan's fiduciary net position. The net pension liability of the Plans is measured as of June 30, 2019, using an annual actuarial valuation as of June 30, 2018 rolled forward to June 30, 2019 using standard update procedures. A summary of principal assumptions and methods used to determine the net pension liability is shown below.

Actuarial Assumptions – The total pension liabilities in the June 30, 2018 actuarial valuations were determined using the following actuarial assumptions:

Valuation date	June 30, 2018
Measurement date	June 30, 2019
Actuarial cost method	Entry-age normal cost method
Discount rate	7.15%
Inflation	2.75%
Salary increases	Varies by entry age and service
Investment rate of return ⁽¹⁾	7.375%
Mortality rate table ⁽²⁾	Derived using CalPERS' membership data for all funds
Post retirement benefit increase	Contract COLA up to 2.00% unit purchasing power protection allowance floor on purchasing power applies, 2.50% thereafter.

⁽¹⁾Net of pension plan investment and administrative expenses; includes inflation

⁽²⁾The mortality rate table was developed based on CalPERS' specific data. The table includes 15 years of mortality improvements using Society of Actuarial Scale BB.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

In 2018, demographic assumptions and inflation rate were changed in accordance to the CalPERS Experience Study and Review of Assumptions December 2017. There were no changes in the discount rate. In 2017, the discount rate was reduced from 7.65% to 7.15%. The Experience Study can be obtained at CalPERS' website under "Forms and Publications".

Change in Assumptions

Inflation Rate

For the measurement date of June 30, 2019, the inflation rate was 2.75%.

Discount Rate

The discount rate used to measure the total pension liability for each Plan was 7.15%. The projection of cash flows used to determine the discount rate for each Plan assumed that contributions from all plan members in the Public Employees Retirement Fund (PERF) will be made at the current member contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, each Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members for all plans in the PERF. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability for each Plan.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS considered both short-term and long-term market return expectations as well as the expected pension fund cash flows. Such cash flows were developed assuming that both members and employers will make their required contribution on time and as scheduled on all future years. Using historical returns of all the funds' asset classes, expected compound (geometric) returns were calculated over the short-term (first 10 years) and the long-term (11+ years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above, adjusted to account for assumed administrative expenses.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

The following table reflects the long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. These geometric rates of return are net of administrative expenses.

Asset Class ⁽¹⁾	Current Strategic Allocation	Real Rates of Return Years 1-10 ⁽²⁾	Real Rates of Return Years 11+ ⁽³⁾
Global Equity	50.0%	4.80%	5.98%
Fixed Income	28.0%	1.00%	2.62%
Inflation Assets	0.0%	0.77%	1.81%
Private Equity	8.0%	6.30%	7.23%
Real Assets	13.0%	3.75%	4.93%
Liquidity	1.0%	0.00%	-0.92%
Total	100.0%		

⁽¹⁾ In the CalPERS CAFR, Fixed Income is included in Global Debt Securities, Liquidity is included in Short-term Investments; Inflation Assets are included in both Global Equity Securities and Global Debt Securities

⁽²⁾ An expected inflation of 2.00% used for this period.

⁽³⁾ An expected inflation of 2.92% used for this period.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Changes in the Net Pension Liability

The following table shows the changes in net pension liability recognized over the measurement period (in millions):

	Increase (Decrease)		
	Total Pension Liability	Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(c) = (a) - (b)
Beginning balance	\$813.7	\$593.8	\$219.8
Changes recognized for the Measurement Period:			
Service cost	16.5	-	16.5
Interest on total pension liability	58.3	-	58.3
Difference between expected and actual experience	13.4	-	13.4
Contribution from employer	-	26.6	(26.6)
Contribution from employees	-	7.6	(7.6)
Net investment income	-	39.3	(39.3)
Benefit payments, including refunds of employee contributions	(38.4)	(38.4)	-
Administrative expense	-	(0.4)	0.4
Net changes	49.8	34.7	15.1
Ending balance	\$863.5	\$628.5	\$234.9

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of Valley Water, calculated using the current discount rate, as well as what Valley Water's net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate (in millions):

	Discount Rate		
	-1%	Current	+1%
Plan Net Pension Liability	\$ 348.5	\$ 234.9	\$ 140.7

To present a more conservative estimate of the pension liability, applying a 3.25% discount rate, for example, would result in a pension liability of approximately \$696.5 million.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Pension Plan Fiduciary Net Position

Detailed information about Valley Water's pension plan fiduciary net position is available in separately issued CalPERS financial reports.

Pension Expenses and Deferred Outflow/Inflow of Resources

For the year ended June 30, 2020 (for measure period ended June 30, 2019), Valley Water recognized pension expense of \$43.6 million. As of June 30, 2020, Valley Water reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (in millions):

	Deferred Outflow of Resources	Deferred Inflow of Resources
Pension contribution subsequent to measurement date	\$ 28.3	\$ -
Change in assumptions	9.3	(4.2)
Net difference between actual and expected experience	10.0	(1.7)
Net difference between projected and actual earnings on plan investments	-	(3.3)
Total	<u>\$ 47.6</u>	<u>\$ (9.2)</u>

\$28.3 million is reported as deferred outflows of resources related to contributions subsequent to the measurement date and will be recognized as a reduction from the net pension liability in the following fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as shown in the succeeding table.

Measurement Periods Ended June 30	Deferred Outflows(Inflows) of Resources
2020	\$11.4
2021	(4.1)
2022	2.0
2023	0.9
Total	<u>\$10.2</u>

**WATER UTILITY ENTERPRISE FUNDS OF
VALLEY WATER**

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

NOTE 11 - OTHER POST EMPLOYMENT BENEFITS (OPEB)

Plan Description

Valley Water provides post-employment health care benefits, in accordance with negotiated memoranda of understanding with employee groups and adoption by the Board of Directors, for retired employees and/or their surviving spouses, and to certain employees who retire due to disability who meet the eligibility requirements and elect the option. Valley Water must be the employee's last CalPERS employer, and the retiree must be receiving a monthly CalPERS retirement pay.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Benefits Provided

	Hire/Retirement Date	Eligibility Rule (Years of Continuous Service)	District's Required Contribution
<u>Classified</u> Employee Association (AFSCME Local 101) – Engineers Society (IFPTE-Local 21) Professional Managers Association (IFPTE – Local 21)	Retired prior to July 1, 1988		Fixed amount of \$165 per month
	Retired from July 1, 1988 through June 30, 1990	10 years	100% medical premium for retiree
	Retired from July 1, 1990 or later and hired prior to December 31, 2006	10 years	100% medical premium for retiree
		15 years	100% medical premium for retiree plus one eligible dependent
	Retired from July 1, 1990 or later and hired between December 31, 2006 and March 1, 2007	10 years	Retiree is covered for medical. Medical premium cost sharing is required with the same contribution percentage as active employees and based on medical premium applicable to active employees or retirees, whichever is less.
		15 years	Retiree plus one eligible dependent are covered for medical. Medical premium cost sharing is required with the same contribution percentage as active employees and based on medical premium applicable to active employees or retirees, whichever is less.
	Hired on or after March 1, 2007	15 years	Retiree is covered for medical. Medical premium cost sharing is required with the same contribution percentage as active employees and based on medical premium applicable to active employees or retirees, whichever is less.
		20 years	Retiree plus one eligible dependent are covered for medical. Medical premium cost sharing is required with the same contribution percentage as active employees and based on medical premium applicable to active employees or retirees, whichever is less.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

	Hire/Retirement Date	Eligibility Rule (Years of Continuous Service)	District's Required Contribution
Unclassified At Will	Retired prior to July 1, 1988		Fixed amount of \$165 per month
	Retired from July 1, 1988 through June 30, 1990	10 years	100% medical premium for retiree
	Retired from July 1, 1990 through June 18, 1995	10 years	100% medical premium for retiree
		15 years	100% medical premium for retiree plus one eligible dependent
	Retired from June 19, 1995 through October 21, 1996	10 years	100% medical premium for retiree
		15 years	100% medical premium for retiree plus one eligible dependent
		25 years	100% medical, dental, and vision coverages for the retiree plus two or more eligible dependents
Retired from October 22, 1996 or later and hired prior to December 30, 2006	10 years	100% medical premium for retiree	
	15 years	100% medical, dental, and vision coverages for the retiree plus one eligible dependent	
	25 years	100% medical, dental, and vision coverages for the retiree plus two or more eligible dependents	
Hired on or after December 30, 2006 and prior to March 1, 2007	10 years	Medical coverage is provided for retiree. Medical premium cost sharing is required with the same contribution percentage as active employees and based on the medical premium amount applicable to active employees or retirees, whichever is less.	
	15 years	Medical, dental, and vision coverages are provided for retiree and one eligible dependent. Medical premium	

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

	Hire/Retirement Date	Eligibility Rule (Years of Continuous Service)	District's Required Contribution
<u>Unclassified</u> At Will	Hired on or after December 30, 2006 and prior to March 1, 2007	15 years (con't)	cost sharing is required with the same contribution percentage as active employees and based on the medical premium amount applicable to active employees or retirees, whichever is less.
		25 years	Medical, dental, and vision coverages are provided for retiree plus two or more eligible dependents. Medical premium cost sharing is required with the same contribution percentage as active employees and based on the medical premium amount applicable to active employees or retirees, whichever is less.
	Hired on or after March 1, 2007	15 years	Retiree is covered for medical. Medical premium cost sharing is required with the same contribution percentage as active employees and based on medical premium applicable to active employees or retirees, whichever is less.
		20 years	Retiree plus one eligible dependent are covered for medical. Medical premium cost sharing is required with the same contribution percentage as active employees and based on medical premium applicable to active employees or retirees, whichever is less.

As of August 1, 2007, all current retirees not yet 65 years of age and Medicare eligible and all future retirees who are Medicare eligible must enroll themselves in Medicare when they reach the eligibility date for Medicare. Their Medicare eligible dependents who are enrolled in Valley Water's health plan must also enroll in Medicare upon their eligibility date. Valley Water reimburses the ongoing Medicare Part B cost incurred by the retiree and/or dependent payable quarterly.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

After an evaluation of the cost savings realized in implementing the Medicare enrollment plan since August 2007, Valley Water decided to expand the Medicare enrollment requirement to all retirees and their eligible dependents that are enrolled in Valley Water's medical plan. As of July 1, 2009, all Medicare eligible retirees and their eligible dependents were required to enroll in Medicare. Valley Water reimburses the Medicare Part B penalty charged by the Social Security Administration to the retirees/dependents due to late enrollment.

Valley Water provides the unclassified group of retirees \$50,000 life insurance upon retirement with a five-year phase out in declining increments of \$10,000 per year after retirement.

Employees Covered – As of the most recent OPEB annual valuation report, dated June 30, 2019, the following employees were covered by the benefit terms of the Plan:

Inactive employees or beneficiaries currently receiving	846
Active employees	753

Contributions

On June 24, 2008, Valley Water's Board of Directors adopted a resolution approving the agreement and election of Valley Water to prefund OPEB through CalPERS under its California Employer's Retiree Benefit Trust (CERBT) Program, an agent multiple-employer plan consisting of an aggregation of single-employer plans. On September 9, 2008, Valley Water joined CERBT. The Board of Directors approved the reallocation of \$17.7 million from its existing reserve for the initial prefunding of the unfunded liability for the first year of reporting. Subsequent years' funding, pursuant to the annual budget approved by the Board of Directors, was made at the beginning of each fiscal year through fiscal year 2017. The CERBT issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained from the California Employees' Retirement System, P. O. Box 942703, Sacramento, CA 94229-2703.

OPEB and its contribution requirements are established by memorandum of understanding with the applicable employee bargaining units and may be amended by agreements between Valley Water and the bargaining groups. For the fiscal year ended June 30, 2020, Valley Water's total contribution to the plan amounted to \$10.8 million. All funds with payroll charges contribute to the actuarially determined contribution.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Net OPEB Liability

Valley Water's net OPEB liability was measured on June 30, 2019 for reporting date June 30, 2020. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation dated June 30, 2019, based on the following actuarial methods and assumptions:

Discount Rate	7.59%
Inflation	3.00%
Salary Increases	3.25%
Investment Rate of Return	7.59%
Mortality Rate	Derived from the CalPERS study of Miscellaneous Public Agency experience
Pre-retirement Turnover ⁽¹⁾	Derived from the CalPERS study of Miscellaneous Public Agency experience
Healthcare Trend Rate ⁽²⁾	5.50% grading to ultimate 4% for medical and flat 3% for dental and vision

⁽¹⁾Net of OPEB plan investment expenses, including inflation.

⁽²⁾The mortality rate table was developed based on CalPERS' non industrial miscellaneous public agency experience study for 14 years ending June 2011.

The long-term, expected rate of return on OPEB plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Strategy 1 Allocation	Real Rates of Return: 1-10 Years ⁽¹⁾	Real Rates of Return: 11-60 Years ⁽²⁾
Global Equity	59.0%	4.80%	5.98%
Fixed Income	25.0%	1.10%	2.62%
Global Real Estate (REITs)	8.0%	3.20%	5.00%
Treasury Inflation Protected Securities (TIPS)	5.0%	0.25%	1.46%
Commodities	3.0%	1.50%	2.87%

⁽¹⁾An expected inflation rate of 2.00% was used for this period.

⁽²⁾An expected inflation rate of 2.92% was used for this period.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Discount Rate

The discount rate of 7.59% is the expected long-term rate of return on Valley Water assets using investment strategy #1 within the CERBT. The projected cash flows used to determine the discount rate assumed that District contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees and beneficiaries. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Changes in OPEB Liability

The following table shows the changes in net OPEB liability recognized over the measurement period (in millions):

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b)
Beginning Balance	\$ 180.8	\$ 107.5	\$ 73.3
Changes Recognized for the Measurement Period:			
Service Cost	2.6	-	2.6
Interest Cost	12.9	-	12.9
Effect of changes in actuarial assumptions loss/(gain)	(5.5)	-	(5.5)
Other Liability Experience Loss/(Gain)	(8.0)	-	(8.0)
Contributions	-	10.1	(10.1)
Benefits Payments	(10.1)	(10.1)	-
Non Benefit Related Admin Expenses from Plan Trusts	-	(0.1)	0.1
Expected Investment Return	-	7.7	(7.7)
Investment Experience (Loss)/Gain	-	(1.1)	1.1
Net Changes	(8.1)	6.5	(14.6)
Ending Balance	\$ 172.7	\$ 114.0	\$ 58.7

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability of Valley Water, calculated using the current discount rate, as well as what Valley Water's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate (in millions):

	Discount Rate		
	-1%	Current	+1%
Net OPEB Liability	\$ 78.7	\$ 58.6	\$ 41.7

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Sensitivity of the Net OPEB Liability to Changes in the Health Care Cost Trend Rates

The following presents the net OPEB liability of Valley Water, if it were calculated using health care cost trend rates that are 1-percentage point lower or 1-percentage point higher than the current rate, for measurement period ended June 30, 2019 (in millions):

	Discount Rate		
	-1%	Current	+1%
Net OPEB Liability	<u>\$ 40.7</u>	<u>\$ 58.6</u>	<u>\$ 80.2</u>

OPEB Plan Fiduciary Net Position

Detailed information about Valley Water's OPEB plan fiduciary net position is available in separately issued CalPERS financial reports.

OPEB Expense and Deferred Outflow/Inflow of Resources

For the year ended June 30, 2020, Valley Water recognized OPEB credit expense of \$5.9 million. At June 30, 2020, Valley Water reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources (in millions):

	Deferred Outflow of Resources	Deferred Inflow of Resources
OPEB contribution subsequent to measurement date	\$ 10.7	\$ -
Changes in assumption		(4.5)
Difference between actual and expected experience	-	(6.4)
Net difference between projected and actual earnings on plan investment	-	(0.7)
Total	<u>\$ 10.7</u>	<u>\$ (11.6)</u>

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

\$10.7 million is reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction from the net OPEB liability in the following fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as OPEB expense as follows (in millions):

Year ending June 30	Deferred Outflows/(Inflows) of Resources
2021	(\$3.1)
2022	(3.1)
2023	(2.5)
2024	(2.3)
2025	(0.6)
Total	<u>(\$11.6)</u>

NOTE 12 - RISK MANAGEMENT

Valley Water is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Valley Water reports all of its risk management activities in its Risk Management Internal Service Fund.

Valley Water's deductibles and maximum coverage are as follows (in thousands):

<u>Coverage Descriptions</u>	<u>Commercial Insurance Deductibles</u>	<u>Coverage</u>
General liability	\$2,000	\$50,000
Workers' compensation	1,000	Statutory
Property damage (subject to policy sub-limits)	50	500,000
Fidelity (Crime) - Directors	5	1,000
Fidelity (Crime) – Non-Directors	10	2,000
Non-owned aircraft liability	-	5,000
Boiler and machinery	50	100,000

Claims expenses and liabilities are reported for self-insured deductibles when it is probable that a loss has occurred, and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported, allocated and unallocated claims adjustment expenses and incremental claim expense. Claim liabilities are reevaluated periodically to take into consideration recently settled claims, the frequency of claims, and other economic and social factors. At June 30, 2020, the liability for self-insurance claims was \$7.5 million. This liability is the Valley Water's best estimate based on available information. Settled claims have not exceeded commercial insurance coverage in any of the past three fiscal years.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Changes in the reported liability since June 30, 2020 are as follows (in millions):

	General Liability	Workers' Compensation	Total
Claims payable at June 30, 2018	\$3.5	\$3.0	\$6.5
Current year premiums, incurred claims and changes in estimates	1.6	0.1	1.7
Claim payments	(0.9)	(0.3)	(1.2)
Claims payable at June 30, 2019	4.2	2.8	7.0
Current year premiums, incurred claims and changes in estimates	1.0	0.3	1.3
Claim payments	(0.7)	(0.1)	(0.8)
Claims payable at June 30, 2020	4.5	\$ 3.0	\$ 7.5
Current Portion	\$1.5	\$0.6	\$2.1

NOTE 13 - TRANSFERS IN AND OUT BETWEEN VALLEY WATER

Transfers are used to 1) move revenues from the fund that statute or budget requires to collect them to the fund that statute or budget requires to expend them, 2) move receipts to debt service from the funds collecting the receipts to the debt service fund as debt service payments become due, and 3) move debt proceeds held in the construction fund to the funds incurring the construction expense.

The Funds received \$1.1 million and sent out \$2.6 million of transfers in the current fiscal year for a net transfer out of \$1.5 million.

- \$0.5 million and \$0.6 million were transferred from the General Fund and Watershed Fund, respectively, to the Water and Enterprise Fund for the Open Space credit.
- \$0.1 million was transferred from the Water Enterprise Fund to the Watershed and Stream Stewardship Fund to help pay for the Safe Clean Water Renewal efforts.
- \$2.5 million were transferred from the Water Enterprise Fund to the Information Technology Fund to fund capital projects.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Details of the interfund transfers for the current fiscal year are as follows (in millions):

Fund Receiving Transfers	Fund Making Transfers	Amount Transferred
Water Enterprise Fund	General Fund	\$ 0.5
Water Enterprise Fund	Watershed & Stream Stewardship	0.6
Total Transfer In		<u>\$ 1.1</u>
Watershed & Stream Stewardship	Water Utility Enterprise Fund	\$ 0.1
Information Technology Fund	Water Utility Enterprise Fund	2.5
Total Transfer Out		<u>\$ 2.6</u>

NOTE 14 - PRIOR PERIOD ADJUSTMENT

Starting fiscal year 2020, Valley Water's Board of Directors decided to record stored water as inventory. The impact of the implementation on the beginning net position is as follows:

	(Dollars in Millions)
Net Position	
Beginning balance	\$ 775.3
Inventory adjustment	133.2
Beginning balance, restated	<u>\$ 908.5</u>

NOTE 15 - COMMITMENTS

(a) Contract and Purchase Commitments

As of June 30, 2020, the Funds have open purchase commitments of approximately \$108.5 million related to new or existing contracts and agreements. These encumbrances represent commitments of the Funds and do not represent actual expenses or liabilities.

(b) San Felipe Project Water Deliveries

Valley Water has contracted with the U.S. Department of the Interior (USDI) for water deliveries from the Central Valley Project. The contract requires Valley Water to operate and maintain Reach 1, Reach 2, and Reach 3 of the San Felipe Division facilities of the USDI.

During fiscal year 2017, Valley Water amended this contract. The amended contract provided for compliance with the Central Valley Project Improvement Act and converted the repayment of the San Felipe Division facilities from a water service contract to a repayment contract with fixed semi-annual payments. The semi-annual payments for January 2007 through July 2016 are \$7.5 million. The semi-annual payments starting January 2017 is \$7.7 million. The

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

amended contract preserved the attributes of a water service contract for other Central Valley Project costs.

The total commitment, including applicable interest, of the repayment contract was \$431.9 million. The remaining commitment as of June 30, 2020 was \$210.4 million.

(c) Participation Rights in Storage Facilities

In December 1995, Valley Water entered into a water banking and exchange program with Semitropic Water Storage District and its Improvement Districts that entitles Valley Water to storage, withdrawal, and exchange rights for Valley Water's State Water Project supplies. Valley Water's share of the total program capital costs is \$46.9 million based on a 35 percent vesting in the program. Valley Water pays the program capital costs when storing and recovering Tier 1 water. The agreement terminates in December 2035.

As of June 30, 2020, Valley Water has paid \$49.8 million towards the base fee obligation of this agreement. Upon withdrawal by Valley Water of all 135,965 acre-feet or remaining Tier 1 water stored, Valley Water would have paid its share of the total program costs. The 2020 rate to retrieve Tier 1 water is \$73.49 per acre-feet. During the first 10 years, Valley Water had a reservation for the full 35 percent allocation; by January 1, 2006, if Valley Water's contributions towards the program capital costs did not equal \$46.9 million, Valley Water's permanent storage allocation would have been reduced. Valley Water decided to utilize its total allowable storage rights at 35 percent on January 1, 2006.

Valley Water currently has a storage allocation of 350,000 acre-feet. As of June 30, 2020, Valley Water has 344,662 acre-feet of water in storage. The participation rights are amortized using the straight-line method over the life of the agreement. Amortization of \$28.7 million has been recorded through fiscal year 2020. Semitropic Water Storage District has reported elevated concentrations of 1, 2, 3 trichloropropane in some of its groundwater wells. There is currently insufficient information to conclude whether these detections could impact banking operations. Impacts could potentially include higher pumping, recovery, and treatment costs and possibly impaired recovery of banked water supplies.

(d) Partnership Agreement Between Valley Water, the City of Palo Alto, and the City of Mountain View to Advance Resilient Water Reuse Programs in Santa Clara County

On December 10, 2019, the Board approved an agreement between Valley Water and its local partners, the City of Palo Alto and Mountain View, to further develop water supplies and infrastructure to meet the County's water supply needs. The three main parts of the agreement include: (1) funding a local salt removal facility, owned and operated by Palo Alto, to provide a higher quality of recycled water for irrigation and cooling towers, (2) an effluent transfer option to Valley Water for a regional purification facility (referred to as the "Regional Plant"), owned and operated by Valley Water, to provide advanced purified water for potable reuse, and (3) a water supply option for the cities of Palo Alto and Mountain View to request an additional supply if needed.

The financial impact to Valley Water includes funding the local salt removal facility in the amount of \$16.0 million, which may be sourced as a component of the Expedited Purified

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Water Program. Valley Water will also pay \$0.2 million per year, starting in year one to culminate in year thirteen, or at startup of the regional purification facility, whichever occurs first. Finally, Valley Water will pay \$1.0 million per year for the effluent once startup of the regional purification facility has been initiated. All three payments will escalate annually based on the factors outlined in the partnership agreement and would be paid for water charge related revenues. Timing of such payments is still to be determined.

NOTE 16 - CONTINGENCIES

(a) Litigation

It is normal for a public entity like Valley Water, with its size and activities, to be a defendant, co-defendant, or cross-defendant in court cases in which money damages are sought. Discussed below are all pending litigations that Valley Water is aware of which are significant and may have a potentially impact on the financial statements.

Great Oaks Water Company v. Santa Clara Valley Water District

In 2005, Great Oaks Water Company (hereinafter "Great Oaks") filed an administrative claim alleging that Valley Water's groundwater charges for 2005-06 violated the law and sought a partial refund. After its claim was deemed denied, Great Oaks filed a lawsuit alleging, among other things, that Valley Water's groundwater production charges violated Proposition 218 (which added Article XIIID to the California Constitution), because proceeds are used to fund projects and services that benefit the general public, not just ratepayers (*Great Oaks Water Company v. Santa Clara Valley Water District*, Santa Clara County Superior Court Case No. 2005-CV-053142; Cal. Court of Appeals Case Nos. HO35260 and HO35885; Cal. Supreme Court No. S231846 (the "Great Oaks Case"). Great Oaks also alleged that the groundwater production charges violated the Law. Great Oaks demanded a partial refund as well as declaratory, injunctive and mandamus relief.

On February 3, 2010, the trial court issued a Judgment After Trial in the Great Oaks case, ruling that Valley Water owed Great Oaks a refund of groundwater charges of approximately \$4.6 million plus interest at 7% per annum. The award of pre-judgment interest amounted to approximately \$1.3 million, and the court awarded post-judgment interest of \$886.62 per day. Valley Water appealed this decision to the California Court of Appeal for the Sixth Appellate District (the "Court of Appeal"). During the pendency of the appeal, in accordance with the requirements of GASB Statement No. 62, Valley Water recorded a liability in the amount of the judgment plus interest. After the favorable judgment by the Court of Appeal in 2015, discussed below, Valley Water reversed its prior total recorded liability in the aggregate amount of \$7.4million in its audited financial statements for Fiscal Year 2017.

In 2015, the Court of Appeal reversed in full the judgment of the trial court. The Court of Appeal found that Valley Water's groundwater production charges did not violate Proposition 218 or the Law. Great Oaks petitioned the California Supreme Court to review the Court of Appeal's ruling, and the Supreme Court granted its petition. The case was placed on hold pending the California Supreme Court's decision in a similar case, *City of Buenaventura v. United Water Conservation District* ("UWCD"). In late 2017, the California Supreme Court issued its opinion in the UWCD case, finding that Proposition 218 does not apply to groundwater charges, but that Article XIIIC of the California Constitution does apply. The

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Supreme Court vacated the Court of Appeal's decision and remanded the Great Oaks case for reconsideration in light of its UWCD opinion. On November 8, 2018, the Court of Appeal reaffirmed its 2015 decision. The Court of Appeal declined to consider Great Oaks' request to consider whether Valley Water's groundwater production charges violated Article XIII C of the California Constitution, as this cause of action had never been considered by the trial court. This case was remanded to the trial court for further proceedings in February 2019.

While the 2005 Great Oaks case was pending, Great Oaks filed additional annual claims and additional annual lawsuits challenging Valley Water's groundwater production charges for each year after 2005, continuing through the present. Great Oaks' subsequent, similar lawsuits were stayed pending resolution of its 2005 case. (Santa Clara Superior Court Case Nos. 2007-CV-087884; 2008-CV-119465; 2008-CV-123064; 2009-CV-146018; 2010-CV-178947; 2011-CV-205462; 2012-CV-228340; 2013-CV-249349; 2015-CV-281385; 2016-CV-292097; 2017-CV-308140; and 2018-CV-327641). In addition, in 2011 Shatto Corporation, Mike Rawitser Golf Shop, and Santa Teresa Golf Club filed a similar refund action, making similar claims (Santa Clara Superior Court Case No. 2011-CV-195879). Other water retailers including San Jose Water Company and the cities of Morgan Hill, Gilroy and Santa Clara, and the Los Altos Golf and Country Club and Stanford University, dispute Valley Water's groundwater charges and entered into tolling agreements with Valley Water pending the final decision in the Great Oaks Case. In 2019, Valley Water filed a collection action against Shatto Corporation for failure to pay groundwater charges from 2009 to 2014 and associated penalties and interest. Valley Water estimates that the amount due is approximately \$1.0 million. Shatto Corporation filed a cross-complaint, alleging that Valley Water's groundwater charges violate Article XIII C of the California Constitution (Santa Clara Superior Court Case No. 2019-CV-348413).

Once the Great Oaks Case was remanded to the trial court in February 2019, the court lifted the stay over Great Oaks' subsequently filed cases, as well as the case brought by Shatto Corporation, Mike Rawitser Golf Shop, and Santa Teresa Golf Club. At the request of the trial court, in order to streamline resolution of the remaining issues this litigation and related litigation, the parties stipulated and agreed to the filing of a new, omnibus complaint. On June 12, 2020, the proposed omnibus "Master Complaint" of plaintiffs Great Oaks and Shatto Corporation was approved for filing and filed under Santa Clara Superior Court Case No. 2011-CV-205462. Great Oaks alleges that Valley Water's groundwater production charges violate Proposition 26, and that Valley Water does not levy or collect groundwater charges from agricultural pumpers but instead uses property taxes to pay these charges. See Note (17) Subsequent Events, regarding Valley Water's settlement with Shatto Corporation.

In the event that a court rules that Valley Water's groundwater production charges violate Proposition 26, such a ruling could materially impact Valley Water's rate revenue and finances.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

Flooding in the City of San Jose

Following a series of storms, a flood event occurred on the Coyote Creek in San Jose, California on or about February 21, 2017. The Coyote Creek is approximately 42 miles long and is the longest creek in the County. In the southern portion of the County, Valley Water owns and maintains the Leroy Anderson Dam and Reservoir along the Coyote Creek near Morgan Hill, California. The Anderson Dam is upstream from the City of San Jose. After the reservoir reached capacity, water began going over the Anderson Dam spillway on February 18, 2017. The spillover volume peaked on the morning of February 21, 2017, increasing flows on Coyote Creek. Beginning on or about February 21, 2017, certain residential and non-residential areas of San Jose along Coyote Creek experienced flooding due to rising water levels in the creek. Thousands of residents were temporarily evacuated, and numerous properties experienced flood damage. Such flood water receded within a short period of time after February 21, 2017.

As of the date of this Official Statement, Valley Water has received 423 claims with respect to the flooding along Coyote Creek. Estimated damages are in excess of \$10.0 million; however, Valley Water cannot predict the final amount of any proven damages. Many of the claimants are also seeking recovery from the City of San Jose; therefore, a portion of the aggregate stated value of the claims may be apportioned to the City of San Jose.

A number of claimants have filed lawsuits in Santa Clara County Superior Court against Valley Water and the City of San Jose alleging damage from the Coyote Creek flood event. Currently, 20 lawsuits have been filed and 19 are pending against Valley Water relating to the flood event (one case was dismissed). Valley Water is evaluating all of such claims and lawsuits and cannot predict the outcomes or financial impacts of these or any future claims and lawsuits with respect to the Coyote flood event. Valley Water intends to vigorously defend any actions brought against it with respect to flood-related property damage caused by the flooding along Coyote Creek. Valley Water has filed a motion to remove all 19 pending cases from the State Superior Court to federal court. A hearing on the removal motion has been set for September 1, 2020.

Of the 423 claims, 192 of the claimants have not filed an action in superior court. As to these 192 claims, Valley Water settled 162 of such claims in September 2019 at a total cost of approximately \$0.7 million.

On September 30, 2020, Pacific Gas & Electric Corporation filed a civil action against Valley Water claiming personal property damages as a result of flooding resulting from a series of storms occurring on or about February 21, 2017.

On or about June 14, 2018, San Jose Unified School District filed a civil action against Valley Water claiming property damages as a result of flooding resulting from a series of storms occurring on or about February 21, 2017.

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued)
For the Year Ended June 30, 2020

(b) Grants and Subventions

Valley Water has received federal and state grants for specific purposes that are subject to review and audit. Although such audits could result in expenditure disallowances under grant terms, any required reimbursements are not expected to be material.

(c) Central Valley Project

On June 7, 1977, Valley Water entered into a contract with the U.S. Bureau of Reclamation for water service from the San Felipe Division of the Federal Central Valley Project (CVP). The CVP water service provides for both agricultural operation and maintenance (O&M) and municipal and industrial (M&I) water deliveries to Valley Water up to a total maximum annual entitlement of 152,500 acre-feet per year. The contract specified initial water rates for O&M and M&I water service and provided for periodic adjustments for the respective water rates in accordance with prevailing CVP water rate policies commencing in the year 1993 for the in-basin M&I rate component; 1996 for the agricultural O&M rate component; 2001 for the full agricultural water rate; and 2008 for the out-of-basin M&I rate component. The methodology of CVP water rate setting has historically recovered current year operating costs and the applicable construction costs over 50 years.

In compliance with the Central Valley Improvement Act (CVPIA), Valley Water entered into negotiations, along with all other CVP contractors, with the U.S. Bureau of Reclamation for contract renewal. Because of concerns related to litigation challenging the renewal process, Valley Water entered into an amended contract. The amendment maintained the basic provisions of the original contract, implemented provisions of CVPIA, and allowed the establishment of a fixed repayment for the San Felipe Division facilities.

(d) Perchlorate

In 2003, perchlorate released from the Olin Corporation facility at Tennant Avenue in Morgan Hill was discovered in groundwater in much of the Llagas Subbasin in South County, impacting many water supply wells. The investigation and clean-up of the contamination are under the jurisdiction of the Central Coast Regional Water Quality Control Board. Due to ongoing remediation by Olin and managed recharge by Valley Water, both the plume size and number of wells impacted have been reduced. As of June 2019, perchlorate was present above the Maximum Contaminant Level (MCL) in fewer than 10 domestic water supply wells. As of June 2020, perchlorate is present above the MCL in fewer than 5 domestic water supply wells. The perchlorate plume exceeding the MCL extends south from the Tennant Avenue site for about 3 miles. Olin's remedial efforts have included on-site soil removal and groundwater treatment as well as off-site plume remediation. Since this issue is no longer of legal significance, it will not be reported in next year's Comprehensive Annual Financial Report.

(e) Rinconada Water Treatment Plant Upgrade

On May 26, 2015, the Board awarded a \$179.9 million construction contract to Balfour Beatty Infrastructure, Inc. ("Balfour Beatty") for the Rinconada Water Treatment Plant (WTP) Reliability Improvement Project. Phase 2 of such project includes the construction of several new facilities for the upgraded treatment system at the Rinconada WTP, including

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

flocculation/sedimentation, ozone generation, and washwater recover facilities. Such project also includes the installation of an electrical control building and appurtenant wiring and control systems, significant underground piping, and installation of chemical feed systems.

Valley Water's contract with Balfour Beatty provided for the project to be built in five phases within a 5-year period. The existing Rinconada WTP is to remain operational during the entire construction period, with the newly constructed facilities and upgrades integrated with plant operations at the end of each phase.

Balfour Beatty's current estimated completion date of Phase 2 work is more than two years later than originally provided in the construction schedule. Valley Water advised Balfour Beatty of Valley Water's concerns regarding quality of construction work, the failure to comprehensively remedy construction defects, and Balfour Beatty's lack of diligence to ensure progress is made in a timely manner. On March 10, 2020, Valley Water and Balfour Beatty entered into an amendment to their original construction contract ("Amendment One") pursuant to which the scope of work was reduced such that Balfour Beatty only responsible for completing Phase 2 of the project and not the later phases, as originally agreed upon. Amendment One reduced the contract amount by approximately \$39.8 million. Balfour Beatty Infrastructure Inc. has completed the scope of work described in Amendment One. On January 12, 2021, Valley Water accepted the work as complete and will submit the Notice of Completion for recording with the County of Santa Clara Clerk/Recorder. As a result of Valley Water's delay in accepting the completed project, Balfour Beatty filed a California Government Code Claim pursuant to section 900 et. seq. on December 7, 2020 alleging entitlement to monetary compensation for Valley Water's breach of contract and violation of Public Contract Code section 7107 relating to the timely release of contract retention, which is approximately \$7.4 million.

(f) Factors Affecting Water Supply

Valley Water has access to several sources of water, both imported and local, which provides flexibility in managing its water supplies to meet the needs of the County. Under normal water conditions, Valley Water imports about half of its water supply under contracts with the California State Water Project (SWP) and the federal CVP, and obtains the other half from local surface water and groundwater resources. Certain water retailers in the County may also import water from the San Francisco Public Utility Commission's (SFPUC) Regional Water System, have their own local surface water supplies, and/or can deliver recycled water. To address factors which may impact these water supplies, Valley Water has undertaken several planning efforts focused on identifying strategies to safeguard the reliability and sustainability of County and State-side water resources on which Valley Water relies, assessing risks from climate change, economic and regulatory uncertainties, environmental and social conflicts, and other considerations.

Valley Water completed its 2015 Urban Water Management Plan ("UWMP") on June 20, 2016 (District Resolution No. 16-50), pursuant to California Water Code Sections 10610 through 10657 (the Urban Water Management Planning Act). The Urban Water Management Planning Act requires urban water suppliers such as Valley Water to review, update, and adopt an UWMP at least every five years. Valley Water's current UWMP was prepared in coordination with water retailers (who also must prepare their own UWMPs), the County, and local cities

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

and towns. Valley Water's 2015 UWMP updated water demand projections based upon increases in population and job growth to 2040 as projected by local water retailers. The 2015 UWMP also presented water supply projections and included Valley Water's Water Shortage Contingency Plan to address dry year objectives and operations. Completion of UWMP updates allows Valley Water to remain eligible for state water bank assistance and for state grant funding. The next UWMP update cycle is scheduled for development and completion by July 2021.

A key finding of the 2015 UWMP was that Valley Water must make significant investments to maintain and safeguard existing water supplies, infrastructure, and programs to ensure a reliable water supply into the future. These investments were described in Valley Water's Water Supply Master Plan 2040 approved by the Board in November 2019 (the "Water Supply Master Plan"). The Water Supply Master Plan recommends a three-prong strategy to ensure a reliable water supply through 2040: secure existing supplies and infrastructure, increase water conservation and water reuse, and optimize the use of existing supplies and infrastructure. The process of developing the Water Supply Master Plan involved evaluating groups of water supply projects and programs to achieve long-term water supply reliability targets. The preliminary 100-year lifecycle cost projections for the water supply projects and programs considered in the Water Supply Master Plan ranges from less than \$100 million to over \$1 billion and are over \$2.3 billion in the aggregate.

The impact of the implementation of the various groups of water supply projects and programs on Valley Water's water supply reliability are provided in the Water Supply Master Plan. Through a Monitoring and Assessment Program ("MAP"), Valley Water expects to continue implementation planning for the Water Supply Master Plan projects. The MAP report summarizes changes in demand forecasts, project descriptions, and water supply reliability analyses and is present to the Board annually.

The Board approved an updated long-term water supply reliability level of service goal on January 14, 2019. The goal is to develop supplies to meet at least 100 percent of annual water demand identified in the Water Supply Master Plan during non-drought years and at least 80 percent of annual water demand in drought years. The projects identified in the Water Supply Master Plan, along with the baseline supplies and infrastructure, is projected meet the water supply reliability level of service goals, even though there are small supply shortages in demand year 2030. The Water Supply Master Plan provides that such small shortages, if they materialize, will be managed by short-term water purchases rather than additional capital projects. The objectives and projects in the Water Supply Master Plan are incorporated into the Capital Improvement Program.

Endangered Species Act Issues

Valley Water's imported and local supplies are subject to regulatory restrictions due to implementation of the federal Endangered Species Act ("ESA") and the California Endangered Species Act ("CESA"). The listing of winter-run Chinook salmon in 1989 and delta smelt in 1993 resulted in pumping restrictions imposed on the State and federal water projects to protect these species. These pumping restrictions resulted in reduced deliveries from the SWP and CVP, compounding the shortages created by the on-going drought at the time. In 1993, the United States Environmental Protection Agency (the "EPA") also proposed to

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

implement water quality standards for the Bay-Delta that would impose severe restrictions on the operation of the SWP and CVP. These circumstances led to the Bay-Delta Accord in 1994, in which the State and federal governments, along with urban, agricultural and environmental interests, agreed to an interim set of ESA protection measures coupled with water supply certainty. The Bay-Delta Accord laid the groundwork for the establishment of the CALFED Bay-Delta Program, which has been succeeded by a number of efforts, including the California Water Action Plan, the Delta Reform Act and Delta Plan, and the proposed Delta Conveyance Project to develop a long-term solution for conflicts in the Bay-Delta. However, there has been significant recent litigation concerning ESA and CESA issues and water moving through the Delta for export to contractors.

Various legal actions have been filed, and are anticipated to be filed, involving the conveyance of water through the Delta by DWR, via the SWP, and by USBR, via the CVP.

2019 Revised Federal Biological Opinions Litigation. Three significant lawsuits have been filed against the United States challenging as unlawful, revised biological opinions (“BOs”) issued in October 2019 by the National Marine Fisheries Service (“NMFS”) and the United States Fish and Wildlife Service (“FWS”). The State (through its natural resources agencies) filed one of these lawsuits in February 2020 (*California Natural Resources Agency, et al. v. Ross*). Another lawsuit was filed by environmental groups in December 2019 (*Pacific Coast Federation of Fishermen’s Association, et al. v. Ross*), and a third lawsuit was filed by other environmental groups, the Central Delta Water Agency and the South Delta Water Agency in May 2020, (*AquaAlliance et al. v. United States Bureau of Reclamation*). These cases have been consolidated before Judge Drozd in the United States District Court for the Eastern District of California, Case Nos. 20-cv-00431, 20-cv-00426, and 20-cv-00878.

The foregoing three lawsuits allege violation of the Administrative Procedure Act (“APA”), the ESA and the National Environmental Policy Act (“NEPA”). Such cases arise from the BOs and associated permits issued by the FWS and NMFS under the ESA for the long-term, coordinated operations of the CVP and the SWP, and USBR’s reliance upon those opinions and permits. For the last decade, the SWP and CVP operations have been controlled by a pair of BOs issued in 2008 and 2009 by FWS and NMFS, respectively, and their reasonable and prudent alternatives (“RPAs”). On August 2, 2016, the USBR and DWR requested re-initiation of consultation for coordinated long-term operations due to new information learned after multiple years of drought, low populations for listed species and new scientific information. DWR and USBR worked to refine operations of the SWP and CVP to reflect water quality regulations, existing ESA restrictions, updated hydrology, developing scientific data, and enhanced real-time monitoring capacity. In January of 2019, USBR issued a Biological Assessment that proposed a new long-term operating plan that would control through 2030. On July 1, 2019, NMFS released a draft BO that found the proposed plan would cause jeopardy and included an RPA. DWR and USBR continued to work with the FWS and NMFS to refine the proposed operations to prevent jeopardy. On October 21, 2019, NMFS and FWS issued new BOs that concluded that the long-term operations plan would not cause jeopardy. On February 19, 2020, USBR completed its NEPA review of the long-term operating plan and issued a Record of Decision adopting the October 2019 BOs.

In these cases, the State and environmental groups allege that NMFS and FWS violated the APA in reaching no jeopardy conclusions in the October 2019 BOs. The State and such

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

environmental groups also allege that USBR violated the ESA by relying on the BOs and that USBR failed to comply with NEPA in issuing its Record of Decision.

Many water agencies, districts, authorities and other government entities have either intervened in these cases or have filed motions to intervene that remain pending. These include, for example, the State Water Contractors association ("SWC"), San Luis & Delta-Mendota Water Authority, Westlands Water District, Tehama-Colusa Canal Authority, and Sacramento River Settlement Contractors.

In two cases, the State and environmental groups brought motions for a preliminary injunction seeking to prevent USBR from implementing the new long-term operations plan and asking the court to require the federal defendants to abide by the 2008 and 2009 BOs pending a determination on the merits of their claims. The Court granted the preliminary injunction for one aspect of the operations plan for a limited amount of time in May 2020 and denied the preliminary injunction for all other aspects.

Depending on the outcome of the litigation, SWP and CVP water supplies may be slightly higher or remain similar to levels from 2009 through 2019 under the 2009 biological opinion.

California Incidental Take Permit and SWP Long-Term Operations EIR Litigation. To Valley Water's knowledge, between five to seven lawsuits have been filed against the State in three or four different Superior Courts by State and federal water contractors and by environmental groups concerning the DWR's March 2020 Final Environmental Impact Report ("EIR") and the California Department of Fish and Wildlife's ("CDFW") Incidental Take Permit ("ITP") for the long-term operation of the SWP. Under CESA, DWR is required to obtain an ITP to minimize, avoid and mitigate impacts to threatened or endangered species, including the Delta Smelt and other fish species, as a result of SWP operations. In past years, DWR obtained coverage for SWP operations under CESA by securing a "consistency determination" from CDFW based on BOs issued by the NMFS and FWS. In 2018, as federal agencies were working to update their BOs, President Trump issued a Presidential Memorandum to accelerate their completion. In February 2019, DWR and CDFW announced that they would pursue a separate State permit to ensure the SWP's compliance with the CESA.

In November 2019, DWR issued its draft EIR for long-term operations of the SWP. The draft EIR found that the project would have no significant environmental impacts. However, the draft EIR also discussed several project alternatives, including "Alternative 2[b]-Proposed Project with Dedicated Water for Delta Outflow from SWP." In December 2019, DWR applied to CDFW for an ITP under the CESA. Despite the draft EIR finding of no significant impact, in its ITP application, DWR described the project in terms closer to Alternative 2b than what it had originally proposed. On March 27, 2020, DWR certified its final EIR, which adopted "Refined Alternative 2b" as the approved project. However, "Refined Alternative 2b" includes several project components that were neither described in the original project description nor in Alternative 2b. In announcing its final EIR, DWR also announced that it does not expect long-term SWP operations to result in an increase in the amount of water exported south of the Delta as compared to that under the prior 2008/2009 federal BOs. On March 31, 2020, CDFW issued an ITP consistent with the final EIR. The ITP and Final EIR will significantly limit exports in wetter years as compared to what is allowed under the 2019 revised federal

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

BOs, with potential reductions of up to 400,000 acre-feet in April and May. The EIR and ITP apply only to SWP operations, not CVP operations.

In April 2020, Metropolitan Water District and Mojave Water Agency jointly filed suit against the State in Fresno Superior Court, as did the San Luis & Delta Mendota Water Authority, Friant Water Authority, and the Tehama Colusa Canal Authority. SWC and Kern County Water Agency jointly filed another lawsuit. These lawsuits allege, among other things, that the State violated CEQA or CESA by: (a) changing the project description after the draft EIR and certifying new "Refined Alternative 2b" without adequate disclosure or public comment; and (b) failing to use the best available science and requiring unnecessary and unjustified fish avoidance and mitigation measures. Metropolitan Water District and Mojave Water Agency also allege in their lawsuit that the State breached its SWP contract by agreeing to mitigation measures stronger than necessary under the CESA, reducing the amount of water that will be delivered and increasing charges. In contrast, the Sierra Club, Center for Biological Diversity and two other environmental groups jointly filed suit against the State in San Francisco Superior Court, alleging that the final EIR and ITP violate the Delta Reform Act and CEQA and do not go far enough in protecting threatened fish species. The Sierra Club, Center for Biological Diversity and the environmental groups allege that the final EIR And ITP allow too much water to be exported south of the Delta and fail to account for the cumulative impacts of SWP operations. Finally, they allege DWR violated CEQA by failing to analyze the Delta Conveyance Facility, the single tunnel project proposed by Governor Newsom. The foregoing lawsuits could be coordinated and consolidated.

The final EIR and ITP could result in less SWP water being exported south of the Delta than would otherwise be authorized under the 2019 revised federal BOs. Valley Water cannot determine at this time whether the final EIR and ITP will result in less SWP water being delivered to contractors than had been delivered for 11 years under the former (2008 and 2009) federal BOs.

Bay-Delta and Imported Water Litigation

Delta Stewardship Council Delta Plan Litigation. In 2013, the federal government, SWP contractors, including Valley Water, and several environmental groups, filed suit against the Delta Stewardship Council ("DSC"), challenging its Bay-Delta Plan. The Delta Reform Act of 2009 ("DRA") established the co-equal goals of restoring the Bay-Delta ecosystem and increasing the reliability of Delta water supplies. The DRA also created the DSC, which was charged with developing a plan that accomplishes these goals. SWC and Valley Water allege that the Bay-Delta Plan violates the DRA because, among other things, its Regulation WR P1 provides that the DSC may reject any projects involving water moving through the Bay-Delta if local agencies do not demonstrate efforts to reduce local water demand, improve efficiency, and/or increase local water supplies. Environmental groups sued the DSC alleging that the Bay-Delta Plan violates the DRA because it does not set forth enforceable, quantified minimum water flows or other measurable objectives. The trial court held that the Bay-Delta Plan violated the DRA because it did not set forth quantified water flow objectives or other measurable limits.

In 2020, the Court of Appeal issued an opinion rejecting the arguments of both the SWP contractors and environmental groups, holding that the Bay-Delta Plan does not violate the

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

DRA. The Court of Appeals rejected the SWP contractors' arguments that the Bay-Delta Plan exceeded the DSC's jurisdiction by regulating local water agencies and local water use by requiring agencies to demonstrate reduced reliance on the Delta, as well as their other arguments. The Court of Appeals also rejected the argument that the Bay-Delta Plan violates the DRA because it does not contain quantified or measurable water flow limits or targets. The Court of Appeals' decision could impact SWP contractors' ability to participate in multi-year water transfers if a SWP contractor, such as Valley Water, is unable to demonstrate reduced reliance on imported Delta water to the satisfaction of the DSC, which may require proof of local retail water agencies or purveyors showing reduced reliance on imported water. However, single-year water transfers are not impacted, as the DRA expressly exempts such transfers.

Bay-Delta Water Quality Control Plan Phase 1 Amendments Litigation. In late 2018, the SWRCB released its "Phase 1" amendments to the San Francisco Bay/Sacramento - San Joaquin Delta Estuary Water Quality Control Plan ("Bay Delta WQCP"), which addressed water quality objectives on the Lower San Joaquin River, its tributaries, and the southern Delta. Phase 2 amendments will focus on the Sacramento River, its tributaries and the northern and central Delta. Among other things, the Phase I amendments require an adaptive 30% – 50% unimpaired flow requirement on all major tributaries to the San Joaquin River, including the Tuolumne River, from which the SFPUC Hetch-Hetchy system obtains its water supplies. The SWRCB announced that it anticipates in forthcoming Phase 2 amendments concerning the Sacramento River and its tributaries and north and central Delta, that it expects to impose a higher, adaptive 45% – 65% unimpaired flow requirement.

Approximately 24 entities, including Valley Water, filed suit against the SWRCB in 13 lawsuits concerning the Phase I Bay-Delta WQCP amendments. Such lawsuits have been consolidated in Sacramento Superior Court in Case No. JCCP 5013. Several water and irrigation districts, environmental groups, the cities of San Francisco and Modesto, the United States, and one Indian tribe are plaintiffs/petitioners. The public agency plaintiffs allege that the flow requirements are arbitrary and capricious, not based on the best available science, or are too restrictive of, or alter, water rights; and the environmental groups allege they are not protective of fish enough. This consolidated litigation is in an early stage. Valley Water's expects to file a dismissal in this matter and to address the issues raised in the lawsuit through a voluntary agreement process. The Phase 1 amendments as well as the anticipated Phase 2 amendments could reduce the supply of imported water available to Valley Water, SFPUC, and other State and federal water contractors.

Litigation Relating to Monterey Amendments to SWP Contract. In late 1994, SWP contractors and DWR entered into an agreement in Monterey to substantially amend the standard SWP contract. In 1995 the first of several CEQA lawsuits challenging the "Monterey Amendments" was filed after a SWP contractor prepared an EIR for these amendments. That case settled after DWR agreed to prepare a new EIR for the Monterey Amendments, which was named the "Monterey Plus" project. In 2010, DWR certified its final Monterey Plus EIR. Central Delta Water Agency and several NGOs filed suit against DWR thereafter (Sac. Sup. Ct. Case No. 34-2010-80000561) ("*Central Delta I*"), alleging that the Monterey Plus EIR violated CEQA because it failed to provide an adequate description of the project and its impacts, failed to adequately analyze alternatives and mitigation measures, contained inadequate responses to public comments, and was not properly circulated. The plaintiffs also

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

alleged that DWR's CEQA findings were not supported by substantial evidence. A related lawsuit was filed, *Rosedale-Rio Bravo Water Storage District v. DWR* (Sacr. Sup. Ct. Case No. 34-2010-80000703), alleging only that the Monterey Plus EIR failed to adequately analyze the operations of the proposed Kern Water Bank). Finally, the Central Delta Water Agency filed a second, separate lawsuit challenging the validity of the transfer of the Kern Water Bank from the Kern County Water Agency to the Kern Water Bank Authority (Sacr. Sup. Ct. Case No. 34-2010-80000719, "*Central Delta II*"). These three actions were ordered related and assigned to a Sacramento Superior Court Judge. *Central Delta II* has been stayed pending resolution of *Central Delta I*.

In a decision in 2014 in *Central Delta I* and *Rosedale-Rio Bravo*, the court upheld the majority of the Monterey Plus EIR. However, the court found that the Monterey Plus EIR did not sufficiently analyze or address the operation of the Kern Water Bank and issued a writ for DWR to further analyze its operations and recertify the Monterey Plus EIR. The *Central Delta I* plaintiffs appealed the rejection the CEQA claims (Ct. of App. 3d. Dist. Case No. C078249). The parties completed appellate court briefing in July of 2016. This case remains pending, as the Court of Appeal has not yet issued a decision.

As ordered by the trial court, DWR conducted further environmental review of the Kern Water Bank, and, in 2016, issued its revised EIR: "Monterey Plus — Kern Water Bank Development and Continued Use Operation." The Center for Food Safety and other NGOs (represented by *Central Delta I & II's* counsel) filed suit shortly thereafter, alleging various CEQA violations (*Center for Food Safety v. DWR*, Sacr. Sup. Ct. Case No. Case No. 34-2016-800002469). The court denied all of plaintiffs' claims in an order and judgment in October 2017, and plaintiffs appealed. The parties completed appellate court briefing approximately 20 months ago, and this action is also pending in the Court of Appeal (Ct. of App. 3d Dist. Case No. C086215).

DWR SWP Contract Long-Term Extension Validation Action. DWR filed a validation action in Sacramento County Superior Court in 2018 (Sacr. Sup. Ct No. 34-2018-00246183) to validate the legality of its approval of long-term extensions of all SWP contracts, including Valley Water's contract. A judgment in favor of DWR would provide that the matters contained therein are in conformity with applicable law, as set forth in such validation action. However, there can be no assurance that a court exercising equitable powers or judicial discretion would not hear an action challenging the matters set forth in such judgment. In February 2019, Valley Water filed an answer supporting DWR's allegations, as did several other SWP contractors. However, several environmental groups and counties and districts filed answers or separate actions opposing DWR's approval, asserting that the approval violates CEQA, the Public Trust Doctrine and the DRA. This case is in its initial procedural stage. All cases have been consolidated and assigned to Judge Culhane, and the administrative record is being prepared.

Oroville Spillway Environmental Damage Cases. In response to record rainfall in early 2017, DWR's Oroville Dam filled and excess water ran down its spillway (as designed). The spillway, however, failed and caused water and debris to be released, uncontrolled, into the Feather River. The District Attorney of Butte County (People of State of CA v. DWR) and other individuals and entities have filed suit for environmental damage or property damage resulting from the spillway failure. These cases have been consolidated in Sacramento

WATER UTILITY ENTERPRISE FUNDS OF VALLEY WATER

Notes to Basic Financial Statements (Continued) For the Year Ended June 30, 2020

Superior Court Case No. JCCP 4974. The Butte County District Attorney is seeking \$51.0 billion in damages (\$25k/day penalty + \$10/pound of spillway and materials discharged into river) under Cal. Fish & Game Code § 5650. Although Article 13(b) of the SWP contract provides that contractors are not liable for DWR's operation or maintenance of SWP structures or facilities before their turnouts, DWR maintains that ultimately, regardless of legal liability, all costs of the SWP system must be borne by SWP contractors rather than the general public, and thus DWR may bill contractors or raise SWP costs to recover expenditures related to this litigation (cost of litigation, settlements, damages awards/verdicts). If a judgment in this case resulted in the award in the amount of the maximum damages being sought by Butte County and it was determined that DWR could recover these costs from SWP contractors, Valley Water's share could be approximately \$1.3 billion. Valley Water cannot predict the outcome of this litigation or the damages in the event that Butte County prevails.

DWR's cost estimate for the Oroville Spillways Emergency Recovery Project is currently \$1.1 billion, but no determination has been made as to the amount for which SWP contractors will ultimately be responsible. The Federal Emergency Management Agency's ("FEMA") Public Assistance program allows for the reimbursement of up to 75 percent of eligible costs for federally declared disasters. As a result, DWR has issued debt for 25 percent of total project costs, resulting in an annual increase of about \$0.6 million to Valley Water's Statement of Charges. To date, FEMA has reimbursed DWR for approximately 50 percent of total project costs and DWR is considering appeal of this decision. If DWR is not successful in obtaining further reimbursement from FEMA and instead issues debt to be repaid by SWP contractors, Valley Water's share of project costs could increase by an additional \$0.6 million per year.

Valley Water cannot predict the outcome of these Delta-related cases. However, Valley Water believes that any new decision or order by a State or federal court related to one or more of the above-described biological opinions and leading to adverse decisions reducing State Water Project and/or Central Valley Project supplies would not have a material impact on Valley Water's ability to pay debt service on the 2020 Bonds or the Installment Payments.

**Required
Supplementary
Information**

SANTA CLARA VALLEY WATER DISTRICT
Schedule of Changes In Net Pension Liability and Related Ratios
as of June 30, 2020
Last 10 Years*
(Dollars in Millions)

	2015	2016	2017	2018	2019	2020
Total pension liability						
Service cost	\$ 14.3	\$ 13.7	\$ 13.8	\$ 15.7	\$ 16.0	\$ 16.5
Interest on total pension liability	46.3	48.8	51.1	53.1	54.9	58.4
Differences between expected and actual experience	-	(0.2)	(3.2)	(4.7)	(1.4)	13.3
Changes in assumptions	-	(12.0)	-	44.3	(8.1)	-
Benefit payments, including refunds of employee contributions	(25.0)	(27.8)	(30.4)	(32.5)	(35.3)	(38.4)
Net change in pension liability	35.6	22.5	31.3	75.9	26.1	49.8
Total pension liability, beginning	622.2	657.8	680.3	711.6	787.5	813.6
Total pension liability, ending (a)	<u>\$ 657.8</u>	<u>\$ 680.3</u>	<u>\$ 711.6</u>	<u>\$ 787.5</u>	<u>\$ 813.6</u>	<u>\$ 863.4</u>
Plan fiduciary net position						
Contributions - employer	\$ 13.8	\$ 15.2	\$ 17.0	\$ 19.0	\$ 20.1	\$ 26.6
Contributions - employee	9.0	6.2	6.6	6.6	7.0	7.6
Net investment income	75.7	11.5	2.8	56.5	47.2	39.3
Benefits payment	(25.0)	(27.8)	(30.4)	(32.5)	(35.3)	(38.4)
Administrative expense	-	(0.6)	(0.3)	(0.7)	(0.9)	(0.4)
Other miscellaneous income/(expenses)	-	-	-	-	(1.6)	-
Net change in fiduciary net position	73.5	4.5	(4.3)	48.9	36.5	34.7
Plan fiduciary net position, beginning	434.7	508.2	512.7	508.4	557.3	593.8
Plan fiduciary net position, ending (b)	<u>\$ 508.2</u>	<u>\$ 512.7</u>	<u>\$ 508.4</u>	<u>\$ 557.3</u>	<u>\$ 593.8</u>	<u>\$ 628.5</u>
Net pension liability, ending (a - b)	<u>\$ 149.6</u>	<u>\$ 167.6</u>	<u>\$ 203.2</u>	<u>\$ 230.2</u>	<u>\$ 219.8</u>	<u>\$ 234.9</u>
 Plan fiduciary net position as a percentage of total pension liability	77.26%	75.36%	71.44%	70.77%	72.98%	72.79%
Covered payroll	\$ 77.9	\$ 78.0	\$ 79.6	\$ 84.1	\$ 88.5	\$ 92.1
Net pension liability as a percentage of covered payroll	192.04%	214.87%	255.28%	273.72%	248.36%	255.05%
Discount rate	7.50%	7.65%	7.65%	7.15%	7.15%	7.15%

* Fiscal year 2015 was the first year of GASB 68 implementation, therefore only 6 years are shown.

SANTA CLARA VALLEY WATER DISTRICT
Schedule of Employer Pension Contributions
June 30, 2020
Last 10 Years*
(Dollars in Millions)

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Actuarially determined contribution	\$ 13.9	\$ 16.5	\$ 18.6	\$ 19.7	\$ 22.6	\$ 25.4
Contributions in relation to the						
actuarially determined contribution	(13.9)	(16.5)	(18.6)	(19.7)	(26.1)	(29.4)
Contribution Deficiency	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (3.5)</u>	<u>\$ (4.0)</u>
Covered payroll ⁽¹⁾	\$ 78.0	\$ 79.6	\$ 84.1	\$ 88.5	\$ 92.1	\$ 95.0
Contribution as a percentage of covered payroll	17.82%	20.73%	22.12%	22.26%	24.54%	26.74%

⁽¹⁾ The covered payroll noted on this page is different from the covered payroll presented on the previous page as the previous page is payroll related to the net pension liability in the applicable measurement period.

The covered payroll for the current year is from the actuarial valuation study using a prior year measurement date, adjusted to the current year using a 3% increase.

* Fiscal year 2015 was the first year of GASB 68 implementation, therefore only 6 years are shown.

SANTA CLARA VALLEY WATER DISTRICT
Schedule of Changes In Net OPEB Liability and Related Ratios
as of June 30, 2020
Last 10 Years*
(Dollars in Millions)

	2018	2019	2020
Total OPEB liability			
Service cost	\$ 2.9	\$ 2.9	\$ 2.6
Interest on total OPEB liability	12.0	12.5	12.9
Changes in assumptions	-	-	(5.5)
Benefit payments	(8.5)	(8.9)	(10.1)
Other liability experience loss/(gain)	-	-	(8.0)
Net change in OPEB liability	6.4	6.5	(8.1)
Total OPEB liability, beginning	167.8	174.3	180.8
Total OPEB liability, ending (a)	<u>\$ 174.2</u>	<u>\$ 180.8</u>	<u>\$ 172.7</u>
Plan fiduciary net position			
Contributions	\$ 11.5	\$ 11.9	\$ 10.1
Benefits payment	(8.5)	(8.9)	(10.1)
Net investment income	6.2	7.1	7.8
Investment return - difference between expected and actual experience	2.9	0.8	(1.2)
Net change in fiduciary net position	12.1	10.9	6.6
Plan fiduciary net position, beginning	84.5	96.6	107.5
Plan fiduciary net position, ending (b)	<u>\$ 96.6</u>	<u>\$ 107.5</u>	<u>\$ 114.1</u>
Net OPEB liability, ending (a - b)	<u>\$ 77.6</u>	<u>\$ 73.3</u>	<u>\$ 58.6</u>
 Plan fiduciary net position as a percentage of total OPEB liability	 55.45%	 59.46%	 66.07%
Covered payroll	\$ 79.7	\$ 84.1	\$ 88.5
Net OPEB liability as a percentage of covered payroll	97.37%	87.16%	66.21%
Discount rate	7.28%	7.28%	7.28%

* Fiscal year 2018 was the first year of GASB 75 implementation, therefore only 3 years are shown.

SANTA CLARA VALLEY WATER DISTRICT
Schedule of Employer Other Post Employment Benefit Contributions
June 30, 2020
Last 10 Years*
(Dollars in Millions)

	<u>2018</u>	<u>2019</u>	<u>2020</u>
Actuarially determined contribution	\$ 9.5	\$ 10.2	\$ 10.8
Contributions in relation to the			
actuarially determined contribution	<u>(12.5)</u>	<u>(10.2)</u>	<u>(10.8)</u>
Contribution Deficiency / (Excess)	<u>\$ (3.0)</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll ⁽¹⁾	\$ 84.1	\$ 88.5	\$ 91.0
Contribution as a percentage of covered payroll	14.86%	11.53%	11.87%

⁽¹⁾ The covered payroll noted on this page is different from the covered payroll presented on the previous page as the previous page is payroll related to the net OPEB liability in the applicable measurement period.

The covered payroll for the current year is from the actuarial valuation study using a prior year measurement date, adjusted to the current year using a 3% increase.

* Fiscal year 2018 was the first year of GASB 75 implementation, therefore only 3 years are shown.

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Other Information

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

Board of Directors
Valley Water District
San Jose, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund and the aggregate remaining fund information of Santa Clara Valley Water District (District) as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise District's basic financial statements, and have issued our report thereon dated January 13, 2021.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of District's internal control. Accordingly, we do not express an opinion on the effectiveness of District's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in black ink that reads "Maze + Associates". The script is cursive and fluid, with the plus sign and the word "Associates" written in a slightly more stylized manner.

Pleasant Hill, California
August 16, 2021

**WATER UTILITY ENTERPRISE FUNDS
OF THE
SANTA CLARA VALLEY WATER DISTRICTS**

Schedule of Revenues and Expenses

(Budgetary Basis)

For the Year Ended June 30, 2020

(Dollars In millions)

	<u>North County</u>	<u>South County</u>	<u>Total</u>
Operating Revenues:			
Ground Water Charges	\$ 97.4	\$ 15.2	\$ 112.6
Treated Water Charges	152.6	-	152.6
Surface and recycled water charges	1.1	0.7	1.8
Other	0.2	-	0.2
Total Operating revenues	<u>251.3</u>	<u>15.9</u>	<u>267.2</u>
Operating Expenses			
Sources of Supply	77.4	10.7	88.1
Water Treatment	37.4	0.3	37.7
Transmission and distribution:			
Raw Water	9.8	3.3	13.1
Treated Water	1.7	-	1.7
Administration and general	20.5	4.2	24.7
Capital Cost Recovery	(5.6)	5.6	-
Total Operating Expenses	<u>141.2</u>	<u>24.1</u>	<u>165.3</u>
Operating income (loss)	<u>110.1</u>	<u>(8.2)</u>	<u>101.9</u>
Nonoperating revenues (expenses):			
Property Taxes	27.1	3.1	30.2
Investment Income	8.8	-	8.8
Operating Grants	3.7	-	3.7
Rental Income	0.1	-	0.1
Other	2.2	0.2	2.4
Interest and fiscal agent fees	(19.4)	-	(19.4)
Open Space Credit Transfer	(7.0)	7.0	-
Interest earned credit	(0.3)	0.3	-
Net Operating revenues	<u>15.2</u>	<u>10.6</u>	<u>25.8</u>
Change in Net Position	<u>\$ 125.3</u>	<u>\$ 2.4</u>	<u>\$ 127.7</u>

Reconciliation to Statement of Revenues, Expenses and Changes in Net Position:

Income (Loss)	127.7
Depreciation and amortization expenses not budgeted	(31.2)
Capital contributions	4.3
Interfund transfers	(1.5)
Reconcile GAAP to budgetary basis for operating expenses	(6.9)
Change in net position per Statement of Revenues, Expenses, and Change in Net Position	<u>92.4</u>



Santa Clara Valley Water District

File No.: 21-1022

Agenda Date: 9/28/2021
Item No.: *4.3.

BOARD AGENDA MEMORANDUM

SUBJECT:

Board Committee Reports.

ATTACHMENTS:

- *Handout 4.3-A: 090921 SPOC Summary
- *Handout 4.3-B: 091521 RAC Summary
- *Handout 4.3-C: 092221 RAC Summary
- *Handout 4.3-D: 092721 WCDM Agenda
- *Handout 4.3-E: 092921 RAC Agenda

09/28/2021



MEMORANDUM

FC 14 (02-08-19)

TO: Board of Directors

FROM: Barbara Keegan
SPOC Chair

SUBJECT: Stream Planning and Operations Committee
(SPOC) September 9, 2021 Meeting
Summary

DATE: 09/13/2021

This memorandum summarizes the informational items from the Stream Planning and Operations Committee (SPOC) meeting held on September 9, 2021.

SPOC received updates and participated in discussions on the following:

- Fish and Aquatic Habitat Collaborative Effort (FAHCE) Progress and Deliverables
 - Draft Environmental Impact Report (EIR) – Public review and comment deadline extended to October 15, 2021.
 - Drought and FAHCE Plus Pilot Flows Implementation of Guadalupe Creek and Stevens Creek – Due to extreme drought conditions there is no water for flow releases.
 - Meeting with the Initialing Parties on the One Water Plan as it relates to FAHCE – No meetings since July 2021.
 - FAHCE Adaptive Management Team meeting – Meeting on July 15, 2021 to discuss refinements to the charter and changes made to the adaptive management and monitoring program. The meeting presentation was based on the draft Fish Habitat Restoration Plan, which is part of the Draft EIR.
 - Update on FAHCE Contracts – The FAHCE Contract with HDR Engineering (HDR) includes processing an administrative no-cost one-year extension, and an amendment to enable HDR to assist with responses to public comments on the draft EIR, make revisions, and finalize. The new amendment will add up to \$1 million for consulting services. Staff's recommendation for contract amendment is scheduled to go to the full Board in fall of 2021.
- District and Non-District Programs, Projects and Other Activities that May Affect the FAHCE Settlement Agreement and Implementation:
 - Received a presentation on Large Woody Debris and Gravel Augmentation Study and Implementation.

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MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors

FROM Redistricting Advisory
Committee

SUBJECT: Redistricting Advisory Committee Meeting
Summary for September 15, 2021

DATE: September 28, 2021

This memorandum summarizes agenda items from the Census Bureau data meeting of the Redistricting Advisory Committee held on September 15, 2021.

Attendees:

Committee Members in attendance were: Swanee Edwards-District 1, Emilie Gatfield-District 2, Michael Kraus-District 3, Michael Gross-District 4, Hon. Howard Miller-District 5, Alfredo Morales-District 6 and Raven Malone-District 7.

Staff in attendance were: Roseryn Bhudsabourg, Glenna Brambill, Lisa Flores, Rachael Gibson, Andy Gschwind, and Don Rocha.

Consultants (Redistricting Partners) in attendance were: Sophia Garcia and Paul Mitchell.

Public in attendance was: Diana, Ellen Forbes, Director Barbara Keegan (District 2), Doug Muirhead, Shayne S., and J. Webb

3. ACTION ITEMS:

3.1 MEETING ON CENSUS BUREAU DATA RELEASE ON EXISTING DISTRICTS AND NEW POPULATIONS

Mr. Paul Mitchell reviewed the following:

Summary from Agenda Memo:

The Redistricting Project's Consultants, Redistricting Partners, will present on the newly released Census data. The Consultants will provide an overview of any considerable changes in population or any other items of interest. The information from this meeting will be utilized in the upcoming outreach district meetings.

The Redistricting Advisory Committee (Ms. Swanee Edwards, Hon. Howard Miller, Mr. Michael Kraus, Ms. Emilie Gatfield, Mr. Michael Gross, Mr. Alfredo Morales, and Ms. Raven Malone) discussed the following: prison populations data (State Department of Corrections), deviations, aligning the maps and data to reflect the best outcome, having a definite rationale of any decisions made, looking at the Plan-the total sum of the deviation (absolute value), legacy data, possibly looking at what other agencies (example the County, City, and School Districts) are doing with redistricting, reviewing/drawing of the maps, potential undercounting concerns, communities of interest, growth percentages within the 7 districts, unincorporated areas/well owners/agricultural populations, the committee consensus is that more information is needed prior to making any final decisions.

The Redistricting Advisory Committee took no action.

3.2 NEXT MEETING AND AGENDA ITEMS

Committee Chair Hon. Miller and Mr. Don Rocha gave a quick overview of the schedule and potential agenda items.

Summary from Agenda Memo:

Review schedule for upcoming meeting dates in 2021-2022.

The October 6, 2021, meeting is rescheduled to Tuesday, October 5, 2021, 6:00 p.m.

The Committee was reminded that they are to attend all meetings and to advise Valley Water staff if unable to attend. A quorum for each meeting is needed to conduct RAC business.

The Redistricting Advisory Committee took no action.

The next committee meeting is scheduled for Wednesday, September 22, 2021, 1:30 p.m.

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

Thank you.

Glenna Brambill, Management Analyst II,
Board Committee Liaison
Office of the Clerk of the Board



MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors

SUBJECT: Redistricting Advisory Committee Meeting
Summary for September 22, 2021

FROM: Redistricting Advisory
Committee

DATE: September 28, 2021

This memorandum summarizes agenda items from the outreach meeting of the Redistricting Advisory Committee held on September 22, 2021.

Attendees:

Committee Members in attendance were: Swanee Edwards-District 1, Emilie Gatfield-District 2, Hon. Howard Miller-District 5, Alfredo Morales-District 6 and Raven Malone-District 7.

Staff in attendance were: Roseryn Bhudsabourg, Glenna Brambill, Lisa Flores, Rachael Gibson, Andy Gschwind, Albert Le, and Don Rocha.,

Consultants (Redistricting Partners) in attendance was: Kay Montplaisir.

Public in attendance was: Elizjen.

PREAMBLE REPORT ON OUTREACH:

Mr. Albert Le reported on the public outreach Valley Water is undertaking for the redistricting efforts: using Facebook events, posting events on next door countywide, Facebook social media posting, live streaming on Valley Water's Facebook page, newsprint ads and utilizing constant contact email newsletter list.

3. ACTION ITEMS:

3.1 OUTREACH MEETING FOR DISTRICT 7

Ms. Kay Montpaisir reviewed the following:

Summary from Agenda Memo:

This meeting will focus on District 7 and provide insight on the Census data changes that occurred within the District. The meeting will provide community members the opportunity to create their own map that satisfies the one-person, one-vote test and ensures compliance with the federal Voting Rights Act. This meeting will also serve as an opportunity for the consultants to take note of any comments or suggestions the public may want to be reflected in the final map submission to the Valley Water Board.

The Redistricting Committee discussed the following: communities of interest.

The Redistricting Advisory Committee (RAC) took no action.

3.2 NEXT MEETING AND AGENDA ITEMS

Committee Chair Hon. Howard Miller reviewed the schedule and potential agenda items.

Summary from Agenda Memo:

Review schedule for upcoming meeting dates in 2021-2022.

Committee Chair Hon. Howard Miller announced that Ms. Raven Malone, District 7 was appointed to the Redistricting Committee for the County Board of Supervisors and today is her last meeting with Valley Water's Redistricting Advisory Committee. Ms. Malone thanked everyone for their well wishes and was grateful for the opportunity to serve on this committee.

Ms. Swanee Edwards thanked Ms. Raven Malone for being a young activist and wished her the best in her future endeavors.

Mr. Don Rocha reported that an agenda item is going to the Valley Water Board of Directors on October 12, 2021, for their consideration and approval for Ms. Raven Malone's (District 7) replacement.

The Redistricting Advisory Committee took no action.

The next committee meeting is scheduled for Wednesday, September 29, 2021, 6:00 p.m.

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

Thank you.

Glenna Brambill, Management Analyst II,
Board Committee Liaison
Office of the Clerk of the Board



Santa Clara Valley Water District Water Conservation and Demand Management Committee

Teleconference-via Zoom

Join Zoom Meeting

<https://valleywater.zoom.us/j/92597340524>

REGULAR MEETING AGENDA

**Monday, September 27, 2021
11:00 AM**

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

BOARD REPRESENTATIVES:
Director Nai Hsueh, Committee Vice
Chair
Director Barbara Keegan
Director Linda J. LeZotte, Committee
Chair

During the COVID-19 restrictions, all public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body, will be available to the public through the legislative body agenda web page at the same time that the public records are distributed or made available to the legislative body. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to participate in the legislative body's meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

Mr. Vincent Gin
(Staff Liaison)

Ms. Glenna Brambill, (COB
Liaison)
Management Analyst II
gbrambill@valleywater.org
1-408-630-2408

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

Santa Clara Valley Water District
Water Conservation and Demand Management Committee
REGULAR MEETING
AGENDA

Monday, September 27, 2021

11:00 AM

Teleconference-via Zoom

IMPORTANT NOTICES

This meeting is being held in accordance with the Brown Act as currently in effect under the State Emergency Services Act, the Governor's Emergency Declaration related to COVID-19, and the Governor's Executive Order N-08-21 issued on June 11, 2021 that allows attendance by members of the Board of Directors, District staff, and the public to participate and conduct the meeting by teleconference, videoconference, or both.

In accordance with the requirements of Gov. Code Section 54954.3(a), members of the public wishing to address the Board/Committee at a video conferenced meeting, during public comment or on any item listed on the agenda, should use the "Raise Hand" tool located in Zoom meeting link listed on the agenda, at the time the item is call. Speakers will be acknowledged by the Board Chair in the order requests are received and granted speaking access to address the Board.

Santa Clara Valley Water District (District), in complying with the Americans with Disabilities Act (ADA), requests individuals who require special accommodations to access and/or participate in District Board meetings to please contact the Clerk of the Board's office at (408) 630-2711, at least 3 business days before the scheduled District Board meeting to ensure that the District may assist you.

This agenda has been prepared as required by the applicable laws of the State of California, including but not limited to, Government Code Sections 54950 et. seq. and has not been prepared with a view to informing an investment decision in any of Valley Water's bonds, notes or other obligations. Any projections, plans or other forward-looking statements included in the information in this agenda are subject to a variety of uncertainties that could cause any actual plans or results to differ materially from any such statement. The information herein is not intended to be used by investors or potential investors in considering the purchase or sale of Valley Water's bonds, notes or other obligations and investors and potential investors should rely only on information filed by the District on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System for municipal securities disclosures and Valley Water's Investor Relations website, maintained on the World Wide Web at <https://emma.msrb.org/> and <https://www.valleywater.org/how-we-operate/financebudget/investor-relations>, respectively

Under the Brown Act, members of the public are not required to provide identifying information in order to attend public meetings. Through the link below, the Zoom webinar program requests entry of a name and email address, and Valley Water is unable to modify this requirement. Members of the public not wishing to provide such identifying information are encouraged to enter "Anonymous" or some other reference under name and to enter a fictional email address (e.g., attendee@valleywater.org) in lieu of their actual address. Inputting such values will not impact your ability to access the meeting through Zoom.

Join Zoom Meeting:
<https://valleywater.zoom.us/j/92597340524>
Dial by your location
+1 669 900 9128 US (San Jose)
Meeting ID: 925 9734 0524

1. CALL TO ORDER:

1.1. Roll Call.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Notice to the Public: Members of the public who wish to address the Committee on any item not listed on the agenda should access the "Raise Hand" tool located in Zoom meeting link listed on the agenda. Speakers will be acknowledged by the Committee Chair in order requests are received and granted speaking access to address the Committee. Speakers comments should be limited to two minutes or as set by the Chair. The law does not permit Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Committee action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Committee may take action on any item of business appearing on the posted agenda.

3. APPROVAL OF MINUTES:

3.1. Approval of Minutes.

[21-0992](#)

Recommendation: Approve the August 30, 2021, Meeting Minutes

Manager: Candice Kwok-Smith, 408-630-3193

Attachments: [Attachment 1: 08302021 WCaDMC Draft Mins](#)

Est. Staff Time: 5 Minutes

4. ACTION ITEMS:

- 4.1. Monthly update on progress towards Valley Water Resolution 21-68's water use reduction target and drought-related water conservation efforts. [21-0993](#)

Recommendation: Receive an update on progress towards meeting the Board's call for water use reduction in response to the water shortage emergency condition, and water conservation efforts relevant to the overall drought response and provide feedback to staff.

Manager: Kirsten Struve, 408-630-3138

Attachments: [Attachment 1: August 2021 Drought Response Report](#)

Est. Staff Time: 20 Minutes

- 4.2. Standing Items Report. [21-0995](#)

Recommendation: A. This agenda item allows the Committee to receive verbal or written updates and discuss the following subjects. These items are generally informational; however, the Committee may request additional information from staff:

B. This is informational only and no action is required. *Staff may provide a verbal update at the 9/27/2021, meeting if there is reportable/updated information.*

1. Sustainable Groundwater Management Act (SGMA)
(Verbal Update 9/27/2021)

2. Flood MAR and Agricultural Baseline Study

Manager: Candice Kwok-Smith, 408-630-3193

Est. Staff Time: 15 Minutes

- 4.3. Review Water Conservation and Demand Management Committee Work Plan, the Outcomes of Board Action of Committee Requests; and the Committee's Next Meeting Agenda. [21-0996](#)

Recommendation: Review the Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

Manager: Candice Kwok-Smith, 408-630-3193

Attachments: [Attachment 1: WCaDMC Work Plan](#)

Est. Staff Time: 5 Minutes

5. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS.

This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during the meeting.

6. ADJOURN:

- 6.1. Adjourn to Regular Meeting at 11:00 a.m., on Monday, October 25, 2021, to be called to order in compliance with the State Emergency Services Act, the Governor's Emergency Declaration related to COVID-19, and the Governor's Executive Order N-08-21.

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Santa Clara Valley Water District Redistricting Advisory Committee Meeting

Teleconference Zoom Meeting

Join Zoom Meeting:

<https://valleywater.zoom.us/j/82398761452>

MEETING - DISTRICT 6 AGENDA

**Wednesday, September 29, 2021
6:00 PM**

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

**REDISTRICTING ADVISORY
COMMITTEE**

Hon. Howard Miller, Committee Chair
Ms. Emile Gatfield, Committee Vice
Chair

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Mr. Don Rocha (Staff Liaison)
Deputy Administrative
Officer

Ms. Glenna Brambill
(COBLiaison)
Management Analyst II
gbrambill@valleywater.org
1-408-630-2408

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

Santa Clara Valley Water District
Redistricting Advisory Committee
MEETING - DISTRICT 6
AGENDA

Wednesday, September 29, 2021

6:00 PM

Teleconference Zoom Meeting

IMPORTANT NOTICES

This meeting is being held in accordance with the Brown Act as currently in effect under the State Emergency Services Act, the Governor's Emergency Declaration related to COVID-19, and the Governor's Executive Order N-08-21 issued on June 11, 2021 that allows attendance by members of the Board of Directors, District staff, and the public to participate and conduct the meeting by teleconference, videoconference, or both.

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Join Zoom Meeting:
<https://valleywater.zoom.us/j/82398761452>

Dial by your location
+1 669 900 9128 US (San Jose)
Meeting ID: 823 9876 1452

1. CALL TO ORDER:

1.1. Roll Call.

2. APPROVAL OF MINUTES:

2.1. Approval of Meeting Minutes.

[21-0895](#)

Recommendation: Approve the September 22, 2021, Meeting Minutes.

Manager: Candice Kwok-Smith, 408-630-3193

Attachments: [Attachment 1: 09222021 RAC DRAFT Mins](#)

Est. Staff Time: 5 Minutes

3. ACTION ITEMS:

3.1. Redistricting Outreach Meeting for District 6.

[21-0896](#)

Recommendation: Receive information on the newly released Census data for District 6.

Manager: Don Rocha, 408-630-2338

Attachments: [Attachment 1: Redistricting Partners Outreach Hearing Presentati](#)

Est. Staff Time: 60 Minutes

3.2. Next Meeting and Agenda Items.

[21-0897](#)

Recommendation: Discuss and confirm next meeting date and agenda items.

Manager: Candice Kwok-Smith, 408-630-3193

Attachments: [Attachment 1: Schedule](#)

Est. Staff Time: 5 Minutes

4. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS.

This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during the meeting.

5. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Notice to the Public: Members of the public who wish to address the Committee on any item not listed on the agenda should access the "Raise Hand" tool located in Zoom meeting link listed on the agenda. Speakers will be acknowledged by the Committee Chair in order requests are received and granted speaking access to address the Committee. Speakers comments should be limited to two minutes or as set by the Chair. The law does not permit Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Committee action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Committee may take action on any item of business appearing on the posted agenda.

6. ADJOURN:

- 6.1. Adjourn to Regular Meeting at 6:00 p.m., on Tuesday, October 5, 2021, to be called to order in compliance with the State Emergency Services Act, the Governor's Emergency Declaration related to COVID-19, and the Governor's Executive Order N-08-21.



Santa Clara Valley Water District

File No.: 21-0864

Agenda Date: 9/28/2021

Item No.: 5.1.

BOARD AGENDA MEMORANDUM

SUBJECT:

Approve the Agreement with Carollo Engineers, Inc. for Consulting Services, for the Water Treatment Plant Implementation Project, Project No. 93044001, CAS File No. 5144, for a Not-to-Exceed Fee of \$6,461,429.

RECOMMENDATION:

Approve the Agreement with Carollo Engineers, Inc. for consulting services, for the Water Treatment Plant Implementation Project, for a Not-to-Exceed Fee of \$6,461,429.

SUMMARY:

Santa Clara Valley Water District (Valley Water) is undertaking a comprehensive capital projects implementation planning effort for existing water utility treatment and distribution infrastructure with three distinct implementation projects: Water Treatment Plant (WTP) Implementation Project; Supervisory Control and Data Acquisition (SCADA) Implementation project, and the Distribution System Implementation Project (DSIP). The WTP Implementation Project is the first of these three projects and will develop a 30-year WTP Capital Improvement Program (CIP) with a suite of capital improvement projects along with a Programmatic Environmental Impact Report (PEIR) for the Board's consideration. Staff recommends Board approval of the consultant services agreement for the WTP Implementation Project.

Background:

On January 14, 2020, staff presented three new CIP projects for the Board's consideration to address the infrastructure needs of existing water treatment and distribution infrastructure. These three infrastructure implementation projects (WTP, Distribution System and SCADA Implementation Projects) are aimed at a comprehensive evaluation of the existing infrastructure under the lens of future needs with respect to demand and regulatory compliance and will define the capital projects needed to ensure the reliability of Valley Water's water supply infrastructure. The Board approved the three projects, and they were subsequently adopted as part of Valley Water's FY 2021-25 five-year CIP. The WTP Implementation Project is the first of the three projects that is being presented for Board consideration of consulting services to complete the project.

This project supports the Board Governance Policy and Water Supply (WS) Goal E-2.3 to protect and maintain existing water infrastructure and the corresponding WS Objectives: 2.3.1. Plan for

infrastructure maintenance and replacement to reduce risk of failure; 2.3.2. Prioritize funding for maintenance and replacement of existing water infrastructure over investments in new infrastructure; and 2.3.3. Prepare for and respond effectively to water utility emergencies.

Consultant Selection Process:

On January 19, 2021, a Request for Proposal (RFP) for the WTP Implementation Project was published on Valley Water's Contract Administration System (CAS).

The RFP notification was sent to firms registered in CAS, under expertise codes WS10 - Water Supply Infrastructure and Reliability, WT10 - Water Treatment Infrastructure Design and Project Management, and WQ10 - Water Quality Infrastructure Planning and Design. Additionally, a search was completed using the Department of General Services (DGS) small business enterprise web portal, as well as advertisements in the San Jose Post and SBEINC.com, prior to publishing the RFP.

Valley Water received proposals from four (4) consultant firms: Brown and Caldwell, Inc., Carollo Engineers, Inc., Cordoba Corporation, Inc., and Stantec Consulting Services, Inc.

An Evaluation Committee (EC) consisting of subject matter experts from Valley Water and an external agency, evaluated and ranked the written proposals. Three (3) firms, Stantec Consulting Services, Inc., Carollo Engineers, Inc., and Brown and Caldwell, Inc. were invited to participate in the subsequent virtual interviews conducted on March 24, 2021.

Based on the combined (written and interview) rating scores, the EC recommended staff to proceed with the highest ranked firm, Carollo Engineers, Inc., for contract negotiations.

Consultant Agreement & Scope of Services:

Over the last three months staff has successfully completed the negotiations with Carollo Engineers, for the tasks and level of effort to develop the WTP Implementation Project. The recommended scope of work includes the required tasks and budget to develop a comprehensive CIP forecasting over a 30-year period, projects to repair, replace, and/or upgrade the infrastructures at Valley Water's WTPs, address the increasingly stringent water quality regulations, and integrate with other key plans such as the Water Supply Master Plan, Countywide Water Reuse Master Plan, and other concurrent water supply implementation projects.

The Project will accomplish the following objectives:

1. Identify water treatment infrastructure needs
2. Integrate identified projects with other Valley Water planning efforts
3. Develop, evaluate, select, and phase projects for the 30-year planning horizon
4. Prepare recommendations and options for Valley Water Board and stakeholder consideration
5. Prepare 30-year WTP CIP and develop planning study reports (10% design) for projects recommended in the first 10 years
6. Prepare a corresponding Programmatic EIR

The Cost Breakdown below (Table 1) provides a list of tasks included in the scope of services and

the associated not-to-exceed fees for each task and the total for the agreement.

Table 1: COST BREAKDOWN

Task	Description	Not-to-Exceed Fees
1	Project Management, Stakeholder Meetings, and Project Development Workshops	\$ 1,054,802
2	Review Existing Records, Master Plans, and Reports	\$ 93,878
3	Develop Goals and Objectives with Board and Stakeholder Input	\$ 189,034
4	Review Current Asset Management Program Information	\$ 108,127
5	Develop Project Assessment Methodology	\$ 119,071
6	Evaluation of Rinconada WTP	\$ 226,104
7	Evaluation of Santa Teresa WTP	\$ 311,706
8	Evaluation of Penitencia WTP	\$ 343,564
9	Integrate Recommendations with Other Master Plans	\$ 204,905
10	Project Development, Evaluation, Selection, and Planning Study (10% Design)	\$ 1,331,787
11	Project Implementation Plan (WTP CIP)	\$ 562,654
12	WTP Implementation Project Report	\$ 140,261
13	Stakeholder Outreach Strategy	\$ 107,209
14	Environmental Planning and Permitting (PEIR)	\$ 718,327
15	Supplemental Services	\$ 950,000
Total Not-to-Exceed Fees		\$ 6,461,429

Supplemental Services:

The Silicon Valley Advanced Water Purification Center (SVAWPC), Campbell Well Field, and San Francisco Public Utilities Commission (SFPUC) - Valley Water Intertie Pump Station evaluations are identified as supplemental services due to the uncertainties with the future use or expansion of these facilities. Further discussions and stakeholder and Board engagement may be necessary to develop the scope of services for these facilities. Staff plans to issue a task order for the evaluation of these facilities once we get more policy guidance from the Board and stakeholder engagement sessions.

Potential Future Program Management Supplemental Services:

The scope of services for this solicitation also included a potential for program management support as needed for implementing the developed WTP CIP. The consultant qualifications were also evaluated to perform these services and Carollo Engineers, Inc was deemed most qualified to perform these services as well.

Therefore, at the completion of the WTP implementation plan development, Valley Water may request the Consultant to perform program management services. If this option is exercised, Staff will negotiate the additional services with the Consultant and propose an amendment to the agreement at that time.

Staff anticipates that the development of the recommended WTP capital improvement projects and

the implementation plan as well as the completion of the Programmatic EIR will take approximately three years to complete.

Staff recommends award of the agreement for WTP Implementation Project services to Carollo Engineers, Inc.

FINANCIAL IMPACT:

The WTP Implementation Project, Project No. 93044001, is included in the FY 2022-26 Five-Year Capital Improvement Plan (CIP) with funding for the requested services. Adequate budget is in the Board-adopted FY 2021-22 Budget to encumber the anticipated Consultant effort through the end of the fiscal year. Funding for subsequent fiscal year Consultant services will be recommended by staff in the regular FY 2022-23 budget process. Long term budget forecasts for the Water Utility Enterprise Fund (Fund 61) includes placeholder capital projects costs for implementation of the developed plan. Those placeholder budgets will be revised as the plan is developed and the funding will be requested in future CIPs and budgets. The not-to-exceed fee for the Consultant Services is \$6,461,429. The funding source for the Project is Fund 61.

CEQA:

The recommended action to approve the Agreement does not constitute a project under the California Environmental Quality Act (CEQA) because it does not have the potential to result in direct or reasonably foreseeable indirect physical change in the environment.

The scope of services for this agreement includes the development and completion of a Programmatic EIR, and the developed plan will not be implemented until completion and certification of the PEIR.

ATTACHMENTS:

Attachment 1: Agreement

UNCLASSIFIED MANAGER:

Bhavani Yerrapotu, 408-630-2735



STANDARD CONSULTANT AGREEMENT

(For Capital Consultant Contracts)
Terms and Conditions Template
Rev. C [5/11/2020-6/30/2021]

This agreement (Agreement) is effective once fully executed (Effective Date), by and between SANTA CLARA VALLEY WATER DISTRICT (Valley Water), and CAROLLO ENGINEERS, INC. a Delaware corporation (Consultant), individually the Party or collectively the Parties.

WHEREAS, Valley Water desires certain services hereinafter described, and Consultant affirms it has the requisite experience and expertise, and desires to provide such services.

NOW, THEREFORE, Valley Water and Consultant, for the consideration and upon the Terms and Conditions specified, agree as follows:

SECTION ONE

SCOPE OF SERVICES

The Scope of Services (Services) to be performed pursuant to this Agreement is described in the Schedule(s), Scope of Services, attached hereto and incorporated herein by this reference (Schedule(s)). Services described in each Schedule are considered a Scope of Services that is separate and apart from the Scope of Services described in another Schedule.

SECTION TWO

DUTIES OF CONSULTANT

1. Performance

- A. Each Scope of Service described in an attached Schedule(s) must be performed by Consultant, or at its direction, to meet the purposes specified in this Agreement. References to "Consultant" herein include those performing any portion of the Services at its direction such as Subconsultants, vendors, suppliers, subcontractors, and other business entities and individuals. Consultant will collaborate with Valley Water staff in engineering, asset management, operations, and maintenance units to be made aware of Valley Water operational constraints, procedures, or preferences relevant to Consultant's performance of the Services described in the attached Schedule(s).
- B. Unless the requirements for the Services described in the attached Schedule(s) are specifically modified in writing, Consultant must perform Services and provide all deliverables as required.
- C. Consultant shall not undertake any Services not described in the attached Schedule(s) unless authorized in writing by Valley Water prior to the performance of such Services by issuance of a Task Order or pursuant to an amendment to this Agreement signed by both Parties.

- 2. **Consultant Controlled Areas** Consultant is responsible for the security and safety of the area(s) it controls wherein it is required to perform field operations pursuant to the Scope of Services.

3. Licensing

Services performed by Consultant will be undertaken only by persons appropriately licensed, certified, or registered in California, as applicable to the Services described herein, when required by statutes or regulations, as well as pursuant to the relevant standard of care as described in subsection 11 Standard of Care. Examples of such Services include those performed by: California State Licensed Contractors, Professional Engineers and Architects, Inspectors, and Surveyors. Consultant shall make available upon Valley Water's request documentation of qualifications and licensing of personnel performing Services described herein. Consultant must be registered with the California Department of Labor Standards Enforcement if the Services or a portion thereof is determined to be "Public Works" pursuant to California Labor Code section 1720(a)(1).

4. Valley Water's Approval of Deliverables

Deliverables prepared by Consultant, notwithstanding acceptance and approval by Valley Water, which Valley Water determines must subsequently be modified due to errors or omissions, will be corrected at no additional cost to Valley Water.

5. Errors and Omissions

The Services may include preparation of deliverables by Consultant to be implemented in a public works construction project. Consultant is responsible for any direct or actual damages incurred by Valley Water which Valley Water determines result from Consultant's errors or omissions in Consultant's deliverables, including, but not limited to, any increase in Valley Water's payment(s) due to its construction contractor, which increase is directly attributable to required revisions to the construction contract documents to the extent caused by Consultant's negligent acts, errors, or omissions.

6. Valley Water Standardization Requirements

- A. Consultant shall perform the Services utilizing Valley Water nomenclature, standardized forms, software requirements, documented procedures, and best management practices. Consultant shall use Microsoft Office software and AutoCAD software that is compatible with Valley Water Microsoft Office software and AutoCAD software used at the time(s) Valley Water issues a Notice to Proceed pursuant to this Agreement.
- B. Engineering drawings prepared by Consultant must be in compliance with Valley Water's CADD and drafting standards including line types, line weights, text sizes, text orientation, dimensioning, labeling/numbering system for detailed plan views and detailed section views. Drawings prepared using different CADD software and versions must be converted to be compatible with Valley Water's CADD software at no additional cost to Valley Water. Prior to acceptance, Valley Water reserves the right to test the submitted CADD files to verify that the files are not corrupted or missing linkages (for blocks, etc., used in the drawing) and that the standards are retained during the conversion process used by the Consultant.

7. Consultant's Key Staff and Subconsultants

- A. Consultant's Key Staff and firms subcontracted by the Consultant (Subconsultants) assigned to perform the Services are identified in in the Schedule Scope of Services, Attachment Three, Consultant's Key Staff and Subconsultants.
- B. The Project team organization chart and delegated responsibilities of each team member will be submitted to Valley Water for concurrence.
- C. Consultant may utilize Subconsultants, subcontractors, suppliers, or vendors it deems appropriate to the complexity and nature of the required Services.
 - 1) Consultant must obtain Valley Water's approval of all Subconsultants. Upon Valley Water's request, Consultant must provide copies of all Subconsultant agreements.
 - 2) Consultant must require its delegates or Subconsultants to agree, in writing, to adhere to Terms and Conditions of this Agreement.
- D. Any delegation or use of Subconsultants by Consultant will not operate to relieve Consultant of its responsibilities as described in this Agreement.
- E. If any of Consultant's designated key staff persons or Subconsultants fail to perform to the satisfaction of Valley Water, on written notice from Valley Water, Consultant will have 15 calendar days to remove that person from the Project and provide a replacement acceptable to Valley Water.
- F. Consultant will not charge Valley Water for the time it takes Consultant's replacement personnel to obtain Valley Water-specific Project knowledge in the possession of the person(s) being replaced.
- G. Consultant's Key Staff: Valley Water Project Manager may approve any revisions to Consultant's list of key staff assigned to the Project as an administrative modification to this Agreement, and such approval will be confirmed in writing.
- H. Consultant's Subconsultants
 - 1) Valley Water Project Manager may approve any revisions to Consultant's list of authorized Subconsultants when the Subconsultant is deleted from the list and the Scope of Services is deleted from the Agreement or such services are assumed by the Consultant; such approval will be confirmed in writing.
 - 2) Valley Water's authorized representative may approve any revisions to Consultant's list of authorized Subconsultants when a listed Subconsultant is replaced (to perform the same Scope) or a new Subconsultant is added (to perform new Scope), provided the firm complies with all insurance requirements established by Valley Water for such work; such approval will be confirmed in writing.

8. Compliance with All Laws

- A. Consultant's performance must be in compliance with the most current versions of any and all laws relevant to the Services it performs pursuant to this Agreement, including, but not limited to adherence to: all applicable governmental laws, statutes, ordinances, rules, codes, regulations, orders, and other requirements; governmental requirements applicable to state and federal compliance with the Professional Land Surveyors Act; state and federal Endangered Species Act; state and federal water quality laws; and all other state and federal laws or regulations regarding environmental protection and compliance, health, safety, wages, hours, equal employment opportunity, nondiscrimination, working conditions, and transportation. In the event that Valley Water's assistance is necessary to achieve such compliance, Consultant shall promptly notify Valley Water.
- B. Consultant shall provide, at Valley Water's request, documentation demonstrating Consultant's compliance with all laws as described herein. After reasonable notice and according to reasonable conditions, Valley Water has the right to inspect and copy any records of Consultant regarding such compliance.
- C. Consultant represents and warrants that neither Consultant nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal government department or agency.

9. Occupational Safety and Health

- A. Consultant will perform the Services in compliance with the most current versions of all laws, standards, rules, and regulations of the Occupational Safety and Health Act, and all state and federal laws and regulations relating to safety and health standards. Consultant shall perform the Services in compliance with, will furnish only supplies, articles, and equipment that comply with such laws, standards, and regulations.
- B. Consultant shall immediately notify Valley Water in the event of any personal injury accident or occurrence occurring during the performance of the Services. Upon Valley Water's request, Consultant shall provide Valley Water with documentation fully describing the accident and injury and the actions implemented to prevent similar occurrences.

10. Consultant as Independent Contractor

Consultant will perform all Services as an independent contractor and not an agent or employee of Valley Water. Consultant represents and warrants that it and its contractors who are performing any of the Services as Subconsultants will perform such Services as an independent contractor, and neither Consultant nor Subconsultants nor their employees are the servants, agents or employees of Valley Water. Except as expressly provided in this Agreement, Valley Water exercises no direction, supervision or control over Consultant, its employees, agents, or Subconsultants.

11. Standard of Care

- A. Consultant must possess and maintain during the term of this Agreement all certifications, licenses, permits, and qualifications to perform the Services and prepare all deliverables. Consultant must perform all Services and prepare all deliverables in accordance with those standards and practices of care, skill, and diligence that are generally recognized and customarily observed by competent persons in Consultant's area of specialty in the State of California at the time such Services are rendered.
- B. Consultant shall perform the Services and prepare all deliverables without any errors or omissions, and in accordance with Section Two Duties of Consultant, subsection 8. Compliance with All Laws.
- C. Consultant and its Subconsultants must perform the Services in compliance with all applicable written federal, state and local codes, statutes, laws, regulations, and ordinances, including, but not limited to, environmental, energy conservation, and disabled access requirements as per the provisions of Section Two Duties of Consultant, subsection 8. Compliance with All Laws.

SECTION THREE

DUTIES OF VALLEY WATER

1. Available Data

Valley Water will make available to Consultant all data and information in its possession and control and which it deems necessary to the preparation of the deliverables specified in the Schedule(s). Valley Water will actively aid and assist Consultant in obtaining such information from other agencies and individuals as it deems necessary. Valley Water is not responsible for providing data and information that it does not possess.

2. Review of Deliverables

- A. Valley Water will designate a Project Manager (Valley Water Project Manager) for purposes of administering and managing this Agreement.
- B. Consultant's progress in completing the Services will be reviewed by Valley Water Project Manager at each milestone identified in the Schedule(s) and at such other time(s) at the discretion of Valley Water.
- C. Consultant must notify Valley Water in writing when it completes each deliverable described in the Schedule(s) and provide Valley Water with said deliverable. Deliverables deemed satisfactory and in compliance with this Agreement are subject to approval by Valley Water. Within 30 calendar days of receipt of each deliverable, Valley Water will either (1) notify Consultant that Valley Water accepts the deliverable, or (2) notify the Consultant that the deliverable is not acceptable and must be revised.
- D. If Valley Water advises Consultant that a deliverable must be revised due to errors or omissions by the Consultant, Consultant must correct, at no cost to Valley Water, those

deficiencies as soon as possible and shall notify Valley Water upon completion of the revised deliverable and submit to Valley Water.

- E. Valley Water will then review the revised deliverable and within 30 calendar days of receipt, advise the Consultant if the revised deliverable is acceptable. All deficient deliverables will be revised at no cost to Valley Water and this process will continue until Consultant has corrected all deficiencies identified by Valley Water.
- F. None of the proposed changes or revisions or anything else in this Agreement will be construed to relieve the Consultant of professional or legal responsibility for the performance of the Services as otherwise required by the Terms and Conditions of this Agreement. Corrections to any deliverable as a result of Consultant's errors or omissions, as determined by Valley Water, will not result in additional costs or expenses to Valley Water.

3. Access to Valley Water Facilities

Valley Water will facilitate access to Valley Water facilities as required for the Consultant to perform the Services.

SECTION FOUR

FEES AND PAYMENTS

1. Total Fixed Not-to-Exceed Fees

- A. Payment for all Services performed by Consultant to the satisfaction of Valley Water, as described in the Schedule(s) will be based on the Total Fixed Not-to-Exceed (NTE) Fees stated in Attachment One to the Schedule(s), Fees and Payments, for completion of the associated tasks. Valley Water will make payments to the Consultant according to the terms provided for herein and in Attachment One to the Schedule(s), Fees and Payments. Payments made by Valley Water to the Consultant for Services rendered will be considered full compensation for all personnel, materials, supplies, Subconsultant(s), equipment, reimbursable travel and per diem expenses incurred by the Consultant to perform the Services.
- B. Upon the written approval of Valley Water Deputy Operating Officer referenced herein, unused fees from a completed or cancelled task may be re-allocated to a task that has not yet been completed, provided the Agreement Total Not-to-Exceed Fees is not exceeded. Transferring fees from a task not yet completed to a different task is not permitted.
- C. Upon the written approval of Valley Water Deputy Operating Officer referenced herein, the Scope of Services described in a task may be reduced or eliminated. If the Scope of Services of a task is reduced or eliminated, the portion of the fees attributable to that reduced or eliminated task may be allocated to revised existing tasks, or transferred to a Supplemental Services task, if provided for herein.
- D. Any reduction or elimination of tasks and any inter-task transfers will be clearly noted and described in the subsequent monthly progress report to Valley Water.

- E. Services to be performed pursuant to the Supplemental Services task, if provided for herein, will commence only after issuance of a fully executed Task Order.
- F. Automobile travel mileage expenses will be paid at the current IRS rate. Valley Water will not reimburse Consultant nor its Subconsultants for mileage nor travel time to and from Valley Water Headquarters and surrounding campus located at 5700 Almaden Expressway, San Jose, California. However, Valley Water will reimburse Consultant and its Subconsultants for mileage incurred from Valley Water Headquarters or Consultant's and Subconsultants' firm address, whichever is closer to the destination, to Project site(s) and, if directed or authorized by Valley Water, to meeting locations with regulatory agencies, for community outreach activities and meetings, for partnering meetings, and Dispute Review Board meetings.

2. Consultant Monthly Invoices

- A. Consultant's monthly invoices will be prepared in accordance with the terms of this Agreement, Section Four Fees and Payments, and represent Services performed and reimbursable costs incurred during the identified billing period. Invoices must be consistent with Scope of Services described in the Schedule(s) attached hereto; and include the following:
 - 1) Employee classification and name itemized with all labor charges by Service task;
 - 2) Summary of the amount Consultant has been billed by their Subconsultants and further detailed by Service task;
 - 3) Other direct charges and expenses by Service task;
 - 4) Other direct charges and expenses must reflect actual fees versus the Agreement Not-to-Exceed Fees as stated in Attachment One to Schedule(s), Fees and Payments; and
 - 5) To the extent that the Consultant is adding an administrative, processing, overhead or mark-up fee, Valley Water will not pay for such duplication of costs for both the Consultant and its Subconsultants.
- B. Before submitting monthly invoices, a progress report and draft invoice (in Adobe PDF format) will be provided by the Consultant for preliminary review by Valley Water Project Manager. Upon preliminary approval by Valley Water, the Consultant will mail the complete signed and dated hardcopy invoice, including all supporting documentation. Valley Water's preliminary review of the draft invoice does not represent final approval of the hardcopy invoice, but is intended to reduce potential for re-submittals of hardcopy invoice by Consultant.
- C. Each monthly invoice must include a monthly progress report that documents whether or not the Services are on schedule to be completed in accordance with the Project Schedule in Attachment Two to the Schedule(s), Schedule of Completion, which applies to the specific Scope of Services, and within the Agreement NTE Fees in accordance with Attachment One to the Schedule(s), Fees and Payments. The progress report shall document Services completed, the execution of the tasks described in this Services, and

enable Valley Water to evaluate the Consultant's progress and performance towards completion of the Services.

1) The monthly progress report shall include:

- a. An assessment of actual versus planned progress in completing the Services, including a description of the tasks and deliverables completed to date;
 - b. A look-ahead schedule listing deliverables and activities planned for the next two months;
 - c. A statement that progress towards completion of the Services is on schedule and will be completed within the timeline set forth in the Schedule of Completion; or, if completion of the Services is not on schedule, then a statement of the anticipated length of the delay, the cause of the delay, measures proposed or taken to prevent or minimize the delay, and the schedule for implementation of such measures;
 - d. A summary of performed tasks to date, an updated Project work plan including estimate of work required to complete this Agreement, explanation of any major variances in percentage of services to be completed compared to percentage of this Agreement NTE fees remaining, and any anticipated changes to this Agreement that may be necessary to complete the Services;
 - e. For any proposed change to the Scope of Services, provide a summary of the proposed changes, including supporting rationale for such change;
 - f. For each task, the percentage of the fees incurred for the task compared to dollar amount allocated to the task, the percentage of services performed versus the percentage of Agreement NTE fees incurred for such task, and explanation of any significant variances in percentage of services performed compared to percentage of fees incurred;
 - g. A statement that all tasks, as specified in this Agreement, shall be completed within the NTE amount of the Agreement;
 - h. Level of Small Business Enterprise (SBE) participation, if applicable, documenting the level of SBE participation throughout the Project; and
 - i. Any changes in Consultant's key staff or Subconsultants.
- D. Invoices will include a summary of labor expenditures, direct costs, and billed Subconsultant charges. Invoices, transmitted separately from the monthly progress reports, will be organized such that the billing categories correspond with the Services tasks.
- E. Consultant shall send all invoices as follows:
1. Electronic copies to be sent via email: APinvoice5750@valleywater.org;
 2. Hard Copies to be sent to:

Santa Clara Valley Water District
Attention: Accounts Payable
P.O. Box 20670
San Jose, CA 95160-0670

- F. In addition to ensuring that each invoice is accompanied with a monthly progress report, Consultant must also ensure that each invoice contains the following information:
- 1) Agreement Number;
 - 2) Full Legal Name of Consultant/Firm;
 - 3) Payment Remit-to Address;
 - 4) Invoice Number;
 - 5) Invoice Date (the date invoice is mailed); and
 - 6) Beginning and end date for billing period that services were provided.
- G. Consultant shall invoice for its performance of the Services on a monthly basis consistent with the task fee breakdown stated in Attachment One to the Schedule(s), Fees and Payments, to the Schedule(s), which applies to the specific Scope of Services.
- H. Valley Water Project Manager will review Consultant's written invoice within five Valley Water business days of receipt, address any questions with Consultant's Contact/Principal Officer and approve the undisputed amount of the invoice within ten working days of receipt of the invoice. Valley Water will pay undisputed invoice amounts within 30 calendar days from date invoice is received by Valley Water Project Manager.
- I. Consultant's services will be performed by its staff members and Subconsultants' staff members at the lowest hourly and unit rates commensurate with the complexity of the required Services.

3. Prevailing Wages

- A. A portion of the Services to be performed pursuant to this Agreement may be considered "Public Works" subject to California Labor Code §1771, et. seq. and the applicable implementing regulations.
- B. Labor Code §1720 includes "Inspection and Land Surveying" in its definition of "Public Works." If Consultant's Services includes such work, Consultant and its Subconsultants must comply with all Labor Codes applicable to prevailing wages.
- C. Consultant and its Subconsultants shall not engage in the performance of public work, as defined in California Labor Code §1771.1, unless currently registered and qualified to perform public work pursuant to California Labor Code §1725.5.
- D. The General Prevailing Wage Rates issued by the California Department of Industrial Relations may be adjusted by the State throughout the term of this Agreement. Notwithstanding any other provision of this Agreement, Consultant will not be entitled to any adjustment in compensation rates in the event there are adjustments to the General Prevailing Wage Rates.

- E. This Agreement is subject to compliance monitoring and enforcement by the State of California Department of Industrial Relations. Upon request, the Consultant and Subconsultants must furnish the records specified in Labor Code §1776 directly to the Labor Commissioner, in a format prescribed by the Labor Commissioner.
- F. All records or documents required to be kept to verify statutory compliance with the prevailing wage requirement, such as certified payroll records, must be made available for audit at no cost to Valley Water, at any time during regular business hours, upon written request by Valley Water.
- G. **California State Department of Industrial Relations Contractor and Sub-Contractor Registration Requirements**

Prior to Valley Water executing a Task Order for Services involving public works, as defined herein, the Consultant, and its Subconsultant(s) performing public works, must provide evidence, in the form required by Valley Water, that Consultant and its Subconsultant(s) are in compliance with the California State Department of Industrial Relations Contractor and Sub-Contractor Registration Requirements.

4. Retention

Unless otherwise specified in Attachment One to the Schedule(s), Fees and Payments, when the total compensation payable pursuant to this Agreement exceeds \$20,000, ten percent of each invoice will be withheld by Valley Water and not paid to Consultant until 30 calendar days after the assigned Valley Water representative signs the final approval for all Services/deliverables as stated in the applicable Schedule, Attachment Two Schedule of Completion, and Section Three, Duties of Valley Water, subsection 2. Review of Deliverables. Provided that at any time after 50% of the work has been completed, Valley Water may, at its sole discretion, determine that satisfactory progress is being made in the completion of the Agreement, and prospectively make the remaining progress payments in full. The retention previously withheld on the first 50% of the work will continue to be withheld until final contract close out.

SECTION FIVE

SCHEDULE OF COMPLETION

1. Performance of Tasks

Consultant will commence performing the tasks described in the Scope of Services of the attached Schedule(s) to this Agreement upon receipt of the Notice to Proceed (NTP) issued by Valley Water.

2. Project Schedule Table

Consultant will perform and complete the services described in the Scope of Services in accordance with the Project Schedule table (Project Schedule) as stated in Attachment Two to the Schedule(s), Schedule of Completion. Consultant will coordinate services with Valley Water to provide the timeline of all tasks and subtasks, including the site visits, document review, meetings, and deliverables.

3. Monitoring of Project Schedule

The approved Project Schedule will be monitored monthly. Changes to the schedule for performance of tasks and deliverables are subject to advance written approval by Valley Water.

4. Project Delays

Consultant will make all reasonable efforts to comply with the Project Schedule as stated in the Attachment Two to the Schedule(s), Schedule of Completion. In the event the Project Schedule will be delayed, Consultant will notify Valley Water Project Manager as soon as possible, providing the reason why, the length of the delay, and a description of the actions being taken to address the delay. In the event Consultant is delayed in performance of its services by circumstances beyond its control, Valley Water may, at its discretion, grant a reasonable adjustment in the Project Schedule.

5. Changes to the Project Schedule

Valley Water Project Manager and Consultant may agree to modify the Project Schedule specified for Consultant's performance as an administrative modification to the Agreement and will confirm such modifications in writing.

SECTION SIX

AGREEMENT MODIFICATIONS

The Parties may agree to modify the Terms and Conditions of this Agreement by executing a written amendment hereto.

SECTION SEVEN

TERM AND TERMINATION

1. Term & Automatic Termination

This Agreement encompasses all Services that Consultant is responsible to perform within the time limits and Not-to-Exceed Fees set forth herein. Consultant will not undertake to provide Services where it reasonably appears that the Services cannot be provided, and expenses cannot be incurred within said total compensation limit and the applicable Not-to-Exceed Fees of any Task Order.

2. Valley Water Rights

- A. Suspension: Valley Water may, by written notice to Consultant, suspend any or all Services pursuant to this Agreement or to any individual Task Order. Valley Water may subsequently terminate this Agreement or any Task Order for convenience, or determine to proceed. If a decision to proceed is not made within 90 days from the date of the notice of suspension, any decision to proceed must be conditioned upon execution of a new Notice to Proceed or Task Order.

- B. Termination for Convenience: Valley Water may, by written notice to Consultant, terminate all or part of this Agreement or any Task Order at any time for Valley Water's convenience. Upon receipt of such notice, Consultant will immediately cease all work as specified in the notice. If this Agreement or any Task Order is so terminated, Consultant will be compensated as set forth in subsection 3. Consultant's Compensation upon Termination or Suspension.
- C. Termination for Breach: If Consultant violates any of the covenants, agreements or stipulations of this Agreement or a Task Order, or if Consultant fails to fulfill in a timely and proper manner its obligations pursuant to this Agreement or any Task Order, and does not cure such failure or violation within 30 days (or a reasonable extension thereof, if requested, which extension will not be unreasonably withheld) after receipt of written notice from Valley Water specifying such failure or violation, Valley Water will thereupon have the right to terminate this Agreement and any or all uncompleted Task Orders by giving written notice to Consultant of such termination. Such notice will specify the effective date thereof, and Consultant will not be entitled to compensation for services or expenses beyond the specified termination date.
- D. If, after notice of termination for breach of this Agreement or any Task Order, it is determined that Consultant did not breach the Agreement or Task Order, the termination will be deemed to have been effected for Valley Water's convenience, and Consultant will receive payment that is allowed by this Agreement for a termination for convenience.
- E. The rights and remedies provided herein to Valley Water are in addition to any other rights and remedies provided by law, this Agreement, or a Task Order.

3. Consultant's Compensation upon Termination or Suspension

In the event of termination of this Agreement or any Task Order, or suspension of Services by Valley Water, Consultant shall receive compensation based on satisfactory performance, accepted by Valley Water, as follows:

- A. Direct Labor: Consultant shall be entitled to receive compensation for all authorized direct labor performed prior to termination pursuant to the provisions of this Agreement or Task Order and all authorized labor expenses incurred to demobilize from the Project after the date of termination;
- B. Other Direct Costs and Expenses: Consultant shall be entitled to receive compensation for all authorized other direct costs and expenses incurred prior to termination and all authorized expenses incurred to demobilize from the Project after the date of termination; and
- C. In no event shall the total compensation paid for any item of Service exceed the payment specified in the Agreement or applicable Task Order for that item of Service.

4. Survival

The Terms and Conditions of this Agreement, that by their context and a standard of reasonableness, are intended to survive termination, suspension, completion, and expiration of this Agreement, shall survive, including but not limited to, the following Sections and subsections: Independent Contractor Status, Confidentiality, Indemnification, Insurance Requirements, and Dispute Resolution, as well as any Consultant representations and warranties.

SECTION EIGHT

INDEMNIFICATION

Notwithstanding any other provision of this Agreement, Consultant agrees to indemnify, defend and hold harmless Valley Water, its agents, officers, directors, and employees from and against any and all demands, claims, damages, losses and reasonable expenses, including but not limited to liabilities, obligations, claims, costs, reasonable expenses (including, without limitation, interest, penalties and reasonable attorney's fees), fines, taxes, levies, imposts, assessment, demands, damages or judgments of any kind or nature, whether in law or equity (including, without limitation, death or injury to any person, property damage, administrative and judicial orders and consents, or any other loss) to the extent they arise out of, pertain to, or relate to the Consultant's negligence, recklessness, or willful misconduct. The foregoing does not limit any strict liability imposed onto the Consultant by law. The rights, duties, and obligations of the Parties as set forth above in this Section Eight, Indemnification, survive termination, expiration, completion, and suspension of this Agreement.

SECTION NINE

INSURANCE REQUIREMENTS

Insurance requirements applicable to this Agreement are set forth in the Standard Consultant Agreement, Appendix Four Insurance Requirements. Consultant must provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, all insurance coverages as detailed in the Standard Consultant Agreement, Appendix Four Insurance Requirements, and comply with all provisions stated therein.

SECTION TEN

OWNERSHIP AND REUSE OF DELIVERABLES

1. Valley Water Ownership

All deliverables and other materials prepared by Consultant, including computer programs and media developed by the Consultant, to perform the Services, during the term of this Agreement, will be and remain the property of Valley Water following payment in full to Consultant for each task or portion of a completed task, or in accordance with Section Seven Term and Termination. In the event the work is not completed, the completed portions thereof will become the property of Valley Water. Consultant will provide Valley Water with such deliverables and material at appropriate times during this Agreement. Consultant may retain a copy for its records. Consultant does not convey, assign, or transfer

the intellectual property rights it has so as to limit its ability or right to develop, design, or provide services on other projects of or for its other clients.

2. Reuse of Instruments of Service

If Valley Water desires to reuse the completed plans, specifications, or other deliverables, in total or in part, on project sites associated with this Agreement, or any other site, or to complete any incomplete portion of construction documentation which Valley Water has already paid Consultant, Valley Water will release Consultant from any liability incurred by Valley Water from reusing said deliverables.

3. Copies of Data

Copies of data exchanged by, through, and between Valley Water and Consultant that may be relied upon are limited to printed copies. Computer-generated files, disks, or tapes of text, data or graphics that are furnished are only for the mutual convenience of the Parties.

4. Computer-Generated Material

Any risk of translation or reliance on information obtained or derived from computer-generated material is at the user's sole risk, and no representations are made, either express or implied, as to the long-term performance of data thus transferred.

5. Work for Hire

Any and all original correspondence, memoranda, reports, designs, plans, specifications, data compilations, computer programs, or drawings delivered to Valley Water by Consultant according to the Terms of this Agreement, in or by any medium is deemed to be "work for hire" according to the copyright laws of the United States and the copyright belongs to Valley Water.

6. Copyright Claims

Co-venturers, subcontractors, Subconsultants, suppliers, and vendors to Consultant are likewise bound by these copyright terms. Valley Water makes no copyright claim and requires no release for copyrighted material or trademarked names used incidentally by Consultant.

SECTION ELEVEN

EQUAL OPPORTUNITY

1. Equal Opportunity Employer

The Santa Clara Valley Water Valley Water is an equal opportunity employer and requires its consultants to have and adhere to a policy of equal opportunity and non-discrimination. In the performance of the Agreement, the Consultant will comply with all applicable federal, state, local laws and regulations, and will not discriminate against any subcontractor, employee, or applicant for employment in the recruitment, hiring, employment, utilization, promotion, classification or reclassification, transfer, recruitment advertising, evaluation, treatment, demotion, layoff, termination, rates of pay or other forms of compensation, and selection for professional development training (including

apprenticeship), or against any other person, on the basis of sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), race, religion, color, national origin (including language use restrictions), ancestry, religious creed (including religious dress and grooming practices), political affiliation, disability (mental and physical, including HIV or AIDS), medical condition (cancer and genetic characteristics), genetic information, marital status, parental status, gender, age (40 and over), pregnancy, military and veteran status, sexual orientation, gender identity and gender expression, the exercise of family and medical care leave, the exercise of pregnancy disability leave, or the request, exercise, or need for reasonable accommodation.

2. Compliance with Applicable Equal Opportunity Laws

The Consultant's policy must conform with applicable state and federal guidelines including the Federal Equal Opportunity Clause, "Section 60-1.4 of Title 41, Part 60 of the Code of Federal Regulations," Title VII of the Civil Rights Act of 1964 as amended; the Americans with Disabilities Act of 1990; the Rehabilitation Act of 1973 (Sections §503 and 504); the Age Discrimination Act of 1975 (42 U.S.C. sec. 6101 et seq.); the California Fair Employment and Housing Act (Government Code Section 12900 et. seq.); and California Labor Code §1101 and 1102.

3. Investigation of Claims

Consultant must designate a specific position within its organization to be responsible for assuring nondiscrimination and non-harassment as provided in this Agreement. Consultant must investigate all complaints directed to it by Valley Water. Valley Water will refer complaints in writing and Consultant will advise Valley Water in writing when such investigations are concluded. The scope of such investigations must include all appropriate officers, employees, and agents of the Consultant, as well as all subcontractors, Subconsultants, and material suppliers of the Consultant. In cases where such investigation results in a finding of discrimination, harassment, or hostile work environment, Consultant must take prompt, effective disciplinary action against the offender.

SECTION TWELVE

MISCELLANEOUS PROVISIONS

1. Entire Agreement

This Agreement, which includes the Terms and Conditions, Appendices, the Schedule(s), Attachments to the Schedule(s), and all executed Task Orders, represents the entire understanding between the Parties hereto relating to the Services described in this Agreement and supersedes any and all prior proposals or agreements, whether written or oral, that may exist between the Parties. This Agreement may not be modified or amended except in writing as stated herein. To the extent that any Schedule conflicts with this Agreement, this Agreement shall control.

2. Formation of Agreement

- A. No agreement between the Parties is formed until all applicable actions have been completed to the satisfaction of Valley Water. Valley Water Project Manager will not issue a Notice to Proceed until all required documents have been submitted and accepted by Valley Water.
- B. Formation of this Agreement between the Parties requires accomplishment of the following, as applicable:
 - 1) Execution of the Agreement by Consultant;
 - 2) Submission by the Consultant, and acceptance by Valley Water, of evidence of all required insurance coverages and documents;
 - 3) Submission by the Consultant, and acceptance by Valley Water, of evidence of all required Form 700 documents, if applicable;
 - 4) Submission by the Consultant, and acceptance by Valley Water, of all required Non-Disclosure Agreements (NDA) documents as provided in Attachment Four to the Schedule(s), Reference Materials, if applicable;
 - 5) Submission by the Consultant, and acceptance by Valley Water, of a Health and Safety Plan, if applicable;
 - 6) Any other requirements that are deemed necessary by Valley Water; and
 - 7) Execution of the Agreement by Valley Water.

3. No Assignment

- A. The expertise and experience of Consultant are material considerations for Valley Water's award and execution of this Agreement. Consultant will not assign or transfer any interest in this Agreement nor the performance of any of Consultant obligations hereunder, without prior written consent of Valley Water in the form of an amendment executed by the Parties, and any attempt to so assign this Agreement, or any rights, duties or obligations arising hereunder, will be void and of no effect. Any assignment of monies due or to become due in accordance with this Agreement, will be to the extent permitted by law, and will be subject to all proper set-offs, deductions, and withholdings in favor of Valley Water.
- B. In no event shall an assignment of any interest in this Agreement release the Consultant from its duties and responsibilities as described in this Agreement nor shall the Consultant be released from liability created by the provision of Services as described in this Agreement until such assignment takes effect. Any attempted or purported assignment without Valley Water's written consent in the form of an amendment executed by the Parties is null and void.

4. Reasonableness

Discretionary actions or approvals to be performed by the Parties will be exercised in a reasonable manner.

5. Gifts

Consultant hereby acknowledges that Valley Water policy prohibits the acceptance by Valley Water personnel of gifts of any kind from its contractors, consultants, suppliers, or vendors. Consultant shall honor this policy by not sending or bringing gifts to Valley Water.

6. Audits

Consultant agrees that Valley Water and its agent(s) have the right to review, obtain, and copy all records pertaining to performance of this Agreement. Consultant agrees to provide Valley Water and its agent(s) with any relevant information requested and will permit Valley Water and its agent(s) access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting or copying books, records, accounts, computerized records, and other materials that may be relevant to the matter under investigation or subject to audit, such as by a government agency, providing Valley Water with grant funds to pay for Consultant's services for the purpose of determining compliance with this Agreement. Consultant further agrees to maintain such records for a period of three years after final payment as provided for in this Agreement.

7. Force Majeure

Neither Party will be held responsible for delays caused by acts beyond its control, such as acts of God or public enemies, utility or communication delays, or failures not caused by such Party's negligence or fault, accidents not caused by such Party's negligence or fault, labor disputes, war, or failure of the other Party to provide data as required pursuant to this Agreement.

8. Binding Effect

This Agreement is binding on the heirs, executors, administrators, successors and assigns of the Parties.

9. Choice of Law and Venue

The Parties agree that this Agreement is to be governed, construed and enforced in accordance with the laws of the State of California. The Parties also agree that the venue of any litigation arising out of or connected with this Agreement will lie exclusively in the state trial court or Federal District Court located in Santa Clara County in the State of California, and the Parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

10. Confidentiality

- A. Due to the nature of the services Consultant will provide pursuant to this Agreement, there may be disclosures made to Consultant of detailed information about Valley Water's operations, including on a need-to-know basis information which may be

protected from public disclosure by confidentiality laws, the attorney-client privilege, and/or other provisions of law which govern the nature and timing of disclosure of public information.

- B. Consultant understands and acknowledges that Valley Water staff members providing information to the Consultant do so with the understanding that such information will be handled appropriately.
- C. In the event Consultant receives such restricted or confidential information, Consultant will limit access to the information to only those of Consultant's employees, its subcontractors and its Subconsultants authorized by Valley Water to have the information.
- D. Consultant will notify Valley Water immediately of any request by any third party to have access to confidential information and will not disclose the requested information without first receiving express written authorization from Valley Water.
- E. The requirements stated herein will survive completion, expiration, suspension, and termination of this Agreement.

11. Release of Information Prohibited

Consultant is not permitted to provide any information concerning the Project to the media nor anyone other than authorized Valley Water personnel. Consultant will not release any information pertinent to the Project for publication, public disclosure, or in any other manner without first obtaining clearance and a release in writing from Valley Water. Any media inquiry at any time to Consultant relating to any matter concerning Services provided or requested to be provided pursuant to this Agreement will be referred immediately to Valley Water. Consultant will not communicate with the media regarding any such matter.

12. Conflict of Interest

- A. Consultant represents that there exists no actual or potential conflict of interest concerning the services to be performed pursuant to this Agreement.
- B. Consultant represents that Consultant's performance required as stated in this Agreement does not require the breach of any agreement or obligation to keep in confidence the proprietary information of another party. Consultant will not bring to Valley Water, or use in the performance of Consultant's duties as described in this Agreement, any materials or documents of another party considered confidential or proprietary unless Consultant has obtained written authorization from such party, and the informed consent of Valley Water, for the possession and use of such materials.
- C. Consultant represents and warrants that during the term of the Agreement, Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant shall not act as a Consultant or expert for any party in support of any potential or active claim or legal action against Valley Water by such party.

D. CALIFORNIA FAIR POLITICAL PRACTICES COMMISSION STATEMENT OF ECONOMIC INTEREST FORM 700 ("FORM 700"): Upon Valley Water's request, Consultant employees, officers, agents, Subconsultants, and subcontractors shall complete, execute, and submit a Form 700 as follows:

- 1) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, shall file, in a manner prescribed by Valley Water, an Assuming Office Statement. The Assuming Office Statement shall be filed:
 - a. Within 30 calendar days of the effective date of this Agreement; or
 - b. Within 30 calendar days of Consultant hiring, adding, or promoting to a designated filer position, employees, officers, agents, Subconsultants, and subcontractors to perform services pursuant to this Agreement.
- 2) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, that filed an Assuming Office Statement, shall file in a manner prescribed by Valley Water, an amendment to their Form 700 any time there is a change to their disclosure information.
- 3) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, that filed an Assuming Office Statement, shall file an Annual Statement in a manner prescribed by Valley Water, during Valley Water's annual filing season, as determined by Valley Water;
- 4) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, that filed an Assuming Office Statement, shall file, in a manner prescribed by Valley Water, a Leaving Office Statement with Valley Water when one of the following occurs:
 - a. Upon termination of this Agreement; or
 - b. Within 30 calendar days of Consultant employees, officers, agents, Subconsultants, and subcontractors vacating a designated filing position (i.e., removed from the Project, promotion, demotion, transfer to non-designated position, end of employment, or as a result of changes in designated filer positions in Valley Water's Conflict of Interest Code).
- 5) Consultant understands and agrees that its employees, officers, agents, Subconsultants, and subcontractors may be disqualified from providing services to Valley Water pursuant to the California Political Reform Act, Gov. Code §81000 et. seq. and Government Code §1090. If any of Consultant's employees, officers, agents, Subconsultants, and subcontractors are disqualified from providing services, on written notice from Valley Water Project Manager, Consultant will have 15 calendar days to remove said employee(s), officer(s), agent(s), Subconsultant(s)' and subcontractor(s)' employee(s) from the Project and provide a replacement acceptable to Valley Water.

- 6) The failure of Consultant's employees, officers, agents, Subconsultants, and subcontractors to file an Assuming Office, Annual, Amended, or Leaving Office Statement within the time prescribed by Valley Water is deemed a material breach and may result in termination of the Agreement for cause.

13. Task Orders

- A. Some tasks and Services will be assigned to the Consultant through issuance of Task Orders. After the tasks and Services are identified and communicated to the Consultant by Valley Water Project Manager, Consultant will prepare a proposed Task Order (see Standard Consultant Agreement, Appendix Three Task Order Template). The proposed Task must identify the following:
 - 1) Description of the services, including deliverables;
 - 2) The total Not-to-Exceed Fees for Consultant to complete the services, including estimated number of hours per assigned staff to complete the services;
 - 3) Proposed staff that will be assigned to complete the services, including resumes if not previously provided to Valley Water's Project Manager;
 - 4) Estimated cost of each other direct cost and reimbursable expense, including any applicable fees;
 - 5) Schedule for completing the services; and
 - 6) Copies of applicable state and federal permits required to complete the services, unless previously provided to Valley Water.
- B. Consultant agrees that the Not-to-Exceed Fees specified in a proposed Task Order will be the product of a good faith effort in exercising its professional judgment. After an agreement has been reached on the negotiable items, the finalized Task Order will be signed by both Valley Water's authorized representative referenced in the Standard Consultant Agreement, Appendix One Additional Legal Terms (Appendix One), and Consultant's authorized representative.
- C. Consultant must not commence performance of work or services on a Task Order until it has been approved by Valley Water's authorized representative and Notice to Proceed has been issued by Valley Water Project Manager. No payment will be made for any services performed prior to approval or after the period of performance of the Task Order. The period of performance for Task Orders will be in accordance with dates specified in the Task Order. No Task Order will be written which extends beyond the expiration date of this Agreement. The total amount payable by Valley Water for an individual Task Order will not exceed the amount agreed to in the Task Order.
- D. Prevailing Wage Requirements: The Scope of Services may be considered by Valley Water to be "Public Works" requiring the payment of prevailing wages. See the Standard Consultant Agreement Section Four Fees and Payments, subsection 3. Prevailing Wages, and Appendix Three Task Order Template.

14. Good Neighbor

Valley Water always strives to be a good neighbor to the community adjacent to its facilities. Consultant will ensure that disturbance to neighbors is minimized. Consultant, its staff, and Subconsultants will always interact with the members of the public in a polite and professional manner.

15. Governmental Permits and Notifications

Unless otherwise expressly stated herein or in an executed Task Order, Consultant represents and warrants that it has investigated the need for, and has or will procure, at its cost, and in its own name to the extent allowed by law, all governmental permits, notifications, approvals and inspections required for the performance of the Services. Consultant shall promptly notify Valley Water if any such permit or approval lapses or is modified or revoked. If, pursuant to applicable law, any such permits or approvals must be procured in Valley Water's name, Consultant shall promptly so inform Valley Water and assist Valley Water in obtaining such permits or approvals.

16. Taxes and Benefits

Consultant has full and exclusive liability for the payment of, and Consultant will pay, any and all taxes and contributions for unemployment insurance, retirement benefits, workers' compensation insurance or benefits, life insurance, pensions, annuities and similar benefits and any other employment-related costs, obligations, and duties that may now or hereafter be imposed by law, collective bargaining agreements or otherwise with respect to persons employed by Consultant for the performance of Services pursuant to this Agreement.

17. Nonwaiver of Rights

The failure of either Party to this Agreement to object to or to take affirmative action with respect to any conduct of the other Party that is in violation of the terms of this Agreement will not be construed as a waiver thereof, or as waiver of any future breach or subsequent wrongful conduct.

18. Notices

Unless otherwise specified in this Agreement, all requests for written approval or legal notices must be sent to the representatives below. All notices are deemed to have been given when made in writing and when delivered or mailed to the representatives of Valley Water and Consultant at their respective addresses as follows:

VALLEY WATER:

Deputy Officer, as listed in Section 1. Representatives, of the attached Schedule(s), Scope of Services

CONSULTANT:

Consultant Principal Officer, as listed in Section 1. Representatives, of the attached Schedule(s), Scope of Services

19. No Third-Party Beneficiaries

Nothing in this Agreement, whether express or implied, shall be construed to give any person or entity, other than the Parties hereto, any legal or equitable right, remedy, or claim under or in respect of this Agreement or any covenants, conditions, or provisions contained herein.

20. Severability

If a court of competent jurisdiction holds any provision of this Agreement to be illegal, unenforceable, or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected, unless an essential purpose of this Agreement would be defeated by the loss of the illegal, unenforceable, or invalid provision.

21. Debt Limitation

This Agreement is contingent on the appropriation of sufficient funding by Valley Water for the services described in this Agreement. Valley Water is subject to laws or policies which limit its ability to incur debt in future years. Nothing in this Agreement shall constitute an obligation of future legislative bodies of Valley Water to appropriate funds for purposes of this Agreement.

22. Appendices

The following listed Appendices are incorporated herein by this reference as though set forth in full:

Appendix One - Additional Legal Terms
Appendix Two - Dispute Resolution
Appendix Three - Task Order Template
Appendix Four - Insurance Requirements

23. Schedule(s) and Attachments

Schedule PM, Scope of Services, and the following listed Attachments are incorporated herein by this reference as though set forth in full:

Attachment One to Schedule PM - Fees and Payments
Attachment Two to Schedule PM - Schedule of Completion
Attachment Three to Schedule PM - Consultant's Key Staff and Subconsultants
Attachment Four to Schedule PM - Reference Materials

Attachment Five to Schedule PM – Valley Water's Risk Methodology and Matrix

IN WITNESS WHEREOF, THE PARTIES HAVE SET FORTH BELOW THEIR CONSENT TO THE TERMS AND CONDITIONS OF THIS AGREEMENT THROUGH THE SIGNATURES OF THEIR DULY AUTHORIZED REPRESENTATIVES.

SANTA CLARA VALLEY WATER DISTRICT
Valley Water

CAROLLO ENGINEERS, INC.
Consultant

By: _____
Tony Estremera
Chair, Board of Directors

By: _____
Christopher T. Cleveland
Senior Vice President

Date: _____

Date: _____

By: _____
Sanjay Reddy
Senior Vice President

Date: _____

ATTEST:

Michele L. King, CMC
Clerk, Board of Directors

Consultants Address:

2795 Mitchell Dr
Walnut Creek, CA94598

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**STANDARD CONSULTANT AGREEMENT
APPENDIX ONE
ADDITIONAL LEGAL TERMS**

1. Conflict of Interest for Future Services

- A. At the time of this award, Valley Water is not able to determine whether undertaking this agreement will permit or prohibit the consultant that wins this solicitation from entering into agreements for subsequent design projects that are a part of this 30-year WTP Implementation Plan. Eligibility to submit a proposal under Section 1090 will be evaluated on the specific facts as they exist at the time of proposal submittal on the subsequent design project.
- B. Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant shall not submit a proposal:
 - i. For any agreement to be awarded for planning, construction management or the construction of any project that is related to the Services provided pursuant to this Agreement. However, if Valley Water retains the selected firm to perform program management services as a supplemental service beyond the initial implementation plan development to help oversee the implementation of the approved projects, the firm will be precluded from proposing on future subsequent design and construction projects during the period where the firm would oversee the implementation of these projects.
 - ii. In response to any request for proposal or Valley Water solicitation developed or prepared by or with the assistance of Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant; or
 - iii. For any single or sole source products/services related to the Services pursuant to this Agreement or have a financial stake in any single or sole source products/services resulting from this Agreement.

2. Dispute Resolution

If a dispute occurs between the Parties as a result of this Agreement, then the Parties agree to use the Dispute Resolution process outlined in the Standard Consultant Agreement, Appendix Two Dispute Resolution.

3. Small Business Enterprise (SBE) Participation - NOT USED

4. Task Order Approvals

- A. Services to be performed pursuant to a Task Order may only commence once a specific Notice to Proceed for that Task Order has been issued by Valley Water.
- B. Task Orders are subject to approval by Valley Water Deputy Officer unless delegated to the Unit Manager.
- C. Valley Water Unit Manager(s) is authorized to approve individual Task Orders in an amount not-to-exceed \$[authorization amount]. [NOT USED]
- D. The total not-to-exceed amount for any one Task Order shall not exceed \$[NTE Amount]. [NOT USED]

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

1. Consultant's Questions and Concerns

Questions regarding the Terms, Conditions, and Services relating to this Agreement will be decided by Valley Water who will furnish the decisions to Consultant in writing within 30 days after receiving a written request from Consultant.

2. Dispute Resolution

A. Alternate Dispute Resolution

Valley Water intends to use Alternate Dispute Resolution (ADR) techniques including partnering and mediation to resolve disputes relating to the Project.

B. Consultant and its Subconsultants are expected to participate in all ADR efforts.

C. The cost of partnering, training facilities, and facilitator will be borne by Valley Water.

3. Negotiations Before and During Mediation

Negotiations to resolve disputes before and during mediation are initiated for settlement purposes only are confidential and are not binding unless otherwise agreed by Valley Water and Consultant.

4. Voluntary Mediation

A. Initiation of Mediation

Any Party to a dispute or claim may initiate mediation by notifying the other Party or Parties in writing.

B. Request for Mediation

A request for mediation must contain a brief written statement of the nature of the dispute or claim, and the names, addresses, and phone numbers of all parties to the dispute or claim, and those who will represent them, if any, in the mediation.

C. Selection of Mediator

- 1) Upon receipt of a written request for mediation, unless otherwise agreed by the Parties, within 14 days, the Parties will confer to select an appropriate mediator agreeable to all Parties.
- 2) If the Parties cannot agree on a mediator, they hereby agree to accept a mediator appointed by a recognized association such as the American Arbitration Association.

D. Qualifications of a Mediator

- 1) Any mediator selected must have expertise in the area of the dispute and be knowledgeable in the mediation process.

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

- 2) No person shall serve as a mediator in any dispute in which that person has any financial or personal interest in the result of the mediation.
- 3) Before accepting an appointment, the prospective mediator must disclose any circumstances likely to create a presumption of bias or prevent a prompt meeting with the Parties. Upon receipt of such information, the Parties will confer and decide whether to select another mediator.

E. Vacancies

If any mediator becomes unwilling or unable to serve, another mediator will be selected unless the Parties agree otherwise.

F. Representation

- 1) Any Party may be represented by person(s) of their choice who must have full authority to negotiate.
- 2) The names and addresses of such person(s) must be communicated in writing to both Parties and to the mediator.

G. Time and Place of Mediation

- 1) The mediator will set the time of each mediation session.
- 2) The mediation will be held at a convenient location agreeable to the mediator and the Parties, as determined by the mediator.
- 3) All reasonable efforts will be made by the Parties and the mediator to schedule the first session within 60 days after selection of the mediator.

H. Identification of Matters in Dispute

- 1) Parties shall comply with the process as required by the mediator with regard to providing the mediator with a memorandum setting forth its position with regard to the issues that need to be resolved. At the discretion of the mediator, or otherwise agreed by the Parties, the Parties may mutually exchange such memoranda.
- 2) At the first session, the Parties will be expected to produce all information reasonably required for the Mediator to understand the issue(s) presented. The mediator may require each Party to supplement such information.

I. Authority of Mediator

- 1) The mediator does not have authority to impose a settlement on the Parties but will attempt to assist the Parties in reaching a satisfactory resolution of their dispute.
- 2) The mediator is authorized to conduct joint and separate meetings with the Parties and to make oral and written recommendations for settlement.

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

- 3) Whenever necessary, the mediator may also obtain expert advice concerning technical aspects of the dispute, provided the Parties agree and assume the expenses of obtaining such advice. Arrangements for obtaining such advice will be made by the mediator or the Parties, as determined by the mediator.
- 4) The mediator is authorized to end the mediation whenever, in the mediator's judgment, further efforts at mediation would not contribute to a resolution of the dispute between the Parties.

J. Privacy

- 1) Mediation sessions are private.
- 2) The Parties and their representatives may attend mediation sessions.
- 3) Other persons may attend only with the permission of the Parties and with the consent of the mediator.

K. Confidentiality

Except as provided by California or federal law or regulation:

- 1) The mediator will not divulge confidential information disclosed to a mediator by the Parties or by witnesses in the course of the mediation.
- 2) All records, reports, or other documents received by a mediator while serving as mediator, are confidential.
- 3) The mediator must not be compelled to divulge such records or to testify in regard to the mediation in any adversary proceeding or judicial forum.
- 4) The Parties must maintain the confidentiality of the mediation and must not rely on, or introduce as evidence in any arbitration, judicial or other proceedings:
 - a. Views expressed, or suggestions made by the other Party with respect to a possible settlement of the dispute;
 - b. Statements made by the other Party in the course of the mediation proceedings;
 - c. Proposals made or views expressed by the mediator; and

L. Whether the other Party had or had not indicated willingness to accept a proposal for settlement made by the mediator.

No Stenographic Record

There shall be no stenographic record of the mediation.

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

M. Termination of Mediation

The mediation shall be terminated:

- 1) By the execution of a Settlement Agreement by the Parties;
- 2) By a written declaration of the mediator to the effect that further efforts at mediation are no longer worthwhile; or
- 3) By a written declaration of a Party or Parties to the effect that the mediation proceedings are terminated.

N. Exclusion of Liability

No mediator shall be a necessary Party in judicial proceedings related to the mediation.

O. Interpretation and Application of These Mediation Provisions

The mediator will interpret and apply these mediation provisions insofar as they relate to the mediator's duties and responsibility.

P. Expenses

- 1) The expenses of witnesses for each Party must be paid by the Party producing the witnesses.
- 2) All other expenses of the mediation, including required travel and other expenses of the mediator, and the expenses of any witness called by the mediator, or the cost of any proofs or expert advice produced at the direct request of the mediator, will be apportioned as the mediator finds appropriate or as otherwise agreed to by the Parties.

5. Compensation for Participation in Mediation

Neither Consultant nor Valley Water is entitled to compensation for time spent in or for negotiations or mediation to resolve questions or disputes between Consultant and Valley Water arising out of this Agreement.

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**STANDARD CONSULTANT AGREEMENT
APPENDIX THREE
TASK ORDER TEMPLATE**

Task Order No. _____

Title: _____

Agreement: Standard Consultant Agreement _____ ("Agreement") Between the Santa Clara Valley Water District ("Valley Water") and _____ ("Consultant"), dated _____.

Valley Water: _____

Consultant: _____

Dollar Amount of Task Order: Not-to-Exceed \$ _____

1. Upon full execution of this Task Order No. _____, as set forth in the Standard Consultant Agreement, Section Twelve Miscellaneous Provisions, subsection 13. Task Orders, and the issuance of a Notice to Proceed by Valley Water Project Manager, the Consultant is hereby authorized to perform the Services described in Attachment A to this Task Order. Any costs incurred, Services performed or expenditures by the Consultant before this Task Order is executed or before the issuance of the Notice to Proceed will be considered outside the contracted Scope of Services and will not be eligible for payment.
2. Both the Scope of Services to be performed and the deliverables to be provided in accordance with this Task Order are described in Attachment A which is attached hereto and incorporated by this reference. Attachment A shall include at a minimum the following:
 - A. The Consultant personnel to be assigned to perform the Services, including resumes if not previously provided to Valley Water;
 - B. The total not-to-exceed fees amount for Consultant to complete the Services, including estimated number of hours required to perform the Services assigned to each Consultant classification;
 - C. Estimated cost of each other direct cost and reimbursable expense, including any applicable fees; and
 - D. Project schedule for completing the Scope of Services.
3. Consultant shall be compensated at fixed fees or at the hourly rates established in Attachment One to the Schedule(s), Fees and Payments, of the Agreement. Consultant agrees that it will provide all equipment, furnish all materials, except as may be otherwise noted in the Attachment A.
4. This Task Order becomes effective on the date of full execution by authorized representatives of the Parties and remains in effect until the earlier of: completion of the tasks set forth in Attachment A; or [expected completion date].

**STANDARD CONSULTANT AGREEMENT
APPENDIX THREE
TASK ORDER TEMPLATE**

5. Copies of applicable local, state and federal permits required to perform the Services described in Attachment A are attached to this Task Order, unless the Consultant previously provided the appropriate permits to Valley Water.
6. Consultant shall perform all Services described in Attachment A to this Task Order in accordance with the Terms and Conditions of the Agreement.
7. Prevailing Wage Requirements
 - A. The Scope of Services described in this Task Order is considered by Valley Water to be "Public Works" requiring the payment of prevailing wages. See the Standard Consultant Agreement, Section Four Fees and Payments, subsection 3. Prevailing Wages.
 - B. In accordance with prevailing wage laws, the Director of the California Department of Industrial Relations (Director) has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the Project. These rates are set forth in the latest determination obtained from the Director, which is on file in Valley Water's Office of the Clerk of the Board of Directors and incorporated herein by reference the same as though set forth in full. The rates are also available on the State of California Department of Industrial Relations website at <http://www.dir.ca.gov>.

8. Signatures:

Signature:

NAME OF CONSULTANT FIRM
[PRINT NAME]
[PRINT TITLE]

DATE

Signature:

NAME OF CONSULTANT FIRM
[PRINT NAME]
[PRINT TITLE]

DATE

Signature:

SANTA CLARA VALLEY WATER DISTRICT
[PRINT NAME]
[PRINT TITLE]

DATE

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

Please Note: Failure to comply with the instructions below could result in a delay in receiving the Notice to Proceed. The District will not be responsible for time lost or costs incurred due to failure to comply with these requirements. Please note the checklist of documents needed at the end of this Appendix Four Insurance Requirements.

Without limiting the Consultant's indemnification of, or liability to, the Santa Clara Valley Water District ("District" or "Valley Water"), the Consultant must provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, the following insurance coverages and provisions as listed below.

Consultant must provide its insurance broker(s)/agent(s) with a copy of these requirements and warrants that these requirements have been reviewed by Consultant's insurance agent(s) and/or broker(s), who have been instructed by Consultant to procure the insurance coverage required herein.

In addition to certificates, Consultant must furnish District with copies of all original endorsements affecting coverage required by this Appendix. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. **All endorsements and certificates are to be received and approved by District before the Agreement is executed.** In the event of a claim or dispute, District has the right to require Consultant's insurer to provide complete, certified copies of all required pertinent insurance policies, including endorsements affecting the coverage required by this Appendix Four Insurance Requirement document.

If your insurance broker has any questions about the above requirements, please advise him/her to call Mr. David Cahen, District Risk Manager at (408) 630-2213.

Certificates of Insurance

Consultant shall furnish the District with a Certificate of Insurance. The certificates will be issued on a standard ACORD Form.

Consultant shall instruct their insurance broker/agent to submit all insurance certificates and required notices electronically in PDF format to the designated District Contract Administrator and email a copy to valleywater@ebix.com.

The certificates will:

1. Identify the underwriters, the types of insurance, the insurance limits, the deductibles and the policy term;
2. Include copies of all the actual policy endorsements required herein; and
3. In the "Certificate Holder" box include:

**Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
Agreement/CAS No. 5144**

IMPORTANT: The agreement or CAS number must be included.

**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

In the Description of Operations/Locations/Vehicles/Special Items Box:

1. Certificate Holder shall be named as Additional Insured;
2. District agreement or project number shall appear;
3. The list of policies scheduled as underlying on the Umbrella policy shall be listed; and
4. Waiver of Subrogation must be indicated as endorsed to all policies.

If Consultant receives any notice that any of the insurance policies required by this Appendix Four Insurance Requirements may be cancelled or coverage reduced for any reason whatsoever, Consultant or insurer shall immediately provide written notice to the designated District Contract Administrator that such insurance policy required by this Appendix Four Insurance Requirements is canceled or coverage is reduced.

Maintenance of Insurance

If Consultant fails to maintain such insurance as is called for herein, District, at its option, may suspend payment for work performed and/or may order Consultant to suspend all Consultant's work at Consultant's expense until a new policy of insurance is in effect.

Renewal of Insurance

Consultant will provide the District with a current Certificate of Insurance and endorsements within thirty (30) business days from the expiration of insurance.

Consultant shall instruct its insurance broker/agent to:

1. Submit all renewals of insurance certificates and required notices electronically in PDF format to: valleywater@ebix.com
2. Provide the following information in the "Certificate Holder" box:

**Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
Agreement/CAS No. 5144**

IMPORTANT: The agreement or CAS number must be included.

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

Consultant must, at its sole cost and expense, procure and maintain during the entire period of this Agreement the following insurance coverage(s).

Required Coverages

1. Commercial General/Business Liability Insurance with coverage as indicated:

\$2,000,000 per occurrence / **\$2,000,000** aggregate limits for bodily injury and property damage

General Liability insurance must include:

- a. Coverage at least as broad as found in standard ISO form CG 00 01.
- b. Contractual Liability expressly including liability assumed under this contract.
- c. If Consultant must be working within fifty (50) feet of a railroad or light rail operation, any exclusion as to performance of operations within the vicinity of any railroad bridge, trestle, track, roadbed, tunnel, overpass, underpass, or crossway must be deleted, or a railroad protective policy in the above amounts provided.
- d. Severability of Interest.
- e. Broad Form Property Damage liability.

2. Business Auto Liability Insurance with coverage as indicated:

\$2,000,000 combined single limit for bodily injury and property damage per occurrence, covering all owned, non-owned and hired vehicles.

3. Professional/Errors and Omissions Liability with coverage as indicated:

\$5,000,000 per claim/ **\$5,000,000** aggregate

Professional/Errors and Omission Liability appropriate to the Consultant's profession, and must include:

- a. If coverage contains a deductible, or self-insured retention, it shall not be greater than one hundred thousand dollars (\$100,000) per occurrence/event.
- b. If coverage is claims-made:
 - i. Certificate of Insurance shall clearly state that the coverage is claims-made.
 - ii. Policy retroactive date must coincide with or precede the Consultant's start of work (including subsequent policies purchased as renewals or replacements).
 - iii. Policy must allow for reporting of circumstances or incidents that might give rise to future claims.
 - iv. Insurance must be maintained and evidence of insurance must be provided for at least three (3) years after completion of the contract of work.

**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

4. Workers' Compensation and Employer's Liability Insurance

Statutory California Workers' Compensation coverage covering all work to be performed for the District.

Employer Liability coverage for not less than \$1,000,000 per occurrence.

General Requirements

With respect to all coverages noted above, the following additional requirements apply:

1. **Additional Insured Endorsement(s):** Consultant must provide an additional insured endorsement for Commercial General/Business Liability (for both on-going and completed operations) and Business Automobile liability coverage naming the **Santa Clara Valley Water District, its Directors, officers, employees, and agents, individually and collectively**, as additional insureds, and must provide coverage for acts, omissions, etc. arising out of the named insureds' activities and work. Other public entities may also be added to the additional insured endorsement as applicable and the Consultant will be notified of such requirement(s) by the District. **NOTE:** This section does not apply to the Workers' Compensation and Professional Liability policies.

(**NOTE:** Additional insured language on the Certificate of Insurance is **NOT** acceptable without a separate endorsement such as Form CG 20 10, CG 2033, CG 2037, or CG 2038. Editions dated 07/04 are not acceptable.)

2. **Primacy Clause:** Consultant will provide evidence (either through the Certificate of Insurance, endorsement or language in the insurance contract) that consultant's insurance is primary with respect to any other insurance which may be carried by the District, its Directors, its officers, agents and employees, and the District's coverage must not be called upon to contribute or share in the loss. **NOTE:** This section does not apply to the Workers' Compensation and Professional Liability policies.
3. **Cancellation Clause:** Consultant will provide endorsements for all policies stating that the policy will not be cancelled without 30 days prior notification to the District.
4. **Acceptability of Insurers:** All coverages must be issued by companies admitted to conduct business in the State of California, which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the District's Risk Manager. Non-Admitted companies may be substituted on a very limited basis at the Risk Manager's sole discretion.
5. **Self-Insured Retentions or Deductibles:** Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, officials, employees and volunteers; or the Consultant shall provide a financial guarantee satisfactory to the Entity guaranteeing payment of losses and related investigations, claim administration, and defense expenses. Consultant agrees that in the event of a claim they will pay down any agreed upon SIR in a prompt manner as soon as bills are incurred in order to trigger the insurance related to the SIR.

**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

6. **Subconsultants:** The Consultant shall secure and maintain or shall be responsible for ensuring that all subconsultants performing the Contract Services secure and maintain all insurance coverages appropriate to their tier and scope of work in a form and from insurance companies reasonably acceptable to the District.
7. **Amount of Liability not Limited to Amount of Insurance:** The insurance procured by Consultant for the benefit of the District must not be deemed to release or limit any liability of Consultant. Damages recoverable by the District for any liability of Consultant must, in any event, not be limited by the amount of the required insurance coverage.
8. **Coverage to be Occurrence Based:** Except for Professional Liability, all coverage must be occurrence-based coverage. Claims-made coverage is not allowed.
9. **Waiver of Subrogation:** Consultant agrees to waive subrogation against the District to the extent any loss suffered by Consultant is covered by any Commercial General Liability policy, Automobile policy, Workers' Compensation policy described in **Required Coverages** above. Consultant agrees to advise its broker/agent/insurer and agrees to provide evidence (either through the Certificate of Insurance, endorsement or language in the insurance contract) that subrogation has been waived by its insurer.
10. **Non-compliance:** The District reserves the right to withhold payments to the Consultant in the event of material noncompliance with the insurance requirements outlined above.

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

CHECK LIST OF DOCUMENTS NEEDED

General Liability:	A.	Limits (\$2,000,000)	
	B.	Additional Insured (Endorsement)	
	C.	Waiver of Subrogation (COI, Endorsement or policy language)	
	D.	Primacy (COI, Endorsement or policy language)	
	E.	Cancellation Endorsement	
Auto Liability:	A.	Limits (\$2,000,000)	
	B.	Additional Insured (Endorsement)	
	C.	Waiver of Subrogation (COI, Endorsement or policy language)	
	D.	Primacy (COI, Endorsement or policy language)	
	E.	Cancellation Endorsement	
Umbrella:	A.	Limits (\$)	
	B.	Primacy (Endorsement or policy language)	
Workers Comp:	A.	Limits (\$1,000,000)	
	B.	Waiver of Subrogation (Endorsement or policy language)	
	C.	Cancellation Endorsement	
Professional Liability:	A.	Limits (\$5,000,000)	
	B.	Cancellation Endorsement	

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**SCHEDULE PM
SCOPE OF SERVICES**

1. Representatives

- A. Valley Water's representatives are as listed below. Unless otherwise provided in this Agreement, all correspondence to Valley Water must be addressed to Valley Water Project Manager (VWPM).

Barton Ching (VWPM)
Senior Engineer
Treated Water Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-3079
Email: BChing@valleywater.org

Nancy Pan (Valley Water Unit Manager)
Capital Engineering Manager
Treated Water Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-2028
Email: NPan@valleywater.org

Bhavani Yerrapotu (Division Deputy Operating Officer)
Treated Water Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-2735
Email: BYerrapotu@valleywater.org

- B. The Consultant's Project Manager is as listed below. All Valley Water questions pertaining to this Agreement shall be referred to the Consultant's Project Manager.

Chris Cleveland (Consultant Project Manager or CPM)
Senior Vice President
2880 Gateway Oaks Drive, Suite 300
Sacramento, CA 95833

Phone: 916-207-4359
Email: ccleveland@carollo.com

SCHEDULE PM SCOPE OF SERVICES

- C. The Consultant's Principal Officer for this Agreement is as listed below. As per the Agreement, Section Twelve, Miscellaneous Provisions, subsection 18. Notices, all notices pertaining to this Agreement must be submitted to the Consultant's Principal Officer.

Chris Cleveland (Consultant Principal Officer)
Senior Vice President
2880 Gateway Oaks Drive, Suite 300
Sacramento, CA 95833

Phone: 916-207-4359
Email: ccleveland@carollo.com

2. About Valley Water

Valley Water manages an integrated water resources system that includes the supply of clean safe water, flood protection and stewardship of streams on behalf of Santa Clara County's 1.8 million residents and businesses. Valley Water effectively manages ten dams and surface water reservoirs, three potable water treatments plants, an advanced water purification center, a state-of-the-art water quality laboratory, nearly 400 acres of groundwater recharge ponds and more than 275 miles of streams.

3. Scope of Services

- A. This Schedule PM, Scope of Services describes the professional planning and conceptual design services to be performed by Consultant for Valley Water's Water Treatment Plant Implementation Project (Project).
- B. Consultant shall be responsible for the services authorized to be performed under the scope of services, and shall perform the services comprising each task, except where it is expressly stated that such services will be performed by others.

5. Project Objectives

The Water Treatment Plant (WTP) Implementation Project will develop a comprehensive implementation plan that coordinates regulatory-driven changes with aging infrastructure needs and other operational improvements for WTPs as well as integrates with the recently completed Water Supply Master Plan (WSMP).

The main objectives of the project are as follows:

- A. Define project goals and objectives including but not limited to capacity, water quality, and reliability goals that align with Valley Water's WSMP.
- B. Determine improvements needed for each WTP to meet the defined goals and objectives over a 30-year period through the following evaluations:
 - 1. Identify improvements needed to meet future capacity, water quality, reliability and other goals.
 - 2. Develop a 30-year renewal and replacement (R/R) plan.
- C. Integrate the recommended WTP improvements with other Valley Water infrastructure planning projects improvements.

SCHEDULE PM SCOPE OF SERVICES

- D. Synthesize improvements into projects which may provide varying levels of service at different costs, perform alternative analysis, select preferred projects, and prepare planning study report.
- E. Develop an implementation plan, including scope, budget, and coordinated schedule, for the preferred projects (capital, operations and maintenance).
- F. Prepare a report summarizing all work completed and present the recommended 30-year Capital Improvement Program for Valley Water's WTPs.
- G. Prepare a Programmatic Environmental Impact Report (PEIR) for the project.
- H. As a supplemental service, perform program management services beyond the initial implementation plan development to help oversee the implementation of the WTP projects approved by the Valley Water Board.

6. Project Background

Valley Water owns and operates three WTPs that provide potable water supply to Santa Clara County. Rinconada Water Treatment Plant (RWTP) is the sole provider of the west side treated water distribution system. Santa Teresa Water Treatment Plant (STWTP) and Penitencia Water Treatment Plant (PWTP) are both located on the east side of the treated water distribution system and can serve as a back-up supply for each other. Source water for the WTPs comes from various sources including the State Water Project (SWP) water via the South Bay Aqueduct, the Central Valley Project water via the San Luis Reservoir, and local Calero and Anderson reservoirs. Potable water produced at the plants augments local groundwater sources for Santa Clara County, which Valley Water maintains through its managed recharge program. Valley Water also owns an advanced water purification center that treats secondary treated wastewater using advanced treatment technologies to produce ultra-pure recycled water. In addition, Valley Water maintains two ancillary systems that supply backup potable water. The San Francisco Public Utilities Commission (SFPUC) – Valley Water Intertie Pipeline and Pump Station Facility (Intertie Facility) provides emergency potable water supply backup to the east distribution system should STWTP or PWTP be out of service. The Campbell Well Field (CWF) is a groundwater well system owned and operated by the Valley Water, constructed under a joint development agreement with the City of Campbell. The primary purpose of the CWF is to provide drinking water during emergencies, supply shortages or during planned and unplanned RWTP outages.

RWTP was constructed in 1967 and is a conventional water treatment plant that is currently undergoing a Reliability Improvement Project. The reliability improvement project will be constructed in six phases. Phase 2 construction has been completed in 2020 and Phases 3 to 6 are yet to be constructed under a separate construction project. The production capacity of RWTP remains at 80 million gallons per day (mgd) after the completion of Phase 2 and will be 100 mgd upon final completion of Phases 3 to 6. The new treatment facilities constructed as part of Phase 2 include a raw water flow control and metering facility, two ozone contactor structures (flow through only; no ozone application), a flash mix facility, four flocculation and sedimentation basins and a washwater recovery facility. In addition to the new Phase 2 facilities, the RWTP currently has six dual-media filters, two clearwells with a total capacity of 1.67 million gallon (MG), a treated water pump station with four booster pumps that lift treated water to a 15 MG treated water reservoir and a residuals handling facility that includes gravity thickeners and centrifuges for sludge handling and disposal. The Phase 3 to 6 facilities haven't been constructed yet and may include ozone generation building, liquid oxygen (LOX) facility, filters, chlorine contact basin and fluoridation and sodium hypochlorite facilities.

SCHEDULE PM SCOPE OF SERVICES

STWTP was constructed in 1989 and is a conventional water treatment plant with a design capacity of 100 mgd. The treatment processes at STWTP include pre-oxidation, clarification, intermediate ozonation for primary disinfection, filtration, fluoridation, free chlorination/chloramination as backup disinfection, and chloramination as secondary disinfection. The plant is equipped with four flocculation basins, four sedimentation basins, two ozone contactors, twelve dual-media filters, one 10 MG clearwell, two washwater clarification basins and sixteen off-site sludge drying beds.

PWTP was constructed in 1974 and is a conventional water treatment plant with a design capacity of 40 mgd. The treatment processes at PWTP include pre-oxidation, clarification, intermediate ozonation for primary disinfection, filtration, fluoridation, free chlorination for backup disinfection, and chloramination as secondary disinfection. The plant is equipped with three flocculation basins, three sedimentation basins, two ozone contactors, six dual-media filters, a 3 MG flow-through clearwell, and a belt-press facility for sludge handling and disposal.

The Silicon Valley Advanced Water Purification Center (SVAWPC) was constructed in 2014 and has an initial design capacity of 8 mgd with future expansion capability to 9 mgd. The treatment processes at the SVAWPC include microfiltration (MF), reverse osmosis (RO), and ultraviolet (UV) disinfection. The plant is equipped with eight MF membrane units, three RO membrane units, and twelve UV disinfection reactors. Water treated at the SVAWPC is blended with tertiary effluent from the San Jose/Santa Clara Regional Wastewater Facility to reduce the total dissolved solids concentrations and improve the overall quality of the recycled water delivered by the South Bay Water Recycling.

Intertie Facility enables SFPUC and Valley Water to share water resources during planned maintenance or an emergency. The Intertie pumps are capable of transferring up to 40 mgd of water in either direction. The Intertie Facility consists of pumps, flow meter, phosphoric acid chemical storage and feed system, generator system for emergency power and water quality monitoring equipment.

CWF consists of three wells with a maximum design capacity of 4.2 mgd of drinking water to the City of Campbell through the Campbell turnout on the West Pipeline. When system demands require that the facility be operated continuously, two wells will be operated concurrently with a combined maximum rate of 3 mgd and the third well will remain as standby. Each well is equipped with a pump and motor as well as a backflow prevention valve, air relief valve, pump-to-waste line, flow meter, sample tap and gate valves. A manifold is provided to combine the flow from the three wells before the turnout. Chemical injection followed by a static mixer is provided before the manifold for chlorination.

The infrastructure needs for the WTPs have been developed over the years through a number of planning documents focused on specific process areas and not through an integrated master implementation plan. There is a need to develop a comprehensive implementation plan that coordinates regulatory-driven changes with aging infrastructure needs and other operational improvements for the WTPs as well as integrates with the recently completed WSMP.

The WTP Implementation Project was adopted as part of Valley Water's Fiscal Year (FY) 2021-25 five-year Capital Improvement Program (CIP). The Project will develop a 30-year Capital Improvement Program with an implementation plan along with a PEIR for Valley Water Board's consideration.

7. Assumptions and Requirements

SCHEDULE PM SCOPE OF SERVICES

A. General Assumptions and Requirements

- 1) **Manage Scope of services.** Consultant shall manage the Scope of Services such that the work is completed within the Not-to-Exceed Fees limit and in accordance with the Project schedule and ensure that all services and deliverables meet Valley Water Project objectives and requirements.
- 2) **Deliverable Format.** Consultant shall submit deliverables in both electronic and hardcopy format, if requested. Deliverables shall be submitted in PDF and native (editable) format, including Word documents, Excel spreadsheets, PowerPoint files, AutoCAD files, etc. The hard copy deliverables shall be printed in professional quality presentation and submitted in 5 (five) copies, if requested. Valley Water may require original copies of signed documents and/or scanned (Adobe PDF) versions.
- 3) **Review of Deliverables.** Valley Water will review and comment on all Project deliverables and forward to the Consultant for revision and preparation of final versions. As determined by Valley Water, some of the deliverables may also be subject to review and comment from regulatory agencies and stakeholders following Valley Water review process. For each deliverable, Valley Water will collect comments from all Valley Water stakeholders and provide a single set of consolidated comments to the Consultant. The comments provided by Valley Water staff during the workshops will be documented by the Consultant as meeting minutes and will be included in the next revision of the documents.
- 4) **Valley Water Quality Environmental Management System.** Valley Water maintains a Quality Environmental Management System (QEMS) which has procedures, guidelines and work instructions for the performance of various Valley Water work. If requested, the Consultant will perform some of the Agreement tasks and/or sub-tasks in accordance with the QEMS framework. In such situations, Valley Water Project Manager (VWPM) will provide the Consultant with the specific QEMS procedure, guideline, and/or work instruction prior to the production of deliverables.
- 5) **Consultant Responsibility.** Consultant, with its expertise in performing the Services described herein, is responsible for making the appropriate assumptions in each task to complete each task's deliverables and to achieve the Project objectives of this Agreement as described in **Section Three, Scope of Services**.
- 6) **Document Control.** Consultant is responsible for establishing and maintaining its own document control system to execute this Scope of Services. An internal document control system for this project is maintained by Valley Water.
- 7) **File Exchange Service.** Consultant will provide a file exchange service, accessible to all parties as designated by Valley Water, to facilitate communications; particularly of large files over three megabytes. Difficulties in using and transmitting information with this exchange service shall be resolved by the Consultant. In the event that transmitting or receiving information does not occur in a timely manner, Valley Water will not be responsible for delays in completing Project work. Consultant may need to coordinate with Valley Water's Information Technology Division to address any firewall issues and/or permissions required to allow for these communications.

B. Project-Specific Assumptions and Requirements

- 1) Valley Water will provide written comments electronically on all draft versions of Consultant's written deliverable documents.
- 2) Valley Water will schedule project meetings with Valley Water staff and external stakeholders as needed and will provide meeting space for all meetings.

SCHEDULE PM SCOPE OF SERVICES

- 3) Valley Water has compiled existing relevant plans, reports and documents and will provide guidance in reviewing past reports.
- 4) Consultant will confirm format of technical memoranda and report with Valley Water and will follow the same format for all deliverables.

C. WTP Implementation Project Tasks

Summary of Project Tasks:

Task 1 - Project Management, Stakeholder Meetings, and Project Development Workshops

Task 2 - Review Existing Records, Master Plans, and Reports

Task 3 - Develop Goals and Objectives with Board and Stakeholder Input

Task 4 - Review Current Asset Management Program Information

Task 5 - Develop Project Assessment Methodology

Task 6 - Evaluation of Rinconada WTP

Task 7 - Evaluation of Santa Teresa WTP

Task 8 - Evaluation of Penitencia WTP

Task 9 - Integrate Recommendations with Other Master Plans

Task 10 - Project Development, Evaluation, Selection, and Planning Study (10% Design)

Task 11 - Project Implementation Plan (WTP CIP)

Task 12 - WTP Implementation Project Report

Task 13 - Stakeholder Outreach Strategy

Task 14 - Environmental Planning and Permitting (PEIR)

Task 15 - Supplemental Services

The Consultant shall provide all services and deliverables as required by this Section 7 Assumptions and Requirements.

Task 1 - Project Management, Stakeholder Meetings, and Project Workshops

The purpose of this task is for Consultant to manage this Scope of Services such that the work is completed within the fees limit stated in Attachment One: Schedule PM, Fees and Payments, and in accordance with the Project Schedule stated in Attachment Two to Schedule PM, Schedule of Completion, while ensuring that all services and deliverables by the Consultant meet Valley Water and Project requirements.

Consultant will maintain effective communications among the Valley Water and Consultant team members, obtain Valley Water staff input on work in progress, and provide a forum for consensus building and decision-making.

1.1 Kickoff Meeting

Consultant will attend a kickoff meeting with Valley Water. The purpose of the kickoff meeting is to introduce key Valley Water and Consultant team members to one another, acquaint all participants with the purpose of and expectations for the Project, describe team members' roles and responsibilities, describe Project procedures, and summarize scope and schedule.

1.2 Project Work Plan

Consultant will prepare a Project Work Plan in accordance with this Scope of Services. The Project Work Plan shall include Project objectives, a discussion of the Consultant's approach to work, a copy of the final scope of work, requirements, constraints, a detailed Project Schedule

SCHEDULE PM SCOPE OF SERVICES

(showing major tasks and deliverables), a breakdown of Consultant's costs for the major tasks, a list of the Consultant's team members and their roles and responsibilities, communication protocols (internal and external), document control procedures, and other administrative procedures.

The Project Work Plan shall include a Project Quality Assurance and Quality Control (QA/QC) Plan documenting the Consultant's procedures to ensure the Consultant's services and deliverables meet Valley Water requirements and accepted practices and standards of the Consultant's profession. Valley Water reserves the right to request and review the Consultant's Project documentation demonstrating its adherence with their own quality assurance procedures.

1.3 Project Management, Progress Meetings, Invoicing, Reporting and Workshops

Consultant will conduct ongoing internal project management with Consultant staff as necessary to meet the scope of work requirements.

Key staff and sub-consultants as determined necessary and appropriate by Consultant, subject to VWPM approval, will coordinate and attend periodic progress meetings and workshops with Valley Water staff, as needed, to review and discuss progress of the work. For each meeting or workshop, the Consultant will prepare the meeting agenda and notes and submit them for review by Valley Water. The Consultant will lead the meetings. For internal meetings with Valley Water Engineering or Operations and Maintenance staff Consultant will submit meeting content (e.g., power point slide deck or other content) prior to the meetings or workshops for review by Valley Water. For meetings with external stakeholders, Steering Committee, or Executive Committee Consultant will prepare draft meeting content for review by Valley Water staff in advance of meetings. Consultant will submit monthly invoice with progress report and look ahead schedule in accordance with the Agreement, Section Four, Fees and Payments.

1.4 One-on-One Meetings with Valley Water Project Manager

Consultant Project Manager must meet periodically with VWPM to provide a brief update of the team's work activities recently completed, the look-ahead activities, and the issues and actions that require Valley Water's attention. The meeting schedule will be established by Valley Water, weekly/biweekly either in person, or by phone, at Valley Water's discretion.

1.5 Coordination and Communication with External Agencies

Consultant will assist VWPM with coordination and communication with appropriate regulatory or other agencies, as necessary, to execute this Scope of Services. This task includes support in drafting correspondence related to the Consultant's Project activities as requested by Valley Water.

1.6 Public Outreach

If requested, the Consultant will provide support and assistance to Valley Water's public outreach activities and will relate to coordination, preparation, and participation including: preparing presentation materials, attendance at meetings, preparation of newsletters, graphics, updates to the Project website, developing responses to questions, and performing other tasks as directed by the VWPM.

1.7 Project Schedule

SCHEDULE PM SCOPE OF SERVICES

Consultant will prepare a baseline project schedule with milestones and update regularly and achieve completion of the project on schedule. Project schedule shall track progress on all tasks at the subtask level. The schedule will not incorporate labor hours or costs. Costs for work performed at each of the four WTP facilities will be tracked separately by Consultant. The monthly update to the project schedule shall include an indication of the progress for each task, anticipated work during the next month and potential changes to project schedule or scope.

1.8 Decision Log

Consultant will create and maintain a record of all key decisions made during the course of the project. For each decision, the log will include the date(s), key factors discussed, decision made, and impacts, if any, on scope, schedule, and fees. The Decision/Change Log will be updated by the Consultant prior to the progress meetings and will be used for discussion purposes.

1.9 Risk Register

Consultant will use a Risk Register methodology to identify, assess and respond to risks to manage or reduce potential adverse effects on the achievement of the Project goals. The Consultant's Risk Register will identify strategies used to overcome the risks, and the resulting impacts to schedule and scope of work. The Risk Register will be updated monthly, and a summary of action items required to mitigate risks will be included in the monthly report.

1.10 Board Communications

If requested, the Consultant will provide support and assistance to Valley Water's Board communication activities that relate to coordination, preparation, and participation including, preparing presentation materials, updates on project schedule, costs and scope, attendance at meetings, preparation of Draft CEO Bulletins, graphics, developing responses to Board questions, and other tasks as directed by the VWPM.

Task 1 – Assumptions

1. Level of effort assume project duration of 36 months, not including Program Management services or Additional Services not included in this scope.
2. Level of effort assumes preparation of one draft and one final document for the Project Work Plan.
3. Level of effort assumes bi-weekly 1:1 project manager meetings at 4 hours per meeting. Bi-weekly project update meetings will occur virtually.
4. Level of effort assumes one of the bi-weekly meetings will be a monthly project progress meeting at 4 hours per meeting. The monthly progress meeting will include key staff from both VW and Consultant. The meeting will have a prepared agenda and will include review of the project schedule (task 1.7), decision log (task 1.8), risk register (task 1.9), and other coordination items. The monthly meetings will be virtual or in-person depending on the complexity of issues to be discussed.
5. Level of effort assumes quarterly briefing meetings with Steering Committee at 12 hours per attendee/meeting for 2 attendees/meeting.
6. Level of effort assumes 2 meetings per year for 2022 and 2023 with Executive Committee/Board of Directors at 20 hours per attendee/meeting for 2 attendees/meeting. Level of effort assumes 6 meetings during 2024 with Executive Committee/Board of Directors

SCHEDULE PM SCOPE OF SERVICES

to support final completion of the project at 24 hours per attendee/meeting for 2 attendees/meeting.

7. Level of effort assumes multiple meetings with retailers and other stakeholders. Consultant will be required to communicate work effort and solicit input, and to present initial findings and recommendations for various tasks, and includes 800 hours for preparation, response to draft presentation comments attendance, and follow-up.

Task 1 - Deliverables

1. Project Work Plan including QA/QC Plan.
2. Meeting agendas, minutes, and presentations.
3. Monthly progress reports, invoicing documentation and look ahead schedules.
4. Project schedule (baseline and monthly updates).
5. Project decision log.
6. Risk Register identifying the Project risks, assessment of impact(s) on scope of work, cost, and schedule. Identification of risk response strategies. On-going monitoring and control efforts and documentation of risks through Project development.

Task 2 - Review Existing Records, Master Plans, and Reports

The purpose of this task is to review existing Valley Water reports, plans, drawings, specifications and other documents related to the project and develop an understanding of the existing condition and functionality of Valley Water's WTPs. Consultant will prepare a memorandum summarizing major findings of relevant existing information and data as they relate to the development of the Implementation Plan.

Consultant will review existing geotechnical reports and summarize findings and recommendations of the reports. Consultant will also provide recommendations for additional work if existing reports and analyses are found to be inadequate to support this scope of work. If additional geotechnical work is determined to be necessary, the scope and level of effort will be determined separately and will be funded out of Supplemental Services budget.

Valley Water will make available the reports, plans, and other information listed in Attachment 4 at the time of the Notice to Proceed. Valley Water will maintain the updated reference document table. A log of the information requested by the Consultant and provided by the Valley Water shall be maintained by the Consultant.

Task 2 – Assumptions

1. It is understood that not all the reference documents have the same level of relevance or value relative to the scope of work for this project. For example, documents including the 2005 Infrastructure Reliability Project Report, shop drawing information, as-built drawings, specifications, etc. have less relevance than the 2016 Infrastructure Reliability Project Report, Water Supply Master Plan, WTP Operations Plans, maintenance records for existing equipment, 2016 and 2021 Watershed Sanitary Surveys for local and imported water sources, WTPs Sanitary Inspections by Division of Drinking Water (DDW), etc. Accordingly, Consultant will use its discretion to assess the documents of primary importance, and the level of review required to support this scope of services.

SCHEDULE PM SCOPE OF SERVICES

2. Consultant will review existing geotechnical information for RWTP and STWTP in this task to evaluate the need for, and scope of, additional geotechnical that may be required during implementation of recommended projects. For PWTP, due to seismic issues, a more detailed assessment will be completed in Task 8.7.
3. Level of effort assumes up to four meetings to discuss significance/relevance of review findings with Valley Water and assess how to account for findings in ongoing work at 6 hours per attendee per meeting for 4 attendees.

Task 2 – Deliverables

1. Meeting agendas, minutes, and presentations.
2. One draft and final memorandum summarizing major findings from review of relevant existing information and data (including geotechnical information review for STWTP and RWTP) as they relate to the development of the Implementation Plan.

Task 3 - Develop Goals and Objectives with Board and Stakeholder Input

This task will establish the project goals and objectives for each WTP including but not limited to capacity, water quality, reliability and other goals and objectives. The level of service objectives and goals shall align with Valley Water's WSMP and Board policies. Consultant will review previous reports, corresponding commitments for service, and related Board policies to establish the basis/benchmarks for goals and objectives to be analyzed in this Scope of Services. In assessing the level of service goals and objectives, Consultant will use a "stepwise" progression of analysis: water delivery capacity, reliability, water quality, and other goals. This progression of analysis will enable Consultant to compare and contrast current conditions with existing and future commitments for service from previously completed planning work and related Board policies. Also, this progression of analysis will allow Consultant to account for condition of existing facilities and systems as related to reliability/operability in assessing ability to meet capacity, water quality and other goals.

3.1 Capacity Goals

The demand projections will be completed as part of the Distribution System Implementation Project (not by Consultant) and will likely not be complete for 9 months or more after Consultant initiates its effort on this WTP Implementation Project. Because the capacity goals and associated capacity analysis is a foundation element of this work and will be completed as one of the first tasks, Consultant will use the most recent existing WSMP and Urban Water Management Plan (UWMP) demand projections to establish future capacity goals. Based on the demand projections, Consultant will establish future plant capacity goals for each WTP. Valley Water will establish a milestone date for the updated demand projections with intent to make the new, updated demand information available to Consultant as soon as possible. Upon receipt of the updated demand information, it is understood that Consultant may need to revisit and/or update work completed based on the existing demand information, and that the level of effort for any revisions to work previously completed will be evaluated at that time and will be considered additional supplemental services.

Valley Water has established its commitments for water delivery, including potable and non-potable supplies, through a year 2040 planning horizon based on analyses of supply availability and reliability (for normal and drought scenarios) in previously completed planning documents,

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including but not limited to the WSMP 2040, the 2016 Infrastructure Reliability Plan (IRP), and the Countywide Reuse Master Plan. Consultant will attend meetings led by Valley Water with retail agencies to determine if the retailers' reliability requirements (as previously established in the 2016 IRP) have changed and will update Valley Water commitments for water delivery as needed to reflect any changes for supply capacity Level of Service through the planning year 2040 and beyond. This Scope of Services is to include a planning horizon through the year 2050. Accordingly, any planning level criteria for water delivery beyond 2040 will be provided to Consultant by Valley Water.

The ability of the WTPs to reliably meet Valley Water's commitments for water delivery is based on permitted capacity, which is typically established with one or more of the treatment and/or ancillary systems out of service. Consultant will compare the permitted treated water delivery capacity from Valley Water's WTPs against the daily and annual supply capacity commitments to establish a baseline reliable water delivery capacity based on permitted capacity (i.e., baseline reliable capacity that does not account for the condition or operability of treatment and ancillary systems). Consultants will determine if level of service objectives can be achieved at the permitted capacities (see additional discussion under Reliability below).

This analysis will be completed through the year 2040 planning horizon based on existing documented commitments, and through the year 2050 planning horizon based on information provided by Valley Water. If it is determined that Valley Water's WTP combined capacity meets the supply commitments, any additional supply requirements for retail customers are assumed to be met by the retail customers (e.g., via groundwater or other supplemental sources). Otherwise, any deficits between water delivery commitments and permitted WTP capacity shall be defined.

3.2 Water Quality Goals

Consultant will review the current and future regulations at the State and Federal levels, the current WTP operating permit requirements, and Valley Water's internal water quality goals, listed in the Water Quality Management Plan (WQMP), which may include target contaminant levels for treated water and triggers for source water and Valley Water's plans in response to taste and odor and cyanotoxins to develop the water quality goals for each WTP. Consultant will benchmark with other agencies and jurisdictions to gather information on best practices for water quality goals.

Valley Water has established its commitments for water quality, including potable and non-potable supplies. The previously established commitments for water quality assume some supply for Valley Water retail customers will be met by the customers' supply sources (e.g. via groundwater or other supplemental sources). As such, Valley Water is only responsible to meet water quality level of service at the respective turnouts for its retail customers.

Consultant will use the previously established water quality goals including treated water quality goals in the WQMP as one basis to assess Valley Water's ability to meet water quality goals based on current regulatory requirements. Consultant is also responsible to create or complete new or supplemental analyses related to Valley Water's commitments for water quality based on an analyses of potential future regulatory requirements. Consultant will rely on the current state of industry knowledge related to pending or possible future regulatory requirements, with the understanding that predicting regulatory requirements beyond the foreseeable future is

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speculative, and of limited value in identifying longer-term master plan concepts. Accordingly, the analyses of pending or potential future regulatory requirements will extend only through the planning year 2030, which Valley Water accepts to be a reasonable planning horizon as relates to pending or potential regulatory changes.

Consultant will compare the permitted treated water delivery capacity and water quality operational requirements from Valley Water's WTPs against the daily and annual supply capacity commitments to determine if objectives for water quality can be achieved at the permitted capacities. This analysis will be completed through the year 2030 planning horizon based on the premise that regulatory requirements beyond this horizon cannot be reasonably predicted, as noted above. Because the scope of services does not include any analysis of water quality beyond the plant (i.e., water quality modeling in the distribution/transmission system beyond the treatment plant entry point to the distribution/transmission system) or beyond the turnouts to retail customers (i.e., within the retail customer service boundary), water quality objectives at the retail customer turnouts will be determined by extrapolation of treatment plant effluent water quality (e.g., disinfection by-product (DBP) objectives at customer turnouts will be calculated based on detention time between the plant effluent and customer turnouts and/or correlated from water quality sampling at the turnouts).

3.3 Reliability Goals

Consultant will help Valley Water develop reliability goals for each WTP for normal operations, and unplanned outages. WTP reliability goals will define the treated water output from the plant only, and that reliability of delivery to system customers via the treated water distribution system will be assessed via separate analyses not included in this scope of services.

Consultant will benchmark reliability goals with other Bay Area agencies and jurisdictions, to include normal operations and unplanned outages. Reliability goals may be in the form of recommended outage duration, recommended levels of redundancy for critical systems within the WTPs, or another format as recommended by the Consultant.

The baseline permitted capacity sets one benchmark to assess the ability of the WTPs to reliably meet Valley Water's commitments for water, but operating at the permitted capacity is largely dependent on the condition and operability of the WTP treatment and ancillary systems (e.g., the condition and operability of WTP systems may be adequate currently, but may be expected to change as systems age where equipment is more prone to downtime or failure). As such, the reliability of treatment capacity and water delivery can only be analyzed upon the completion of an asset/system condition assessment at the WTP.

3.4 Additional Goals

Based on analysis in subtasks 3.1-3.3, Consultant may identify potential supplemental goals to compliment or enhance capacity, water quality, or reliability goals, including but not limited to water treatment infrastructure goals not identified in the WSMP, additional environmental or regulatory goals, ease of operations and maintenance and efficiency improvement goals, and climate change adaptability and other environmental or social benefits goals.

Task 3 - Assumptions

1. Water Delivery Capacity

- a. Consultant is not responsible for creating or completing any new or supplemental

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- analyses related to Valley Water's commitments for water delivery.
- b. The level of effort for this scope of services assumes that raw water transmission capacity, and distribution system capacity and reliability, as related to Valley Water's commitments for water delivery to retail customers, is to be evaluated as part of a separate analysis by others, and is therefore not part of this work effort.
2. Reliability
 - a. None.
 3. Water Quality
 - a. Consultant is not responsible to assess water quality within the retail customers' service boundaries.
 4. Additional Goals
 - a. The need for (benefit of) additional goals has not been defined. Consultant is only responsible to define potential additional goals to the extent that delivery capacity, reliability, and water quality goals do not meet Valley Water's mission objectives and related Board policies.
 - b. Additional goals would likely require input from the Board and/or a potential change in policy, and as such would require consideration by Valley Water Board. Policy level decisions are beyond the scope of this work effort. Accordingly, Consultant's level of effort to propose potential new or alternate additional goals is limited to a brainstorming workshop, during which potential goals and the rationale for the goals will be considered and/or recommended for further consideration at a policy level by the Valley Water Board.
 5. Level of effort assumes 10 meetings with retail agencies to be completed as part of Task 1 scope to confirm supply capacity requirements developed previously in the 2016 IRP at 4 hours per attendee/meeting for 2 attendees/meeting.
 6. Level of effort assumes one preparatory briefing, one internal workshop, one workshop with Steering Committee, one intermediate briefing, to discuss goals with Valley Water and assess how to account for goals in ongoing work at 16 hours per attendee/meeting, and for 4 attendees/meeting

Task 3 - Deliverables

1. Meeting agendas, minutes, and presentations.
2. One draft and final technical memorandum on capacity, water quality, reliability and additional goals and objectives.

Task 4 - Review of Current Asset Management Program Information

The objective of this task is to assess the operational reliability of WTP assets, with emphasis on risk of operational failure for key assets or asset groups that could impact the ability to meet reliability goals.

Valley Water has a comprehensive Asset Management Program (AMP) that includes a detailed asset registry (via Maximo) and management strategy group (MSG) definitions (via the Asset Management Planning Tool (AMPT)). Valley Water has also previously completed a business risk exposure (BRE) analysis of WTP assets (as measured by Probability of Failure (POF), Consequence of Failure (COF) and redundancy). Given that Valley Water has a well-developed AMP, Consultant's scope of services is generally limited to field assessments of WTP assets in order to cross-check and/or validate previous work completed by Valley Water.

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In completing the field condition assessment work, Valley Water shall provide raw asset data from Maximo to Consultant, and will define the scope and level of effort required for the cross-check/validation effort (i.e., the Maximo database includes a variety of assets/asset groupings including small parts that are beyond the scope of the field assessment). Valley Water is aware that some key WTP assets (e.g., ozone contactors) are not included in the Maximo data.

In completing the field condition assessments, Consultant will use Valley Water's Asset Management Program Risk Methodology (AMPRM) and is only responsible for developing new or supplemental inspection criteria or POF scoring methods for asset types or MSGs not currently defined in the AMPRM as directed by Valley Water. POF scoring and inspection criteria for existing asset types will be used for the WTP assets, where applicable to preserve the continuity with work already completed by Valley Water. Consultant may recommend and use additional inspection criteria if deemed important to determining asset condition. Consultant is responsible to document condition, potential failure mechanisms, etc. using inspection criteria provided by Valley Water as referenced in their Risk Assessment Methodology and Matrix (Attachment Six). Consultant will use its electronic asset management tool to capture its findings of the assessment and will provide the findings in Maximo database format.

For structures, HVAC and other facilities/building systems Consultant is responsible to complete standard field assessments based largely on visual inspection (i.e., detailed seismic analyses of structures and building systems is not part of the base scope of work). During field assessments, Consultant is responsible to identify potential areas of concern for structures and other facilities/building systems based on age, condition, or potential for poor seismic performance. Consultant will work with Valley Water to determine what additional assessment techniques or methods that could/should be executed (e.g., American Society of Civil Engineers (ASCE) 41 structural analyses), and if determined necessary, this work could be completed under Supplemental Services.

Valley Water is currently in the process of developing repair and replacement (R&R) strategies based on asset condition in-lieu of asset age. The information to support condition-based R&R strategies is more developed for some MSGs than others (e.g., information on mechanical systems condition is more developed than electrical/I&C, and there is limited information on structures and below ground piping). Consultant will recommend R&R strategies specific to WTPs, with emphasis on categories for which information is lacking, and will include recommendations for type and frequency of routine maintenance checks that will support the condition-based R&R strategies.

Task 4 - Assumptions

1. General

- a. Valley Water has an established asset assessment methodology. As such, developing a methodology and completing COF analysis is not part of Consultant's scope of work. Consultant is responsible to complete a field assessment of assets using Valley Water methodology.
- b. Prior to conducting the field condition assessment work, Valley Water will provide Consultant an export of the asset registry and lead briefing workshops with Consultant

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to describe the specifics and methodology of the AMP, the Maximo registry, the AMPT, and the AMPRM. Valley Water will work with Consultant to establish which assets are not included and jointly develop a method to include (i.e., add them to the database), or not include assets in Consultant's evaluation (i.e., Valley Water to evaluate at a later date).

- c. Based on work previously completed, Valley Water has identified assets and/or asset groupings that present the highest risk. Consultant's primary objective is to conduct field assessments to cross-check and/or validate these assets. The need for field assessments for assets of lesser risk will be determined by Valley Water (i.e., Valley Water may determine there is limited value of a complete assessment of assets of low risk profile).
- d. Consultant is not responsible for review of new assets (e.g., recent upgrades at the Rinconada WTP), or assets planned for upgrades (e.g., solids handling facilities at the Penitencia WTP). Prior to scheduling field assessments, Consultant will meet with Valley Water staff to confirm the assets or asset groupings for which field work is not required.
- e. Upon completion of the field assessments by Consultant, it is understood that time is of the essence, and that Valley Water shall complete its cross-check/validation of the assessment findings against previously completed work, and shall provide Consultant with its findings consistent with Consultants schedule, in order for Consultant to complete subsequent tasks.
- f. Valley Water will provide the current projection of asset R&R projects from the AMPT. Consultant will make recommendations regarding regrouping/reconfiguration of projects as necessary to reflect more efficient project delivery during future implementation phases.

2. Mechanical and Electrical Systems

- a. Valley Water will gather existing information on mechanical and electrical test methods and results for review and evaluation by Consultant.
- b. Consultant will use a combination of visual inspection and specialty testing to assess the condition of these systems. Consultant will rely on previous maintenance records and input from WTP operations and maintenance staff to assess the need for specialty testing (i.e., for newer or lower maintenance systems, visual assessment may be sufficient, whereas older or high-maintenance systems may require more than visual inspection). Consultant will provide recommendations for additional testing as appropriate.

3. Structures

- a. Valley Water is aware of some concrete structures that are showing signs of deterioration (i.e., soft/pasty surface concrete). Consultant will complete an assessment of all accessible concrete structures using non-destructive testing (i.e., no core samples), and will coordinate with Valley Water the timing for which structures/basins can be removed from services for access. If core sampling is determined to be a necessary next step (i.e., if significant deterioration of surficial concrete is noted), Consultant will recommend scope of work to complete additional testing, to be completed under Additional Services task/budget.

4. Underground Piping

- a. Valley Water has limited maintenance history or other data to confirm the condition of underground piping. Consultant will use a step-wise progression of analysis in order to better quantify and/or develop data on the piping condition: desktop analysis, non-destructive testing of select piping considered to be at risk based on desktop analysis, and visual inspection of size-appropriate accessible piping. Valley Water will be responsible for exposing buried pipe that is determined to be at risk or performing additional condition assessment on buried pipe that is not easily accessible. Valley

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Water may choose to delay these activities until a later date or to include these as projects in the implementation plan.

5. Level of effort assumes 4 workshops and two briefings review of the asset registry and AMP with Valley Water, and follow-up meetings to discuss findings of field assessments with Valley Water and determine how to account for findings in ongoing work at 16 hours per attendee per meeting for 4 attendees.

Task 4 - Deliverables

1. Workshop minutes.

Task 5 – Develop Project Assessment Methodology

The objective of this task is to develop a methodology to assess and screen the alternative WTP projects. The methodology will include screening and rating criteria, cost estimating, and project benefit analysis. Consultant will document the process used to develop the methodologies and summarize the final project assessment methodologies developed during this task in a technical memorandum.

5.1 Screening/Rating Criteria

Consultant will develop criterion to evaluate projects for feasibility and separate rating criterion to score projects objectively by WTP process needs.

5.2 Cost Estimating

Consultant will develop a methodology to estimate total project costs, including non-construction, capital, and lifecycle costs. The methodology will be used for non-capital projects (i.e., operations or maintenance projects) and capital projects.

Non-construction costs shall include planning, design, environmental and permitting, right-of-way, land acquisition, and lifecycle operations and maintenance costs.

Capital construction cost estimates shall include itemized capital construction costs for projects, with details corresponding to the design level and availability of project information. The construction cost estimate will include direct construction costs for materials, labor and equipment, including sales tax, appropriate markups for general contractor's general requirements/general conditions, overhead, and profit. The estimate will also include contingencies for design development and estimating factors in accordance with the estimating guidelines set forth by the Association for the Advancement of Cost Estimating (AACE). The estimate will be priced in current dollars. A separate line item allowance will be added to project the current costs to the expected or assumed mid-point of construction.

Capital cost estimate will include vendor quotes specific to proposed facilities, historical construction estimates and cost data, and professional experience with similar projects. Capital costs will include construction-related materials and equipment costs, tax, contractor overhead and profit, owner's reserve for change orders, construction management, and engineering services for design and construction.

Lifecycle costs will be based on expected operation and maintenance costs to include consumables (such as filter media, membranes, UV lamps), energy/power, chemicals, and labor.

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For the development of projects to be considered for implementation, a planning level cost estimate consistent with AACE Class 5 estimate (3%-5% design) with an expected accuracy range of -50% to +100% will be used. AACE Class 4 estimate (10% design) with an expected accuracy range of -30% to +50% will be used to further develop the projects recommended to be implemented in the first 10 years.

5.3 Project Benefits

Consultant will develop a methodology to analyze benefits as applicable to goals identified in Task 3. The methodology will quantify benefits and develop a cost-benefit ratio for projects. Some benefits may be measured qualitatively, and some may be measured quantitatively (i.e., cost per acre-foot or similar).

Task 5 - Assumptions

1. Level of effort assumes 4 meetings to discuss screening and rating criteria, cost estimating methodology, and approach to assessment methodology with Valley Water at 16 hours per attendee per meeting for 4 attendees.

Task 5 - Deliverables

1. Meeting agendas, minutes, and presentations.
2. One draft and final technical memorandum on project assessment methodology.

Task 6 - Evaluation of Rinconada WTP

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated. Consultant will document the process of evaluating the WTP for capacity, water quality, reliability, and additional goals and the evaluation of projects of concern in a technical memorandum.

6.1 Capacity Evaluation

Consultant will develop a calibrated plant hydraulic model (Excel based) as part of the initial assessment of existing infrastructure. Consultant will coordinate with VW staff to obtain the data needed (such as level measurements) for the model calibration process. Using the model, Consultant will verify and determine the existing plant capacity and recommend treatment process and equipment modifications and/or additions required to meet future capacity goals identified in Task 3.

6.2 Water Quality Evaluation

Consultant will assess the ability to meet the regulatory and water quality goals established in Task 3 and recommend treatment process modifications and/or additions to facilitate compliance. The ability of the plant to meet current and future regulatory requirements and the water quality goals will be evaluated using the recent historical data from the plant including but not limited to the review of at least the last 10 years of raw and treated water quality, DDW plant sanitary inspections, any process failures of close calls, and areas of challenge. Special attention to be given to wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson outage and San Luis Low Point. Future regulatory requirements and water quality goals that cannot be accommodated by the existing facilities using

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current or recommended alternative operational practices shall be identified. Ability of the plant to treat emerging contaminants such as Per- and Polyfluoroalkyl Substances (PFAS) or microplastics or meet more stringent regulatory requirements for primary or secondary contaminants should be evaluated. Consultant shall assess improvements for total organic carbon removal, and disinfection by-product minimization, and biological filtration performance in terms of manganese removal and rerelease.

6.3 Reliability Evaluation

Consultant will assess each treatment process and equipment's reliability and redundancy capability and recommend modifications and/or additions required to meet the reliability goals developed in Task 3.

6.4 Additional Goals Evaluation

Consultant will assess the treatment processes and equipment and recommend modifications and/or additions required to meet the additional goals established in Task 3. This may include identifying operating deficiencies and potential modifications or enhancements to optimize the operation of existing facilities/equipment. Operational enhancement could mean adding new equipment, such as adding controls to automate the system. This may also include recommendations to address future climate change concerns, additional environmental regulations, good-neighbor recommendations, or improvements to facilitate long term maintenance activities.

6.5 Projects of Concern Evaluation

The current on-going infrastructure improvement projects at the plant are listed below:

- Reliability Improvement Project – This project will improve plant reliability by adding a new raw water ozonation facility, a new flocculation and sedimentation with plate settler clarification facility and a new dual media filtration system as well as increasing the plant capacity from 80 mgd to 100 mgd.
- Residuals Remediation Project – This project will improve the capacity, redundancy and reliability of the existing residuals management system.

Plant staff has identified other improvements needed at the plant such as a new ammonia storage and metering facility, plant water system upgrades, Rinconada Reservoir relining and reroofing improvements, a new warehouse, etc. A list of improvements identified will be provided to the Consultant at the time of the Notice to Proceed. Consultant will work with Valley Water staff to validate the list of improvements identified. Consultant will gather information from staff interviews and site-visits and evaluate if the improvements identified should be included as a part of the plant recommendations.

6.6 Asset Renewal and Replacement Evaluation

As noted in Task 4 above, many of the assets at Rinconada are new, and therefore may not require near-term field condition assessment. In addition, due to the recent construction work at Rinconada, the asset registry for this facility is not up to date. Consultant will meet with Valley Water staff to confirm the assets or asset groupings for which field work is not required.

Consultant will prepare an inspection plan that includes inspection location, procedure, field work sequencing and schedules, data management protocols, safety procedures, and points of contact. Valley Water will provide the evaluation checklist and forms to document field

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observations and findings. Consultant will provide recommendations to modify the content, as appropriate. Consultant will schedule a conference call to review the inspection plan and collect Valley Water comments.

Consultant will coordinate with Valley Water to schedule site visits and any specific interviews with plant staff. Valley Water staff will be available during the preliminary reconnaissance and condition assessment field visits and will answer questions and escort Consultant staff to the plant areas.

Consultant will conduct field condition assessments and document all field investigation findings. Field visits shall be conducted with senior level Consultant staff from the site/civil, process/mechanical, structural, electrical and instrumentation departments to assess the condition of specific processes and subcomponents. Consultant will complete the field condition assessments as described in Task 4 and will use Valley Water's AMPRM.

Consultant will provide a database of field condition assessment findings of assessed assets.

Consultant will review Valley Water's renewal and replacement schedule for the plant assets and systems that has been updated using Consultant provided field assessment data and management strategy updates. This schedule will be used as a prioritized list of renewal and replacement recommendations, with higher priority projects scheduled sooner. Consultant shall review scheduled R&R projects and recommend changes to the schedule if needed to group projects by system or area of the plant, or in consideration with other plant improvements such as process or capacity upgrades. (i.e., if a system is being upsized, the R&R work may not be needed, or may need to be grouped with capacity increase work).

Consultant will provide a summary of recommended changes to Valley Water's R&R schedule.

Task 6 - Assumptions

1. Level of effort assumes that Consultant will need multiple site visits to complete Task 6 scope elements, and includes 180 hours for the field condition assessment site visits.
2. Valley Water will provide Consultant with expected water quality parameters related to potential impacts from wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson Reservoir outage and San Luis Reservoir low point, and emerging contaminants such as PFAS or microplastics.
3. Upon completion of the field work by Consultant, Valley Water will take lead responsibility to compare, contrast, and/or validate Consultant's assessment against previously completed work and will re-set prioritization for repair or replacement of critical assets as appropriate.

Task 6 - Deliverables

1. Meeting agendas, minutes, and presentations.
2. Plant hydraulic model.
3. One draft and final technical memorandum on capacity, water quality, reliability, additional goals and projects of concern evaluations.
4. Proposed field assessments, procedures and inspection plan.

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5. Database of field condition assessment findings of assets for validation by Valley Water Staff. Results and findings of field condition assessment in electronic format, consistent with Valley Water AMP.
6. Summary of MSG recommendations.
7. Summary of R&R recommended updates based on groupings and other project considerations. Final consolidation/integration of projects will occur in Task 9.

Task 7 - Evaluation of Santa Teresa WTP

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated. Consultant will document the process of evaluating the WTP for capacity, water quality, reliability, and additional goals and the evaluation of projects of concern in a technical memorandum.

7.1 Capacity Evaluation

Consultant will develop a calibrated plant hydraulic model (Excel based) as part of the initial assessment of existing infrastructure. Consultant will coordinate with VW staff to obtain the data needed (such as level measurements) for the model calibration process. Using the model, Consultant will verify and determine the existing plant capacity and recommend treatment process and equipment modifications and/or additions required to meet future capacity goals identified in Task 3.

7.2 Water Quality Evaluation

Consultant will assess the ability to meet the regulatory and water quality goals established in Task 3 and recommend treatment process modifications and/or additions to facilitate compliance. The ability of the plant to meet current and future regulatory requirements and the water quality goals will be evaluated using the recent historical data from the plant including but not limited to the review of at least the last 10 years of raw and treated water quality, DDW plant sanitary inspections, any process failures of close calls, and areas of challenge. Special attention to be given to wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson outage and San Luis Low Point. Future regulatory requirements and water quality goals that cannot be accommodated by the existing facilities using current or recommended alternative operational practices shall be identified. Ability of the plant to treat emerging contaminants such as PFAS or microplastics or meet more stringent regulatory requirements for primary or secondary contaminants should be evaluated. Consultant shall assess improvements for total organic carbon removal, and disinfection by-product minimization, and biological filtration performance in terms of manganese removal and rerelease.

7.3 Reliability Evaluation

Consultant will assess each treatment process and equipment's reliability and redundancy capability and recommend modifications and/or additions required to meet the reliability goals developed in Task 3.

7.4 Additional Goals Evaluation

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Consultant will assess the treatment processes and equipment and recommend modifications and/or additions required to meet the additional goals established in Task 3. This may include identifying operating deficiencies and potential modifications or enhancements to optimize the operation of existing facilities/equipment. Operational enhancement could mean adding new equipment, such as adding controls to automate the system. This may also include recommendations to address future climate change concerns, additional environmental regulations, good-neighbor recommendations, or improvements to facilitate long term maintenance activities.

7.5 Projects of Concern Evaluation

The current on-going infrastructure improvement projects at the plant are listed below:

- Air Wash Line Replacement Project – This project will replace the aboveground air wash pipeline and line the below-ground air wash pipeline.
- Backwash Pump P-9/P-10 Rebuild Project – This project will rebuild the backwash pumps.
- Filter Media Replacement Project – This project will replace the filter media in all twelve filters and replace all nozzles. Failing coating on all filter basins will be power washed or lightly sandblasted. Concrete crack on Filter 5W will be repaired.
- Electrical Improvement Project – This project will improve the electrical equipment, extend the service life of the electrical distribution systems and improve reliability and reduce maintenance at STWTP.

Plant staff has identified other improvements needed at the plant such as ammonia injection system improvements, backup chlorine feed addition at ozone contactors, flowmeter replacements, etc. A list of improvements identified will be provided to the Consultant at the time of the Notice to Proceed. Consultant will work with Valley Water staff to validate the list of improvements identified. Consultant will gather information from staff interviews and site-visits and evaluate if the improvements identified should be included as a part of the plant recommendations.

7.6 Asset Renewal and Replacement Evaluation

Consultant will complete field condition assessment of plant assets which may include but are not limited to mechanical and electrical equipment, aboveground and below-ground structures and piping, and facilities (i.e., roof, buildings & grounds, etc.).

Consultant will develop the field condition assessment procedure for each asset type. For assets that are not accessible and require system shutdown (i.e., underground structures, piping, etc.), Consultant will also specify the shutdown duration and impacts to the plant. Assessment of electrical and instrumentation equipment should be based on electrical or instrument testing in addition to visual inspection.

Consultant will prepare an inspection plan that includes inspection location, procedure, field work sequencing and schedules, data management protocols, safety procedures, points of contact and evaluation checklist and forms to document field observations and findings. Consultant will schedule a conference call to review the inspection plan and collect Valley Water comments.

Consultant will coordinate with Valley Water to schedule site visits and any specific interviews with plant staff. Valley Water staff will be available during the preliminary reconnaissance and condition assessment field visits and will answer questions and escort Consultant staff to the plant areas.

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Consultant will conduct field condition assessments and document all field investigation findings. Field visits shall be conducted with senior level Consultant staff from the site/civil, process/mechanical, structural, electrical and instrumentation departments to assess the condition of specific processes and subcomponents. Consultant will complete the field condition assessments as described in Task 4 and will use Valley Water's AMPRM.

Consultant will provide a database of field condition assessment findings of assessed assets.

Consultant will review Valley Water's renewal and replacement schedule for the plant assets and systems that has been updated using Consultant provided field assessment data and management strategy updates. This schedule will be used as a prioritized list of renewal and replacement recommendations, with higher priority projects scheduled sooner. Consultant shall review scheduled R&R projects and recommend changes to the schedule if needed to group projects by system or area of the plant, or in consideration with other plant improvements such as process or capacity upgrades. (i.e., if a system is being upsized, the R&R work may not be needed, or may need to be grouped with capacity increase work).

Consultant will provide a summary of recommended changes to Valley Water's R&R schedule.

Task 7 - Assumptions

1. Level of effort assumes that Consultant will need multiple site visits to complete Task 7 scope elements and includes 300 hours for the field condition assessment site visits.
2. Valley Water will provide Consultant with expected water quality parameters related to potential impacts from wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson Reservoir outage and San Luis Reservoir low point, and emerging contaminants such as PFAS or microplastics.
3. Upon completion of the field work by Consultant, Valley Water will take lead responsibility to compare, contrast, and/or validate Consultant's assessment against previously completed work and will re-set prioritization for repair or replacement of critical assets as appropriate.

Task 7—Deliverables

1. Meeting agendas, minutes, and presentations.
2. Plant hydraulic model.
3. One draft and final technical memorandum on capacity, water quality, reliability, additional goals and projects of concern evaluations.
4. Proposed field assessments, procedures and inspection plan
5. Database of field condition assessment findings of assets for validation by Valley Water Staff. Results and findings of field condition assessment in electronic format, consistent with Valley Water AMP.
6. Summary of MSG recommendations.
7. Summary of R&R recommended updates based on groupings and other project considerations. Final consolidation/integration of projects will occur in Task 9.

Task 8 - Evaluation of Penitencia WTP

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated. Consultant

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will document the process of evaluating the WTP for capacity, water quality, reliability, and additional goals and the evaluation of projects of concern in a technical memorandum.

8.1 Capacity Evaluation

Consultant will develop a calibrated plant hydraulic model (Excel based) as part of the initial assessment of existing infrastructure. Consultant will coordinate with VW staff to obtain the data needed (such as level measurements) for the model calibration process. Using the model, Consultant will verify and determine the existing plant capacity and recommend treatment process and equipment modifications and/or additions required to meet future capacity goals identified in Task 3.

8.2 Water Quality Evaluation

Consultant will assess the ability to meet the regulatory and water quality goals established in Task 3 and recommend treatment process modifications and/or additions to facilitate compliance. The ability of the plant to meet current and future regulatory requirements and the water quality goals will be evaluated using the recent historical data from the plant including but not limited to the review of at least the last 10 years of raw and treated water quality, DDW plant sanitary inspections, any process failures of close calls, and areas of challenge. Special attention to be given to wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson outage and San Luis Low Point. Future regulatory requirements and water quality goals that cannot be accommodated by the existing facilities using current or recommended alternative operational practices shall be identified. Ability of the plant to treat emerging contaminants such as PFAS or microplastics or meet more stringent regulatory requirements for primary or secondary contaminants should be evaluated. Consultant shall assess improvements for total organic carbon removal, and disinfection by-product minimization, and biological filtration performance in terms of manganese removal and rerelease.

8.3 Reliability Evaluation

Consultant will assess each treatment process and equipment's reliability redundancy capability and recommend modifications and/or additions required to meet the reliability goals developed in Task 3.

8.4 Additional Goals Evaluation

Consultant will assess the treatment processes and equipment and recommend modifications and/or additions required to meet the additional goals established in Task 3. This may include identifying operating deficiencies and potential modifications or enhancements to optimize the operation of existing facilities/equipment. Operational enhancement could mean adding new equipment, such as adding controls to automate the system. This may also include recommendations to address future climate change concerns, additional environmental regulations, good-neighbor recommendations, or improvements to facilitate long term maintenance activities.

8.5 Projects of Concern Evaluation

The current on-going infrastructure improvement projects at the plant are listed below:

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- Flocculation and Sedimentation Basin Rehabilitation Project – This project will replace equipment in the flocculation and sedimentation basins.
- Residuals Management Project – This project will construct a new sludge dewatering facility to replace the existing belt-press facility including all ancillary equipment and will enhance the quality and treatability of the recycled flow returned to the plant headworks. The project will include separation of filter-to-water flow, improvement of wash water recovery ponds and/or construction of a clarification facility, and automation of desludging process from the sedimentation basins.
- Electrical Improvement Project – This project will improve the electrical equipment, extend the service life of the electrical distribution systems and improve reliability and reduce maintenance at PWTP.

Plant staff has identified other improvements needed at the plant such as sulfuric acid addition to the raw water, old plant water pumps replacement, Non-ionic Polymer and Phosphoric Acid storage and metering system upgrades, chemical/sample/plant water pipelines rehabilitation, backwash pump structure roof modification, etc. A list of improvements identified will be provided to the Consultant at the time of the Notice to Proceed. Consultant will work with Valley Water staff to validate the list of improvements identified. Consultant will gather information from staff interviews and site-visits and evaluate if the improvements identified should be included as part of the plant recommendations.

8.6 Asset Renewal and Replacement Evaluation

Consultant will complete field condition assessment of plant assets which may include but are not limited to mechanical and electrical equipment, aboveground and below-ground structures and piping, and facilities (i.e., roof, buildings & grounds, etc.) identified under desktop assessment to further refine and update POF scores.

Consultant will develop the field condition assessment procedure for each asset type. For assets that are not accessible and require system shutdown (i.e., underground structures, piping, etc.), Consultant will also specify the shutdown duration and impacts to the plant. Assessment of electrical and instrumentation equipment should be based on electrical or instrument testing in addition to visual inspection.

Consultant will prepare an inspection plan that includes inspection location, procedure, field work sequencing and schedules, data management protocols, safety procedures, points of contact and evaluation checklist and forms to document field observations and findings. Consultant will schedule a conference call to review the inspection plan and collect Valley Water comments.

Consultant will coordinate with Valley Water to schedule site visits and any specific interviews with plant staff. Valley Water staff will be available during the preliminary reconnaissance and condition assessment field visits and will answer questions and escort Consultant staff to the plant areas.

Consultant will conduct field condition assessments and document all field investigation findings. Field visits shall be conducted with senior level Consultant staff from the site/civil, process/mechanical, structural, electrical and instrumentation departments to assess the condition of specific processes and subcomponents. Consultant will complete the field condition assessments as described in Task 4 and will use Valley Water's AMPRM.

Consultant will provide a database of field condition assessment findings of assessed assets.

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Consultant will review Valley Water's renewal and replacement schedule for the plant assets and systems that has been updated using Consultant provided field assessment data and management strategy updates. This schedule will be used as a prioritized list of renewal and replacement recommendations, with higher priority projects scheduled sooner. Consultant shall review scheduled R&R projects and recommend changes to the schedule if needed to group projects by system or area of the plant, or in consideration with other plant improvements such as process or capacity upgrades. (i.e., if a system is being upsized, the R&R work may not be needed, or may need to be grouped with capacity increase work). Consultant will provide a summary of recommended changes to Valley Water's R&R schedule.

8.7 PWTP Geotechnical Assessment

The objective of this task is two-fold: to review existing geotechnical reports and determine if additional geotechnical analyses are warranted, and to complete additional geotechnical work as necessary.

Consultant will review existing geotechnical reports and summarize findings and recommendations of the reports. Consultant will also provide recommendations for additional work if existing reports and analyses are found to be inadequate to support this scope of work. In developing recommendations for additional work, Consultant will consider if the work can be deferred (i.e., it may be prudent to complete the geotechnical work (if necessary) during the design phase of a specific recommended project).

Task 8 - Assumptions

1. Level of effort assumes that Consultant will need multiple site visits to complete Task 8 scope elements and includes 300 hours for the field condition assessment site visits.
2. Valley Water will provide Consultant with expected water quality parameters related to potential impacts from wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson Reservoir outage and San Luis Reservoir low point, and emerging contaminants such as PFAS or microplastics.
3. If additional geotechnical work is determined to be necessary, the scope and level of effort will be determined separately and will be funded out of Supplemental Services budget.
4. Upon completion of the field work by Consultant, Valley Water will take lead responsibility to compare, contrast, and/or validate Consultant's assessment against previously completed work and will re-set prioritization for repair or replacement of critical assets as appropriate.

Task 8 - Deliverables

1. Meeting agendas, minutes, and presentations.
2. Plant hydraulic model.
3. One draft and final technical memorandum on capacity, water quality, reliability, additional goals and projects of concern evaluations.
4. Proposed field assessments, procedures and inspection plan.
5. Database of field condition assessment findings of assets for validation by Valley Water Staff.
Results and findings of field condition assessment in electronic format, consistent with Valley

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Water's AMP.

6. Summary of MSG recommendations.
7. Summary of R&R recommended updates based on groupings and other project considerations. Final consolidation/integration of projects will occur in Task 9.
8. One draft and final geotechnical assessment report for PWTP.

Task 9 – Integrate Recommendations with Other Master Plans

The objective of this task is to integrate recommendations from this scope of work with other Valley Water implementation and master plan projects. Consultant will use the latest information available from the other projects.

9.1 Integrate STWTP and PWTP Recommendations

Consultant will evaluate the east side treatment system (STWTP and PWTP) as a whole. For example, if 10 MGD of additional capacity is needed on the east side, assess whether it is more beneficial to increase capacity at STWTP or PWTP or both. Consultant will integrate recommendations for STWTP and PWTP to most efficiently achieve the goals identified in Task 3 for the east side treated water distribution system.

9.2 Integrate SCADA Implementation Project Recommendations

Consultant will review findings from the SCADA implementation project efforts and ensure their recommendations are not competing efforts with the WTP recommendations. Consultant will evaluate recommendations from both projects together to eliminate repetitive recommendations, (i.e., if SCADA implementation project recommends a new facility within the WTPs, then it may be combined with the WTP implementation project).

9.3 Integrate Distribution System Implementation Project Recommendations

Consultant will review findings from the distribution system implementation project efforts and ensure recommendations from this work are not competing with the Distribution System Implementation Plan recommendations, and that planned future capacity needs are aligned within both projects. Consultant will evaluate recommendations from both projects together to eliminate repetitive recommendations and to coordinate facility shutdowns during implementation (i.e., if distribution system implementation project recommends a new facility within the WTPs, then it may be combined with the WTP implementation project).

9.4 Integrate Countywide Water Reuse Master Plan Recommendations

Consultant will review findings from the Countywide Water Reuse Master Plan (CWRMP) efforts and determine how recommendations from that work may impact the WTP recommendations. The WTP implementation project should consider space allocations for CWRMP recommendations that may impact the WTPs.

9.5 Problem Definition Report

Consultant will prepare a problem definition report to summarize and document all the problems, findings and recommendations identified from Tasks 6 – 8 including findings and recommendations from integration within WTPs and other Valley Water implementation and master plan projects. This report summary becomes the basis for project development and alternatives analysis.

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Task 9 - Assumptions

1. Level of effort assumes that Consultant will need multiple meetings with Valley Water and other consultants to stay abreast with work efforts on the Distribution System and SCADA projects, and to present initial findings and recommendations for the Task 11 work, including the Problem Definition Report, and includes 600 hours for preparation, attendance, and follow-up for 4 attendees/meeting support staff.
2. Valley Water will arrange meetings and check-ins with the other project teams throughout the project.

Task 9 - Deliverables

1. Meeting agendas, presentations, and minutes.
2. One draft and one final Problem Definition Report.

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Task 10 - Project Development, Evaluation, Selection, and Planning Study (10% Design)

The objective of this task is to develop a list of project alternatives and to perform a comprehensive alternative analysis to select a final set of preferred projects. Consultant will use the project assessment methodology developed in Task 5 to evaluate the project alternatives. Final selected projects will be further developed with Planning Study Report and Basis of Design preparation.

10.1 Generate High-Level Projects to Address Needs

Consultant will generate high-level potential projects which address the needs and recommendations identified in Tasks 6 through 8. Consultant and Valley Water will jointly determine if detailed alternatives analysis is required based on the specific project type. Consultant will develop site plans, process diagrams, and AACE Class 5 cost estimates for all projects generated.

10.2 Screen and Score Projects, Select Recommended Projects, and Bundle and Prioritize Projects

Consultant will gather all high-level projects in a single table and screen the projects for feasibility using the project assessment methodology developed in Task 5.1. After the projects are screened for feasibility, the Consultant will perform a comprehensive scoring to propose final suite of options to implement projects. Based on internal and external stakeholder input, a final package of projects will be selected.

10.3 Planning Study

For projects to be implemented in the first 10 years, Consultant will develop the projects to a basis of design level and develop AACE Class 4 cost estimates.

Consultant will prepare a Planning Study Report to document the entire project formulation process. This report will include the project background, objectives, problem definition, conceptual

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and feasible alternatives analyses, the recommended projects, the basis for the selection, and Basis of Design.

Task 10 - Assumptions

1. General
 - a. Consultant will complete the Project Development, Evaluation, and Selection Process for Penitencia, Santa Teresa, and Rinconada WTPs (total of 3). Because the Rinconada WTP has been recently upgraded, the level of effort assumes minimal project development and analysis for new capital projects by comparison to Penitencia and Santa Teresa WTPs.
2. Basis of Design
 - a. For each project type and each facility, the Planning Study Report will include a Basis of Design Criteria summary table and 10% conceptual level engineering to include, but not be limited to:
 - i. Major project element list
 - ii. Plant hydraulic and process flow diagrams
 - iii. Key design and performance criteria
 - iv. Conceptual site layouts (generic plans and section views)
 - v. Potential equipment vendors (as well as any related procurement issues)
 - vi. Recommendations for levels of automation/control
 - vii. Specific discipline considerations (civil/site, mechanical, electrical, instrumentation and controls, etc.)
 - viii. Major operations and maintenance considerations (access, redundancy needs, etc.).
 - ix. Lifecycle cost estimates
 - b. As part of the SCADA implementation project, new SCADA standards will be developed for the WTPs. Consultant will use the new SCADA standards to develop the basis of design for the projects. Design criteria shall comply with Valley Water, Local, State, and Federal agency requirements.
3. Meetings
 - a. The level of effort assumes that multiple meetings/workshops with Valley Water will be required to review work in progress, solicit input and feedback, and coordinate all work activities in this task. A total of 1000 hours is included in the level of effort (400 hours each for Penitencia and Santa Teresa, and 200 hours for Rinconada).

Task 10 - Deliverables

1. Meeting agendas, minutes, and presentations.
2. One draft and one final "high-level" conceptual alternatives report.
3. One draft and one final recommended alternatives report.
4. One draft and one final Planning Study Report.

Task 11 - Project Implementation Plan (WTP CIP)

The objective of this task is to develop a comprehensive implementation plan for the preferred projects over a 30-year period. Consultant will determine how Valley Water can most efficiently and cost effectively implement these projects. The preferred projects will be assembled into a feasible construction schedule based on dependencies and sequencing for various project types and opportunities to group/consolidate. This schedule will determine the capital requirements for each year of the 30-year planning horizon.

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The scope and breadth of the master plan effort will generate significant new data and associated technical analyses, all of which must be organized and archived. Consultant will use industry standard electronic tools and information management system applications to maximize efficiency of project execution. The information management system will also include an electronic CIP that is integrally linked to specific project-related information for each treatment plant via a customized system developed by Consultant and hosted in Valley Water's Microsoft cloud-based environment. The electronic CIP will provide project implementation details for the planning horizon including goals/drivers, estimated costs, schedule, and interdependencies. The electronic CIP and implementation plan will be adaptable by Valley Water staff should planning level assumptions or priorities change over time (i.e., a "living document"). Scheduling and phasing of the preferred projects will align with Valley Water's other implementation and master plan projects.

11.1 Staffing Plan

Consultant will perform a staffing evaluation and provide a recommended staffing plan to compliment the implementation schedule of the preferred projects. Consultant will review staffing plans from other similar utilities to establish benchmarks that may be used for comparison with Valley Water. In assessing the staffing level requirements, Consultant will use a "stepwise" progression of analysis: operational and maintenance guiding objectives, tools, technologies and vendor contract services that could assist with operations, functional groups required for operation, staffing keys to success, and staffing scheduling. This progression of analysis will enable Consultant to compare current conditions with existing and future commitments for service and the associated requisite staffing.

11.2 Technical Baseline Document

Valley Water has identified a need to develop a document ("Technical Baseline Document") to summarize lessons learned, best practices, preferences and minimum standards related to design and construction, with the intent that this information would be used as baseline/benchmark information to establish objectives and expectations at the start of preliminary design for new capital projects. The Technical Baseline Document will include items that are typical for most WTP projects and include general, civil, structural, mechanical, electrical, and instrumentation and control systems disciplines.

Task 11 - Assumptions

1. General
 - a. Level of effort assumes that Consultant will need multiple meetings with Valley Water to establish the basis for staffing, and to present initial findings and recommendations for the staffing plan work and includes 600 hours for 4 attendees/meeting.
 - b. The level of effort assumes that multiple meetings/workshops with Valley Water engineering, operations and maintenance staff will be required to develop the technical baseline document to solicit input and feedback. A total of 200 hours for these meetings and workshops is included in the level of effort.
 - c. Consultant is not responsible to develop standard specifications or other related design standards as part of the Technical Baseline document.

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- d. The level of effort assumes that multiple meetings/workshops with Valley Water will be required to review work in progress, solicit input and feedback, and coordinate all work activities for the Project Implementation Plan work in this task. A total of 200 hours is included for these meetings and workshops in the level of effort.
2. Project Information Management System
 - a. Consultant will customize the information management system using the Critical Path Method (CPM), so that all project participants have access to customized project information on a single common project interface platform.
3. Staffing Plan
 - a. The objective of the staffing plan is to provide analysis and support treatment plant organizational structure and staffing needs to operate and maintain the treatment facilities in the future, and also to support implementation of projects.
 - b. The staffing plan will outline staffing qualifications, recruitment, and training requirements.

Task 11 - Deliverables

1. Meeting agendas, minutes, and presentations.
2. One draft and final Project Implementation Plan.
3. One draft and final Staffing Plan.
4. One draft and final Technical Baseline Document.

Task 12 - WTP Implementation Project Report

The objective of this task is to prepare a final report that incorporates the conclusions of all work on the project. The report will present a recommended 30-year Capital Improvement Program for Valley Water's WTPs that includes a suite of recommended capital improvement projects and an implementation plan. The report will summarize all recommendations from Tasks 3-11.

Task 12 - Assumptions

1. The level of effort assumes that multiple meetings/workshops with Valley Water will be required to review work in progress, solicit input and feedback, and coordinate all work activities in this task. A total of 200 hours is included in the level of effort.

Task 12 - Deliverables

1. Meeting agendas, minutes, and presentations.
2. Draft and Final WTP Implementation Project Report.
3. Closeout Checklist of all tasks and deliverables completed.

Task 13 - Stakeholder Outreach Strategy

The objective of this task is to develop a stakeholder outreach strategy and provide technical support to the stakeholder outreach effort as well as holding workshops throughout the project to obtain stakeholder input and concurrence.

Consultant will develop a stakeholder outreach plan that identifies internal and external stakeholder groups. Valley Water may form a separate Technical Advisory Group (TAG) consisting of experts in a number of disciplines and regulatory bodies and ask Consultant to work with the TAG group as part of the stakeholder outreach plan. The plan will describe how and when

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outreach will be conducted to the various groups. Outreach may include individual meetings, group meetings, email/written or other communication. The plan will identify the goals of each stakeholder meeting or communication.

Consultant will facilitate the meetings and support Valley Water staff on technical, regulatory or other matters. The consultant's primary involvement in the Stakeholder Outreach effort will be to 1) recommend method, timing, and goal of outreach throughout the duration of the project, 2) prepare slides, handouts and/or other materials for the stakeholder meetings and workshops, 3) facilitate and present information at stakeholder meetings and 4) during the outreach process, perform additional technical, regulatory and/or environmental analyses to support the ongoing stakeholder meetings.

Consultant will prepare presentation materials and make presentations to the Valley Water Board and stakeholders if needed. Consultant will summarize the stakeholder outreach process and results in a technical memorandum.

Task 13 – Assumptions

1. Valley Water staff will be responsible for organizing and conducting the stakeholder meetings.

Task 13 - Deliverables

1. Draft and final stakeholder outreach plan
2. Stakeholder meeting facilitation, materials, displays and handouts, and minutes
3. Presentation materials for Valley Water Board meetings
4. Draft and final technical memorandum on Stakeholder outreach process and results

Task 14 - Environmental Planning and Permitting (PEIR)

Deliverable Format. Consultant will ensure the technical level of writing will be such that the material is fully understandable by a person without specific training in the field at hand but without compromising its value to the target audience. The target audience includes technical, managerial, and executive personnel, as well as Valley Water's Board of Directors, staff, and the public.

Compliance with National Environmental Policy Act

Compliance with National Environmental Policy Act may be required for some of the projects identified within the Program that have federal nexus.

As early as possible, Consultant, Valley Water staff and the federal agency shall determine whether NEPA compliance is necessary, based on identified federal sites for projects under the Program or retained alternative(s) or if federal nexus will be established through grants or other funding mechanisms.

As part of Supplemental Services Task 15.7, if NEPA compliance is required, Consultant shall prepare a scope and budget, and contract modification request to prepare an Environmental Assessment (EA) that includes sufficient information that the NEPA lead agency can prepare the Finding of No Significant Impacts (FONSI) or Environmental Impact Statement (EIS), as appropriate. Or, if the federal lead agency prefers, Consultant shall prepare a joint CEQA/NEPA document.

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14.1 Preliminary Project Description

14.1.1 Collect Background Information on the Projects

Consultant shall work with Valley Water Project Team to identify additional existing background information which has not been provided, compile a list of all available information and submit the list to Valley Water for review.

14.1.2 Prepare Base Map

Consultant shall prepare a base map for each project area and its environs. The map shall be prepared in a Geographic Information System (GIS) format compatible with Valley Water's GIS system; have an appropriate level of detail to serve as a basis for the analysis associated with task 14.1.2, and subsequent environmental analysis; be constructed in a manner consistent with the protocol for information sharing of Valley Water's GIS department; and be consistent with applicable metadata requirements.

Examples of appropriate level of detail would include inclusion of features located within 300' of the exterior boundary of each project site at a scale of 1" =100'; record boundaries, easements and preliminary title reports; and topography, site improvements and public infrastructure.

14.1.3 Analyze Existing Data and Information, Based on Draft Project Description and Objectives, and Define Key Technical Issues to be Addressed

Consultant shall analyze the existing data and information, based on the draft problem definition and project objectives, in order to define key technical issues to be addressed. Based on this analysis, Consultant shall identify environmental concerns for the projects and preliminary CEQA alternatives that may be carried forward into the PEIR for analysis and document these in a technical memorandum for Valley Water review.

14.1.4 Refine Problem Definition and Project Objectives

In concert with Task 3, Consultant shall meet with Valley Water Project Team to discuss refining the problem definition and project objectives, based on the review and analysis conducted in the previous three items. The problem definition and project objectives will be used to define parameters of environmental analysis and field investigations, as well as the foundation for drafting the detailed project description for each project for use in the Programmatic Environmental Impacts Report (PEIR). The revised preliminary project description is subject to Valley Water review.

Task 14.1 - Assumptions

1. Tasks preceding Task 14 will generate CAD or GIS files for proposed improvements that will support Task 14.1.2 deliverables.
2. Level of effort is based on not more than one round of review for the Project Description and other deliverables.
3. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.
4. Preparation of NEPA documents is not included in this scope of work

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5. **CEQA Evaluation.** The California Environmental Quality Act (CEQA) evaluation will be conducted at a program-scale analysis (Program) and the Environmental Impact Report (EIR) document will address the Program elements described in this Agreement. The Consultant will explore with Valley Water whether sufficient detail is available to pursue project-level evaluation for near-term actions contemplated under the Master Plan.
6. **Quality Management.** Valley Water staff is responsible for ensuring that project design meets Valley Water engineering design specifications and Board Ends Policies. Close coordination between the Consultant, Valley Water environmental planners, engineers, and Project Team throughout the course of the project is expected to ensure that critical information for conceptual design, alternatives analysis and environmental analysis is available to the appropriate Project Team members in a timely manner. Valley Water's Environmental Planning Unit for the project is responsible for quality assurance/quality control for work products associated with the environmental planning and review process and environmental management objectives. The first version of each deliverable shall be submitted as a draft to Valley Water for review and comment. The Environmental Planner shall provide consolidated comments to Consultant, and these consolidated comments shall serve as the basis for the final version of the document. The documents shall adhere to Valley Water CEQA guidelines and formats.
7. As related to Task 14.1.1, Valley Water shall provide Consultant with:
 - a. Any updates to the projects' goals, objectives and draft preliminary project description that have occurred since the issuance of the RFP.
 - b. Valley Water data and information relevant to the projects; a list of other known available documents relevant to the projects.
 - c. A list of information, including the source(s) and keeper(s) of the information that may be relevant to the projects but is not in Valley Water's possession.

14.1 – Deliverables

1. List and Copies of Background Data and Other Compiled Information
2. Base Map and metadata
3. Memorandum Identifying Environmental Concerns for the Project/Proposed Alternatives
4. Draft Project Description and Project Objectives (for CEQA process)

14.2 Initial Environmental Assessment

14.2.1 Gather and Organize Environmental Information Relevant to the Project

Consultant shall work with Valley Water to identify any existing environmental data not previously identified in task 14.1. Consultant shall then gather existing environmental documents, memos, data, plans and policies and other information relevant to each project. Such information may include, but is not limited to: hazards and hazardous materials assessments of the property(ies) involved; programmatic environmental impact report (PEIR) for similar facilities in the vicinity and/or other projects on the property(ies) involved; biological, or cultural resource studies, Valley Water Watershed Management Initiative (WMI) data and report information specific to the project vicinity; engineering, hydraulic and/or geotechnical reports for each project area; FEMA reports; other mapping, reports and documentation of special status species in the vicinity of the project site; planning documents by the affected jurisdiction(s), including relevant General Plans, Project

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Plans and/or Master Plans; and other relevant materials. Consultant shall submit this list to Valley Water for review.

14.2.2 Summarize Environmental Conditions Based on Existing Data

Consultant shall review existing reports, plans and policies and other information relevant to each project, as identified in task 14.2.1. Consultant shall analyze the environmental conditions, based on existing data, focusing on relevant environmental statutes and regulations that include, but are not limited to, the Migratory Bird Treaty Act, state and federal Endangered Species Acts, cultural and archaeological statutes, noise ordinances and traffic laws.

Consultant shall identify the federal nexus, if any, and the requirement for compliance with NEPA. Should NEPA be required, a scope of work and budget will be prepared as a supplemental task.

Results of this analysis shall be summarized by Consultant in a technical memorandum. The technical memorandum should also identify additional data requirements and environmental issues not previously identified. The technical memorandum shall be submitted to Valley Water for review.

14.2.3 Prepare Field Investigation Plan

Based on the data requirements identified under task 14.2.2, Consultant shall develop a field investigation plan, and submit it to Valley Water for review. These investigations may include, but may not be limited to, biological surveys for sensitive and non-sensitive species, habitat assessments, water quality impact assessment, wetland delineations, investigation of cultural resources and other environmental considerations required under CEQA.

14.2.4 Conduct Site Visit and Surveys, As Appropriate

In accordance with the approved field investigation plan, Consultant shall conduct screening level field assessments on the biological, cultural and other environmental resources, as applicable, within each project vicinity. Consultant shall prepare a technical report, along with supporting field notes, photos and other relevant materials, as appropriate.

14.2.5 Compile Documentation in Support of Draft CEQA Initial Determination Memo

This internal Valley Water document provides the rationale for the use of a particular CEQA document for a project. Consultant, in consultation with the Environmental Planner, shall prepare supporting documentation for draft CEQA Initial Determination Memo, and submit it to Valley Water for review.

Task 14.2 Assumptions

1. Level of effort for fieldwork is based on not more than one round of review for deliverables.
2. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.
3. The scope of work for field investigations assumes definition of facilities sites by Valley Water, and provision of access by Valley Water. The Consultant's cost estimate for Field Investigations is based upon its current understanding of proposed facilities, and represents

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an order of magnitude cost estimate. Additional resources may be necessary to complete field investigations of facilities and/or alternatives generated by Valley Water's design process. Because the level of effort for the initial environmental assessment (Task 14.2) cannot be confirmed at this time, it is assumed to not exceed 180 hours for budgeting purposes.

4. Unless deemed necessary to provide an adequate investigation of each potential project effects, the impact analysis will not include intersection volumes or level of service computations.
5. Presentation of the regulatory setting at the federal, state and local levels, as well as the evaluation of each project's contribution to cumulative impacts, will be conducted in the PEIR, not in a technical memorandum.
6. The scope of work focuses on efforts required for CEQA compliance, and as such, identification of mitigation measures will include a description of elements of a traffic control plan, but not the preparation of conceptual plans for a traffic control plan itself.
7. It is assumed that geotechnical and site investigation reports would be completed by Valley Water or other firms and available for reference during completion of the Administrative Draft EIR.
8. It is assumed that site access and right of way entry will be available or provided by Valley Water. It is assumed that Consultant will identify any needed access and right of way entry at the early stage of the Program Planning to allow Valley Water to acquire the necessary easements.
9. As it relates to Task 14.2.5, Valley Water environmental planner is responsible for finalizing the CEQA Initial Determination Memo, based on the material provided by Consultant.

14.2 – Deliverables

1. List of References, and Environmental Data and documents for each project.
2. Technical Memorandum identifying additional data required and environmental issues not previously identified.
3. Field Investigation Plan.
4. Site visit survey notes, aerial photographs, ground level photographs and other appropriate documentation; technical memorandum summarizing field work outcomes.
5. Supporting documentation for draft CEQA Initial Determination Memo.

14.3 Environmental Investigations, Surveys and Studies

The Environmental Investigations task includes assessments needed to evaluate environmental impacts of the project as required by CEQA and other applicable laws and regulations. Tasks under task 14.3 Environmental Investigations, Surveys and Studies must link closely with 14.2.4, 14.4.A.2 and 14.4.A.5, which require expertise in all areas related to CEQA clearance, especially biological resources.

14.3.1 Conduct Additional Site Visit(s) and Survey(s)

Consultant and Valley Water shall meet to discuss additional site investigations beyond those designated as mandatory in the final Field Investigation Plan, created under task 14.2.3. If the Field Investigation Plan does not include additional field investigations beyond those deemed mandatory, then Consultant shall amend the Field Investigation Plan, and submit it to Valley Water for review. Based on Valley Water's written consent, Consultant shall conduct additional

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site visits and surveys, as necessary, and submit to Valley Water for review an addendum to the technical memorandum summarizing field work outcomes.

14.3.2 Determine Baseline Environmental Conditions

Consultant shall prepare a report that details the existing site conditions, as determined through completion of tasks 14.2 and 14.3.1 and submit to Valley Water for review. Based on the problem definition and project objectives, this report shall identify design considerations related to biological goals and objectives, habitat requirements, cultural and other environmental resources and potential future conditions. This report shall establish the baseline environmental conditions for the CEQA process and shall be submitted to Valley Water for review. This baseline shall be used to establish the level of CEQA evaluation required for the project.

Task 14.3 Assumptions

1. Level of effort for fieldwork is based on not more than one round of review for deliverables.
2. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.

14.3 - Deliverables

1. Amended Field Investigation Plan; Site Visit Survey Notes, Photographs (Aerial and Ground Level) and Other Appropriate Documentation; Addendum to Technical Memorandum Summarizing Field Work Outcomes
2. Baseline Environmental Conditions Technical Report

14.4.A Programmatic Environmental Impact Report

14.4.A.1 Prepare Notice of Preparation

In collaboration with Valley Water, Consultant shall prepare the Notice of Preparation.

14.4.A.2 Assist with Development and Screening of Project Alternatives

Consultant shall work closely with Valley Water's engineering and environmental planning staff to develop criteria for evaluating Conceptual Alternatives. Consultant shall assist Valley Water in developing the Conceptual Alternatives. Consultant shall reference projects from Task 10.2 in the development of Conceptual Alternatives. Consultant shall document the inclusion of environmentally beneficial features (e.g., avoidance, minimization, enhancements) within Project.

Consultant shall prepare a technical memorandum documenting the evaluation process, as well as the conceptual alternatives, and provide this memo to Valley Water for review.

14.4.A.3 Conduct Environmental Scoping

In collaboration with Valley Water Public Information Officer (PIO), Consultant shall schedule and plan the public scoping meeting(s) required by CEQA. At Valley Water's direction, Consultant shall take the lead in conducting the public PEIR scoping meeting, presenting the Program to the public and tracking public comments received formally in writing. Valley Water PIO will provide the transcript of the meeting to Consultant and. Consultants shall provide a summary of the scoping comments received and recommendations for issues to be addressed in the PEIR. Consultant

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will revise the draft scoping report in response to Valley Water's comments and submit a final scoping report to Valley Water.

14.4.A.4 Assist with Development and Screening of Project Alternatives

As already developed and evaluated under Task 11, Consultant shall work closely with Valley Water's engineering and environmental planning staff to develop criteria for evaluating a reasonable range of Alternatives, including the "No Project" to be used in the development of the PEIR. Consultant shall assist Valley Water in developing the feasible Alternatives. Consultant shall document the inclusion of environmentally beneficial features (e.g., avoidance, minimization, enhancements) within each Project Alternative. Consultant shall prepare a technical memorandum documenting the evaluation process and provide this memo to Valley Water for review.

14.4.A.5 Refine Project Description

Consultant shall work with Valley Water Project Team to refine the preliminary project description, based on the review and analysis in Tasks 14.2 and 14.3, and the previous three subtasks, to produce a draft detailed project description for use in the CEQA process. The revised project description is subject to ValleyWater review and may require two (2) drafts prior to final.

1. The Consultant will update the project description developed based on information provided in Task 14.2 and 14.3 using additional project information provided by Valley Water. The project description will define the Project purpose and need.
2. The Consultant will collaborate with Valley Water to develop a Project Description for the PEIR that explains the key elements of the projects to an adequate level of detail to serve as the common project description for all CEQA resource evaluations.
3. The Consultant will identify to Valley Water the level of engineering design and associated data needed to complete the Project Description.
4. The Project Description will describe in text and map(s) the project areas considered for evaluation in the EIR.
5. The Project Description will list Valley Water's objectives for the proposed Project in conformance with CEQA Guideline §15124, and all laws and regulations relevant to services performed for this task, describe the plans for operation and maintenance of the improved facilities commensurate with the level of detail provided by Valley Water.
6. The Project description will include all the standard information required by CEQA guidelines, such as
 - i. a site location map
 - ii. description of the proposed Project and its goals
 - iii. Project construction methods
 - iv. long-term management
7. The project description will also include a list of responsible and/or trustee agencies that have jurisdiction over the projects under CEQA, including local, state, and federal regulatory agencies.
8. The project description will provide an overview of the project alternatives and provide detail on each project element.

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9. Summary tables will be included to illustrate the elements that comprise each project alternative.
10. A draft Project Description will be submitted to Valley Water for review and comment. Valley Water will provide a consolidated set of comments.
11. Based on comments and guidance from Valley Water, the Consultant will prepare a revised Project Description. Comments provided by Valley Water on the revised Project Description will be incorporated into the version of the Project Description that will be used in the Administrative Draft PEIR (ADPEIR).

14.4.A.6 Prepare ADPEIR, Including Mitigation Monitoring and Reporting Program

Consultant shall work closely with Valley Water Project Team to develop and document the screening criteria, evaluate the retained alternatives, and identify the preferred alternative(s). Results of this evaluation shall form the basis of the alternatives analysis in the ADPEIR that Consultant shall prepare, working closely with Valley Water's Project Team.

As part of the ADPEIR, Consultant shall prepare a Mitigation Monitoring and Reporting Program for the Program. Required format is a matrix showing impacts, mitigation measures, timing, status and document references. A permit matrix shall also be prepared for all identified specific projects to be implemented at a later time to facilitate activities under Task 15.3.

The first PEIR delivered to Valley Water shall be an Administrative Draft document. Valley Water shall review the Administrative Draft and provide consolidated comments to Consultant for use in preparing the Draft PEIR. In addition, each document prepared for compliance with CEQA requirements shall be prepared in such a way that the document fully satisfies CEQA requirements.

14.4.A.7 Prepare Draft PEIR, including Mitigation Monitoring and Reporting Program

Based on Valley Water comments compiled by the Environmental Planner and provided to Consultant, Consultant shall revise the ADPEIR. The resulting document shall be the Draft PEIR, including the Mitigation Monitoring and Reporting Program. Valley Water shall review a screen check copy of the Draft PEIR to ensure that Valley Water comments have been incorporated before presentation to the Board of Directors.

Consultant will receive and compile all records to create an indexed, subject-matter organized, and chronically assembled administrative record that will include all relevant documents. Files will be organized into a spreadsheet index, which will be reviewed by Valley Water. A Program email will be set up such that the Consultant's Administrative Record Team can maintain the record for email correspondence and other electronic documents in real time. All email headers will be removed from these records so that the email transport to the record address is not included in the index. The Administrative Record index and materials will be provided on DVD.

Task 14.4.A Assumptions

1. Consultant assumes that project Description will address one preferred project; alternatives to the project will be evaluated at a lesser level of detail consistent with CEQA Guidelines Section 15126.6.
2. For each project the EIR will evaluate up to 3 alternatives, including the No Project Alternative.

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3. Consultant assumes that visual simulations will not be required to support the aesthetics evaluations in the Program EIR.
4. Scope of work assumes preparation and attendance at one public meeting and is limited to the preparation and presentation of a PowerPoint presentation during the meeting.
5. Scope of work assumes the NOP mailing list of addresses along proposed facilities will be generated by Valley Water's PIO and/or the Public Outreach Consultant.
6. Valley Water will be responsible for identifying, securing and coordinating the scoping meeting locations, as well as facilitating the meeting.
7. Notice of Preparation and Draft Environmental Impact Report will be distributed in electronic format. Consultant will format public documents suitable for posting on Valley Water website.
8. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.
9. As part of the project description, Valley Water and/or the design team will quantify the area of ground disturbance, quantity of cut and fill, and quantity of earth materials transported to and from the Program Area. Valley Water will assist in the description of key elements of the Program at an adequate level of detail to depict the project to the general public and resource agencies.
10. Scope of work assumes that comments on the camera-ready Draft EIR will be primarily related to document layout, format, and editing, and that no substantive revisions of technical analysis will be required; assume electronic copies of administrative draft documents.

Task 14.4.A – Deliverables

1. Notice of Preparation
2. Draft and final Technical Memorandum on the Screening Process for Conceptual Alternatives, including detailed documentation of conceptual alternatives
3. Draft and Final Project Description for CEQA document
4. ADPEIR, Including Mitigation and Monitoring Plan
5. Public Draft PEIR including Mitigation Monitoring and Reporting Program

14.4.B Programmatic Environmental Impact Report – Public Noticing and Participation Requirements

14.4.B.1 Prepare Notice of Completion

In coordination with Valley Water Environmental Planner, Consultant shall prepare the Notice of Completion for the PEIR. Consultant will assist the environmental planner with the preparation of the IDM.

Consultant shall provide support for the release of the Draft PEIR. Support may include preparation of the support documentation for the preparation of the IDM.

14.4.B.2 Prepare Information for Valley Water Website and Filing with the State Clearinghouse

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Consultant shall provide the Draft PEIR and other materials, as appropriate, to fulfill public noticerequirements for posting on Valley Water website and with the State Clearinghouse.

14.4.B.3 Respond to Public Comments

In collaboration with Valley Water Project Team, Consultant shall prepare responses to public comments on the Draft PEIR for review by Valley Water Project Team to ensure responses are consistent with Valley Water policy.

14.4.B.4 Prepare Final PEIR

Based on the public comments and the Response to Comments Report (task 14.4.B.4), Consultant shall prepare the Administrative Final PEIR, incorporating the public comments and responses. The Administrative Final PEIR shall include the Mitigation Monitoring and Reporting Program. Monitoring protocols shall include mitigation elements, a detailed description of equipment and supplies, sampling design (with rationale), data to be collected, sample sizes (as appropriate), timing and frequency of data collection, data analysis, related success criteria, adaptive management activities, and estimated cost.

Consultant shall provide the Administrative Final PEIR to Valley Water for review. Based on Valley Water comments on the Administrative Final the Consultant shall prepare the Final PEIR. Consultant shall provide a screen check copy of the Final PEIR for Valley Water to review to ensure that Valley Water comments have been incorporated.

14.4.B.5 Prepare Findings and Statement of Overriding Considerations

If required, and in coordination with Valley Water, Consultant shall prepare the CEQA Findings and Statement of Overriding Considerations, as directed.

Consultant shall submit the Draft Findings and Statement of Overriding Considerations to Valley Water for comment and prepare the final version of these documents based on Valley Water comments resulting from that review.

14.4.B.6 Prepare Notice of Determination (NOD)

Consultant shall prepare the Notice of Determination, in coordination with Valley Water Environmental Planner.

14.4.B.7 Assist with Public Hearing/Certification of Final PEIR

Consultant shall provide support for Valley Water staff for the public meeting or hearing where Valley Water Board of Directors considers the PEIR for approval. This support may include preparation of materials, answering technical questions at the meeting/hearing, and/or presenting the environmental component of the project. Consultant shall record public comments during this meeting and provide these to Valley Water.

Task 14.4B - Assumptions

1. Consultant will assist in preparation of one presentation and supporting materials for a public hearing.
2. Final Environmental Impact Report will be distributed in electronic format. Consultant will format public documents suitable for posting on Valley Water website.
3. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley

SCHEDULE PM SCOPE OF SERVICES

Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.

4. It is assumed that Valley Water will provide comments received on a weekly basis so that Consultant can review comments as early as possible and begin to develop a strategy for responding to comments.
5. Based on the level of public interest in this project, it is assumed that up to 25 comment letters and up to 150 individual comments could be received.
6. Scope of work assumes creation of an administrative record of individual documents, such that an approximately 500 labor hours would be required to organize, respond to comments, and complete all task 14.4B tasks.
7. Scope of work assumes participation in up to 1 public meetings.
8. Scope of work is limited to the preparation and presentation of a PowerPoint overview of the project, impacts, and conclusions of the EIR for the board meeting for certification of the PEIR.
9. Meeting summaries will generally characterize comments received; specific recordation of comments will be provided by Valley Water. Scope of work assumes that comments on the camera ready Final EIR will be primarily related to document layout, format, and editing, and that no substantive revisions of technical analysis will be required.
10. Valley Water will be responsible for all other project approval materials, including staff report and resolutions.
11. Valley Water will be responsible for facilitating legal review of all certification materials.
12. Valley Water will pay all filing fees, including CDFW NOD Filing Fee
13. For Task 14.4.B.1, The VW CEO will sign the NOC and issue the draft EIR for public review and The VW Environmental Planner will assure the posting of the NOC with the Santa Clara County.
14. For Task 14.4.B.3 Valley Water will collect and collate written public comments on the Draft PEIR and provide these collated comments to Consultant.

Task 14.4.B - Deliverables

1. Draft and Final Noticing for Valley Water Website and State Clearinghouse Filing
2. Notice of Completion
3. Public Hearing Displays, Handouts, Meeting Notes, presentations
4. Draft and Final Response to Public Comments Report
5. Administrative Final PEIR and MMRP, Response to Comments (Task 14.4.B.3), and technical appendices (for example, maps, GIS files, presentation materials, technical data)
6. Final PEIR and MMRP
7. Findings and Statement of Overriding Considerations, if required.
8. Notice of Determination
9. Public Hearing Displays, Presentation, Handouts, Meeting Notes
10. Administrative Record

Task 15 - Supplemental Services

Valley Water may require, and the Consultant will perform, Supplemental Services on an as-needed basis. Prior to performing such Supplemental Services, Consultant must obtain written authorization in the form of a Task Order approved by Valley Water's Treated Water Division DOO and executed by both Parties. The form of this Task Order will be as per the Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, Subsection 13, Task Orders; and, Appendix Three, of the Standard Consultant Agreement, Task Order Template.

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Task 15.1 Evaluation of SVAWPC

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated.

If determined to be required, the scope of work for the evaluation of SVAWPC will generally follow the same scope as completed for Penitencia, Rinconada, and Santa Teresa, modified as necessary to reflect potential reduced level of effort due to the age/condition of the facility.

Task 15.2 Evaluation of Ancillary Systems

The objective of this task is to evaluate ancillary systems including the Campbell Well Field (CWF) and Intertie Facility and assess future process and equipment needs for these facilities. Valley Water will coordinate with SFPUC and City of Campbell to enable Consultant to complete work in this task.

If determined to be required, the scope of work for the evaluation of the ancillary systems will generally follow a similar scope as completed for the SVAWPC, modified as necessary to reflect potential reduced level of effort due to limited scope of the ancillary systems.

15.3 Regulatory Permitting Assistance

This task is intended to produce the permit applications, environmental documents and other support material needed for project implementation. Valley Water Environmental Planner shall take the lead in negotiations with regulatory agency staff. Consultant shall provide support as noted below.

As noted on page one of this scope of work, the WTP Implementation Project will develop a comprehensive implementation plan. Thus, it is unknown at this time, following completion of the programmatic EIR, which projects under the Plan will be moved into the regulatory permitting phase at the completion of CEQA, and the specific regulatory permits that would apply to those projects. The following describes the typical process that would be undertaken for a project-specific regulatory permitting process. However, the specific work approach, and scope, would need to be refined prior to initiation of permitting activities.

15.3.1 Identify Required Permits

Upon completion of CEQA, Consultant will coordinate with the Valley Water Environmental Planner and Team to identify early implementation projects. Consultant will use the matrix of required regulatory permits for the project(s) to be implemented (Task 14.4.A.6) and an overview of work approach for each permit required.

15.3.2 Assist with Initial Regulatory Agency Consultations

Under the direction of Valley Water Environmental Planner, Consultant shall assist in planning and attending initial consultation(s) with regulatory agency personnel. Consultant shall be responsible for keeping detailed notes of meeting(s).

SCHEDULE PM SCOPE OF SERVICES

15.3.3 Prepare Draft Permit Applications

In consultation with Valley Water Environmental Planner, Consultant shall identify the necessary permits for the proposed project and prepare the necessary permit applications for the project. The application shall be provided to Valley Water for review.

15.3.4 Prepare Biological Assessment

If required, in consultation with Valley Water Environmental Planner and Biologist, Consultant shall prepare the Biological Assessment, as appropriate, for special status species that are present in the project area and could be impacted by the project. The Biological Assessment shall be reviewed by Valley Water.

15.3.5 Compile/Identify Possible Permit Terms and Conditions

In consultation with Valley Water Environmental Planner and based upon the Mitigation and Monitoring Plan, Consultant shall prepare a matrix of possible permit terms and conditions likely to result from permitting the project. Consultant shall prepare a technical memorandum on possible permit terms and conditions, including the matrix mentioned above, and submit it to Valley Water for review.

15.3.6 Prepare Final Permit Application

Based on the comments received from Valley Water, Consultant shall prepare the permit applications for the project.

15.3.7 Provide Support to Valley Water Team During Permit Negotiations

Consultant shall provide support to Valley Water Project Team during permit negotiations. This support may take the form of strategizing with Project Team members, preparing handouts and/or displays, attending meetings to answer questions and/or give short presentations. At Valley Water discretion, Consultant may be responsible for preparing meeting notes to document meeting discussions and outcomes.

Task 15.3 - Assumptions

1. Level of effort for regulatory permitting is based on not more than one round of review for deliverables.
2. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.
3. The specific permits required for each project, and work approach for each permit process will be determined prior to undertaking Tasks 15.3.3 through 15.3.7.

Task 15.3 - Deliverables

The following potential deliverables are as follows:

1. Initial Consultation Meeting Notes
2. Draft Permit Applications
3. Draft and final Biological Assessment

SCHEDULE PM SCOPE OF SERVICES

4. Technical Memorandum on Possible Permit Terms and Conditions
5. Final Permit Applications and other permit documentations as required and requested by appropriate agency
6. (Optional) Ongoing Meeting Notes (Consultant shall submit, in one package, all technical info that went into the biological assessment and permit applications. This may include, but not be limited to, GIS files, vegetation or wildlife survey results, cultural, and resource data.)

15.4 Program Management Services

Consultant may provide program management services beyond the initial implementation plan development, to help oversee the implementation of the WTP projects approved by the Valley Water Board and included in the Capital Improvement Program. Consultant will coordinate with multiple project management teams on the work approach for the program. If this option is exercised, the specific scope of services would be negotiated and executed by Valley Water and the Consultant as a task order at the completion of the implementation plan.

Program Management Work Plan

Consultant will prepare a program management work plan in accordance with the program's scope and shall include the Consultant's approach to effectively manage and administer the program including processes, procedures, techniques and methods to monitor the schedule and budget of the multiple implementation projects, communication protocols, document control and other administrative procedures.

Program Quality Assurance and Quality Control Plan

Consultant will prepare a program QA/QC plan of the procedures to monitor the performance and provision of the services and deliverables to meet Valley Water requirements, accepted industry and professional practices, and standard of care.

Program Risk Management Plan

Consultant will create and maintain a program risk management plan that will include the identification of known risks, potential impacts and probability, risk response strategies, and mitigation measures which will minimize or resolve impacts to the program.

Cost and Schedule Monitoring

Consultant will monitor and track the actual progress and completed activities against the planned activities on the baseline cost and schedule for the program including the various implementation projects. Consultant will prepare an Actual Progress and Completed Activities against Planned Activities Report on a monthly basis.

Consultant will monitor and track the budget and schedule of the implementation projects and report any early warning indicators to the Valley Water PM, while ensuring these are addressed in a timely fashion. Consultant will prepare a Budget and Schedule Report with Early Warning indicators on a monthly basis.

Progress Reports

Consultant will obtain progress reports from the various implementation projects and prepare a monthly progress report that will be a high-level summary of the month's activities with an overall analysis of the various projects' progress including issues and concerns and a look-ahead

SCHEDULE PM SCOPE OF SERVICES

schedule for the following month's activities. Consultant will develop a program-level status progress report template for Valley Water approval.

Management of Meetings

Consultant will organize and conduct the following meetings at a frequency mutually agreed upon or as directed by Valley Water. Consultant will prepare agendas and minutes for these meetings.

- Monthly progress meetings with the Consultant and Valley Water PM to review the monthly invoice and progress report.
- Progress meetings with various implementation project management teams, Valley Water staff and other participants as necessary to discuss the progress and planned work, project issues, potential changes, the review of recent activities and agenda items, exchange of new information, planning and coordination of upcoming design/construction and related activities, as well as any other areas for discussion.
- Special technical meetings to resolve issues with various implementation project management teams, designers, contractors, utilities, regulators, local agencies having jurisdiction, Valley Water's plant operations and maintenance staff, and any other participants.
- One-on-one meetings with Valley Water to provide a brief update of the program activities completed, the look-ahead activities, and the issues and actions that require Valley Water's attention, in a weekly/bi-weekly meeting/conference call with Valley Water PM.

Coordination and Communication

Consultant will assist Valley Water with the coordination and communication with external agencies and stakeholders, projects and programs by others, and program participants, including Valley Water's management and operations and maintenance staff, implementation project managers, designers and contractors, including support in drafting correspondence related to the program management activities and other related issues.

Consultant will serve as the primary point of communication for coordination between the implementation project management teams, other program management teams and other parties; receive program correspondence and prepare draft responses; and transmit Valley Water-approved responses. Consultant will maintain program-level correspondence logs, decision logs and action items logs.

Consultant will establish, implement, manage and maintain a Master Calendar of all significant events and meetings for the program's projects, and a Master Project Directory listing all program participants, their role on the program, address, phone numbers(s), email, and other pertinent information, which shall be accessible by all team members.

Consultant will provide program specific input to Valley Water's Capital Improvement Program and long-term financial forecast on an annual basis.

If requested, Consultant will prepare board agenda packages and make presentations to the Valley Water Board.

Task 15.4 - Deliverables

The following potential deliverables are as follows:

1. Program management work plan

SCHEDULE PM SCOPE OF SERVICES

2. Program QA/QC plan
3. Program risk management plan
4. Monthly actual progress and completed activities against planned activities reports
5. Monthly budget and schedule reports with early warning indicators
6. Monthly progress reports
7. Meeting agenda and minutes
8. Master calendar and master project directory
9. Board agenda packages and presentation materials

15.5 Supplemental Geotechnical Field Work

The objective of this task is to provide supplemental geotechnical support that may be required to better assess cost for upgrades. Work completed under this task would be defined from review of existing geotechnical information under Task 2 (Santa Teresa and Rinconada) and Task 8 (Penitencia).

Because geotechnical information already exists, the scope and level of effort for supplemental field work and the associated technical analyses and findings is expected to be relatively minimal.

15.6 Blue Plan-it® Development and Training

The objective of this task is to build from the results developed in Task 3, and use the Blue-Plan it predictive data analytic tool to evaluate current and future treatment scenarios, and to assess the impacts of changing a variety of inputs and resulting potential operational constraints for the treatment facilities. The effort will be completed in a stepwise fashion by first building the base unit process models for each treatment facility (including the east pipeline connection between Penitencia and Santa Teresa), calibrating the models based on existing operations, and completing analysis of potential future scenarios and/or future treatment additions/modifications. The primary focus of the analyses is to identify potential operational stresses including deteriorating finished water quality, increased operational costs, potential for treatment upsets, etc. that may manifest from source water quality changes. The model will be configured with potential future treatment processes to enable Consultant to test possible process enhancements to address water quality changes and potential regulatory changes, and will identify costs for potential recommended improvements. The model will also be configured with distribution trihalomethane (THM) data for the east pipeline to enable Consultant to test possible process enhancements to address THM potential resulting from water quality changes and potential regulatory changes.

As part of this task, training on the use and application of the Blue Plan-it® tool may also be provided.

15.7 Additional Services

Consultant may provide additional quantities of previously identified services as requested by Valley Water. Consultant may provide additional services for any quantity of tasks and deliverables beyond those stated in Tasks 1 through 14, to include but not be limited to:

1. Additional meetings and workshops;
Water Treatment Plant Implementation Project
Standard Consultant Agreement-Capital
Ver. 8/2/21

SCHEDULE PM SCOPE OF SERVICES

2. Additional time allotted for meetings;
3. Additional status/progress reports;
4. Additional phone conference calls;
5. Additional support to Valley Water in preparing Valley Water deliverables;
6. Additional pages or copies of technical memoranda, plans, reports, drawings, and specifications;
7. Additional public outreach visual materials;
8. Additional field condition assessment work;
9. Additional geotechnical assessments, studies and field work;
10. Additional studies required;
11. Additional work associated with integrating recommendations from the other implementation and master plan project efforts into the WTP recommendations; and
12. Additional work associated with environmental planning and permitting, such as NEPA

9. Attachments

The following listed Attachments are incorporated herein by this reference as though set forth in full:

Attachment One to Schedule PM - Fees and Payments
Attachment Two to Schedule PM - Schedule of Completion
Attachment Three to Schedule PM - Consultant's Key Staff and Subconsultants
Attachment Four to Schedule PM - Reference Materials
Attachment Five to Schedule PM – Valley Water's Risk Methodology and Matrix

**SCHEDULE PM
ATTACHMENT ONE
FEES AND PAYMENTS**

1. Total Authorized Funding

Total payment for Services performed, to the satisfaction of Valley Water, as described in the Schedule(s) will not exceed a total amount of **\$6,461,429** (Not-to-Exceed Fees or NTE). Under no conditions will the total compensation to the Consultant exceed this NTE payment amount without prior written approval in the form of an amendment to this Agreement executed by Valley Water's Board of Directors (Board), or Chief Executive Officer, or designee, as authorized by the Board.

2. Cost Breakdown

The NTE total compensation of this Agreement consists of the following task fee breakdown. No services will be performed, or fees paid by Valley Water to the Consultant for Supplemental Services without prior written authorization by Valley Water as stated in this Agreement.

COST BREAKDOWN

Task	Description	Not-to-Exceed Fees
1	Project Management, Stakeholder Meetings, and Project Development Workshops	\$ 1,054,802
2	Review Existing Records, Master Plans, and Reports	\$ 93,878
3	Develop Goals and Objectives with Board and Stakeholder Input	\$ 189,034
4	Review Current Asset Management Program Information	\$ 108,127
5	Develop Project Assessment Methodology	\$ 119,071
6	Evaluation of Rinconada WTP	\$ 226,104
7	Evaluation of Santa Teresa WTP	\$ 311,706
8	Evaluation of Penitencia WTP	\$ 343,564
9	Integrate Recommendations with Other Master Plans	\$ 204,905
10	Project Development, Evaluation, Selection, and Planning Study (10% Design)	\$ 1,331,787
11	Project Implementation Plan (WTP CIP)	\$ 562,654
12	WTP Implementation Project Report	\$ 140,261
13	Stakeholder Outreach Strategy	\$ 107,209
14	Environmental Planning and Permitting (PEIR)	\$ 718,327
15	Supplemental Services	\$ 950,000
Total Not-to-Exceed Fees		\$6,461,429

**SCHEDULE PM
ATTACHMENT ONE
FEES AND PAYMENTS**

3. Terms and Conditions

A. Payments for Services performed, as described in this Schedule, which applies to the specific Services, will be based on the following terms:

1. Valley Water will pay for Services provided by the Consultant according to the schedule of rates for professional, technical, and administrative personnel, as well as materials and supplies as listed below in the Hourly/Unit Rate Schedule.
2. The stated hourly rates are effective for the term of this Agreement unless otherwise revised as indicated. After 12 months from the date this Agreement is entered into by parties ("anniversary date"), and each 12 months thereafter, these hourly rates may be negotiated by the Consultant and Valley Water, provided Consultant submits written notice to Valley Water of Consultant's request to revise the hourly rates 90 calendar days prior to the anniversary date of this Agreement. Both parties will use as a benchmark for negotiations the percent change for the previous 12 months of the "Employment Cost Index (ECI), for total compensation for private industry workers, for the San Francisco-Oakland-San Jose, CA CSA Census region and metropolitan area (not seasonally adjusted)" as published by the U.S. Department of Labor, Bureau of Labor Statistics, or 3%, whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by Valley Water's Deputy Operating Officer.

B. Reimbursable Expenses

1. All reimbursable expenses not already covered in overhead may include, but are not limited to, mapping, rendering, printouts, leased equipment, mailing and delivery services, printing services, film and processing, plotting, and supplies. These other direct expenses as approved by Valley Water Project Manager will be billed on a monthly basis at actual cost linked to each Agreement Task, provided that the Task total NTE amount is not exceeded. Consultant shall provide receipts for each other direct expense item(s) with monthly invoices submitted. No markup will be applied to reimbursable expenses, either by the Consultant or by its subconsultants, subcontractors, or vendors. Consultant shall provide invoices for all such services regardless of cost.
2. Equipment purchased on behalf of Valley Water that costs \$50 or more must receive the prior written approval of Valley Water Project Manager. All equipment purchased on behalf of Valley Water and paid for by Valley Water shall become the property of Valley Water and be delivered to Valley Water prior to expiration of this Agreement.
3. Travel expenses are reimbursed at actual costs. Travel and overnight accommodations, including per diem, required for performance of this Agreement will be paid at reasonable cost not to exceed the U.S. General Services Agency Per Diem Rates for Sunnyvale/Palo Alto/San Jose, California area, provided prior approval has been obtained from Valley Water Project Manager. For air travel, Valley Water will pay the cost of a coach class or equivalent ticket. Where air travel is required, Valley Water will pay the total cost of taxi, rideshare, public transportation, or a rental car, which may include insurance, gas, car fee, and taxes and will be paid at the actual costs incurred. Vehicle rental is limited to a compact or economy model, unless prior approval has been obtained from Valley Water Project Manager for a different type of vehicle.

**SCHEDULE PM
ATTACHMENT ONE
FEES AND PAYMENTS**

- C. A markup of 5% will apply to the Consultant to manage Subconsultants, subcontractors and vendors, including lab services.

D. Prevailing Wage Requirements

1. The Scope of Services described in some of the tasks such as Task 8.7 – PWTP GEOTECHNICAL ASSESSMENT is considered by Valley Water to be “Public Works” requiring the payment of prevailing wages. See the Standard Consultant Agreement Section Four, Fees and Payments, subsection 3., Prevailing Wages.
2. In accordance with prevailing wage laws, the Director of the California Department of Industrial Relations (Director) has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the Project. These rates are set forth in the latest determination obtained from the Director, which is on file in Valley Water’s Office of the Clerk of the Board of Directors and incorporated herein by reference the same as though set forth in full. The rates are also available on the State of California Department of Industrial Relations website at <http://www.dir.ca.gov>.

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**SCHEDULE PM
ATTACHMENT ONE
FEES AND PAYMENTS**

HOURLY/UNIT RATE TABLE

CLASSIFICATION	HOURLY/ UNIT RATE
Consultant: Carollo Engineers, Inc.	
Project Manager	\$309.00
Sr. Professional	\$309.00
Lead Project Professional	\$301.79
Lead Project Professional – Electrical Engineer	\$301.79
Lead Project Professional - Advisor/QC	\$301.79
Project Professional	\$281.19
Project Professional – Structural Engineer	\$281.19
Project Professional – Mechanical Engineer	\$281.19
Professional	\$244.00
Assistant Professional	\$193.64
Assistant Professional – Electrical Engineer	\$193.64
Assistant Professional – Structural Engineer	\$193.64
Assistant Professional – Mechanical Engineer	\$193.64
Senior Technician	\$203.94
Technician	\$146.26
Document Processing/Clerical	\$128.75
Subconsultant(s):	
Cal Engineering & Geology	
Principal	\$280.75
Sr. Professional	\$215.05
Project Professional II	\$171.29
Project Professional I	\$139.88
Project Professional	\$121.63
Staff Professional	\$96.29
Sr. GIS/CADD Specialist	\$96.29

**SCHEDULE PM
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	HOURLY/ UNIT RATE
Subconsultant(s), Continued:	
ESA	
CEQA Lead	\$262.95
CEQA Deputy Lead	\$160.04
CEQA Advisory Support	\$246.38
Aesthetics	\$166.79
Geology/Hydrology	\$151.54
Alternatives Analysis	\$190.94
Architectural History	\$211.29
Archaeology	\$175.57
Air Quality/GHG/Energy/Noise	\$183.59
Traffic/Transportation	\$195.16
Jr. Biological Resources	\$110.40
Katz and Associates	
Executive Vice President	\$263.77
Vice President	\$217.58
Director	\$170.93
Account Executive I	\$93.22
Graphic Design	\$108.09
Liquisti	
Principal/Advisor/QC	\$321.10
V&A	
Principal-In-Charge	\$288.68
Sr. Project Manager	\$235.52
Sr. Project Engineer	\$207.08
Project Engineer	\$143.01
Associate Engineer	\$148.05
Assistant Engineer	\$121.14
Project Admin/Clerical	\$111.97

**SCHEDULE PM
ATTACHMENT TWO
SCHEDULE OF COMPLETION**

1. This Agreement commences on the Effective Date, subject to accomplishment of all conditions to formation of an agreement listed in the Agreement at Section Twelve, Miscellaneous Provisions, subsection 2. Formation of Agreement.
2. This Agreement expires three (3) years, with the option of two-one (1) year term extensions, after the Effective Date, unless, prior to its expiration, its term is modified by a written amendment hereto, and signed by both Parties.
3. Valley Water and Consultant may agree to modify the schedule specified for Consultant's performance as an administrative modification to the Agreement and will confirm such modification in writing.

PROJECT SCHEDULE

Task	Description	Duration From Notice to Proceed (months)
1	Project Management, Stakeholder Meetings, and Project Development Workshops	Duration of Agreement
2	Review Existing Records, Master Plans, and Reports	2 months
3	Develop Goals and Objectives with Board and Stakeholder Input	5.5 months
4	Review Current Asset Management Program Information	5.5 months
5	Develop Project Assessment Methodology	6 months
6	Evaluation of Rinconada WTP	17.5 months
7	Evaluation of Santa Teresa WTP	18.5 months
8	Evaluation of Penitencia WTP	18.5 months
9	Integrate Recommendations with Other Master Plans	26 months
10	Project Development, Evaluation, Selection, and Planning Study (10% Design)	28 months
11	Project Implementation Plan (WTP CIP)	32 months
12	WTP Implementation Project Report	36 months
13	Stakeholder Outreach Strategy	36 months
14	Environmental Planning and Permitting (PEIR)	36 months
15	Supplemental Services	Duration of Agreement

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**SCHEDULE PM
ATTACHMENT THREE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

1. Consultant's Key Staff assigned to the Project are as follows:

Team Member	Classification	Project Role	Contact Information (Address, Phone and Email)
Chris Cleveland	Senior Professional	Project Manager	2880 Gateway Oaks Dr Suite 300 Sacramento, CA 95833 916-565-4888 ccleveland@carollo.com
Dan Baker	Lead Project Professional	IMS	5355 Mira Sorrento Place, Suite 270 San Diego, California 92121 858-505-1020 dbaker@carollo.com
Sanjay Reddy	Senior Professional	Basis of Planning	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 sreddy@carollo.com
Thomas Gillogly	Senior Professional	Process & Ops Support	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 tgillogly@carollo.com
Felicia James	Professional	Facilities Condition & Asset Mgmt	2880 Gateway Oaks Dr Suite 300 Sacramento, CA 95833 916-565-4888 fjames@carollo.com
Scott Weddle	Project Professional	Project Development	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 sweddle@carollo.com
Marianne Springer	Project Professional	Project Development	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 mspringer@carollo.com
Ken Wilkins	Lead Project Professional	Advisor/QC	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 kwilkins@carollo.com

**SCHEDULE PM
ATTACHMENT THREE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

2. The following Subconsultants are authorized to perform Services on the Project:

Firm	Project Role	Contact Information (Address, Phone and Email)
Cal Engineering & Geology	Geologic Field Condition Assessment	Dan Peluso 6455 Almaden Expressway Suite #100 San Jose, CA 925-433-5018 dpeluso@caleng.com
V&A	Infrastructure Assessment	Deborah Kaye 1000 Broadway, Suite 320 Oakland, CA 619-436-5789 dkaye@vaengineering.com
ESA	Environmental Impact Support	Alisa Moore 787 The Alameda, Suite 250 San Jose, CA 415-962-8440 AMoore@esassoc.com
Katz & Associates	Outreach	Karen P. Snyder 1460 Mission Street San Francisco, CA 615-604-2568 ksnyder@katzandassociates.com
Liquisti LLC	Policy & Operational Goals	Phillippe Daniel 6100 Harwood Ave Oakland, CA 925-260-3239 phillippe@liquisti.com

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**SCHEDULE PM
ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref No.	Description
1	Valley Water Non-Disclosure Agreement and Personal Non-Disclosure Agreement
2	Valley Water Board Policies
3	Water Supply Master Plan (WSMP) and Monitoring and Assessment Program (MAP) Annual Report and Demands Update
4	Protection and Augmentation of Water Supplies (PAWS) Report
5	Urban Water Management Plan and Water Shortage Contingency Plan
6	Countywide Water Reuse Master Plan
7	South Bay Water Recycling Strategic and Master Plan
8	South County Recycled Water Master Plan
9	Groundwater Management Plan
10	Climate Change Action Plan
11	FY22-26 Capital Improvement Program (CIP)
12	FY22-26 Water Utility Enterprise Operations and Maintenance Plan
13	Asset Management Plans
14	Maximo Asset Registry (excel download)
15	Asset Management Planning Tool Database: Asset Rehab, Replacement and Cost Forecasting (excel download)
16	Maintenance Records for Equipment
17	2005 Infrastructure Reliability Project Report
18	2016 Infrastructure Reliability Project Report and Retailer Level of Service Meeting Notes
19	American Water Infrastructure Act (AWIA) Assessment Tech Memo
20	Treatment Plant Project Drawings, Specifications and Reports
21	Treatment Plant Geotechnical Reports

**SCHEDULE PM
ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref No.	Description
22	Operations Plans
23	Water Quality Management Plan
24	Water Quality Goals
25	Water Quality Parameters
26	Water Quality Reports
27	Taste and Odor Action Plan
28	Cyanotoxin Response Plan
29	Local Reservoir Sanitary Surveys
30	State Water Sanitary Surveys
31	San Luis Low Point Analysis Memo
32	Water Quality Data (as requested)
33	Operations Data (as requested)
34	Risk Management and Hazardous Materials Business Plans
35	Current Treatment Plant Projects and Other Identified Needs List

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**SCHEDULE PM
ATTACHMENT FIVE
VALLEY WATER'S RISK ASSESSMENT METHODOLOGY AND MATRIX**

Risk Methodology

Overview

The Valley Water measures risk as Business Risk Exposure (BRE). BRE is calculated as follows:

$$\text{BRE} = (\text{Probability of Failure}) \times (\text{Consequence of Failure}) \times (\text{Redundancy})$$

Each of these components is discussed below in more detail.

Probability of Failure (PoF)

PoF is equal to an asset's condition score. The condition score indicates how close the asset is to failure. Scores range from 1 to 5, as shown below:

- 1 – Excellent (Normal Maintenance Required)
- 2 – Minor Defects Only
- 3 – Maintenance Required
- 4 – Major Renewal Required
- 5 – Unserviceable or Failed

Valley Water performs field condition assessments and assigns an overall condition score, which becomes the asset's PoF. An example of asset condition assessment criteria for a mixer is shown in Table 1. The assessor evaluates the asset for each inspection criteria and assigns the appropriate rating. The assessor then assigns an overall condition score, typically equal to the worst scoring criteria. For example, if 'shaft alignment' is 'failure imminent', but all other criteria are 'excellent', the asset would receive an overall score of 5, because it requires immediate maintenance. The overall condition/PoF score is loaded into the asset databases in Maximo and AMPT and is monitored for changes over time.

Table 1: Example Condition Assessment Criteria

Inspection Criteria	Rating				
	1	2	3	4	5
Corrosion	Negligible	Minor	Moderate	Major	Excessive
Support	Excellent		Moderate		Inadequate, Failure Imminent
Functional	Excellent Mixing at all flows	Mixing adequate under all flow conditions	Mixing adequate under most flow conditions	Mixing inadequate 50% of time	Inadequate Mixing
Shaft Alignment	Excellent	Minor Wear but no Misalignment	Moderate Wear or Misalignment	Major Wear	Failure Imminent
Belt/Chain	Excellent	Minor Wear	Moderate Wear	Major Wear	Failure Imminent

**SCHEDULE PM
ATTACHMENT FIVE
VALLEY WATER'S RISK ASSESSMENT METHODOLOGY AND MATRIX**

Consequence of Failure (CoF)

Consequence of failure measures impacts of asset failure. The Valley Water evaluates the social, environmental, and financial effects of asset failure to determine CoF. To calculate CoF, subject matter experts assign a score for six categories using a standardized matrix, shown in Table 2 on the following page. The total CoF score is the sum of the scores for each of the six categories. The minimum CoF score is zero, which would occur if an asset scored zero in each of the six categories. The maximum CoF score is 30, which would occur if an asset scored five in each of the six categories. CoF scores do not vary much over time, unless external conditions change, such as an area becoming more populated.

Redundancy

Redundancy accounts for back-up assets or extra capacity within a system. The asset management program is working to develop standards for measuring redundancy and incorporating it into the BRE score.

Total BRE Score

To recap, the Valley Water measures risk associated with an asset with a Business Risk Exposure (BRE) score.

$$\text{BRE} = (\text{Probability of Failure}) \times (\text{Consequence of Failure}) \times (\text{Redundancy})$$

Probability of Failure equals the asset's condition score, which ranges from one to five. Consequence of Failure is determined using the matrix in Table 4, and ranges from zero to thirty. Total BRE scores, therefore, can range from 0 to 150.

The total BRE score is used to determine when an asset requires action or a changed maintenance strategy. Valley Water generally follows the BRE score thresholds below. These thresholds identify when an adjustment in an asset's management strategy is needed. The thresholds may be adjusted over time as risk scores are refined. The thresholds were developed by comparing BRE scores to actual maintenance practices. The critical risk BRE score threshold was set at the point where the Valley Water has typically initiated an asset replacement or rehabilitation project. The moderate risk threshold was set at the point where the Valley Water has typically initiated more frequent condition monitoring of an asset.

BRE Score	Risk Category	Action
61 – 150	Critical	Develop and implement a risk mitigation strategy such as accelerated asset replacement or rehabilitation
51 – 60	Moderate	Implement more frequent condition monitoring
0 – 50	Low	Continue routine maintenance program as planned

In addition, the total BRE score is useful in determining relative risk among assets. Rehabilitation work on an asset with a higher BRE score should be prioritized over work on an asset with a lower BRE score.

**SCHEDULE PM
ATTACHMENT FIVE
VALLEY WATER'S RISK ASSESSMENT METHODOLOGY AND MATRIX
CONSEQUENCE OF FAILURE MATRIX**

	Parameter	0	1	2	3	4	5
Social	Service Delivery	No reduction in service	Reduction of service to a localized area and alternatives exist	a) Reduction of service to a localized area and no alternatives exist b) Reduction of service to entire region and alternatives exist	a) Interruption of service to localized area and alternatives exist b) Reduction of service to entire region and no alternatives exist	a) Interruption of service to localized area and no alternatives exist b) Interruption of service to entire region and alternatives exist	Interruption of service to entire region and no alternatives exist
	Community Impacts	No injury or impact to public well-being; no damage to community property; and no reduction in essential community service (i.e., traffic, hospitals)	a) First-aid injury b) Impacts public wellbeing for one week or less c) Minor repairable damage to 25 or fewer structures d) Reduction of service to a localized area and alternatives exist	a) Recordable injury b) Impacts public wellbeing for one week to one month c) Minor repairable damage to more than 25 structures d) Reduction of service to a localized area and no alternatives exist e) Reduction of service to entire region and alternatives exist	a) Short-term disability b) Impacts public wellbeing for more than one month c) Repairable damage to one or more structures d) Interruption of service to localized area and alternatives exist e) Reduction of service to entire region and no alternatives exist	a) Permanent disability b) Complete loss of 10 or fewer structures c) Interruption of service to localized area and no alternatives exist d) Interruption of service to entire region and alternatives exist	a) Death b) Complete loss of more than 10 structures c) Interruption of service to entire region and no alternatives exist
	Workplace Safety	No injury or impact to well-being	a) First-aid injury b) Impacts wellbeing for one week or less	a) Recordable injury b) Impacts wellbeing for one week to one month	a) Short-term disability b) Impacts wellbeing for more than one month	Permanent disability	Death
Environmental	Environmental Impacts	No damage	Damage to localized area and recovery in less than 1 year	a) Damage to localized area and recovery in 1-2 years b) Damage to widespread area and recovery in less than 1 year	a) Damage to localized area and recovery in 3-5 years b) Damage to widespread area and recovery in 1-2 years	Damage to widespread area and recovery in 3-5 years	Permanent localized or widespread damage
Economic	Financial Impacts	No loss	Loss of less than \$25,000	Loss of \$25,000 - \$250,000	Loss of \$250,000 to \$2.5 Million	Loss of \$2.5 to \$25 Million	Loss of more than \$25 Million
	Impact to Reputation	No damage	Public complaints to Valley Water staff	Incidental media coverage and attention of Board members	Incidental media coverage and fewer than 20 public complaints to Board members	Widespread media coverage and 20 or more public complaints to Board members	Widespread media coverage, 20 or more public complaints to Board members, plus potential for criminal charges



Santa Clara Valley Water District

File No.: 21-1030

Agenda Date: 9/28/2021

Item No.: 7.1.

BOARD AGENDA MEMORANDUM

SUBJECT:

Approve, and Authorize Staff to Finalize and Submit the Fiscal Year 2020-2021 (FY21) Safe, Clean Water and Natural Flood Protection Program Annual Report - Year 8 (Final 2012 Program Report), for Independent Monitoring Committee (IMC) Review.

RECOMMENDATION:

- A. Approve the FY21 Safe, Clean Water Program Annual Report - Year 8 with unaudited financials; and
- B. Authorize staff to finalize the FY21 Safe, Clean Water Program Annual Report - Year 8 (with audited financials) and submit the final report to the IMC for its review.

SUMMARY:

Fiscal Year 2020-21 (FY21) marks the eighth and final year of the 2012 voter-approved Safe, Clean Water and Natural Flood Protection Program (2012 Program). On November 3, 2020, Santa Clara County voters overwhelmingly approved the renewed Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) that replaced the 2012 Program in its entirety on July 1, 2021.

To ensure transparency and accountability, Valley Water publishes an annual report providing a progress update for each project under the 2012 Program priorities listed below:

- 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

Each of these priorities has specific operations and capital projects, which have key performance indicators (KPIs) meant to keep them on track to meet the overall program priorities. Additionally, the program requires Valley Water to prepare an annual report providing a progress update and fiscal year accomplishments for each project. To ensure transparency and accountability, the program requires that the annual report be reviewed by an independent committee of volunteers, known as the Independent Monitoring Committee (IMC), which the Board appointed.

The report provides the status of each project's progress towards accomplishing its KPIs and targets

established in the 5-Year Implementation Plan for Fiscal Years 2019-2023. The project status is described by one of the five categories below:

On Target: Status indicates the project is on track to meet targets.

Adjusted: Status indicates the potential that targets will not be met and implementation required a schedule adjustment (future year status- will be based upon the adjusted schedule).

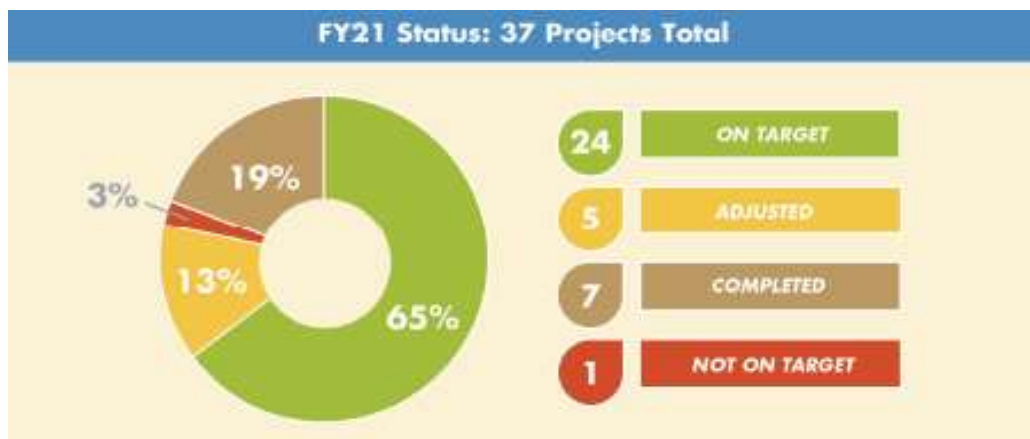
Not on Target: Status indicates that the target has not been or will not be met

Modified: Status indicates the Board formally modified the project following a public hearing (future year status' will be based upon the modified project targets).

Completed: Status indicates that the project has been completed and the KPIs have been met.

Overall FY21 Program Performance

There were 37 projects under the 2012 Program. As of June 30, 2020, approximately 65% (24 projects) were On Target; 13% (5 projects) required schedule Adjustments; 3% (1 project) was Not on Target, and 19% (7 projects) were Completed.



In FY21, Project B4: Good Neighbor Program: Encampment Cleanup was Not on Target as encampment cleanups were severely curtailed because of the many restrictions concerning unhoused encampment cleanups in response to the COVID-19 pandemic. In keeping with the Center for Disease Control guidance, Valley Water suspended encampment abatement until mid-March 2021, except for instances of particular encampments obstructing Valley Water's planned work or negatively impacting its ability to meet regulatory or other legal obligations. However, Valley Water continued to perform cleanups adjacent to homeless encampments to reduce the amount of trash and debris in local waterways.

Table 1: Program Status as of June 30, 2021

Project	Project Description	Status
Priority A: Ensure a Safe, Reliable Water Supply		
A1	Main and Madrone Avenue Pipelines Restoration	COMPLETED
A2	Safe, Clean Water Partnerships and Grants	ON TARGET
A3	Pipeline Reliability Project	ADJUSTED
Priority B: Reduce Toxins, Hazards, and Contaminants in our Waterways		
B1	Impaired Water Bodies Improvement	ON TARGET
B2	Interagency Urban Runoff Program	ON TARGET
B3	Pollution Prevention Partnerships and Grants	ON TARGET
B4	Good Neighbor Program: Encampment Cleanup	NOT ON TARGET
B5	Hazardous Materials Management and Response	ON TARGET
B6	Good Neighbor Program: Remove Graffiti and Litter	ON TARGET
B7	Support Volunteer Cleanup Efforts and Education	ON TARGET
Priority C: Protect our Water Supply from Earthquakes and Natural Disasters		
C1	Anderson Dam Seismic Retrofit	ON TARGET
C2	Emergency Response Upgrades	ON TARGET
Priority D: Restore Wildlife Habitat and Provide Open Space		
D1	Management of Revegetation Projects	ON TARGET
D2	Revitalize Stream, Upland and Wetland Habitat	COMPLETED
D3	Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails	ON TARGET
D4	Fish Habitat and Passage Improvement	ADJUSTED
D5	Ecological Data Collection and Analysis	ON TARGET
D6	Creek Restoration and Stabilization	ADJUSTED
D7	Partnerships for the Conservation of Habitat Lands	COMPLETED
D8	South Bay Salt Ponds Restoration Partnership	ON TARGET
Priority E: Provide Flood Protection to Homes, Businesses, Schools, and Highways		
E1.1	Vegetation Control for Capacity	ON TARGET
E1.2	Sediment Removal for Capacity	ON TARGET
E1.3	Maintenance of Newly Improved Creeks	ON TARGET
E1.4	Vegetation Management for Access	ON TARGET
E2	Emergency Response Planning	ON TARGET
E3	Flood Risk Reduction Studies	ON TARGET
E4	Upper Penitencia Creek Flood Protection	ON TARGET
E5	San Francisquito Creek Flood Protection	ON TARGET
E6	Upper Llagas Creek Flood Protection	ON TARGET
E7	San Francisco Bay Shoreline Protection	ON TARGET
E8	Upper Guadalupe River Flood Protection	ADJUSTED
Other Flood Protection Projects and Clean, Safe Creeks Grants Projects		
	Permanente Creek Flood Protection	COMPLETED
	Sunnyvale East and Sunnyvale West Channels Flood Protection	ADJUSTED
	Berryessa Creek Flood Protection	COMPLETED
	Coyote Creek Flood Protection	ON TARGET
	Calabazas Creek Flood Protection	COMPLETED
	Clean Safe Creeks Grants Projects	COMPLETED

For Fiscal Year 2020-21 (FY21), the adjusted budget for the 2012 Program totaled \$148 million. Actual funds expended and encumbered as of June 30, 2021, were \$86 million, approximately 58% of the 2012 Safe, Clean Water Program's adjusted budget. Underspending was primarily due to delays in capital projects, especially the flood protection projects, because of various reasons, such

as lack of federal funding, design changes and coordination with property owners to obtain easements. Among the capital projects underspent were: Upper Penitencia Creek (E4), Upper Guadalupe River (E8); Sunnyvale East and West Channels (Clean, Safe, Creeks Plan or CSC); and Hale Creek Enhancement Pilot Project (D6). Berryessa Creek Flood Protection Project (CSC), which completed construction in FY18, was underspent because the USACE had yet to complete the final closeout of Valley Water's share of design and construction costs. Additionally, underspending was also due to the impacts of the COVID-19 pandemic on operations projects such as B1: Impaired Water Bodies Improvement; B3: Pollution Prevention Partnership and Grants; and B4: Good Neighbor Program: Encampment Cleanup.

Since this is the final annual report for the 2012 Program that ended on June 30, 2021, the 15-Year Adjusted Plan for capital projects is based on the FY2021-25 Five-Year Capital Improvement Program (CIP) and its FY21 implementation. It does not reflect the funding allocations developed as part of the FY2022-26 Five-Year CIP, which marked the start of the renewed Safe, Clean Water that replaced the 2012 Program.

To address recommendations made by the IMC, Valley Water utilizes a rating system for capital projects that include confidence levels for schedule, funding, permits and jurisdictional complexity (the level to which a project's deliverables can be impacted by other entities or jurisdictions). By applying a confidence level to each of these topics, the IMC and community will be able to identify the areas of concern for each project that could impact the probability for the project to remain On Target. The confidence levels are addressed under the Opportunities and Challenges section for each of the capital projects. Appendix D can be referenced to delve into the confidence levels for each capital project, as well as demonstrate the jurisdictional complexity related to funding sources, regulatory permitting and coordination between cities, counties and other agencies. Listed below are the three (3) confidence levels and their definitions:

High - Applies to projects that have achieved the following: received full funding, received regulatory permits, met schedule milestones (and will continue to move forward on schedule) and, if applicable, jurisdictional complexity issues have been resolved.

Moderate - Applies to projects that are in the process of the following: receiving funding from other sources, receiving permits, recommending the Board approve a schedule adjustment and, if applicable, resolving jurisdictional complexity issues.

Low - Applies to projects that have a high probability of experiencing or already have been denied funding, denied permits, delayed in schedule and, if applicable, jurisdictional complexity issues that are impacting completion of the project.

Following the Year-7 annual report review, the IMC made recommendations to improve the report, which were presented to the Board. These improvements have been incorporated into the Year-8 annual report. One such improvement is a new financial summary section highlighting what is being shared with the community in the financial appendices that follow. Additionally, Appendix A-1.1: Annual Financial Summary table and project-specific Financial Summary tables now include separate columns showing "Budget Adjustment" and "Carryforward." Other changes include an updated report format with all completed projects tabbed at the back of the report under the "Completed Projects"

section; and pie charts showing the funding breakdown for projects with more than one Valley Water funding source. Furthermore, the Glossary section now includes the definition of financial terms, such as “Capital Projects”, “Operations Projects”, “Carryforward” and “Budget Adjustment”, etc.

Key Accomplishments

Water Supply

Anderson Dam Seismic Retrofit: In June 2021, Valley Water began the construction phase of the Anderson Dam Tunnel Project (ADTP), which is part of the larger Anderson Dam Seismic Retrofit Project (ADSRP) to strengthen the existing dam and spillway so it can safely withstand a large earthquake. The tunnel project is scheduled to be completed in December 2023. Construction of the remaining ADSRP elements, including the high-level outlet works, removing and reconstructing the spillway, and the dam embankment, will commence subsequently, will take seven (7) years and is dependent on the permit requirements and the field conditions. Furthermore, approximately 40% of the Coyote Creek Flood Protection Project (CCFPP) has been expedited and is being funded by the Water Utility Enterprise (Fund 61) as it is necessary to be constructed by the end of 2023 to prevent flooding within the urbanized areas of San José as a result of water releases from the new tunnel.

Pipeline Reliability: Valley Water completed designs for three (3) line valves and 60% design for the fourth line valve. Once completed, this project will improve water supply reliability by improving the infrastructure delivering safe, clean water.

Flood Protection

Permanente Creek Flood Protection: In April 2021, Valley Water completed the project with the completion of two stormwater capture basins in Rancho San Antonio County Park and Open Space Preserve, thus providing flood protection to homes and businesses along a 10-mile stretch of Permanente Creek in Los Altos and Mountain View. The detention basins will capture and gradually release stormwater during a significant storm. As part of the overall project, in 2020, Valley Water completed new baseball fields at McKelvey Park that double as a place to contain floodwaters when Permanente Creek overflows. In 2018, sections of Permanente and Hale creeks were also widened to improve the creeks’ capacity to carry stormwater safely.

Upper Llagas Creek Flood Protection: In April 2021, Valley Water awarded an approximately \$44 million construction contract for Phase 2A, including construction of the underground high-flow tunnel and twin reinforced concrete box culverts. During the year, Valley Water also completed the construction of the on-site compensatory mitigation, Lake Silveira wetlands. The creation of the wetland habitat is part of the Phase 1 construction project that began in FY20.

Sediment Removal and Vegetation Control: Valley Water completed 12 sediment removal

projects, removing 55,878 cubic yards of sediment to reduce flood risks by ensuring flood protection projects continue to provide the protection they were designed to give. The 2012 Program funds 14% of this work. Valley Water also completed approximately 1,152 acres of in-stream vegetation management to reduce flood risk along 135 miles of streams throughout the county.

Stewardship

Almaden Lake Improvement Project: In May 2021, the Valley Water Board selected the Almaden Lake Project to be constructed under Fish Habitat and Passage Improvement (Project D4) and deliver KPI #2 to “Construct 1 creek/lake separation project in partnership with local agencies.” The Board also certified the final Environmental Impact Report for the Almaden Lake Improvement Project that will separate Alamos Creek from Almaden Lake. This will improve fish passage for native fish to the upper Guadalupe Watershed and address the lake’s mercury-related water quality issues.

Revitalize Stream, Upland and Wetland Habitat: Completed KPI #1 of the project by revitalizing 7.7 acres through the removal of invasive and non-native vegetation stands in FY21. Valley Water, along with its partners, removed a total of approximately 87 acres of invasive and non-native vegetation stands from FY14 to FY21 and delivered on KPI #1 to “Revitalize at least 21 acres, guided by the 5 Stream Corridor Priority Plans, through native plant revegetation and removal of invasive exotic species.” The remaining two project KPIs - KPI #2 to “Provide funding for revitalization of at least 7 of 21 acres through community partnerships” and KPI #3 to “Develop at least 2 plant palettes for use on revegetation projects to support birds and other wildlife”- were completed in FY19 and FY15, respectively.

Trash Removal: Of the seven (7) projects in Priority B, five (5) include trash removal components to reduce and remove contaminants in our local streams and bay. This work is accomplished not only by Valley Water but with the help of volunteers and grantees alike. In FY21, 347 tons of trash were removed from our waterways.

Safe, Clean Water Stewardship Grants: Through Priorities A, B and D, Valley Water awarded \$489,042 in grants and partnerships in FY21. These dollars were for local grantees for projects addressing issues such as new water conservation activities, pollution prevention, watershed stewardship, cleanup, education and outreach activities, and restoring wildlife habitat.

Next Steps

Once approved by the Board and the FY21 financial reports are audited, all tables and appendices will be updated with the audited financials and corresponding accomplishments to finalize the report. Dependent on the final auditor opinion, the final audited report is expected to be available in late December 2021 or early January 2022 and will be sent to the Board and the IMC. It will also be made available to the public on Valley Water’s website at

www.valleywater.org/safe-clean-water-and-natural-flood-protection-program/safe-clean-water-

[program-archive <http://www.valleywater.org/safe-clean-water-and-natural-flood-protection-program/safe-clean-water-program-archive>](http://www.valleywater.org/safe-clean-water-and-natural-flood-protection-program/safe-clean-water-program-archive).

Meanwhile, the IMC is scheduled to receive the preliminary report on December 1, 2021, after which time the committee will reconvene in the second week of December to discuss and establish the review process and schedule for the FY21 annual report. During that meeting, the committee will also receive presentations on the following subjects:

- Water Conservation Programs and the Savings Model used to calculate cost-effectiveness
- Management of the blending of Clean, Safe Creeks, Safe, Clean Water and Measure S, including capital projects and changes to the grant program
- Anderson Dam and Pacheco Dam progress report, including permitting and funding challenges
- Grants Management Audit

FINANCIAL IMPACT:

The annual report 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: FY21 Safe, Clean Water Annual Report
Attachment 2: PowerPoint

UNCLASSIFIED MANAGER:

Melanie Richardson, 408-630-2035

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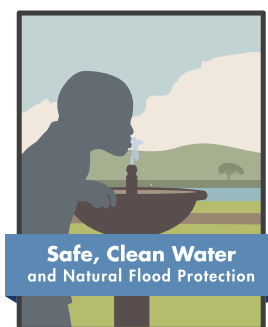
Valley Water

This is the final report for the 2012 Safe, Clean Water and Natural Flood Protection Program.

FY 2020-21 | YEAR 8

Safe, Clean Water and Natural Flood Protection

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Safe, Clean Water and Natural Flood Protection

Fiscal Year 2020–2021 | Year 8

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ASSISTANT CHIEF EXECUTIVE OFFICER

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Jessica Collins
BUSINESS PLANNING AND ANALYSIS UNIT MANAGER

September 28, 2021



Valley Water

Safe, Clean Water and Natural Flood Protection Fiscal Year 2020–21 Annual Report

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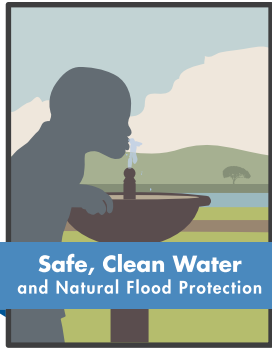
Safe, Clean Water and Natural Flood Protection Fiscal Year 2020–21 Annual Report

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MESSAGE FROM THE CHIEF EXECUTIVE OFFICER

September 2021

Fiscal Year 2020-21 (FY21) marks the eighth and final year of the 2012 voter-approved Safe, Clean Water and Natural Flood Protection Program (2012 Program). On November 3, 2020, Santa Clara County voters overwhelmingly approved the renewed Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) that replaced the 2012 Program in its entirety on July 1, 2021.

The renewed Safe, Clean Water Program addresses new and growing challenges and reflects the community's current needs and priorities. Climate change means we will see more frequent and severe weather, including flooding and droughts. Currently, Santa Clara County is in an extreme drought. The renewed program includes a new project providing funding for conservation programs, including rebates, that will help protect our water supply.

While almost all the active projects from the 2012 Program have been carried into the renewed Safe, Clean Water Program, some of the project key performance indicators (KPIs) and schedules were realigned. For details on the renewed Safe, Clean Water Program and its project KPIs and schedules, visit <https://www.valleywater.org/safe-clean-water-and-natural-flood-protection-program>.

Each year, Valley Water prepares a report providing a progress update for each of the projects under the program. This report (Year-8 annual report) presents a status update on the implementation of projects during FY21 under the following 2012 Program priorities:

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

To date, Valley Water has completed seven (7) projects and multiple KPIs for various projects creating the foundation for many other projects to be completed in the coming years. Highlights of FY21 accomplishments consistent with Valley Water's core mission areas include:

Water Supply

- **Anderson Dam Seismic Retrofit:** In June 2021, Valley Water began the construction phase of the Anderson Dam Tunnel Project (ADTP), which is part of the larger Anderson Dam Seismic Retrofit Project (ADSRP) to strengthen the existing dam and spillway so it can safely withstand a large earthquake. The tunnel project

is scheduled to be completed in December 2023. Construction of the remaining ADSRP elements, including the high-level outlet works, removing and reconstructing the spillway, and the dam embankment, will commence subsequently, will take seven (7) years and is dependent on the permit requirements and the field conditions. Furthermore, approximately 40% of the Coyote Creek Flood Protection Project (CCFPP) has been expedited and is being funded by the Water Utility Enterprise (Fund 61) as it is necessary to be constructed by the end of 2023 to prevent flooding within the urbanized areas of San José as a result of water releases from the new tunnel.

- **Pipeline Reliability:** Valley Water completed designs for three (3) line valves and 60% design for the fourth line valve. Once completed, this project will improve water supply reliability by improving the infrastructure delivering safe, clean water.

Flood Protection

- **Permanente Creek Flood Protection:** In April 2021, Valley Water completed the project with the completion of two stormwater capture basins in Rancho San Antonio County Park and Open Space Preserve, thus providing flood protection to homes and businesses along a 10-mile stretch of Permanente Creek in Los Altos and Mountain View. The detention basins will capture and gradually release stormwater during a significant storm. As part of the overall project, in 2020, Valley Water completed new baseball fields at McKelvey Park that double as a place to contain floodwaters when Permanente Creek overflows. In 2018, sections of Permanente and Hale creeks were also widened to improve the creeks' capacity to carry stormwater safely.
- **Upper Llagas Creek Flood Protection:** In April 2021, Valley Water awarded an approximately \$44 million construction contract for Phase 2A, including construction of the underground high-flow tunnel and twin reinforced concrete box culverts. During the year, Valley Water also completed the construction of the on-site compensatory mitigation, Lake Silveira wetlands. The creation of the wetland habitat is part of the Phase 1 construction project that began in FY20.
- **Sediment Removal and Vegetation Control:** Valley Water completed 12 sediment removal projects, removing 55,878 cubic yards of sediment to reduce flood risks by ensuring flood protection projects continue to provide the protection they were designed to give. The Safe, Clean Water Program funds 14% of this work. Valley Water also completed approximately 1,153 acres of in-stream vegetation management to reduce flood risk along 135 miles of streams throughout the county.

Stewardship

- **Almaden Lake Improvement Project:** In May 2021, the Valley Water Board selected the Almaden Lake Project to be constructed under Fish Habitat and Passage Improvement (Project D4) and deliver KPI #2 to "Construct 1 creek/lake separation project in partnership with local agencies." The Board also certified the final Environmental Impact Report for the Almaden Lake Improvement Project that will separate Alamos Creek from Almaden Lake. This will improve fish passage for native fish to the upper Guadalupe Watershed and address the lake's mercury-related water quality issues.
- **Revitalize Stream, Upland and Wetland Habitat:** Completed KPI #1 of the project by revitalizing 7.7 acres through the removal of invasive and non-native vegetation stands in FY21. Valley Water, along with its partners, removed a total of approximately 87 acres of invasive and non-native vegetation stands from FY14 to FY21 and delivered on KPI #1 to "Revitalize at least 21 acres, guided by the 5 Stream Corridor Priority Plans, through native plant revegetation and removal of invasive exotic species." The remaining

two project KPIs – KPI #2 to “Provide funding for revitalization of at least 7 of 21 acres through community partnerships” and KPI #3 to “Develop at least 2 plant palettes for use on revegetation projects to support birds and other wildlife”—were completed in FY19 and FY15, respectively.

- **Trash Removal:** Of the seven (7) projects in Priority B, five (5) include trash removal components to reduce and remove contaminants in our local streams and bay. This work is accomplished not only by Valley Water but with the help of volunteers and grantees alike. In FY21, 347 tons of trash were removed from our waterways.
- **Safe, Clean Water Stewardship Grants:** Through Priorities A, B and D, Valley Water awarded \$489,042 in grants and partnerships in FY21. These dollars were for local grantees for projects addressing issues such as new water conservation activities, pollution prevention, watershed stewardship, cleanup, education and outreach activities, and restoring wildlife habitat.

To ensure transparency and accountability, the Board established an Independent Monitoring Committee (IMC) to track the program’s progress and ensure the outcomes are achieved cost-efficiently. Each year, the Board authorizes the finalization of the prior fiscal year’s annual report and submittal to the IMC for its review.

Following the Year-7 annual report review, the IMC made recommendations to improve the report, which were presented to the Board. These improvements have been incorporated into the Year-8 annual report. One such improvement is a new financial summary section highlighting what is being shared with the community in the financial appendices that follow. Other changes include an updated report format with all completed projects tabbed at the back of the report under the “Completed Projects” section; revised column headers in financial appendices to communicate more clearly; and infographics reflecting the funding breakdown for projects with more than one Valley Water funding source. Valley Water appreciates each IMC member for volunteering and looks forward to the committee’s review of the Year-8 annual report.

The accomplishments presented in this report would not have been achieved without Valley Water’s dedicated employees, each of whom is committed to the success of the Safe, Clean Water Program.

The FY21 annual report and independent audit are available to the public at <https://www.valleywater.org/safe-clean-water-and-natural-flood-protection-program/safe-clean-water-program-archive> under the section “2012 Safe, Clean Water & Natural Flood Protection Program: Reports and Documents.”

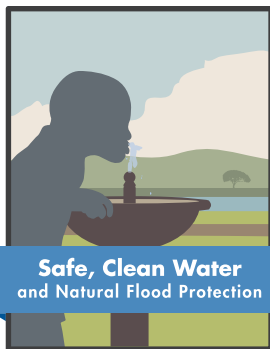
We welcome your inquiries and insightful comments on the FY21 annual report.

Sincerely,



Rick L. Callender, Esq.
Chief Executive Officer
Valley Water

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FY 2020–2021 Annual Report
**Safe, Clean Water
 and Natural Flood Protection**



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List of Abbreviations

Abbreviation	Description
AAC	Adopt-A-Creek
ACWA	Association of California Water Agencies
AMI	Advanced Metering Infrastructure
ADSRP	Anderson Dam Seismic Retrofit Project
AQPI	Advanced Quantitative Precipitation Information
AVW	Access Valley Water
BART	Bay Area Rapid Transit
BASMAA	Bay Area Stormwater Management Agencies Association
BCDC	San Francisco Bay Conservation and Development Commission
BMP	Best management practice
BRRI	Bay Restoration Regulatory Integration Team
Cal-IPC	California Invasive Plan Council
CAP	Continuing Authorities Program
CASQA	California Stormwater Quality Association
CDFW	California Department of Fish and Wildlife
CCNEET	Coyote Creek Native Ecosystem Enhancement Tool
CEO	Chief Executive Officer
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFS	Cubic feet per second
CIP	Capital Improvement Program
CLOMR	Conditional Letter of Map Revision
CRAM	California Rapid Assessment Method
CRS	Community Rating System
CSC	Clean, Safe Creeks and Natural Flood Protection Plan
CY	Cubic yards
DEIR	Draft Environmental Impact Report
DSOD	Division of Safety of Dams
EAP	Emergency Action Plan
EOC	Emergency Operations Center

List of Abbreviations

EIA	Economic Impact Area
EIR	Environmental Impact Report
ESA	Endangered Species Act
FCSA	Feasibility Cost Share Agreement
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FY	Fiscal year
GI	General Investigation
GIS	Geographic Information Systems
GSI	Green Stormwater Infrastructure
IMC	Independent Monitoring Committee
IRWMP	San Francisco Bay Area Integrated Regional Water Management Plan
KPI	Key performance indicator
LEDPA	Least Environmentally Damaging Practicable Alternative
LFA	Limiting Factors Analysis
LOMR	Letter of Map Revision
LWD	Large woody debris
MAC	Multi-Agency Coordination
MidPen	Mid-Peninsula Regional Open Space District
MOA	Memorandum of agreement
MOU	Memorandum of understanding
NASA	National Aeronautics and Space Administration
NCCP	Natural Communities Conservation Plan
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries Service
NOAA	National Oceanographic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NWR	National Wildlife Refuge
O&M	Operations and maintenance
RFP	Request for proposal
RWQCB	Regional Water Quality Control Board

List of Abbreviations

RWRC	Recycling & Waste Reduction Commission
SBSPRP	South Bay Salt Pond Restoration Project
SCC	Santa Clara County
SCPP	Stream Corridor Priority Plan
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
SFCJPA	San Francisquito Creek Joint Powers Authority
SFEI	San Francisco Estuary Institute
SFPUC	San Francisco Public Utilities Commission
SJPD	San José Police Department
SMP	Stream Maintenance Program
SPRR	Southern Pacific Railroad
SWRCB	State Water Resources Control Board
SWRP	Storm Water Resource Plan
TAC	Technical Advisory Committee
TMDL	Total Maximum Daily Load
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Services
USGS	U.S. Geological Survey
Valley Water	Santa Clara Valley Water District
VHA	Santa Clara Valley Habitat Agency
VHP	Santa Clara Valley Habitat Plan
VTa	Santa Clara Valley Transportation Authority

Safe, Clean Water and Natural Flood Protection



Priority A:

Ensure a safe, reliable
water supply

Safe, Clean Water
and Natural Flood Protection



Priority B:

Reduce toxins, hazards and
contaminants in our waterways

Safe, Clean Water
and Natural Flood Protection



Priority C:

Protect our water supply from
earthquakes and natural disasters

Safe, Clean Water
and Natural Flood Protection



Priority D:

Restore wildlife habitat
and provide open space

Safe, Clean Water
and Natural Flood Protection



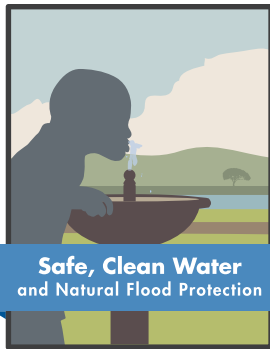
Priority E:

Provide flood protection to homes,
businesses, schools and highways

Safe, Clean Water
and Natural Flood Protection

Fiscal Year 2020–2021 Annual Report

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FY 2020–2021 Annual Report **Safe, Clean Water and Natural Flood Protection**



PROGRAM SUMMARY

In November 2012, Santa Clara Valley voters approved the Safe, Clean Water and Natural Flood Protection Program (2012 Program), a 15-year strategy to ensure uninterrupted water resources services in Santa Clara County. The 2012 Program was developed through extensive community collaboration to prepare for the scheduled sunset of Clean, Safe Creeks and Natural Flood Protection Plan (CSC) funding. Subsequently, on November 3, 2020, county voters overwhelmingly approved the renewed Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) that replaced the 2012 Program on July 1, 2021. For details on the renewed Safe, Clean Water Program, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.

To ensure transparency and accountability, Valley Water publishes an annual report providing a progress update for each project under the following 2012 Program priorities.

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

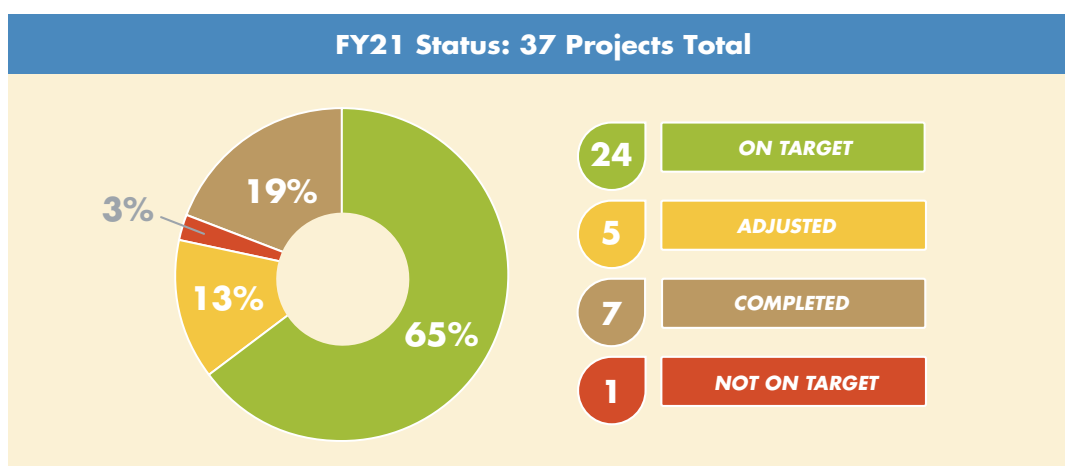
Priority E: Provide Flood Protection to Homes, Businesses, Schools and Highways

This report is the eighth and final annual report to be prepared for the 2012 Program. Since it is the final report for the program that ended on June 30, 2021, the 15-Year Adjusted Plan for capital projects is based on the FY2021-25 Five-Year Capital Improvement Program (CIP) and its FY21 implementation. It does not reflect the funding allocations developed as part of the FY2022-26 Five-Year CIP, which marked the start of the renewed Safe, Clean Water that replaced the 2012 Program. The report provides project status towards accomplishing the key performance indicators (KPIs) and the targets identified in the Safe, Clean Water 5-Year Implementation Plan for FY 2019–2023:

- On Target – Status indicates the project is on track to meet targets;
- Adjusted – Status indicates the potential that targets will not be met and implementation required a schedule adjustment (future year status will be based upon the adjusted schedule);
- Not on Target – Status indicates that the target has not been or will not be met;
- Modified – Status indicates the Board formally modified the project following a public hearing (future year status' will be based upon the modified project targets);
- Completed – Status indicates that the project has been completed and the KPIs have been met.

There are 37 projects under the 2012 Program. As shown in Table 1 (p. 4), 65% (24 projects) are On Target (■); 13% (5 projects) required schedule Adjustments (■); 3% (1 project) was Not on Target (■); and 19% (7 projects) were Completed (■). See Graph 1 (p. 2).

Graph 1



In FY21, Project B4: Good Neighbor Program: Encampment Cleanup was Not on Target as encampment cleanups were severely curtailed because of the many restrictions concerning unhoused encampment cleanups in response to the COVID-19 pandemic. In keeping with the Center for Disease Control guidance, Valley Water suspended encampment abatement until mid-March 2021, except for instances of particular encampments obstructing Valley Water's planned work or negatively impacting its ability to meet regulatory or other legal obligations. However, Valley Water continued to perform cleanups adjacent to homeless encampments to reduce the amount of trash and debris in local waterways.

For Fiscal Year 2020–21 (FY21), the adjusted budget for the 2012 Program totaled \$148 million. Actual funds expended and encumbered as of June 30, 2021, were \$86 million, approximately 58% of the 2012 Safe, Clean Water Program's adjusted budget. Underspensing was primarily due to delays in capital projects, especially the flood protection projects, because of various reasons, such as lack of federal funding, design changes and coordination with property owners to obtain easements. Among the capital projects underspent were: Upper Penitencia Creek (E4), Upper Guadalupe River (E8); Sunnyvale East and West Channels (CSC); and Hale Creek Enhancement Pilot Project (D6). Berryessa Creek Flood Protection Project (CSC), which completed construction in FY18, was underspent because the USACE had yet to complete the final closeout of Valley Water's share of design and construction costs. Additionally, underspending was also due to the impacts of the COVID-19 pandemic on operations projects such as B1: Impaired Water Bodies Improvement; B3: Pollution Prevention Partnership and Grants, and B4: Good Neighbor Program: Encampment Cleanup.

To address recommendations made by the Independent Monitoring Committee (IMC), Valley Water utilizes a rating system for capital projects that include confidence levels for schedule, funding, permits and jurisdictional complexity (the level to which a project's deliverables can be impacted by other entities or jurisdictions). By applying a confidence level to each of these topics, the IMC and community will be able to identify the areas of concern for each project that could impact the probability for the project to remain On Target. The confidence levels are addressed under the Opportunities and Challenges section for each of the capital projects. Appendix D can be referenced to delve into the confidence levels for each capital project, as well as demonstrate the jurisdictional complexity related to funding sources, regulatory permitting and coordination between cities, counties and other agencies. Listed below are the three (3) confidence levels and their definitions:

- **High** – Applies to projects that have achieved the following: received full funding, received regulatory permits, met schedule milestones (and will continue to move forward on schedule) and, if applicable, jurisdictional complexity issues have been resolved.
- **Moderate** – Applies to projects that are in the process of the following: receiving funding from other sources, receiving permits, recommending the Board approve a schedule adjustment and, if applicable, resolving jurisdictional complexity issues.

- **Low** – Applies to projects that have a high probability of experiencing or already have been denied funding, denied permits, delayed in schedule and, if applicable, jurisdictional complexity issues that are impacting completion of the project.

In response to FY20 IMC recommendations, the report incorporates several improvements. One such improvement is a new financial summary section highlighting what is being shared with the community in the financial appendices that follow. Additionally, Appendix A-1.1: Annual Financial Summary table and project-specific Financial Summary tables now include separate columns showing “Budget Adjustment” and “Carryforward.” Other changes include an updated report format with all completed projects tabbed at the back of the report under the “Completed Projects” section; and pie charts showing the funding breakdown for projects with more than one Valley Water funding source. Furthermore, the Glossary section now includes the definition of financial terms, such as “Capital Projects”, “Operations Projects”, “Carryforward” and “Budget Adjustment”, etc. For further project and contact information, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Table 1

Project	Project Description	Status
Priority A: Ensure a Safe, Reliable Water Supply		
A1	Main and Madrone Avenue Pipelines Restoration	COMPLETED
A2	Safe, Clean Water Partnerships and Grants	ON TARGET
A3	Pipeline Reliability Project	ADJUSTED
Priority B: Reduce Toxins, Hazards, and Contaminants in our Waterways		
B1	Impaired Water Bodies Improvement	ON TARGET
B2	Interagency Urban Runoff Program	ON TARGET
B3	Pollution Prevention Partnerships and Grants	ON TARGET
B4	Good Neighbor Program: Encampment Cleanup	NOT ON TARGET
B5	Hazardous Materials Management and Response	ON TARGET
B6	Good Neighbor Program: Remove Graffiti and Litter	ON TARGET
B7	Support Volunteer Cleanup Efforts and Education	ON TARGET
Priority C: Protect our Water Supply from Earthquakes and Natural Disasters		
C1	Anderson Dam Seismic Retrofit	ON TARGET
C2	Emergency Response Upgrades	ON TARGET
Priority D: Restore Wildlife Habitat and Provide Open Space		
D1	Management of Revegetation Projects	ON TARGET
D2	Revitalize Stream, Upland and Wetland Habitat	COMPLETED
D3	Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails	ON TARGET
D4	Fish Habitat and Passage Improvement	ADJUSTED
D5	Ecological Data Collection and Analysis	ON TARGET
D6	Creek Restoration and Stabilization	ADJUSTED
D7	Partnerships for the Conservation of Habitat Lands	COMPLETED
D8	South Bay Salt Ponds Restoration Partnership	ON TARGET
Priority E: Provide Flood Protection to Homes, Businesses, Schools, and Highways		
E1.1	Vegetation Control for Capacity	ON TARGET
E1.2	Sediment Removal for Capacity	ON TARGET
E1.3	Maintenance of Newly Improved Creeks	ON TARGET
E1.4	Vegetation Management for Access	ON TARGET
E2	Emergency Response Planning	ON TARGET
E3	Flood Risk Reduction Studies	ON TARGET
E4	Upper Penitencia Creek Flood Protection	ON TARGET
E5	San Francisquito Creek Flood Protection	ON TARGET
E6	Upper Llagas Creek Flood Protection	ON TARGET
E7	San Francisco Bay Shoreline Protection	ON TARGET
E8	Upper Guadalupe River Flood Protection	ADJUSTED
Other Flood Protection Projects and Clean, Safe Creeks Grants Projects		
	Permanente Creek Flood Protection	COMPLETED
	Sunnyvale East and Sunnyvale West Channels Flood Protection	ADJUSTED
	Berryessa Creek Flood Protection	COMPLETED
	Coyote Creek Flood Protection	ON TARGET
	Calabazas Creek Flood Protection	COMPLETED
	Clean Safe Creeks Grants Projects	COMPLETED

The FY21 annual report is available at <https://www.valleywater.org/safe-clean-water-and-natural-flood-protection-program/safe-clean-water-program-archive> under "2012 Safe, Clean Water & Natural Flood Protection Program: Reports and Documents."



Priority A:
Ensure a safe, reliable
water supply

**Safe, Clean Water
and Natural Flood Protection**

FY 2020–2021 Annual Report
**Safe, Clean Water
and Natural Flood Protection**



Priority A

Ensure a Safe, Reliable Water Supply

Projects under Priority A will upgrade aging water transmission systems to increase pipeline capacity and reduce the risk of water outages. The priority also provides grants to develop future conservation programs, helps local schools fulfill state mandates for drinking water availability, and provides rebates on nitrate removal systems to improve water quality and safety for private well users.

Project A1 Completed (See Completed Projects, page 182)

Main Avenue and Madrone Pipelines Restoration

Project A2

Safe, Clean Water Partnerships and Grants

Project A3

Pipeline Reliability Project

Project A2

Safe, Clean Water Partnerships and Grants

Grants and partnerships covered under this project include:

- Grants for agencies and organizations to study and pilot-test new water conservation programs. In FY10, county water conservation stood at 50,600 acre-feet, but this number needs to nearly double by 2030 to meet future demand.
- Grants to help schools in the county provide drinking water dispensers and other potable water devices for students. California Senate Bill 1413 (SB 1413) requires that schools provide access to free, fresh drinking water during mealtimes in food service areas.
- Rebates to private well water users for the installation of point-of-use treatment systems to remove excess nitrate from their drinking water.

Benefits

- Helps Valley Water exceed the conservation goal of 98,500 acre-feet per year by 2030
- Reduces water demands and the need to invest in new or expanded water supply sources and associated infrastructure
- Increases water supply reliability
- Helps schools provide safe, clean drinking water to students and comply with state mandate
- Assists private well water users in maintaining the quality and safety of their drinking water

Key Performance Indicators (15-year Program)

1. Award up to \$1 million to test new conservation activities.
2. Increase number of schools in Santa Clara County in compliance with SB 1413 and the Healthy Hunger-Free Kids Act, regarding access to drinking water by awarding 100% of eligible grant requests for the installation of hydration stations; a maximum of 250 grants up to \$254,000.
3. Reduce number of private well water users exposed to nitrate above drinking water standards by awarding 100% of eligible rebate requests for the installation of nitrate removal systems; up to \$30,000 for all rebates.

Geographic Area of Benefit: Countywide



Water to Go station at Fremont High School.

ON TARGET

Project A2 FY21 Highlights

- The Pilot Water Conservation Mini-Grant Program is completed.
- Awarded 100% of eligible nitrate treatment system rebate requests totaling \$420 for one (1) nitrate removal system.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	MODIFIED
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21:

ON TARGET

Progress on KPI #1:

- On February 11, 2020, the Board approved the development of a Pilot Water Conservation (Priority A2) Mini-Grant Program. The pilot mini-grant program designated a total amount not-to-exceed \$100,000 for projects that meet A2 criteria to allow grantees to kick-start projects and gain data to support an application for future funding opportunities. Mini-grant applications were accepted on a rolling basis through December 31, 2020. Seven (7) applications for a total funding request of \$34,995 were awarded.
- From FY14-20, 17 standard grant projects were awarded for a total of 706,132. Of these, 10 have been completed or closed. Four (4) were cancelled by grantee request.
- See Appendix C for a cumulative list of grants and partnerships awarded to date.

Progress on KPI #2: (Completed in FY18)

- This KPI was delivered in FY18.

Progress on KPI #3:

- In FY21, one rebate request for \$420 was awarded to a private well user for the installation of one (1) nitrate removal system. The total amount awarded to date is \$14,056.

Financial Information

Water Conservation Grant Program (KPI #1)

In FY21, 20% of the total annual project budget was expended.

The COVID-19 countywide guidance included a shelter-in-place order and other restrictions that impacted and delayed many grant projects, especially those interfacing with the public. The under-expenditure was due to CEQA compliance requirements and impacts from the COVID-19 public health orders, which resulted in staff and grantees experiencing delays in executing agreements for projects that were awarded funding, including A2 mini-grants. The grant funds that were budgeted for FY21 will be adjusted into FY22 to align with the agreements that need to be executed, per Board approval.

Nitrate Treatment System Rebate Program (KPI #3)

In FY21, 10% of the annual project budget was expended.

The under-expenditure was due to few rebates being requested. See the Opportunities and Challenges section for additional information about the modification to the funding allocation for KPI #3 and program sunset.

Financial Summary (\$ Thousands)									
A2. Safe, Clean Water Partnerships and Grants									
Fiscal Year 2020-2021								15-year Program	
Project No. and Name	Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan*	% of Plan Spent
				Actual	Encumbrance	Total			
26061008 Water Conservation	\$137	\$77	\$214	\$42	\$0	\$42	20%	\$1,219	57%
26062009 Hydration Stations	\$0	\$0	\$0	\$0	\$0	\$0	0%	\$300	101%
26061010 Nitrate Treatment System Rebate	\$4	\$0	\$4	\$0*	\$0	\$0	10%	\$231	55%
Total	\$141	\$77	\$218	\$43	\$0	\$43	20%	\$1,751	64%

* A rebate of \$420 was awarded.

Opportunities and Challenges

FY21 Safe, Clean Water Grant Program Audits and Improvements

The Board Audit Committee approved a desk audit of the grants program by an external auditor in FY20. The outcome of the desk audit was the recommendation for a subsequent performance audit for the grants program. In FY21, staff worked with the external auditor, subcontracted under TAP International, to identify streamlining opportunities and collect the IMC and Board's requested metrics. In early 2021, the auditor completed the full program audit and presented findings and recommendations to the Board Audit Committee and the entire Board for acceptance.

As a result of the audit and stakeholder feedback, the following improvements were implemented in FY21:

- Invoices are now reviewed within 10 days of receipt and paid out within 30 days of invoice approval.
- Staff tracks and monitors key administrative milestones, including application review status, agreement drafting and execution, invoicing, closeouts and outreach.
- Staff worked with internal stakeholders to develop standardized agreement templates for all grant types, retroactive start dates for projects, insurance waivers for low-risk mini-grant projects and electronic approval routing for agreement execution.

- Staff provides improved grantee guidance and assistance, including project and grant administration orientations for grantees; convenient meetings and coaching through online platforms like Zoom; 48-hour response time for email and telephone inquiries; and the use of DocuSign electronic signatures for agreements and invoices.
- Dashboards were created in the Fluxx Grants Management System (Fluxx) to streamline reviews for grant proposals, mini-grants, CEQA, and Valley Water permits.
- Staff conduct virtual grant workshops that are posted on the website as a resource for potential applicants
- Staff participated in grant training provided by recognized grant professional organizations, such as the National Grants Management Association (NGMA), PEAK Grantmaking and FluxxCon training through Fluxx.

As a result of the audit and stakeholder feedback, the following improvements are currently under development:

- Staff began developing a program policy and procedures manual, using Valley Water’s QEMS guidelines and NGMA best practices to ensure program consistency, efficiency and compliance. In addition, manuals and online resources are being developed for grantees.
- In June 2021, a consultant launched a robust survey of current and past grantees. Results will help develop program procedures, improve grantee experience and redesign the grants and partnerships program under the renewed Safe, Clean Water Program to incorporate best practices and any other improvements.
- In November 2020, staff began planning and developing a redesigned Safe, Clean Water grants and partnerships program under Measure S. This plan includes a transition program for FY22. Staff was in the process of interviewing stakeholders, collecting lessons learned, and procuring a consultant to create the redesigned program. This program will incorporate audit recommendations such as grant criteria, right-sizing grant policies and procedures, risk analysis, best practices, new grant opportunities and process improvements.

Staffing

Past staffing issues resulted in a backlog of invoices, agreements, mini-grant applications and project closeouts. However, a permanent Senior Management Analyst position was filled in June 2020 and temporary staffing resources were dedicated to supporting the program, addressing the backlog and updating Fluxx records.

The audit and IMC recommended increased staffing levels to address the growing need for program-dedicated staffing to manage the increasing number of grant projects. On May 11, 2021, the Board approved two additional staff positions for the program. Recruitment began in June 2021.

COVID-19 Impacts to Safe, Clean Water Grants Program

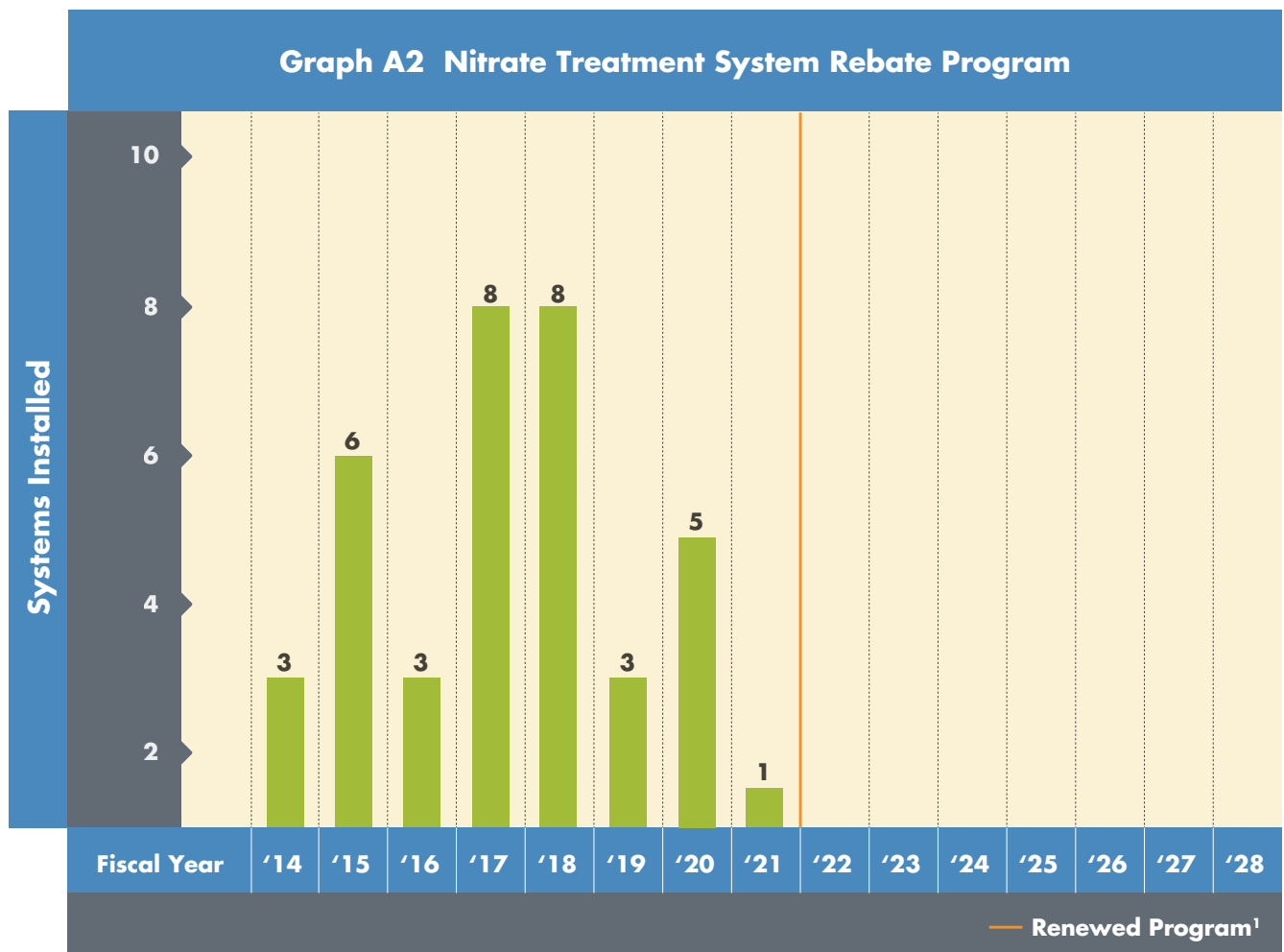
In March 2020, the Santa Clara County Public Health Officer issued countywide guidance to slow the spread of COVID-19 in our community. The countywide guidance included a shelter-in-place order and other restrictions, which impacted many grant projects, especially those interfacing with the public and involving work outdoors. Staff continued to support grantees in navigating project implementation during the pandemic in FY21. Grantees found creative ways to continue their project activities; however, many of the grantees could not perform many project tasks due to social distancing mandates in FY21.

Staff continues to receive and process several time-extension requests, schedule adjustment inquiries and delays to agreement executions due to the impacts of COVID-19. The Board approved longer agreement terms for FY21 grants to account for COVID-related delays. Staff will continue to monitor these projects and work with grantees to address these unforeseen changes.

Nitrate Treatment System Rebate Program

In February 2018, after years of monitoring outreach improvements, participation incentives and the resulting low participation levels for the Nitrate Treatment System Rebate Program, the IMC recommended a reduction in program funding to reflect the community demand. On May 23, 2018, in accordance with the Change Control Process, the Board approved a modification to KPI #3 for the Nitrate Treatment System Rebate Program to reduce funding, with an annual allocation of \$4,000 for rebates through the project's 2023 completion date.

Due to low program participation, the Nitrate Treatment System Rebate Program was not included in the renewed Safe, Clean Water Program.



¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. Some aspects of this project are included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.



Plunger Valve at Main Avenue Ponds Vault.

ADJUSTED

Project A3 FY21 Highlights

- Completed designs for three (3) line valves.
- 60% design completed for the fourth valve.

Project A3

Pipeline Reliability Project

This project constructs 4 line valves at various locations along the East, West and Snell treated water pipelines in Saratoga, Cupertino and San José. This will allow Valley Water to isolate sections of pipelines for scheduled maintenance and repairs following a catastrophic event, such as a major earthquake.

Benefits

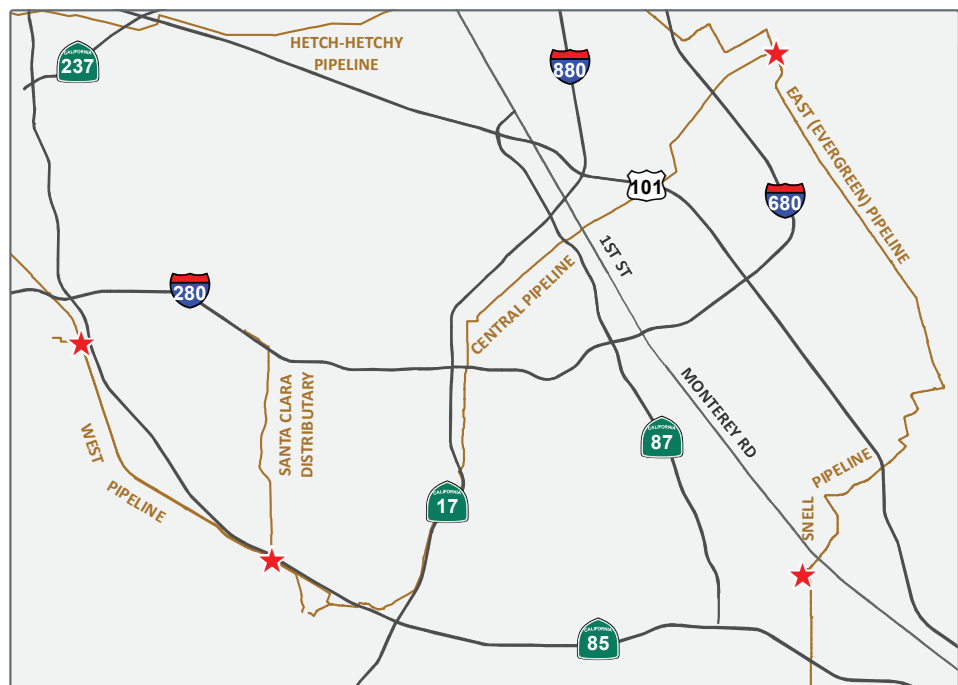
- Supports shorter service interruption in the case of a pipeline break
- Provides operational flexibility for pipeline maintenance work
- Improves drinking water reliability

Key Performance Indicator (15-year Program)

1. Install 4 new line valves on treated water distribution pipelines.

Geographic Area of Benefit: Mountain View, Sunnyvale, Santa Clara, Cupertino, Saratoga, Los Gatos, Los Altos, Campbell, San José and Milpitas

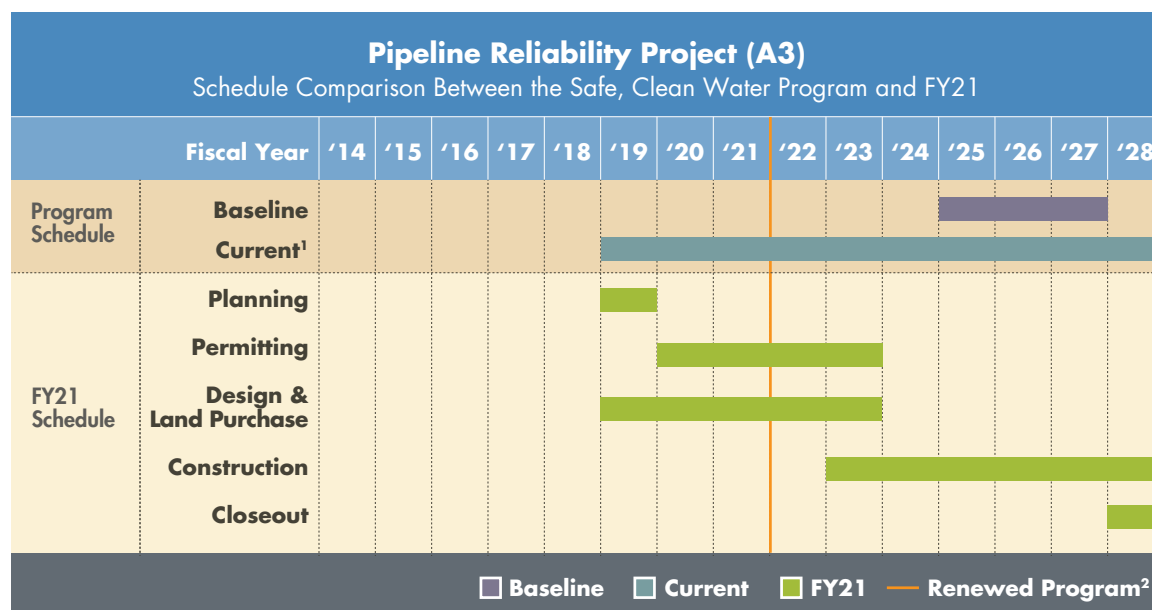
Project Location



★ Project Locations □ Santa Clara County



Schedule



¹ Board approved schedule adjustments through the change control process in FY17, FY20 & FY21.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	SCHEDULED TO START
FY 15	SCHEDULED TO START
FY 16	SCHEDULED TO START
FY 17	SCHEDULED TO START
FY 18	SCHEDULED TO START
FY 19	ON TARGET
FY 20	ADJUSTED

Status for FY21: ADJUSTED (Schedule Adjustment)

Progress on KPI #1:

- Project work was initiated in FY19. Planning has been completed for all four locations. Designs for three (3) of the line valves have been completed and the fourth line valve is at 60% for FY21. Final design completion for the fourth valve will be in FY22. Construction is scheduled for FY23 through FY28 in conjunction with the 10-Year Pipeline Inspection and Rehabilitation Program.

Financial Information

In FY21, 101% of the annual project budget was expended.

Financial Summary (\$ Thousands)									
A3. Pipeline Reliability Project									
Fiscal Year 2020-2021							15-year Program		
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total			
\$634	\$538	\$155	\$1,327	\$1,322	\$17	\$1,339	101%	\$12,093	19%

Opportunities and Challenges

Schedule Adjustment

In FY21, the Board approved a schedule adjustment, extending the project completion date by two years to FY28. The project is incorporated into Valley Water's 10-Year Pipeline Inspection and Rehabilitation Program to ensure coordination with the long-term operations and maintenance pipeline shutdown schedule. The schedule adjustment was required due to updates to the Pipeline Inspection and Rehabilitation Program, developed with input from water retailers. The Board approved the schedule adjustment on May 11, 2021. As a result, the project is now scheduled to begin construction of the first valve in FY23 and complete the final valve in FY28.

Acquisition of Easements

Permanent easement acquisition may be required for the project. Line valves will be installed in existing Valley Water pipeline easements and/or public rights-of-way to the greatest extent possible.

Confidence levels

Schedule: Moderate Confidence

The installation of the valves will require the pipelines to be dewatered, which will take the pipeline out of service. The construction is coordinated with the long-term maintenance plan as well as other projects to minimize the disruption of water supply to the community. It is currently projected that construction will be completed in FY28 due to maintenance and other projects.

Funding: High Confidence

Funding from the Safe, Clean Water Program is expected to be sufficient to complete the project work.

Permits: Moderate Confidence

There has been no indication that permit acquisition will be challenging.

Jurisdictional Complexity: High Confidence

Coordination with the County of Santa Clara, City of San José, City of Saratoga and City of Cupertino has been initiated. There has been no indication that jurisdictional issues will be challenging.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.

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**Priority B:**

Reduce toxins, hazards and
contaminants in our waterways

Safe, Clean Water
and Natural Flood Protection

FY 2020–2021 Annual Report
**Safe, Clean Water
and Natural Flood Protection**



Priority B

Reduce Toxins, Hazards and Contaminants in our Waterways

Projects under Priority B use multiple strategies to reduce and remove contaminants in our local creeks, streams and bay. In addition to mercury treatment systems in our reservoirs, projects under this priority also prevent toxins from entering waterways by working with municipalities and other agencies to reduce runoff pollution. Valley Water also provides grants to reduce emerging contaminants and supports public education and volunteer cleanup efforts. Additional projects include coordinated cleanup of encampments near waterways, trash and graffiti removal, and rapid emergency response to hazardous materials spills.

Project B1

Impaired Water Bodies Improvement

Project B2

Interagency Urban Runoff Program

Project B3

Pollution Prevention Partnerships and Grants

Project B4

Good Neighbor Program: Encampment Cleanup

Project B5

Hazardous Materials Management and Response

Project B6

Good Neighbor Program: Remove Graffiti and Litter

Project B7

Support Volunteer Cleanup Efforts and Education



Water column sampling at Guadalupe Reservoir.

ON TARGET

Project B1 FY21 Highlights

- Operated and maintained existing oxygenation treatment systems in four (4) reservoirs (Almaden, Calero, Guadalupe, and Stevens Creek).
- The project also funds the operation of four (4) solar-powered circulators in Almaden Lake to improve oxygen concentration at the lake bottom.
- Implemented six (6) priority pollution prevention and reduction activities at 27 waterbodies, including 15 creeks and the Guadalupe River.
- Initiated the Reservoir Greenhouse Gas Emission Study under a collaborative agreement with the University of California, Davis.

Project B1

Impaired Water Bodies Improvement

This project helps Valley Water meet surface water quality standards and reduces pollutants in streams, groundwater, lakes and reservoirs. Efforts are carried out in compliance with the Regional Water Quality Control Board (RWQCB) Total Maximum Daily Loads (TMDLs) standards as they continue to evolve (TMDLs are the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards). Under this project, Valley Water employs treatment systems in reservoirs to reduce methylation of mercury, and also helps create realistic plans and expectations for reducing contaminant loads by engaging in the regulatory development process with the RWQCB for new and emerging contaminants.

Benefits

- Reduces contamination in creeks and reservoirs
- Improves water quality, including water going to drinking water treatment plants
- Reduces methylmercury in reservoirs to prevent its entry into the food web
- Improves ecosystem health by reducing mercury contamination in fish and other biota
- Supports regulatory compliance of TMDL standards affecting Valley Water operations

Key Performance Indicators (15-year Program)

1. Operate and maintain existing treatment systems in 4 reservoirs to remediate regulated contaminants, including mercury.
2. Prepare plan for the prioritization of pollution prevention and reduction activities.
3. Implement priority pollution prevention and reduction activities identified in the plan in 10 creeks.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

Progress on KPI #1:

- Operated and maintained existing oxygenation treatment systems in four (4) reservoirs (Almaden, Calero, Guadalupe and Stevens Creek) to reduce methylmercury production and improve water quality. Valley Water, which is subject to the Guadalupe River Watershed Mercury TMDL (Mercury TMDL), initiated voluntary methylmercury production and control studies in 2005 prior to its adoption.

Oxygenation System Operation

Hypolimnetic oxygenation systems are operated to prevent anaerobic (no-oxygen) conditions that occur during summer reservoir stratification. Stratification is a separation of the water into two (2) layers of differing temperature: the epilimnion (top layer) and the hypolimnion (bottom layer). During stratification, oxygen can be depleted in the hypolimnion. Under low-oxygen conditions, mercury can be converted to methylmercury, a highly toxic compound that accumulates in fish tissue and presents serious health risks to birds and people consuming fish.

The Mercury TMDL has water quality objectives for fish tissue and hypolimnion water methylmercury concentrations. For more information on the Mercury TMDL, please see the San Francisco Bay RWQCB website: [tinyurl.com/GuadalupeMercuryTMDL](https://www.tinyurl.com/GuadalupeMercuryTMDL).

In the summer of 2020, the oxygenation systems at Guadalupe and Stevens Creek reservoirs operated nearly continuously throughout the stratification periods. Those at Almaden and Calero reservoirs had parts failures that took additional time to correct due to COVID-19 restrictions.

Although Stevens Creek Reservoir is located outside of the Guadalupe River Watershed, and therefore not subject to the Mercury TMDL, it also contains fish with mercury concentrations that exceed standards. Valley Water operates an oxygenation system at Stevens Creek Reservoir to reduce methylmercury production, improve downstream water quality and serve as a positive control site for comparison to the other three reservoirs.

During the summer of 2020, Valley Water used lower oxygen flow at the Stevens Creek oxygenation system to reduce impacts on turbidity and temperature while maintaining sufficient oxygenation to reduce methylmercury formation. While temperature changes within the reservoir overall are relatively small during oxygenation, the outlet temperature during those periods can increase by a couple of degrees Celsius. In June 2020, Valley Water began a one-year study to better understand the water quality effects of the oxygenation system on reservoir discharge, including downstream dissolved oxygen, turbidity, and temperature. Results of the study will allow staff to better manage the operation of the oxygenation system, if necessary, while maintaining sufficient oxygen levels. The study

was cut short in April 2021 due to the low reservoir water level and the need to preserve the limited cold water pool for downstream fish habitat. As a result, Valley Water will produce a data report instead of a complete interpretive report. Also, the resumption of the study will be evaluated in future years.

Operation of oxygenation systems in 2020:

- Almaden Reservoir – 8 weeks
- Calero Reservoir – 10 weeks
- Guadalupe Reservoir – 20 weeks
- Stevens Creek Reservoir – 16 weeks

The oxygenation systems were not deployed until May (Calero and Almaden) and June (Guadalupe and Stevens Creek) in 2020 due to the impacts of the COVID-19 pandemic, which slowed the availability of maintenance parts and services, especially for the Stevens Creek Reservoir unit, and delayed required maintenance on all units. In late June and early July 2020, the Almaden Reservoir system and Calero Reservoir system had electric or mechanical failures. Repairs to the Almaden Reservoir system were completed and the system restarted in mid-September. Repairs to the Calero Reservoir system were completed in June. All systems were shut down for the wet season in October 2020. In April 2021, the Almaden Reservoir System was turned on for the season until mechanical failure in May 2021. Repairs were completed in June 2021. Guadalupe and Stevens Creek reservoirs were both around 19% of capacity as of May 2021. Because line-diffuser oxygenation can warm bottom waters, especially under low water conditions, operation of the Guadalupe and Stevens Creek reservoir systems was delayed to support cold water (<16 °C) releases as long as possible. Oxygenation may begin later in summer 2021 if the cold-water pools are depleted.

Continuous specialized maintenance and troubleshooting are needed to keep the oxygenation systems operational. Major annual maintenance tasks were performed on the oxygen generators in April 2021, and additional maintenance has been performed since then. Damaged diffuser lines and anchors were replaced at Almaden and Calero reservoirs in June 2021. Valley Water staff continue regular weekly maintenance inspections of oxygenation units while they are operational.

Almaden Lake Solar-Powered Circulators

While not part of the KPI, this project also funds the operation of four (4) solar-powered circulators in Almaden Lake to improve oxygen concentration at the lake bottom. They have resulted in modest reductions in methylmercury in bottom water of the lake. After being serviced in May and June of 2020, all of the circulators have functioned normally throughout the year.

Progress Report on Methylmercury Control

Operation of the oxygenation systems resulted in a significant reduction in methylmercury in the hypolimnion (bottom of a reservoir), with an average decrease of up to 70% below historical summer concentrations. In most



Sampling the Guadalupe River for mercury during a storm.

cases, the methylmercury TMDL for the hypolimnia of reservoirs was met. However, no change was measured in the epilimnion (upper layer). Guadalupe and Stevens Creek reservoirs showed a trend of decreasing fish mercury, but concentrations remained well above targets. In Calero Reservoir, oxygenation also improves source water quality by increasing dissolved oxygen and reducing manganese and iron (which affect taste and odor), benefitting the Rinconada and Santa Teresa drinking water treatment plants.

Valley Water performs twice-monthly water quality monitoring at Almaden, Guadalupe, Calero, and Stevens Creek reservoirs, and Almaden Lake when the reservoirs and lake are stratified (monthly the rest of the year). Monitoring was suspended in April 2020 due to the COVID-19 pandemic. Regular monitoring resumed from October 2020 to Mid-December 2020, at which point it was again suspended in keeping with the statewide stay-at-home order. Monthly monitoring resumed in February 2021. Valley Water did not complete fish tissue sampling for 2020, because, unlike water sampling, safe social distancing could not be maintained while sampling. COVID-19 restrictions permitting, fish sampling will be done in 2021.

Valley Water staff worked with colleagues from RWQCB and UC Merced to author a technical paper on the effectiveness of the oxygenation system in reducing fish tissue mercury. The paper was published in the January 2021 issue of the *Environmental Pollution* journal, available at tinyurl.com/MercuryFishAlmaden.

Key findings of the technical paper are:

- Reservoir oxygenation decreased methylmercury concentrations in the bottom water of all four reservoirs but did not lower the total mass of methylmercury. This suggests that methylmercury production was not inhibited by oxygenation.
- Oxygenation increased the growth of algae and cyanobacteria, likely due to increases in temperature and nutrient concentrations.
- Fish tissue mercury concentrations are declining in Guadalupe and Stevens Creek reservoirs. This could be due to biodilution in the food web as a result of increased algae growth.

The 2019 cover letter/progress report can be found at tinyurl.com/2019Methylmercury.

Valley Water staff gave presentations on reservoir oxygenation and mercury remediation at the North American Lake Management Society annual conference (November 2020), the California Lake Management Society annual conference (October 2020), the California Aquatic Bioassessment Workgroup (October 2020), the Delta Tributaries Mercury Council (September 2020), UC Davis (April 2021), and at the Waste Management Symposium (March 2020). A recorded presentation covering reservoir oxygenation systems is available at <https://www.youtube.com/watch?v=P5I3DTIFAuA>.

To study the transport of mercury through the food web, Valley Water collected suspended particulate matter and zooplankton from Almaden, Calero, Guadalupe and Stevens Creek reservoirs in October 2020. These samples will be analyzed for stable isotopes of nitrogen and carbon, total mercury, and methylmercury as part of Valley Water's reservoir mercury bioaccumulation study. Additional sampling occurred in June 2021. Samples will be analyzed in FY22. The study will be complete in FY22.

Progress on KPI #2: (Completed in FY15)

Valley Water drafted a Pollution Prevention Prioritization Plan in January of 2015. This plan is intended to prioritize 10 Santa Clara County waterbodies that would benefit most from pollution prevention projects. Focusing on

waterbodies listed as impaired on the Environmental Protection Agency’s Clean Water Act section 303(d) list, Valley Water revised the plan in 2017. The updated plan includes a revised ranking methodology and recommendations for pollution prevention activities. The plan is currently being revised a third time to incorporate new information and regulatory changes. Because the 303(d) list is updated every two (2) years to include new data, emerging pollutants and de-listings, the plan is considered a “working document” and will be updated as regulatory priorities evolve. As a result, specific pollution prevention activities to be implemented as part of KPI #3 are not identified in the plan but are identified as part of annual reporting. Specific pollution prevention projects will be focused on addressing existing impairments in priority waterbodies.

Progress on KPI #3:

In FY21, Valley Water continued to implement six (6) priority pollution reduction activities in 27 waterbodies, including 14 creeks and the Guadalupe River. The following table shows the Pollution Prevention activities and applicable waterbodies.

B1 Priority Pollution Prevention and Reduction Activities	
Pollution Prevention Activity	Waterbody ¹
#1: Trash Accumulation Point Mapping and Removal	Guadalupe River
#2: Trash Reduction — Park Rangers and SJPD	Coyote Creek Guadalupe River
#3: Trash Accumulation Point Mapping and Removal	Coyote Creek
#4: Angler Survey	Almaden Reservoir Anderson Reservoir Calero Reservoir Camden Ponds Chesbro Reservoir Guadalupe Reservoir Lexington Reservoir Ogier Ponds ² Stevens Creek Reservoir Uvas Reservoir Vasona Lake
#5: Homelessness Best Practices	Calabazas Creek Coyote Creek Guadalupe Creek Guadalupe River Llagas Creek Los Gatos Creek Lower Penitencia Creek Permanente Creek Ross Creek San Tomas Aquino Creek Saratoga Creek Silver Creek Stevens Creek Thompson Creek Uvas Creek
#6: Reservoir Greenhouse Gas Emission Study (new)	Chesbro Reservoir Stevens Creek Reservoir Uvas Reservoir
Total 6 Pollution Prevention Activities	27 Waterbodies

¹ “Waterbody” includes creeks, lakes and reservoirs.

² Ogier Ponds are owned by Santa Clara County.

*Pollution Prevention Activity #1 & 3: Trash Accumulation Point Mapping and Removal***Guadalupe River**

Valley Water began implementing the Pollution Prevention Prioritization Plan in December 2015. The first pollution reduction activity in the plan was the mapping of trash accumulation locations in the Guadalupe River, from Highway 237 to Blossom Hill Road. The first Trash Accumulation Point Map was completed in FY16. Trash accumulation point mapping and removal is now part of a Memorandum of Agreement with the City of San José. Valley Water staff mapped and assessed trash accumulation points in the Guadalupe River in October 2020. In February 2021, six (6) cubic yards of trash were removed from Guadalupe River between Willow Street and Alma Avenue. In March 2021, 15 cubic yards of trash were removed from Guadalupe River downstream of Malone Road. Guadalupe River assessments are scheduled for summer 2021. During FY21, accumulation point mapping efforts were delayed due to COVID-19 shelter-in-place orders. (www.valleywater.org/GuadalupeTrash2017).

Coyote Creek

In January 2021, Valley Water removed 12 cubic yards of accumulated trash from Coyote Creek at Watson Park. Work orders in 2021 for Coyote Creek will continue into FY22. During FY21, Trash accumulation point mapping efforts on Coyote Creek were completed. In May 2021, Valley Water and City of San José staff resumed accumulation point assessments along Coyote Creek.

Pollution Prevention Activity #2: Trash Reduction - Park Rangers and San Jose Police Department (Guadalupe River and Coyote Creek)

This project funds patrol and enforcement services from the City of San José and California Department of Fish and Wildlife (CDFW) officers for proactive patrols along the Coyote Creek and Guadalupe River. Valley Water first executed an agreement with the San José Police Department in May 2019, which was extended in January 2020 for a total of \$400,000 for 16 months of a Stream Stewardship Law Enforcement Program. In October of FY21, this agreement was extended for a total of \$200,000. This program is critical to providing a safe environment for Valley Water personnel and volunteers to undertake stream stewardship activities and thereby discourage re-encampment. The extended agreement includes training for officers on environmental violations. Patrols were on hold as of March 2020 due to the COVID-19 pandemic and resumed in spring 2021.

An agreement with the CDFW for \$70,000 was intended to assist in identifying debris sites, patrolling areas to prevent re-encampment, and conduct enforcement related to the Department's jurisdiction. Due to CDFW staffing shortages and the COVID-19 pandemic, few funds were expended in FY21. These services complement the encampment cleanups completed under the Project B4: Good Neighbor Program – Encampment Cleanup.

Pollution Prevention Activity #4: Angler Survey in mercury-impaired waterbodies

This study assessed fish consumption and human health risk in 13 mercury-impaired lakes and reservoirs and evaluated the effectiveness of existing consumption advisories, informing future consumption advisories and directing public outreach actions. The surveys, which were available in English, Spanish, Vietnamese, and Chinese, were carried out during the summers of 2017 and 2018. The final angler survey report was shared with the County of Santa Clara, who manages recreation at Valley Water reservoirs, and is posted at <https://www.valleywater.org/project-updates/b1-impaired-water-bodies-improvement>.

Key findings include:

- 18% of anglers planned to eat their catch or give it to others. Most anglers who eat their catch feed it to children and women of child-bearing age.
- Anglers from zip codes with lower median incomes ate their catch more often.
- Anglers who were unaware of fish consumption advisories were more likely to consume their catch.
- Most anglers learned of fish consumption advisories through signage.

Recommended management actions included clarifying existing signage and posting additional signage, conducting additional outreach, and using new data to update advisories. The results of the Angler Survey are being incorporated in joint efforts with the County to update signage. A new law requires the County to post the Office of Environmental Health Hazard Fish Advisories at each reservoir.

Pollution Prevention Activity #5: Homelessness Best Practices

Valley Water continues to track and research best practices for preventing watershed pollution associated with homeless encampments. Valley Water previously collaborated with the City of San José to provide homeless residents with trash bags to contain their waste, primarily along Coyote Creek and Guadalupe River. This included purchasing 2,500 bags for distribution and conducting two bag pickup events. During FY21, trash bag pickups by Valley Water were no longer active. Bag pickup and distribution needs were serviced through the City of San Jose's Beautify San Jose initiative as part of their response to the COVID-19 pandemic. Staff is researching additional options for homelessness best practices to support clean waterways.

Pollution Prevention Activity #6: Reservoir Greenhouse Gas Emission Study

Valley Water entered a collaborative agreement with the University of California, Davis, to study greenhouse gas emissions from the surfaces of Chesbro, Stevens Creek, and Uvas Reservoirs. During this year-long study, researchers will quantify the seasonal and spatial variation of reservoir greenhouse gas fluxes. This information will be incorporated into Valley Water's Climate Change Action Plan to help achieve carbon neutrality. Findings may also be used to improve global climate models. Monthly 24-hour sampling is being conducted at Uvas Reservoir, and quarterly sampling is being conducted at the other reservoirs.

Financial Information

In FY21, 73% of the annual project budget was expended.

The underspending was due to the COVID-19 pandemic and shelter-in-place orders, which halted monitoring and studies that could not be completed while maintaining social distancing, including mercury monitoring and planned food web study monitoring and analysis.

Financial Summary (\$ Thousands)

B1. Impaired Water Bodies Improvement

Fiscal Year 2020–2021							15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$1,776	\$41	\$1,817	\$952	\$382	\$1,334	73%	\$27,427	38%

Opportunities and Challenges

Technical Studies on Methylmercury Control

Valley Water conducts technical studies to analyze the effectiveness of oxygenation to control methylmercury production and to better understand mercury cycling in the reservoirs. The COVID-19 pandemic paused the technical studies starting in April 2020. Due to the mercury sample method as well as the need to sample from a boat, close proximity between two staff is needed for sampling. Valley Water notified the RWQCB of the paused technical studies. Sampling resumed in October 2020 with staff following COVID-19 protocols.

Valley Water staff published a manuscript in January 2021 (Effects of Hypolimnetic Oxygenation on Mercury Cycling and Bioaccumulation in Reservoirs near the New Almaden Mining District, California, USA) in the journal *Environmental Pollution*. Coauthors include staff from Valley Water, UC Merced, and the RWQCB. The published journal can be found at tinyurl.com/MercuryFishAlmaden.

In May 2019, Valley Water entered into a partnership agreement with the United States Geological Survey (USGS) to study water column mercury methylation in the four reservoirs (Almaden, Calero, Guadalupe, and Stevens Creek). Emerging research suggests that the water columns of reservoirs, in addition to the sediment-water interface, may be important locations of methylmercury production and bioaccumulation. Field sampling and experiments occurred in May and August 2019. The data produced for this project is here: <https://doi.org/10.5066/P9N7LEER>.

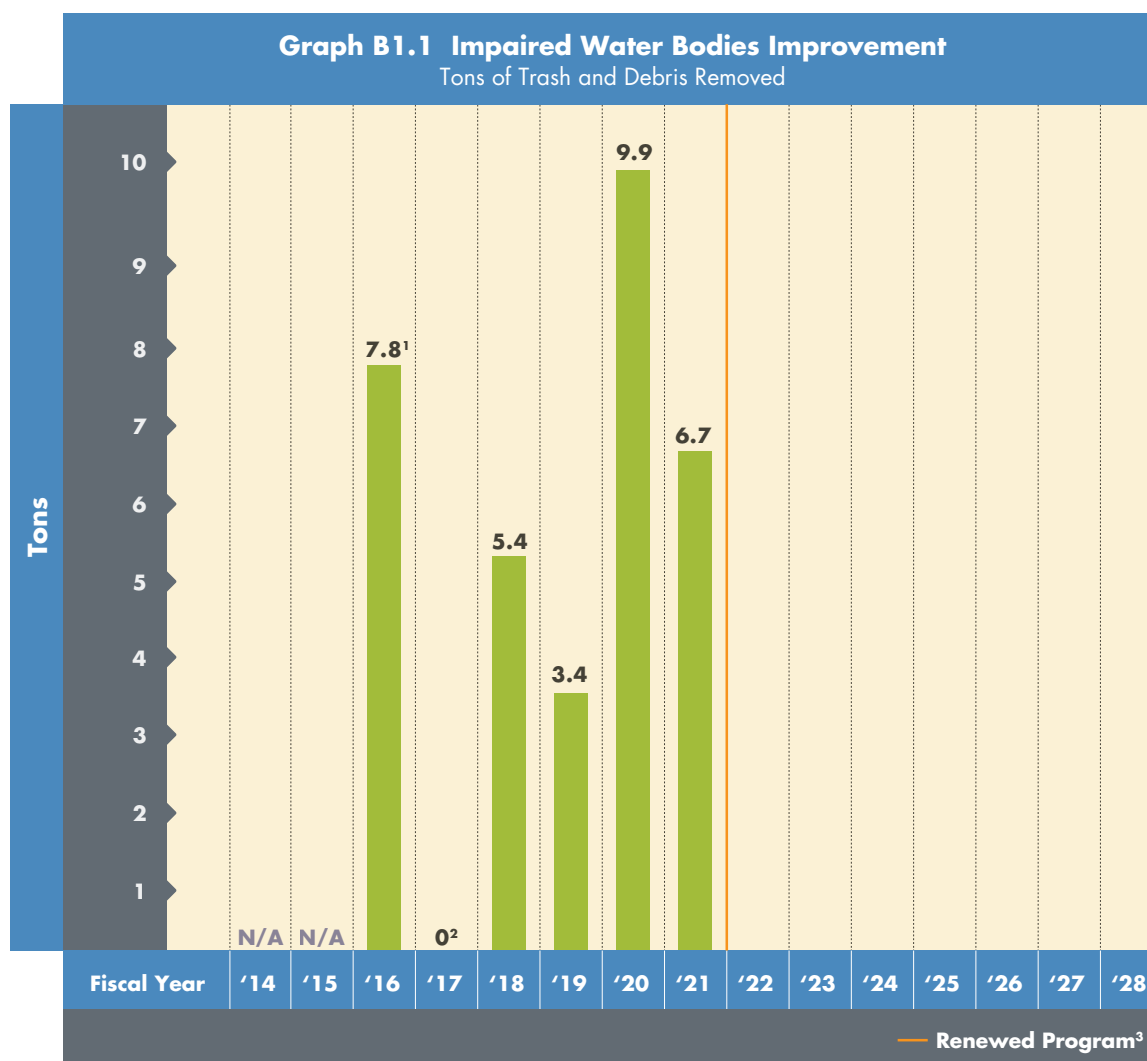
UC Merced received a research grant from the Department of Energy to study treatment methods that may be employed to reduce methylmercury production in contaminated sediments such as those in Guadalupe Reservoir. Valley Water supported this effort by facilitating field data collection events with university researchers. A manuscript detailing findings is currently in progress.

The findings of Valley Water's technical studies will inform the implementation plan of the upcoming Statewide Mercury Program for Reservoirs currently under development by the State Water Resources Control Board. Valley Water actively participates in the statewide effort.

Coordinated Mercury TMDL Monitoring Program and Partnerships

In addition to reservoir monitoring, the Guadalupe River Watershed Mercury TMDL requires coordinated monitoring of fish in creeks and mercury loads to the San Francisco Bay by mine site and reservoir owners. Valley Water coordinated with project partners (County of Santa Clara, Midpeninsula Regional Open Space District, and Guadalupe Rubbish Disposal Company) to plan the second 5-year phase of the Coordinated Monitoring

Program for the Guadalupe River Watershed Mercury TMDL project. A 5-year monitoring report was submitted to the RWQCB in January 2017 (tinyurl.com/GuadCMP5Yr). The partners are primarily responsible for source control and implementing projects to remediate mercury-contaminated sites upstream of the reservoirs in the historical Almaden Mining District.



¹ This estimate may have varied slightly from past annual reports due to a refinement of the conversion from cubic yards to tons.

² Due to high flows during the winter of FY17, re-mapping was delayed and conducted in May and June 2017. The 0.2 tons of trash identified as part of this mapping effort was cleaned in FY18.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

Valley Water led the development of a cost-share agreement to fund a consultant to develop and implement a plan to meet the mercury monitoring requirements. The consultants prepared a sampling plan that was reviewed by all partners and approved by the RWQCB in October 2018. The sampling plan and approval letter can be found at <https://www.valleywater.org/project-updates/b1-impaired-water-bodies-improvement>. The consultants

sampled two large February storms to estimate mercury loading in FY18. In addition, the consultants sampled fish tissue mercury in creeks and Lake Almaden. A progress report was submitted to the RWQCB in March 2020 and can be found at www.valleywater.org/GuadalupeMonitoringReport2018-19.

Pollution Prevention Partnership Opportunities

Valley Water continues to explore partnerships with cities, non-profits, and volunteer groups to implement priority pollution prevention and reduction activities in 10 water bodies throughout the county. This includes:

- Working with the City of San José on trash in Guadalupe River and Coyote Creek.
- Collaboration with the RWQCB and mercury researchers, as well as presenting mercury findings at various conferences.
- Partnership with USGS and UC Merced on mercury studies.
- Coordinated Monitoring Program for Guadalupe River mercury monitoring.
- Active participation in the California Lake Management Society.
- In addition, the project is coordinated with the ongoing Guadalupe and Calero dam seismic retrofit projects to protect and improve reservoir water quality.

Operational and Maintenance Challenges

Operating the oxygenation systems consistently can be a challenge due to maintenance issues. As mentioned earlier, the systems require specialized maintenance by original vendors.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.

Project B2

Interagency Urban Runoff Program

This project supports Valley Water’s continued participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and South County programs that help Valley Water reduce stormwater pollution and meet regulatory requirements to reduce contaminants in surface water.

Valley Water also participates in the regulatory development process related to stormwater by providing review, analysis and commentary on various basin plan amendments, Total Maximum Daily Loads (TMDLs) and water bodies listed as impaired or threatened under the federal Clean Water Act. Project B2 also allows Valley Water to maintain regional public education and outreach activities to help prevent urban runoff pollution at the source.

Benefits

- Uses partnerships with municipalities and local agencies to reduce contaminants and improve surface water quality in our streams, reservoirs, lakes and wetlands
- Maintains Valley Water compliance with the Regional Water Quality Control Board and National Pollutant Discharge Elimination System (NPDES) permits
- Allows continued participation in SCVURPPP and South County urban runoff programs
- Promotes stormwater pollution prevention through public outreach

Key Performance Indicators (15-year Program)

1. Install at least 2 and operate 4 trash capture devices at stormwater outfalls in Santa Clara County.
2. Maintain partnerships with cities and County to address surface water quality improvements.
3. Support 5 pollution prevention activities to improve surface water quality in Santa Clara County, either independently or collaboratively with South County organizations.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET



Trash boom cleaning at Thompson Creek.

ON TARGET

Project B2 FY21 Highlights

- Operated four (4) trash capture devices (booms) in the county, which collected approximately 0.2 tons of trash.
- Maintained several partnerships with all cities and the county.
- Completed two (2) and in process for two (2) pollution prevention activities in South County.

Status for FY21: **ON TARGET****Progress on KPI #1:**

In FY21, a total of four (4) trash capture devices (booms) were operated in Santa Clara County. Approximately two (2) cubic yards (0.2 tons) of trash were collected and removed (Figure B2.1). Due to low flows and drought conditions during FY21, trash accumulated upstream of the trash boom on Thompson Creek and was cleaned as part of trash hot spot cleanups. Low flows and drought conditions also contributed to reduced levels of trash in the Lower Silver Creek boom compared to previous fiscal years.

The four (4) booms were located at:

- Lower Silver Creek near King Rd. and Schulte Dr., San José
- Matadero Creek at West Bayshore Rd., Palo Alto
- Adobe Creek at East Bayshore Rd., Palo Alto
- Thompson Creek upstream of Tully Rd., San José

The Matadero and Adobe creek booms are managed by the City of Palo Alto under an agreement with Valley Water, which obtained environmental permits. Per the agreement, the two (2) booms in Palo Alto are removed each year between December and April, while the booms in San José are typically left in the creeks all year. Valley Water inspects all booms regularly.

In addition to booms, the stormwater NPDES permit requires Valley Water to clean up designated “hot spots.” Under Project B2, 12 hot spots were cleaned during the year, removing 17 cubic yards (1.7 tons) of trash. In June 2020, the Bay Area Stormwater Management Agencies Association released the final report on receiving water trash monitoring, including data collected from some of Valley Water’s trash hot spot sites. The report summarizes findings from qualitative and quantitative trash monitoring protocols used throughout the Bay Area. The final report was submitted to the San Francisco Bay Regional Water Board and is available at tinyurl.com/TrashJune2020.

Progress on KPI #2:

Maintained several partnerships with cities and Santa Clara County.

- Valley Water is an active member of SCVURPPP. SCVURPPP is a partnership with Santa Clara County and 13 cities within the county to reduce pollution in urban runoff to the “maximum extent practicable” to improve the water quality of South San Francisco Bay and the streams of Santa Clara County. Below is more information about SCVURPPP partnership activities:
 - Valley Water’s contribution to the SCVURPPP budget is 30%, and Valley Water chairs the management committee. More information can be found at <http://scvurppp.org/>.
 - Information on the SCVURPPP regional outreach program can be found at <http://www.mywatershedwatch.org/>.
 - Work conducted in FY21 includes continued implementation of the requirements of the San Francisco

Bay Municipal Regional Stormwater Permit (MRP) (see tinyurl.com/MRP2015Nov) and support of Green Stormwater Infrastructure implementation as part of the approved Stormwater Resource Plan (see <https://scvurppp.org/swrp/>). A SCVURPPP 2020 Program Summary will be posted at <https://scvurppp.org/library/>.

- SCVURPPP, municipalities and Valley Water submit annual reports to the San Francisco Bay Regional Water Quality Control Board (RWQCB) with accomplishments on the required activities. Valley Water's latest annual report can be found here: tinyurl.com/MRPAnnualReportFY20
- Permittees, including Valley Water, are currently working with the RWQCB on planning for the re-issuance of the MRP. The current MRP expired at the end of 2020 but was administratively extended to allow additional time for the development of the reissued permit, which is currently expected to become effective July 1, 2022.
- From May 2019- December 2020, Valley Water staff represented SCVURPPP on the Bay Area Stormwater Management Agencies Association (BASMAA) Board of Directors. More information on BASMAA can be found at <http://basmaa.org/>.
- Valley Water staff served on the California Stormwater Quality Association (CASQA) Board of Directors until December 2020. For more information on CASQA, visit <https://www.casqa.org/>
- Valley Water continues to participate in the Santa Clara County Technical Advisory Committee (TAC) to the Recycling and Waste Reduction Commission (RWRC). The TAC works on various relevant issues, including waste and litter reduction, outreach, green business and reducing disposables. Under Project B3: Pollution Prevention Partnerships and Grants, Valley Water has supported the County of Santa Clara's Green Business Program, which is reviewed by the RWRC TAC. SCVURPPP and the RWRC are co-funding waste and litter reduction outreach efforts. In addition, Valley Water actively participates in the Eco-Gardeners committee, jointly funded by the Recycling and Waste Reduction Committee and SCVURPPP, with a goal of promoting native, drought-tolerant landscaping, reducing the use of pesticides and encouraging composting.
- Valley Water actively participates and shares data, reports, and findings with the South County stormwater group, comprised of Morgan Hill, Gilroy and the County of Santa Clara.

Progress on KPI #3:

In FY21, Pollution Prevention Activity #2 was still in process, while Pollution Prevention Activity #3 was completed for a total of three (3) pollution prevention activities in South County. Pollution Prevention Activity #1 was completed in FY19. The Pollution Prevention Prioritization Plan that was completed and updated under Project B1: Impaired Water Bodies Improvement (KPI #2) is also being used to prioritize projects for Project B2 with a focus on South County.

- Pollution Prevention Activity #1 (completed):
Worked with Gilroy, Morgan Hill, and the County



Typical Bioretention Design Green Infrastructure
(Image Credit: SCVURPPP).

to complete the South County Pajaro River Watershed Pathogen and Microbial Source Tracking Study (tinyurl.com/PajaroFIB2017). Valley Water finalized the report in FY17. This study resulted in further monitoring of pathogen sources by South County agencies with additional investment by Valley Water in FY18. This activity has resulted in information that other agencies are using to develop pollution prevention outreach. A summary of the study was developed and can be found at tinyurl.com/PajaroFIB2018.

- **Pollution Prevention Activity #2 (in progress):** Valley Water performed data analysis for South County nutrient impairment and TMDL for the Pajaro River watershed to prioritize agricultural parcels based on predicted nitrate, precipitation, soil erosivity, slope and area. The analysis was presented to the South County stormwater group. Valley Water is currently developing the next steps to reduce nutrient loading in the Uvas/Llagas Watershed. Valley Water staff is tracking the regulatory requirements for agricultural discharges of nutrients and pesticides.
- **Pollution Prevention Activity #3 (completed):** Valley Water developed a Storm Water Resource Plan (SWRP) in collaboration with stormwater permittees in South County (Gilroy, Morgan Hill and County of Santa Clara) to identify and prioritize Green Stormwater Infrastructure (GSI) opportunities that could be eligible for funding. Similar to the SCVURPPP effort, this SWRP is a planning document that uses a data-mapping approach to identify and prioritize local and regional GSI projects that can be implemented to improve local surface water quality through enhanced stormwater management. GSI reduces the quantity and improves the quality of water flowing into our creeks while also providing other possible benefits, including groundwater infiltration, flood attenuation, aesthetics, reduction in heat islands and other community benefits.
- **Pollution Prevention Activity #4 (in progress):** South County Pet Waste Outreach Project Valley Water identified pet waste as a source of bacteria in local South County Creeks. Valley Water assisted Morgan Hill, Gilroy, and the County with the production of mailers and signage for their pet waste outreach project. Signs were installed in selected areas with pet waste issues in spring 2021. The signs and mailers will provide information on the environmental impacts of improper disposal of pet waste and a link for a survey and pledge. Results of the survey will be shared with Valley Water.

Financial Information

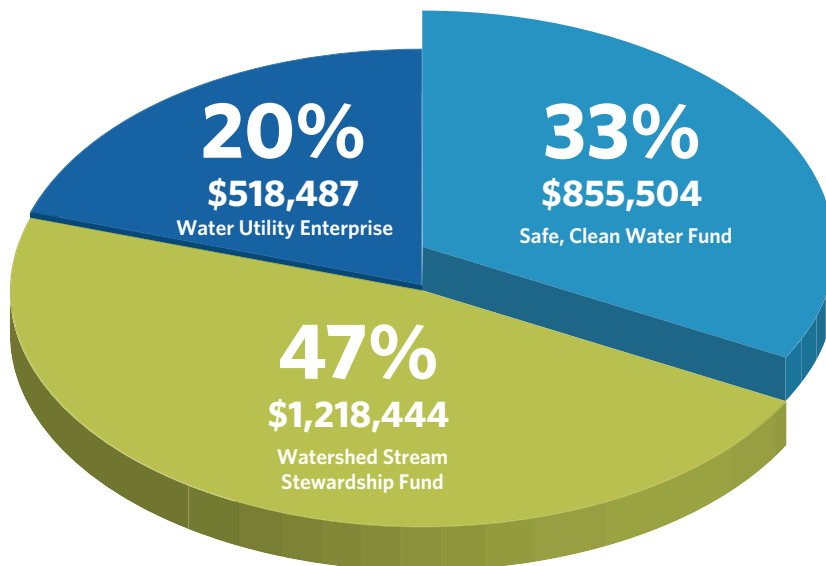
In FY21, 82% of the annual project budget was expended. The underspending was primarily due to less labor expended on this project as a result of staffing changes.

Financial Summary (\$ Thousands)								
B2. Interagency Urban Runoff Program								
Fiscal Year 2020-2021						15-year Program		
Adopted Budget	Budget Adjustment	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$856	\$0	\$856	\$703	\$0	\$703	82%	\$12,641	43%

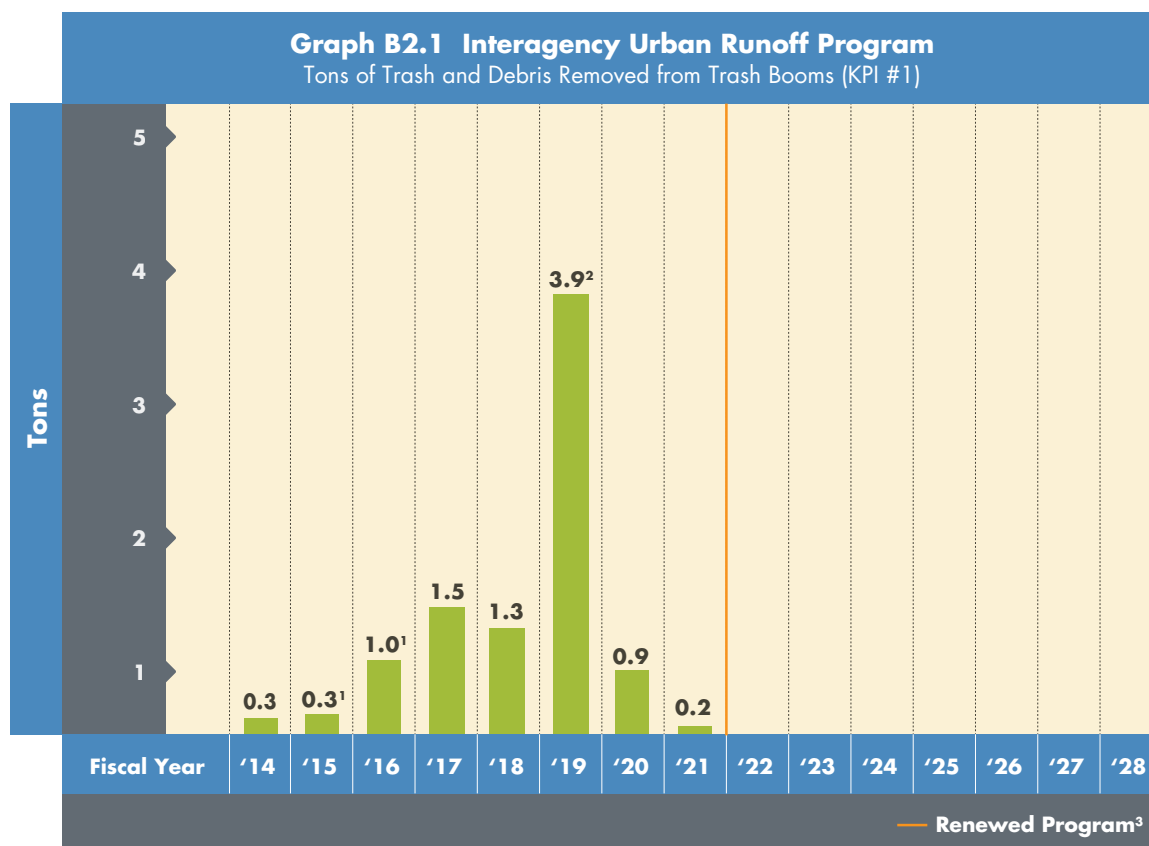
Figure B2.2

B2 Interagency Urban Runoff Program

Total FY21 Project Budget: \$2,592,435



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure B2.2 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.



¹ This estimate may have slightly varied from past annual reports due to a refinement of the conversion from cubic yards to tons.

² The FY19 increase is likely due to more frequent boom cleaning, necessitated by more frequent rainfall.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

Opportunities and Challenges

Trash Capture

Opportunities exist for the use of booms at additional creek locations to help capture trash during Project B1 trash mapping and cleanup activities. Trash booms require environmental permitting and may not be appropriate for all creek locations. In addition, a new Municipal Regional Stormwater Permit is being developed by the RWQCB that may affect future strategies for trash capture. Valley Water provided lessons learned information on booms to SCVURPPP and BASMAA partners and presented on booms at the 2019 CASQA conference.

Trash Prevention

Through collaboration with cities as part of SCVURPPP, the Zero Litter Initiative and the RWRC TAC, Valley Water works on preventing trash through education and outreach. Valley Water's outreach and school education programs also address reducing litter and waste.

Homelessness

Encampments in creeks are increasing and contributing significant amounts of trash to urban creeks. Several of the Priority B projects are related to the clean up of trash and encampments. Valley Water meets regularly internally as well as with the City of San José to coordinate resources and cleanup efforts.

Volunteer Creek Cleanup Partnership Program

The interest and enthusiasm for volunteer cleanup were very high, although volunteer activities were impacted by the COVID-19 pandemic. Some activities appear to overlap with activities covered in Projects B2, B3, B4, B6 and B7. To achieve cost-effectiveness and avoid duplication, additional coordination among these projects continued to optimize the use of the various funding sources. A factsheet was compiled in FY20 showing the amount and type of litter removed during creek cleanups ([tinyurl.com/CleanupsFY20](https://www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program)). For additional information on the volunteer program, please see Project B7.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.

Project B3

Pollution Prevention Partnerships and Grants

This project provides pollution prevention grants to qualified local agencies, nonprofit groups, schools, etc., totaling an average of \$500,000 per cycle. In addition, up to \$200,000 per year goes toward partnerships with municipalities for specific programs to reduce contaminants in surface or groundwater, and reduce emerging contaminants.

Grants could support programs such as public education to prevent pharmaceuticals from entering waterways, technical assistance to help growers protect groundwater, and partnerships to reduce litter and graffiti.

Benefits

- Helps prevent contaminants such as pharmaceuticals, household hazardous waste and trash from entering our waterways
- Helps meet regulatory requirements as listed under the impaired water bodies listing of the federal Clean Water Act
- Reduces contaminant source loads in groundwater and surface water, and protects local watersheds
- Provides public education to reduce contaminants in our waterways
- Leverages community resources for efficient use of funds

Key Performance Indicator (15-year Program)

1. Provide 7 grant cycles and 5 partnerships that follow pre-established competitive criteria related to preventing or removing pollution.

Geographic Area of Benefit: Countywide



S.F. Bay Wildlife Society cleanup event.

ON TARGET

Project B3 FY21 Highlights

- A partnership agreement for \$180,000 was executed with the City of San José for the Cash for Trash Project.
- Closed one (1) partnership with the City of San José for the Pollution Project Prevention and Creeks Cleanup.
- Continued administering 14 open grants and partnerships.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

Progress on KPI #1:

FY21 was not a grant cycle year for Project B3.

A partnership agreement for \$180,000 was executed with the City of San José for the Cash for Trash Project.

- From FY14-20, 21 grant projects and five (5) partnerships were awarded for a total of \$3,288,251. Eleven (11) have been completed or closed. One (1) was cancelled per grantee's request.
- See Appendix C for a cumulative list of grants and partnerships awarded to date.

Financial Information

In FY21, 59% of the annual project budget was expended.

The COVID-19 countywide guidance included a shelter-in-place order and other restrictions that impacted and delayed many grant projects, especially those interfacing with the public. The under-expenditure was due to delays in executing grant agreements. Due to CEQA compliance requirements and impacts from the COVID-19 public health orders, staff and grantees experienced delays in executing agreements for projects that were awarded funding. The grant funds that were budgeted for FY21 will be adjusted into FY22 to align with the agreements that need to be executed, per Board approval.

Financial Summary (\$ Thousands)								
B3. Pollution Prevention Partnerships and Grants								
Fiscal Year 2020-2021							15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$356	\$435	\$791	\$229	\$235	\$463	59%	\$7,350	52%

Opportunities and Challenges

FY21 Safe, Clean Water Grant Program Audits and Improvements

The Board Audit Committee approved a desk audit of the grants program by an external auditor in FY20. The outcome of the desk audit was the recommendation for a subsequent performance audit for the grants program. In FY21, staff worked with the external auditor, subcontracted under TAP International, to identify streamlining opportunities and collect the IMC and Board’s requested metrics. In early 2021, the auditor completed the full program audit and presented findings and recommendations to the Board Audit Committee and the entire Board for acceptance.

As a result of the audit and stakeholder feedback, the following improvements were implemented in FY21:

- Invoices are now reviewed within 10 days of receipt and paid out within 30 days of invoice approval.
- Staff tracks and monitors key administrative milestones, including application review status, agreement drafting and execution, invoicing, closeouts and outreach.
- Staff worked with internal stakeholders to develop standardized agreement templates for all grant types, retroactive start dates for projects, insurance waivers for low-risk mini-grant projects and electronic approval routing for agreement execution.
- Staff provides improved grantee guidance and assistance, including project and grant administration orientations for grantees; convenient meetings and coaching through online platforms like Zoom; 48-hour response time for email and telephone inquiries; and the use of DocuSign electronic signatures for agreements and invoices.
- Dashboards were created in the Fluxx Grants Management System (Fluxx) to streamline reviews for grant proposals, mini-grants, CEQA and Valley Water permits.
- Staff conduct virtual grant workshops that are posted on the website as a resource for potential applicants.
- Staff participated in grant training provided by recognized grant professional organizations, such as the National Grants Management Association (NGMA), PEAK Grantmaking and FluxxCon training through Fluxx.

As a result of the audit and stakeholder feedback, the following improvements are currently under development:

- Staff began developing a program policy and procedures manual, using Valley Water’s QEMS guidelines and NGMA best practices to ensure program consistency, efficiency and compliance. In addition, manuals and online resources are being developed for grantees.
- In June 2021, a consultant launched a robust survey of current and past grantees. Results will help develop program procedures, improve grantee experience, and redesign the grants and partnerships program under the renewed Safe, Clean Water Program to incorporate best practices and any other improvements.

- In November 2020, Valley Water staff began planning and developing a redesigned Safe, Clean Water grants and partnerships program under the renewed program. This plan includes a transition program for FY22. Staff was interviewing stakeholders, collecting lessons learned, and procuring a consultant to create the redesigned program. This program will incorporate audit recommendations such as grant criteria, right-sizing grant policies and procedures, risk analysis, best practices, new grant opportunities and process improvements.

Staffing

Past staffing issues resulted in a backlog of invoices, agreements, mini-grant applications, and project closeouts. However, a permanent Senior Management Analyst position was filled in June 2020 and temporary staffing resources were dedicated to supporting the program, addressing the backlog, and updating Fluxx records.

The audit and IMC recommended increased staffing levels to address the growing need for program-dedicated staffing to manage the increasing number of grant projects. On May 11, 2021, the Board approved two additional staff positions for the program. Recruitment began in June 2021.

COVID-19 Impacts to Safe, Clean Water Grants Program

In March 2020, the Santa Clara County Public Health Officer issued countywide guidance to slow the spread of COVID-19 in our community. The countywide guidance included a shelter-in-place order and other restrictions, which impacted many grant projects, especially those interfacing with the public and involving work outdoors. Staff continued to support grantees in navigating project implementation during the pandemic in FY21. Grantees found creative ways to continue their project activities; however, many of the grantees could not perform many project tasks due to social distancing mandates in FY21.

Staff continues to receive and process several time-extension requests, schedule adjustment inquiries and delays to agreement executions due to the impacts of COVID-19. The Board approved longer agreement terms for FY21 grants to account for COVID-related delays. Staff will continue to monitor these projects and work with grantees to address these unforeseen changes.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.

Project B4

Good Neighbor Program: Encampment Cleanup

This project supports Valley Water’s ongoing coordination with local cities and agencies to clean up creekside encampments that contaminate waterways and damage Valley Water facilities. This cooperative effort includes local police departments, social services, and nonprofit advocacy groups that help provide alternatives to homelessness.

Benefits

- Reduces trash and other pollutant loads in surface water, including streams, reservoirs and wetlands
- Improves the aesthetics of creeks in neighborhoods and parks
- Coordinates efforts among multiple agencies to create lasting solutions

Key Performance Indicator (15-year Program)

1. Perform 52 annual cleanups for the duration of the Safe, Clean Water Program to reduce the amount of trash and pollutants entering the streams.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21:

NOT ON TARGET

Progress on KPI #1:

- In FY21, 29 encampment sites were cleaned (Graph B4.1) and 119 tons of trash and debris generated from encampments were removed (Graph B4.2).



Homeless encampment along Coyote Creek in San José.

NOT ON TARGET

Project B4 FY21 Highlights

- Cleanups were severely curtailed because of COVID-19 related restrictions concerning unhoused encampments.
- Cleaned 29 encampment sites and removed 119 tons of trash and debris from encampments.
- Participated in the Joint Trash Team along with the City of San José and other partner agencies on a monthly basis.

Cleanups were severely curtailed during the year because of the many COVID-19 related restrictions concerning unhoused encampments. In keeping with the Center for Disease Control (CDC) guidance, Valley Water suspended encampment abatements until mid-March 2021, except for in instances of particular encampments obstructing Valley Water's planned work or negatively impacting its ability to meet regulatory or other legal obligations.

However, Valley Water continued to perform cleanups adjacent to homeless encampments to reduce the amount of trash and debris in local waterways and these activities were funded through Project B6: Good Neighbor Program: Remove Graffiti and Litter.

While Valley Water provides encampment cleanup support on Valley Water and local municipal agencies' properties throughout the county, most of these cleanups were performed in coordination with the City of San José as part of an ongoing agreement to complete encampment cleanup activities along the creeks. In addition, Valley Water participated in the Joint Trash Team along with the City of San José and other partner agencies on a monthly basis to plan and schedule services that are required for cleanup events, such as social services, law enforcement and volunteer support.

Financial Information

In FY21, 33% of the annual project budget was expended.

The under-expenditure was because encampment abatement activities remained suspended for most of the fiscal year due to COVID-19.

Financial Summary (\$ Thousands)							
B4. Good Neighbor Program: Encampment Cleanup							
Fiscal Year 2020-2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$922	\$0	\$922	\$301	\$0	\$301	33%	\$15,679
							49%

Opportunities and Challenges

Volunteer Creek Cleanup Partnership Program

The interest and enthusiasm for volunteer cleanup was high, although the pandemic impacted volunteer activities. Some activities appear to overlap with activities covered in Projects B2, B3, B4, B6, and B7. To achieve cost-effectiveness and avoid duplication, additional coordination among these projects continued to optimize the use of the various funding sources. For additional information on the volunteer program, please see Project B7.

Homelessness in Santa Clara County

On May 25, 2021, the Valley Water Board endorsed the Santa Clara County Community Plan to End Homelessness 2020-2025, the countywide plan that serves as a roadmap for addressing homelessness in the county. The community plan is organized around three main strategies: 1) Address the root causes of

homelessness through system and policy change; 2) Expand homelessness prevention and housing programs to meet the need; and 3) Improve the quality of life for unsheltered individuals and create healthy neighborhoods for all.

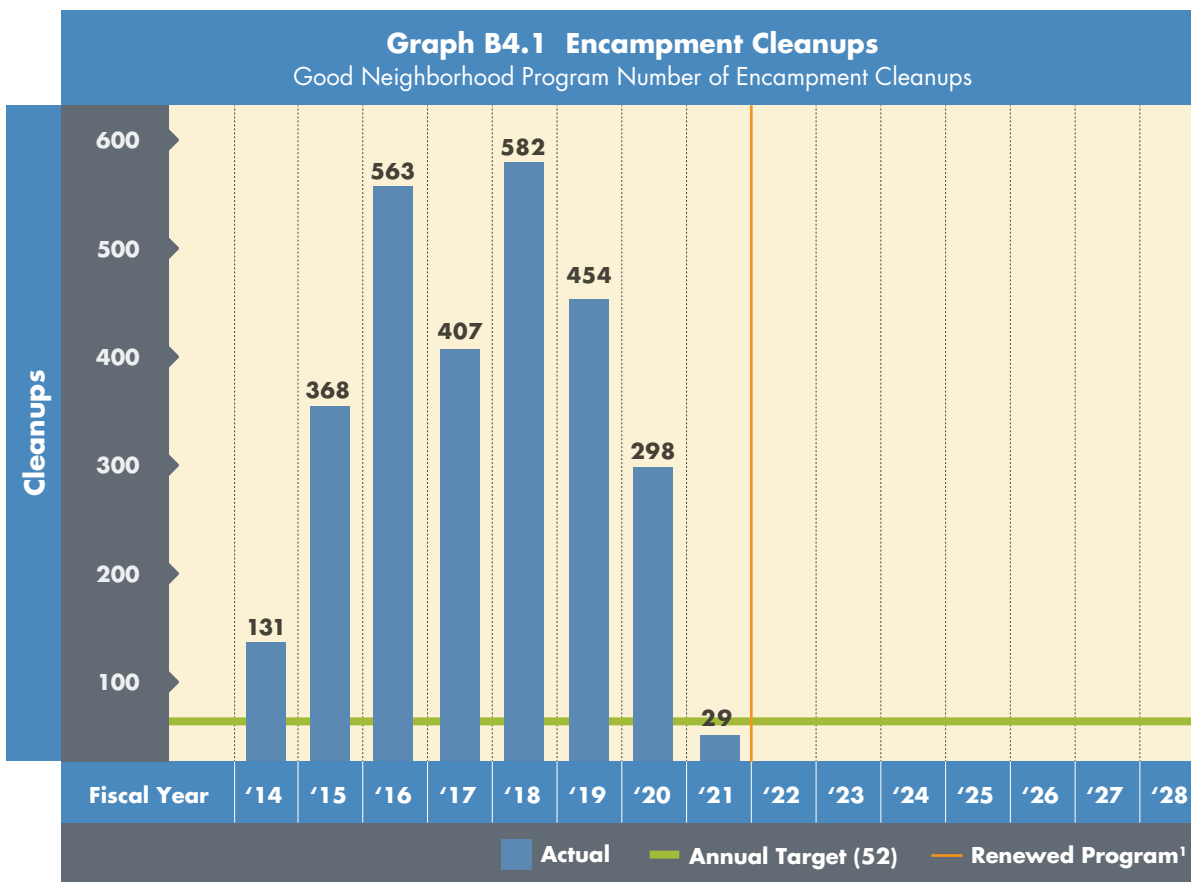
COVID-19 Impacts

Under the state and county’s shelter-in-place order to slow the spread of COVID-19, Valley Water is considered critical and essential as an organization from a utility and public works perspective. Essential work includes those activities and processes necessary to ensure public safety; to align with Valley Water’s charter to provide safe, clean water, flood protection and environmental stewardship; to ensure the viability of the agency; and work that, if not performed, would have a significant impact to the community. Following the evolving CDC guidance regarding homeless encampment abatements during the pandemic, local agencies, including Valley Water, ceased encampment abatements until mid-March 2021. As a result, the total number of cleanups during the year was significantly reduced.

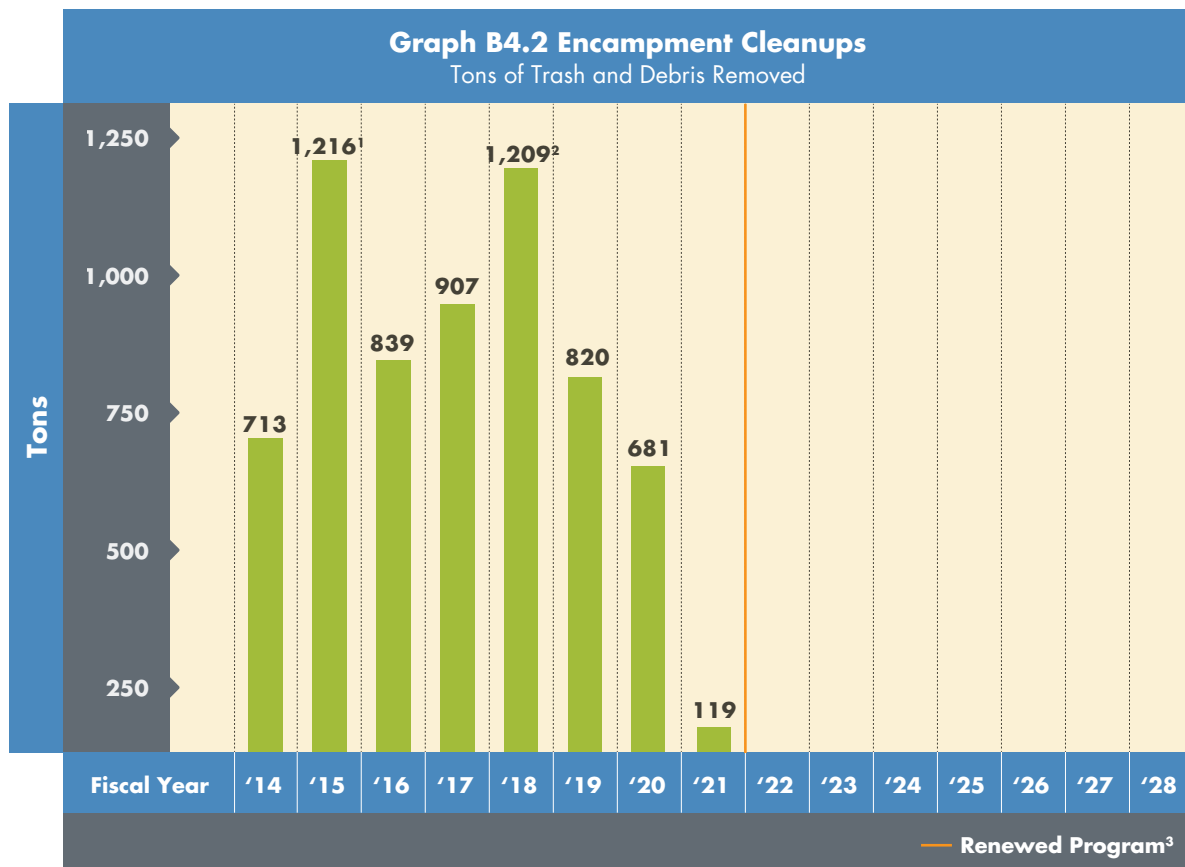
As mentioned earlier, Valley Water continued to perform cleanups adjacent to homeless encampments to reduce the amount of trash and debris in local waterways and these activities were funded through Project B6: Good Neighbor Program: Remove Graffiti and Litter.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.



¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.



¹ In FY15, the Encampment Cleanup totals spiked as a result of trash and debris removed from combined cleanups in Coyote Creek in December 2014.

² In FY18, the Encampment Cleanup totals spiked due to an increase in community demand.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

Project B5

Hazardous Materials Management and Response

This project allows Valley Water to continue providing a local, toll free number to report hazardous materials spills 24 hours a day, 7 days a week. Emergency staff responds within 2 hours of the initial report, with spill cleanup in Valley Water rights-of-way performed in a timely manner. Appropriate agencies are alerted when spills are outside Valley Water jurisdiction.

Benefits

- Prevents and reduces contaminants in surface and groundwater
- Provides a quick, systematic emergency response that reduces negative impacts of hazardous materials spills

Key Performance Indicator (15-year Program)

1. Respond to 100% of hazardous materials reports requiring urgent on-site inspection in 2 hours or less.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

In FY21, Valley Water received 110 incident calls countywide, of which 23 received an on-site response; six (6) were classified as urgent. The remaining 87 calls did not receive on-site responses because they were outside of Valley Water's jurisdiction, were reporting an event that occurred in the past and was already mitigated or were addressed by another Valley Water team. Valley Water met 100% of its required two (2) hour or less response time for urgent calls, with an average response time of 85 minutes countywide.



Absorbent pads soak up Matadero Creek diesel spill.

ON TARGET

Project B5 FY21 Highlights

- Met 100% of the required two (2) hour or less response time for urgent calls, with an average response time of 85 minutes countywide.
- Received 110 incident calls countywide, of which 23 received an on-site response; six (6) were classified as urgent.

Progress on KPI #1:**Matadero Creek Diesel Spill**

In May 2021, a facility located in Palo Alto experienced mechanical problems with their emergency generator unit. This resulted in approximately 200-gallon of diesel fuel escaping into the environment and a portion of it getting into the nearby Matadero Creek. Valley Water's Pollution Hotline staff, along with representatives for Palo Alto Fire Department, and the California Department of Fish and Wildlife responded to the incident. The spill was confined to a 500-foot section of Matadero Creek. A local hazardous waste firm, Environmental Logistics, was brought to undertake mitigation activities.



Boom deployment at Stevens Creek Reservoir.

Financial Information

In FY21, 76% of the annual project budget was expended.

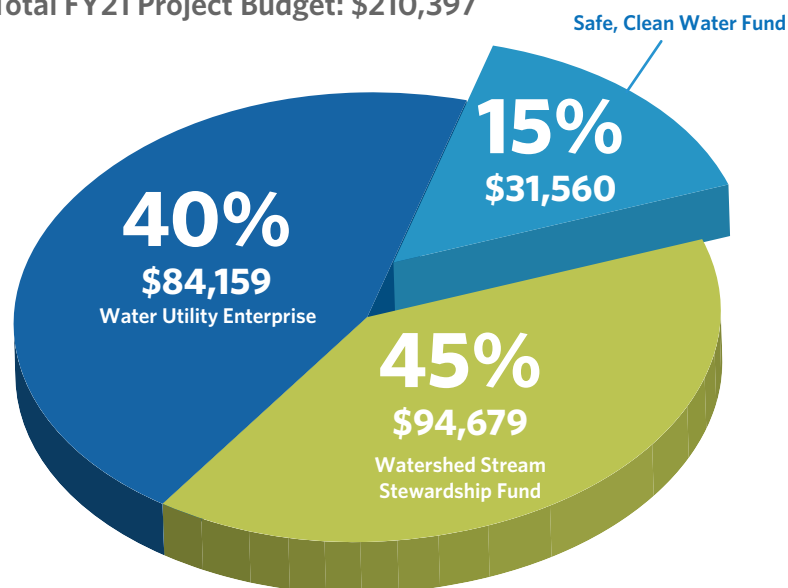
Expenditures under this project can fluctuate widely based on the following:

1. The number of calls received on the Pollution Prevention hotline;
2. The number of calls requiring a field response;
3. The varying amount of time required to resolve/mitigate once in the field; and
4. The unspecified amount of waste to be disposed under the Emergency Response Program.

Financial Summary (\$ Thousands)							
B5. Hazardous Materials Management and Response							
Fiscal Year 2020-2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$32	\$0	\$32	\$24	\$0	\$24	76%	\$618
							33%

Figure B5.1**B5 Hazardous Materials Management and Response**

Total FY21 Project Budget: \$210,397



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure B5.1 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.

Opportunities and Challenges**Multiple incidences**

It is possible, multiple incidents requiring a field response, could occur in a short timeframe for the sole on-call staff to address. Response Program may potentially have trouble meeting the two (2) hour response goal. However, this rarely occurs and when it has the other three on-call responders have been able to assist to ensure Valley Water meets its KPI.

Response times

Other challenges to meeting timeliness performance standards include accessing remote locations or encountering traffic when traveling to various locations in the county. It is also critical that Valley Water's Pollution Hotline Program staff maintains good working relationships with other response agencies.

Table B5

Fiscal Year	Total Reports	Total Responses*	On-site Responses Classified as "Urgent"	Countywide Average Response Time
2020–2021	110	23	6	85 minutes

*The remaining 87 calls did not receive on-site responses because they were outside of Valley Water's jurisdiction, were reporting an event that occurred in the past and already mitigated, or were addressed by another Valley Water team.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.



Graffiti in Adobe Creek channel.

ON TARGET

Project B6 FY21 Highlights

- Removed 157 tons of debris countywide.
- Removed 101,628 square feet of graffiti at 1,807 sites throughout the county.
- Logged 292 complaints regarding illegal dumping and trash and 54 complaints regarding graffiti.

Project B6

Good Neighbor Program: Remove Graffiti and Litter

This project allows Valley Water to continue responding to complaints about illegal dumping, trash and graffiti on Valley Water property and rights-of-way. Cleanup efforts include graffiti removal from headwalls, concrete embankments, signs, structures and other Valley Water assets, as well as maintaining, repairing and installing fences and gates so that Valley Water structures and facilities remain safe and clean. The project also includes quarterly cleanups of problem sites to help reduce waterway pollution and keep creeks and riparian areas free of debris.

Benefits

- Reduces trash and contaminants in local waterways
- Improves the appearance of waterways in neighborhoods and parks by removing trash, graffiti and litter as well as illegally dumped items such as cars, shopping carts, appliances, etc.
- Reduces illegal dumping into or near waterways by repairing and installing fencing on Valley Water property
- Provides coordinated response to community complaints about trash and graffiti in neighborhoods

Key Performance Indicators (15-year Program)

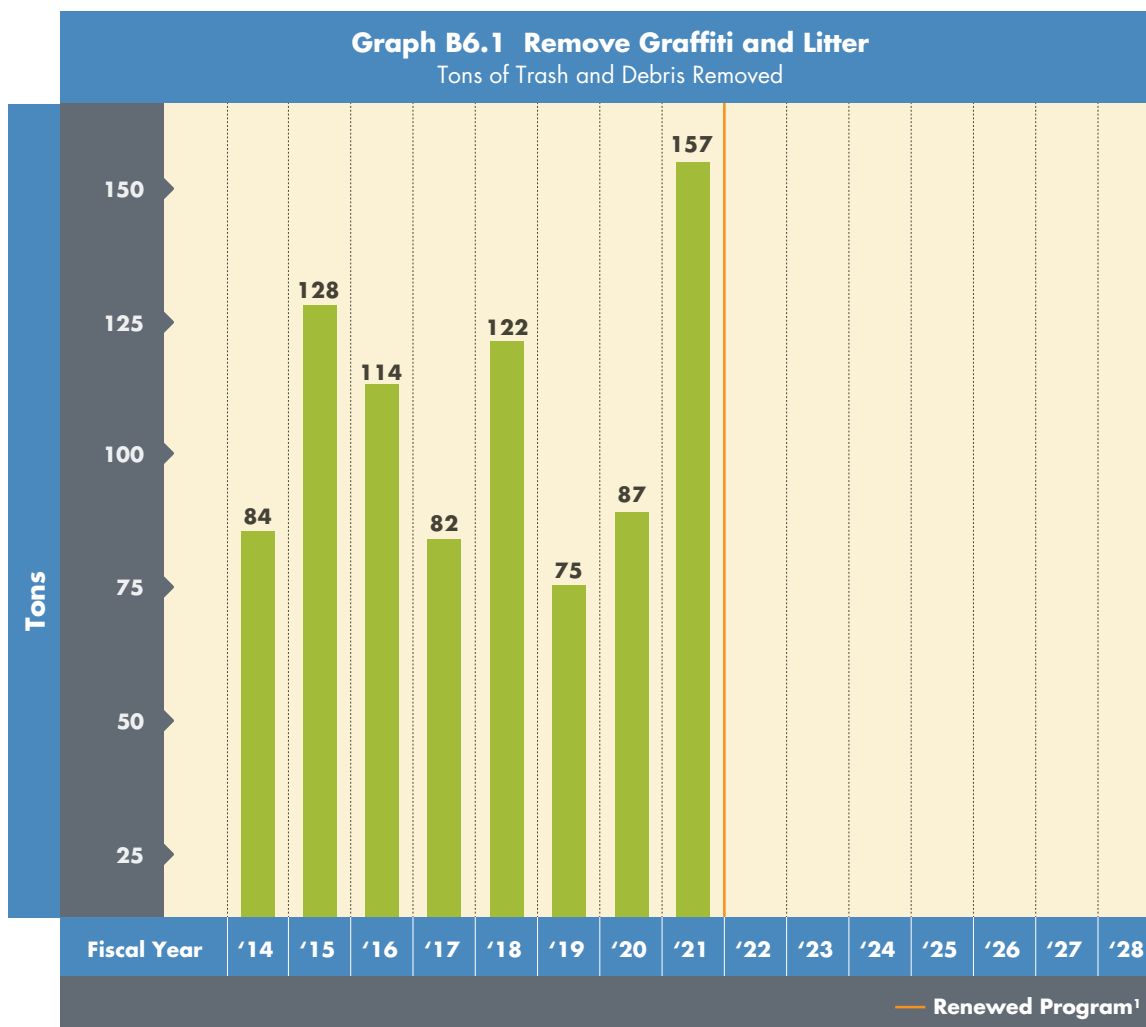
1. Conduct 60 cleanup events (4 per year).
2. Respond to requests on litter or graffiti cleanup within 5 working days.

Geographic Area of Benefit Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: **ON TARGET**



¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

Progress on KPI #1:

- Conducted four (4) litter cleanup events (1 per quarter), which consisted of removing trash and debris from a total of 330 sites throughout the county. These sites were identified as trash hot spots where Valley Water had fee title. In total, 157 tons (2,199 cubic yards) of debris was removed countywide (Graph B6.1).
- Conducted four (4) graffiti cleanup events throughout the county removing graffiti from identified locations and from sites based on inspection or citizen complaint within five (5) working days. A total of 101,628 square feet of graffiti was removed at 1,807 sites throughout the county.

Progress on KPI #2:

- Logged 292 complaints regarding illegal dumping and trash and 54 complaints regarding graffiti on the online customer service center--Access Valley Water (AVW). All AVW complaints were responded to within five (5) days or less (1.6 days on average) regarding scheduling the planned activity. Each complaint must be assessed to determine whether the reported location is on Valley Water property. For graffiti complaints on Valley Water property, work was completed on average within 1.1 days of being reported to the outside

Financial Information

In FY21, 131% of the annual project budget was expended.

The overspending was due to an increase in trash in the creeks and riparian corridors generated from illegal dumping activities and encampments.

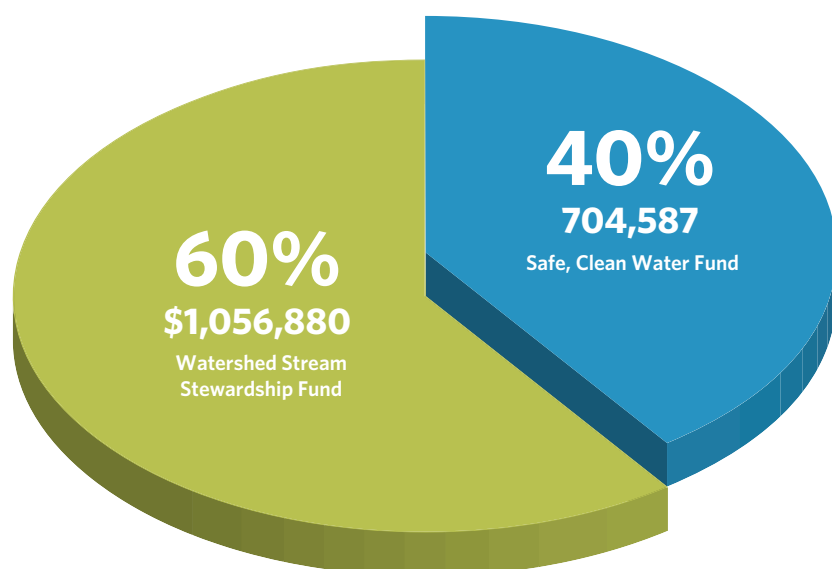
Following the evolving CDC guidance regarding homeless encampment abatements during the pandemic, local agencies, including Valley Water, ceased encampment abatements under Project B4 Good Neighbor Program: Encampment Cleanup until mid-March 2021. However, Valley Water continued to perform cleanups adjacent to homeless encampments to reduce the amount of trash and debris in local waterways and these activities were funded through Project B6.

Financial Summary (\$ Thousands)							
B6. Good Neighbor Program: Remove Graffiti and Litter							
Fiscal Year 2020-2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$705	\$0	\$705	\$874	\$51	\$925	131%	\$10,038
							47%

Figure B6.1

B6 Good Neighbor Program: Remove Graffiti and Litter

Total FY21 Project Budget: \$1,761,467



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure B6.1 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.

Opportunities and Challenges

Volunteer Creek Cleanup Partnership Program

The interest and enthusiasm for volunteer cleanup was very high, although volunteer activities were impacted by the COVID-19 pandemic. Some activities appear to overlap with activities covered in Projects B2, B3, B4, B6, and B7. To achieve cost-effectiveness and avoid duplication, additional coordination among these projects continued to optimize the use of the various funding sources. For additional information on the volunteer program, please see Project B7.

Contractor Services

The approach of utilizing the services of a contractor to remove graffiti has proven to be successful for Valley Water. In FY21, the contractor conducted monthly inspections of five (5) specific geographic locations with subsequent removal of any graffiti found. Utilizing a computer application for smart phones, the contractor also responded to 1,807 sites resulting in removal of 101,628 square feet of graffiti. On average work was completed in less than 1.1 days of being reported. Because of the success of this program, graffiti removal will continue to be addressed by a contractor in FY22.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.

Project B7

Support Volunteer Cleanup Efforts and Education

This project provides grants and partnerships for cleanup, education, outreach and watershed stewardship activities. Funding also allows Valley Water to continue supporting volunteer cleanup activities such as National River Cleanup Day, California Coastal Cleanup Day, the Great American Pick Up, and Adopt-A-Creek, as well as Creek Connections Action Group and creekwise education.

Benefits

- Reduces contaminants entering our waterways and groundwater
- Engages community, and supports watershed stewardship
- Leverages volunteer community resources for efficient use of funds

Key Performance Indicators (15-year Program)

1. Provide 7 grant cycles and 3 partnerships that follow pre-established competitive criteria related to cleanups, education and outreach, and stewardship activities.
2. Fund Valley Water support of annual National River Cleanup Day, California Coastal Cleanup Day, the Great American Pick Up; and fund the Adopt-A-Creek Program.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

Progress on KPI #1:

- On February 23, 2021, the Board awarded a total of \$188,558 for four (4) grant projects:
- Bay Area Older Adults – Watershed Waste Reduction Program (\$40,985)



Volunteers collect trash on Coastal Cleanup Day.

ON TARGET

Project B7 FY21 Highlights

- The Board awarded a total of \$188,558 for four (4) grant projects.
- Closed three (3) grant projects.
- Continued administering 14 open grants and partnerships.
- Continued to fund three (3) of the four (4) countywide volunteer cleanup activities during the COVID-19 pandemic.

- Grassroots Ecology – Coyote/Stevens Creek Watershed Community Engagement Project (\$49,980)
- IISME, dba Ignited – Santa Clara Water Weeks (\$47,593)
- Silicon Valley Bicycle Coalition – Wheels and Waterways (\$50,000)
- From FY14-20, 19 grant projects and one (1) partnership were awarded for a total of \$878,406. Of these, 11 were completed and closed.
- See Appendix C for a cumulative list of grants and partnerships awarded to date.



Valley Water grant-funded Guadalupe River Park Conservancy's mural painting underneath the Coleman Ave. bridge.

Progress on KPI #2:

Continued funding of countywide volunteer cleanup activities (Graph B7.3):

- **National River Cleanup Days (May 1, 8, 15, 22, 29, 2021):** In 2021, the event took place every Saturday in May from 9 a.m. to noon. Volunteers were able to register on Eventbrite to receive safety guidelines, recycling and hazardous waste information, and sign up to pick up supplies such as trash bags, litter sticks, and gloves at a variety of locations throughout the County. Volunteers recorded their cleanup efforts on an app called CleanSwell. 774 volunteers removed about 77,043 pounds of trash including 203.3 pounds of recyclables along 128 miles in Santa Clara County.
- **Coastal Cleanup Days (September 5, 12, 19, 26, 2020):** 1,240 volunteers removed about 46,272 pounds of trash including 913 pounds of recyclables along 336 miles in Santa Clara County.
- **Great American Litter Pickup:** The Great American Litter Pickup 2020 was cancelled due to the countywide shelter-in-place order to slow the spread of COVID-19.
- **Adopt-A-Creek (AAC) (year-round):** This year, the program saw growth in new partnerships and was more accessible to the public with interactive creeks maps. As of May 2021, Valley Water had 74 active adopted sites with 65 groups committing to host a minimum of two (2) cleanup events per year. Partners continued to utilize the online customer service center, Access Valley Water, to report cleanup numbers and request trash pickups. Valley Water continued to utilize social media to outreach and increase awareness of the program.

Financial Information

In FY21, 35% of the annual project budget was expended.

The COVID-19 countywide guidance included a shelter-in-place order and other restrictions that impacted and delayed many grant projects, especially those interfacing with the public. The under-expenditure was due to delays in executing grant agreements. Due to CEQA compliance requirements and impacts from the COVID-19 public health orders, staff and grantees experienced delays in executing agreements for projects that were awarded funding. The grant funds that were budgeted for FY21 will be adjusted into FY22 to align with the agreements that need to be executed, per Board approval.

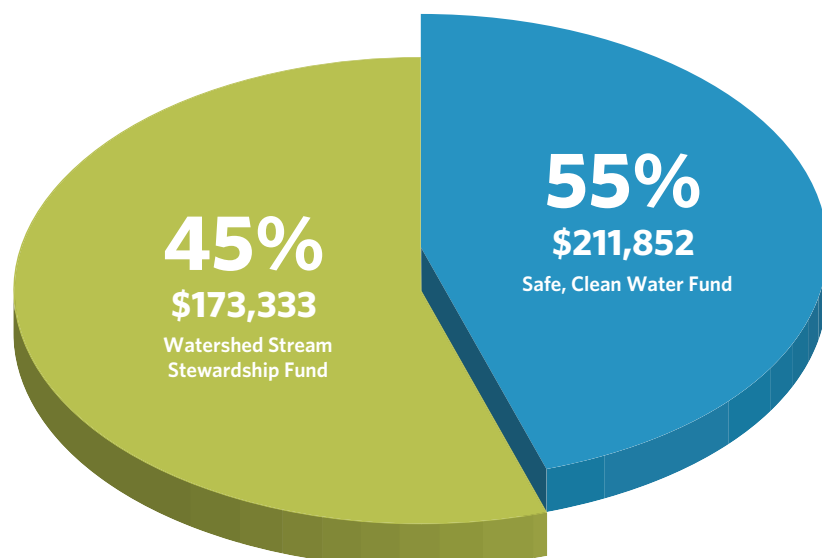
During the pandemic, the Adopt-A-Creek program was on pause for six (6) months. National River Cleanup and Coastal Cleanup adapted a virtual format and encouraged participants to use their household supplies for cleanups to prevent travel and exposure. Additionally, the cancellation of National River Cleanup in FY20 resulted in a carryover of supplies for FY21.

Financial Summary (\$ Thousands)							
B7. Support Volunteer Cleanup Efforts and Education							
Fiscal Year 2020-2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$206	\$6	\$212	\$74	\$0	\$74	35%	\$2,326
							64%

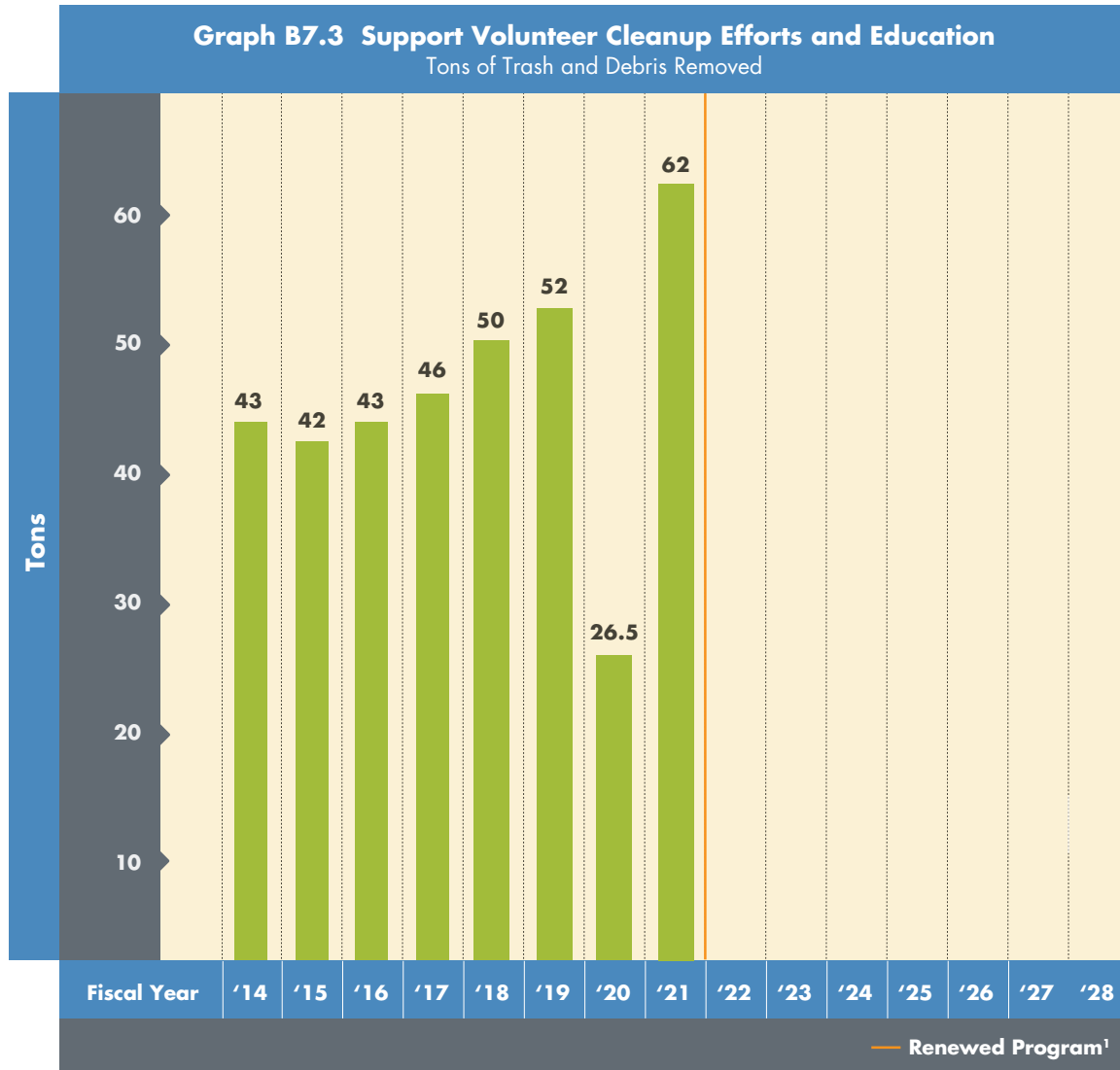
Figure B7.2

B7 Support Volunteer Cleanup Efforts and Education

Total FY21 Project Budget: \$385,185



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure B7.2 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.



¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

Opportunities and Challenges

FY21 Safe, Clean Water Grant Program Audits and Improvements

The Board Audit Committee approved a desk audit of the grants program by an external auditor in FY20. The outcome of the desk audit was the recommendation for a subsequent performance audit for the grants program. In FY21, staff worked with the external auditor, subcontracted under TAP International, to identify streamlining opportunities and collect the IMC and Board's requested metrics. In early 2021, the auditor completed the full program audit and presented findings and recommendations to the Board Audit Committee and the entire Board for acceptance.

As a result of the audit and stakeholder feedback, the following improvements were implemented in FY21:

- Invoices are now reviewed within 10 days of receipt and paid out within 30 days of invoice approval.

- Staff tracks and monitors key administrative milestones, including application review status, agreement drafting and execution, invoicing, closeouts and outreach.
- Staff worked with internal stakeholders to develop standardized agreement templates for all grant types, retroactive start dates for projects, insurance waivers for low-risk mini-grant projects and electronic approval routing for agreement execution.
- Staff provides improved grantee guidance and assistance, including project and grant administration orientations for grantees; convenient meetings and coaching through online platforms like Zoom; 48-hour response time for email and telephone inquiries; and the use of DocuSign electronic signatures for agreements and invoices.
- Dashboards were created in the Fluxx Grants Management System (Fluxx) to streamline reviews for grant proposals, mini-grants, CEQA, and Valley Water permits.
- Staff conduct virtual grant workshops that are posted on the website as a resource for potential applicants.
- Staff participated in grant training provided by recognized grant professional organizations, such as the National Grants Management Association (NGMA), PEAK Grantmaking and FluxxCon training through Fluxx.

As a result of the audit and stakeholder feedback, the following improvements are currently under development:

- Staff began developing a program policy and procedures manual, using Valley Water’s QEMS guidelines and NGMA best practices to ensure program consistency, efficiency and compliance. In addition, manuals and online resources are being developed for grantees.
- In June 2021, a consultant launched a robust survey of current and past grantees. Results will help develop program procedures, improve grantee experience and redesign the grants and partnerships program under the renewed Safe, Clean Water Program to incorporate best practices and any other improvements.
- In November 2020, staff began planning and developing a redesigned Safe, Clean Water grants and partnerships program under the renewed program. This plan includes a transition program for FY22. Staff was interviewing stakeholders, collecting lessons learned, and procuring a consultant to create the redesigned program. This program will incorporate audit recommendations such as grant criteria, right-sizing grant policies and procedures, risk analysis, best practices, new grant opportunities and process improvements.

Staffing

Past staffing issues resulted in a backlog of invoices, agreements, mini-grant applications and project closeouts. However, a permanent Senior Management Analyst position was filled in June 2020 and temporary staffing resources were dedicated to supporting the program, addressing the backlog and updating Fluxx records.

The audit and IMC recommended increased staffing levels to address the growing need for program-dedicated staffing to manage the increasing number of grant projects. On May 11, 2021, the Board approved two additional staff positions for the program. Recruitment began in June 2021.

COVID-19 Impacts to Safe, Clean Water Grants Program

In March 2020, the Santa Clara County Public Health Officer issued countywide guidance to slow the spread of COVID-19 in our community. The countywide guidance included a shelter-in-place order and other restrictions,

which impacted many grant projects, especially those interfacing with the public and involving work outdoors. Staff continued to support grantees in navigating project implementation during the pandemic in FY21. Grantees found creative ways to continue their project activities; however, many of the grantees could not perform many project tasks due to social distancing mandates in FY21.

Staff continues to receive and process several time-extension requests, schedule adjustment inquiries and delays to agreement executions due to the impacts of COVID-19. The Board approved longer agreement terms for FY21 grants to account for COVID-related delays. Staff will continue to monitor these projects and work with grantees to address these unforeseen changes.

Volunteer Creek Cleanup Partnership Program

Valley Water attends monthly Creek Partners meetings with the City of San José for better coordination on cleanup efforts and for ongoing communication with various community organizations. Internally, Valley Water holds quarterly meetings to improve coordination among staff working on various pollution prevention priority projects to achieve cost-effectiveness and avoid duplication. Furthermore, Project B1 Impaired Water Bodies Improvement, continues to fund part-time assistance in support of Project B7, the Adopt-A-Creek program, which greatly benefits the interagency urban runoff program.

Annual Volunteer Recognition Event

As an opportunity for continued improvement of the Adopt-A-Creek program and to further connect with volunteers, each winter, Valley Water holds a volunteer recognition event for AAC partners and National River Cleanup and Coastal Cleanup volunteers. The event continues to serve as an opportunity to recognize volunteers and their contributions in maintaining clean and healthy creeks and to help recruit new AAC partners. The next volunteer recognition event is planned for winter of 2021.

COVID-19 Impacts to Creek Stewardship Activities

In alignment with the public health order due to the COVID-19 pandemic, large group cleanup events and activities were limited. Valley Water staff encouraged local neighborhood opportunities and alternatives to host smaller scale cleanups to avoid large group gatherings.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/project-updates/safe-clean-water-and-natural-flood-protection-program.



Priority C:

Protect our water supply from
earthquakes and natural disasters

**Safe, Clean Water
and Natural Flood Protection**

Priority C

Protect our Water Supply from Earthquakes and Natural Disasters

Projects under Priority C include retrofitting to protect our water supply infrastructure from the impacts of natural disasters, like earthquakes. It also includes emergency flood response enhancements to improve communication between responders and help reduce damages from floods.

Project C1

Anderson Dam Seismic Retrofit

Project C2

Emergency Response Upgrades



Anderson Dam

ON TARGET

Project C1 FY21 Highlights

- Commenced construction of Anderson Dam Tunnel Project.
- Completed the first fund transfer in FY16 and second and final transfer was scheduled for FY28.

Project C1

Anderson Dam Seismic Retrofit

Anderson Reservoir is currently limited in its capacity due to seismic concerns, costing Santa Clara County valuable drinking water resources. This project covers earthquake retrofitting of Anderson Dam to improve reliability and safety, and returns the reservoir to its original storage capacity.

Anderson Dam creates the county's largest surface water reservoir—Anderson Reservoir— which stores local rainfall runoff and imported water from the Central Valley Project. The reservoir is an important water source for treatment plants and the recharge of the groundwater basin. Besides restoring drinking water supplies, the upgrade also supports compliance with environmental regulations. Valley Water's regular reservoir releases ensure that downstream habitat has healthy flows and temperatures to sustain wildlife.

A breach of Anderson Dam at full capacity could have catastrophic consequences, including inundation of surrounding land more than 30 miles northwest to San Francisco Bay, and more than 40 miles southeast to Monterey Bay.

In December 2016, the Board was informed by Valley Water that findings from the geotechnical and geologic investigations performed during the project's design phase led to the conclusion that a more extensive dam retrofit than had originally been envisioned would have to be performed. Further, the Board was informed that the more extensive retrofit work would double the previous project's estimated cost. Valley Water presented the Board with a water supply cost-benefit analysis that showed the benefits of the more extensive retrofit project significantly outweighed the cost of not proceeding with the retrofit, which would require Valley Water to purchase additional imported water every year to make up for the loss of long-term storage at Anderson Reservoir. Based upon this information and analysis, the Board directed Valley Water to continue work on this critical infrastructure project.

Benefits

- Brings the dam into compliance with today's seismic standards
- Increases reliability and safety of our area's largest reservoir by protecting it from earthquakes
- Eliminates operational restrictions issued by the state Department of Water Resources Division of Safety of Dams (DSOD) which would restore Anderson Reservoir to its full capacity of approximately 90,373 acre-feet, regaining 48% or about 43,500 acre-feet of water storage for our current and future water supply
- Ensures compliance with environmental laws requiring reservoir releases that maintain appropriate flows and temperatures to support downstream wildlife habitat
- Minimizes the risk of uncontrollable releases from the reservoir which could cause downstream flooding

Key Performance Indicator (15-year Program)

1. Provide portion of funds, up to \$45 million, to help restore full operating reservoir capacity of 90,373 acre-feet.

Geographic Area of Benefit: Countywide

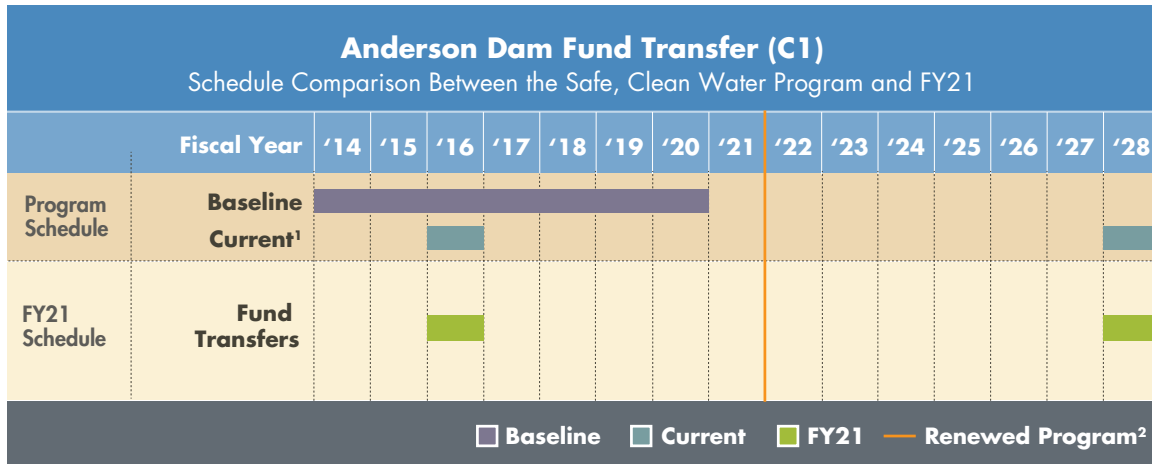
Project Location



Legend

★	Project Location	▭	Santa Clara County Cities
—	Coyote Creek	▭	Santa Clara County

Schedule



¹ Board approved a schedule adjustment through the change control process in FY17.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ADJUSTED
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21:

ON TARGET

Progress on KPI #1:

- The first fund transfer was completed in FY16. The second and final transfer was scheduled for FY28. However, under the renewed Safe, Clean Water Program that voters approved in November 2020, the project KPI and schedule have been updated. For more information on the Anderson Dam Project, visit <https://www.valleywater.org/project-updates/c1-anderson-dam-seismic-retrofit>.

Financial Information

In FY21, there was no budget allocation for this project.

Opportunities and Challenges

Progress

On May 28, 2021, Valley Water issued a notice to proceed to Flatiron West Inc. to construct the Anderson Dam Tunnel Project (ADTP), an offshoot of one portion of the Anderson Dam Seismic Retrofit (ADSRP) Project. Earlier, on April 27, 2021, the Valley Water Board had awarded Flatiron West Inc. the ADTP construction contract for \$161,140,321.

This followed the February 2020 order by the Federal Energy Regulatory Commission (FERC), the federal dam regulator, directing Valley Water to immediately implement risk reduction measures to protect the public from the risk of Anderson Dam failure due to seismic activity and develop and implement necessary avoidance, minimization and mitigation measures. The FERC order included maintaining Anderson Reservoir at a level no higher than 565 feet elevation immediately and begin lowering the reservoir to an elevation of 488 feet in a safe manner no later than October 1, 2020. FERC issued a second order on October 1, 2020, that approved the measures of the Reservoir Drawdown and Operations Plan necessary for Valley Water to effectuate the reservoir drawdown. The October 2020 order includes drawdown of the reservoir, reservoir bank and rim stability improvements, existing intake structure modifications, imported water releases and Cross Valley Pipeline extension, and steelhead and fish avoidance and minimization measures.

In compliance with the February 2020 FERC order, Valley Water immediately restricted the reservoir to 565 feet elevation; began defining the interim risk reduction measures; and initiated emergency consultation processes regarding adverse environmental impacts of these interim risk reduction measures with the regulatory agencies, as appropriate. Furthermore, Valley Water created a project that is described in the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) Engineer's Report. The project, which includes ADTP, is to achieve the following:

- a. allow Valley Water a way to safely, reliably and expeditiously draw down Anderson Reservoir (Reservoir) and maintain the Reservoir at a required lower elevation;
- b. minimize risks associated with exceeding the restricted Reservoir level and an undersized outlet structure by constructing a new, low-level outlet;
- c. prioritize the interim downstream protection of residents and property; and
- d. minimize the public health and safety and environmental impacts of reservoir drawdown.

Per the February 20, 2020, FERC order, Valley Water expedited and completed the design of the tunnel, which would provide greater flexibility in maintaining the reservoir levels.

Valley Water started discussions with DSOD and FERC in November 2020 and was officially authorized on April 9, 2021, to utilize phased approvals to authorize the contractor to build the ADTP. The phased approvals intend to allow the ADTP to move forward in Spring 2021, giving FERC and DSOD additional time to review and authorize the more complex components of the ADTP. The project was divided into four phases (1, 2A, 2B and 3) and Valley Water received approvals for Phases 1, 2A and 2B from DSOD. Valley Water also received construction authorization for Phase 1 and engineering design approval for Phase 2A from FERC.

Meanwhile, Valley Water continues to work with FERC to update the environmental/construction schedule of the ADSRP. Pending completion of environmental obligations for the FOCP, Valley Water plans to release the

ADSRP Draft Environmental Impact Report (EIR) for public review as early as November 2021. Valley Water also continued work on the ADSRP 90% design, which is scheduled to be completed at the end of 2021 or early 2022. Construction of the remaining ADSRP elements, including the high-level outlet works and removing and reconstructing the spillway and the dam embankment, will commence subsequently and will take seven (7) years and is dependent on the permit requirements and the field conditions.

Valley Water has been working closely with the regulatory agencies since early 2018. Valley Water is holding monthly technical working group and bi-monthly interagency consultation meetings with key regulatory agencies and the County of Santa Clara. In addition, Valley Water continued to engage key agencies through FY21 for negotiating and securing the necessary permits for project construction.

Valley Water also continued to work with other stakeholders, including the Santa Clara County Department of Parks and Recreation (SCCParks) and the community at large. Staff also provided the Valley Water Board regular updates on the project progress. Regular monthly meetings were held with SCCParks. In FY21, during the COVID-19 pandemic, Valley Water held several virtual community meetings to provide a status update on the project.

Meanwhile, on January 26, 2021, the Board directed staff to pursue the surrender and decommissioning of the Anderson Hydroelectric Facility. The facility, which has been operating at the Anderson Dam for over 30 years, has generated renewable energy as part of the overall Valley Water energy portfolio. Over the last several years, Valley Water has made significant strides in diversifying our energy portfolio towards much more economically favorable and greener solutions to the point that almost 100% of Valley Water's energy use is from carbon-free sources at a very competitive cost. Meanwhile, as with any aging infrastructure, the cost of operating and maintaining the facility has been increasing and exceeds the revenues from power generation at the facility.

As a result, the Board directed staff to take the necessary steps to seek FERC's approval to surrender and decommission the facility, including but not limited to:

- Evaluate the surrender of the license exemption and decommissioning the facility in the ADSRP EIR; and
- Coordinate with FERC and other regulatory agencies to submit all applications and obtain any necessary approval to implement decommissioning of the facility as part of the ADSRP.

Permits

While the FOCPP and the ADSRP are two separate independent projects, Valley Water's goal is to incorporate most ADTP infrastructure into the future ADSRP infrastructure and facilities. CEQA and National Environmental Policy Act (NEPA) compliance and regulatory approval processes for the ADSRP continue in parallel to the approval, construction and operation of the FOCPP.

FERC is the federal lead agency under NEPA and issued an Environmental Assessment (EA) in support of its ordered dam safety directive on October 1, 2020. FERC issued a supplemental EA for the remaining components of the FOCPP on February 2, 2021.

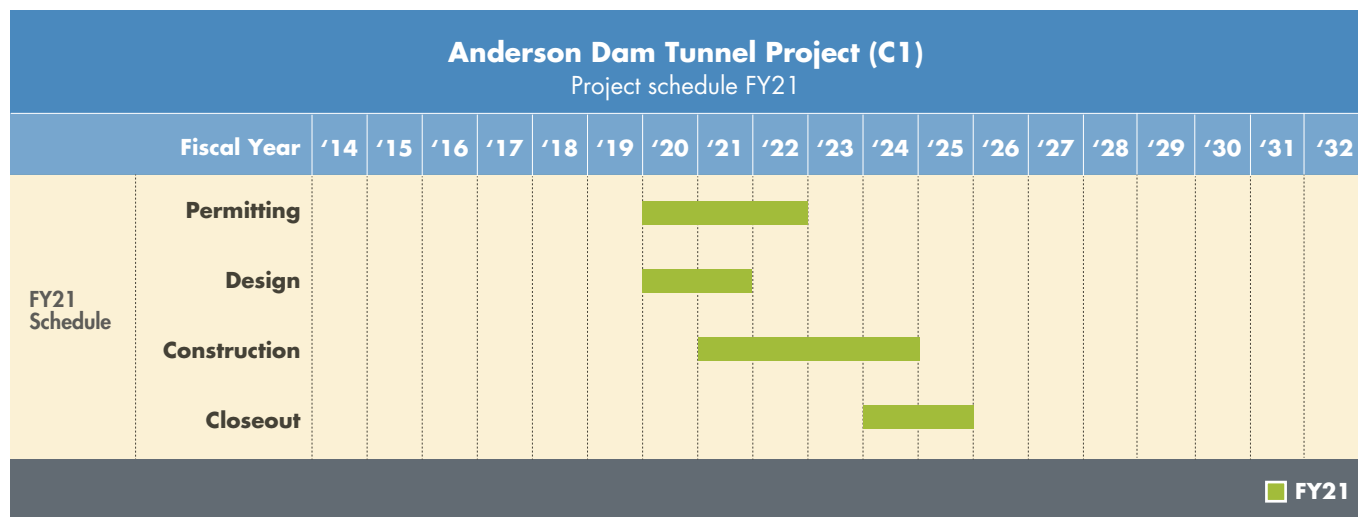
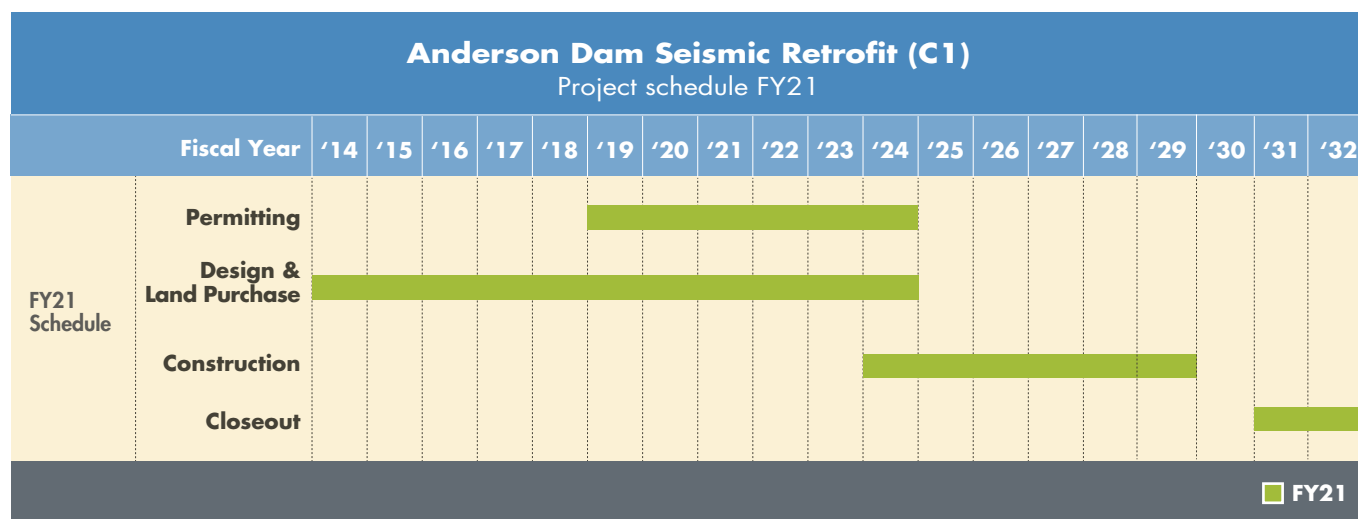
The proposed projects are covered activities under the Santa Clara Valley Habitat Plan (VHP), and the VHP will provide the federal Endangered Species Act and state Natural Community Conservation Planning Act compliance for several special-status species the project may affect, including California tiger salamander, California red-legged frog and coyote ceanothus. Consistent with Habitat Plan requirements, Valley Water has

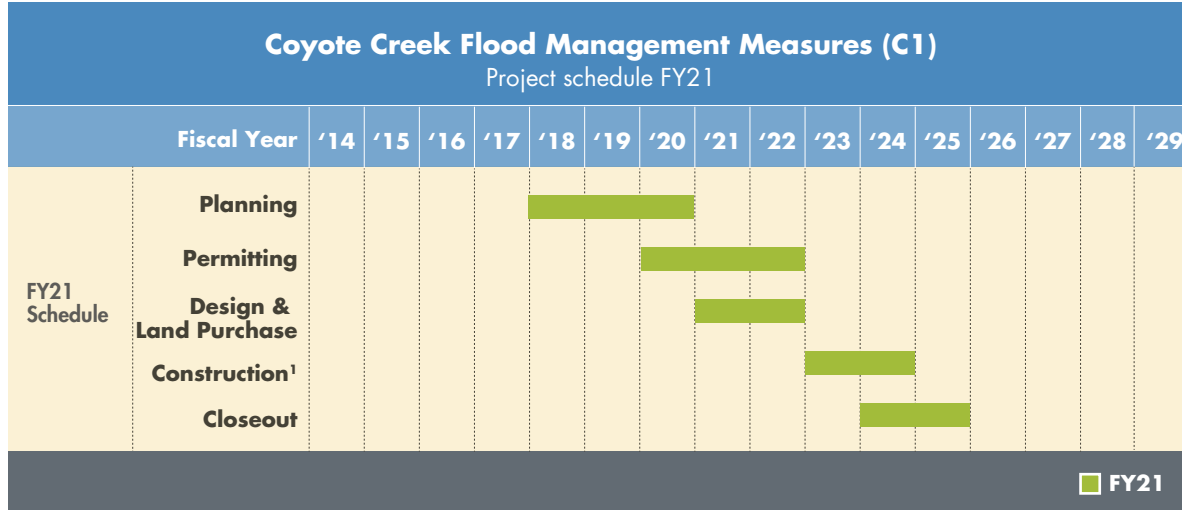
consulted with wildlife agencies with project-specific design and construction details. Several additional informal consultation efforts have also occurred with individual regulatory agencies, including site visits with the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB) and National Marine Fisheries Service (NMFS).

Additionally, Coyote Creek downstream of Anderson Dam is a designated critical habitat for Central California Coast steelhead and essential fish habitat for Chinook salmon. Early coordination with resource agencies indicates potential construction-related water quality concerns, fish passage considerations and operational effects will require appropriate evaluation. Extensive consultation has continued with NMFS, CDFW, State Water Resources Control Board (SWRCB), RWQCB and Valley Habitat Agency on these issues throughout the year.

The Draft EIR to be released for public review will further evaluate the magnitude of impacts of implementing the project. In addition, Valley Water will continue to engage natural resource agencies through development of environmental documentation to support natural resource permitting efforts.

Valley Water's inundation map can be viewed on the C1 website, under Reports and Documents: <https://www.valleywater.org/project-updates/c1-anderson-dam-seismic-retrofit>





¹ Construction also includes a 3-year revegetation establishment period, not shown.

Confidence levels

Schedule: Moderate confidence

As a result of the FERC order, Valley Water expedited completing the plans and specifications for the FOCP first. The estimated start of construction for FOCP is the summer of 2021 and for ADSRP is 2024.

Funding: High confidence

The total project cost is estimated at \$617 million (uninflated) and is in Valley Water's Fiscal Years 2022-26 Capital Improvement Program.

Permits: Moderate confidence

Anderson Dam is operated under licenses from DSOD and FERC. The project design will require their approval before construction. The permits from these agencies will depend mostly on the technical complexity of the project. DSOD and FERC will review the project at various design stages to facilitate the issuance of the permits from the different agencies that will be required for this project, including USACE, NMFS, CDFW, California Department of Industrial Relations/California Occupational Safety and Health, State Water Resources Control Board, and the Santa Clara Valley Habitat Plan. The SWRCB issued a final water quality certification for the FOCP on November 9, 2020. USACE and CDFW are expected to issue final FOCP permits under their jurisdiction in June 2021. The schedule for ADSRP permits cannot be easily predicted; the current permitting path assumes natural resource agency permits will be obtained for the ADSRP by spring 2023.

Jurisdictional Complexity: Moderate confidence

Valley Water owns and operates Anderson Dam and Reservoir, which are located within the City of Morgan Hill. Santa Clara County Parks manages the recreational activities at Anderson Reservoir through a lease agreement with Valley Water. Valley Water is working with these various agencies throughout the project.

See Appendix D: Capital Projects Jurisdictional Complexities for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project C2

Emergency Response Upgrades

This project covers the development of an automated flood warning system that uses real-time rainfall data to predict stream flows and potential flood risk. The system efficiently disseminates information to emergency responders and the public using the web, text, automated calls and other technologies, allowing more time to activate flood-fighting measures and reduce flood damage.

Benefits

- Enhances interagency response to storm-related emergencies
- Improves the accuracy of flood forecasting services
- Helps municipalities and neighborhoods lessen flood impacts
- Maintains access to technical resources that assist municipalities with floodplain management
- Promotes community awareness of flood risks
- Implements risk reduction strategies consistent with the Federal Emergency Management Agency's (FEMA) Community Rating System as appropriate

Key Performance Indicator (15-year Program)

1. Map, install, and maintain gauging stations and computer software on 7 flood-prone reaches to generate and disseminate flood warnings.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET



X-Band radar atop Penitencia Water Treatment Plant.

ON TARGET

Project C2 FY21 Highlights

- Maintained seven (7) gauging stations and computer software on seven (7) flood-prone reaches.
- Actively engaged with the National Oceanographic and Atmospheric Administration (NOAA) team to implement the Advanced Quantitative Precipitation Information (AQPI) System to feed forecast data into our system.
- Beta testing the new website that integrates the stream gauge network, historical data and forecast data.

Progress on KPI #1:

- In FY19, Valley Water installed its seventh gauging station and in FY21, it maintained these flood forecast points and the computer software to generate and disseminate flood warnings. Listed below are the seven flood-prone reaches that generate flood forecasts:
 - San Francisquito Creek
 - Ross Creek
 - Upper Guadalupe River
 - West Little Llagas Creek
 - Uvas Creek
 - Upper Penitencia Creek
 - Canoas Creek
- Valley Water continued to be actively engaged with the National Oceanographic and Atmospheric Administration (NOAA) team at the Earth System’s Research Laboratory in Boulder, Colorado, to implement the Advanced Quantitative Precipitation Information (AQPI) System. The direct benefit to this project will be a customized rainfall forecast for Valley Water by NOAA that leverages new radar technologies. In FY21, Valley Water has been working with NOAA to complete a “blend forecast,” which will combine the best short, medium, and long-range forecast models and products into a single dataset to use in our flood forecasting software. This is still under development and is expected to run into FY22.
- In FY21, the main focus was to develop a new website integrating the stream and rain gauge network, historical data and forecast data. This new website will consolidate many use cases and also disseminate warnings. At the end of FY21, the website is operational and live, with the warning dissemination as the last feature to be implemented. It is expected that the site will remain in beta testing through FY22.

Financial Information

In FY21, approximately 103% of the annual project budget was expended.

Financial Summary (\$ Thousands)							
C2. Emergency Response Upgrades							
Fiscal Year 2020–2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$354	\$0	\$354	\$361	\$3	\$364	103%	\$3,357
							75%

Opportunities and Challenges

Reservoir Operations

As additional reservoir inflow forecasts get implemented and accuracy improves, there is opportunity to assist in optimizing the operations of Valley Water's reservoirs. Since these decisions are often complicated and regulated by existing, conflicting needs (for example, balancing water supply, environmental flows, and flood protection), additional work would be needed to study the effects of using forecasts to inform operations. However, tools would need to be in place to help inform the operational decisions, which is an area for development.

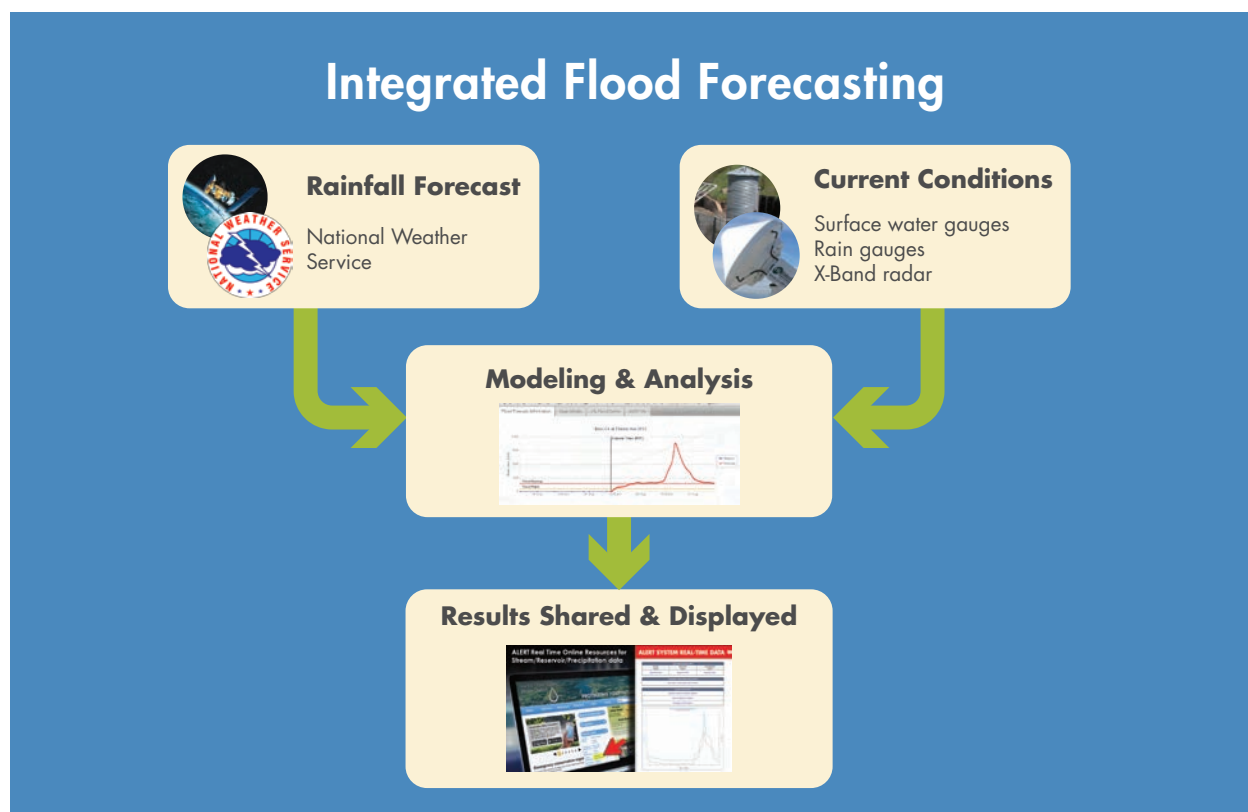
Research & Development

Currently, a proprietary software is being used, but research and investigation is being performed to see if a better system can be built to better suit our needs. This is an area of continuous improvement.

Weather forecasts were and remain the biggest source of error in the forecasts. In addition to the traditional meteorological forecasts from NOAA and our weather consultants, we are exploring the use of ensemble and artificial intelligence driven forecasts.

New Web Portal

As the new website is rolled out, some users might need to get used to the new format and layout. Deciding how to balance different user needs against keeping the overall website simple to use may be challenging.



2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

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Priority D:
Restore wildlife habitat
and provide open space

**Safe, Clean Water
and Natural Flood Protection**

FY 2020–2021 Annual Report
**Safe, Clean Water
and Natural Flood Protection**



Priority D

Restore Wildlife Habitat and Provide Open Space

The eight (8) projects under Priority D restore and protect wildlife habitat and provide opportunities for increased access to trails and open space. Funding for this priority pays for control of non-native, invasive plants, revegetation of native species, and maintenance of previously revegetated areas. Other projects include removal of fish barriers, improvement of steelhead habitat and stabilization of eroded creek banks.

To support these and future restoration projects Valley Water will create a comprehensive, updated database on stream conditions countywide. Valley Water and other agencies can then use the new information to make informed decisions on where and how to use restoration dollars so they have the greatest value for wildlife.

Project D1

Management of Revegetation Projects

Project D2 Completed (See Completed Projects, page 185)

Revitalize Stream, Upland and Wetland Habitat

Project D3

Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails

Project D4

Fish Habitat and Passage Improvement

Project D5

Ecological Data Collection and Analysis

Project D6

Creek Restoration and Stabilization

Project D7 Completed (See Completed Projects, page 193)

Partnerships for the Conservation of Habitat Lands

Project D8

South Bay Salt Ponds Restoration Partnership



Revegetation at Permanente Creek.

ON TARGET**Project D1 FY21 Highlights**

- Maintained 315.8 acres of revegetation projects at 95 sites countywide.

Project D1

Management of Revegetation Projects

This project supports Valley Water maintenance of at least 300 acres of existing revegetation projects throughout the 5 watersheds, and provides for maintenance of future revegetation sites. Funding for this project ensures that design objectives of all revegetation projects are maintained during the establishment period so that mitigation results in functional habitat that can support wildlife.

Benefits

- Maintains 300 acres of existing revegetation
- Allows Valley Water to monitor plant survival and habitat functions
- Complies with environmental laws requiring habitat mitigation for flood protection and water supply projects
- Provides for maintenance of future revegetation sites

Key Performance Indicator (15-year Program)

1. Maintain a minimum of 300 acres of revegetation projects annually to meet regulatory requirements and conditions.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	NOT ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21:

ON TARGET

Progress on KPI #1:

In FY21, Valley Water maintained 315.8 acres of revegetation projects at 95 sites throughout all five (5) watersheds in Santa Clara County. This included invasive plant control, pruning, mowing and irrigation of 22 recently planted sites that require more maintenance. Valley Water monitors the mitigation sites as per the success criteria established by various regulatory agencies. Valley Water provides

the monitoring reports to the regulatory agencies on an annual basis. The monitoring reports can be found at tinyurl.com/D1AgencyReports.

Financial Information

In FY21, 138% of the annual project budget was expended.

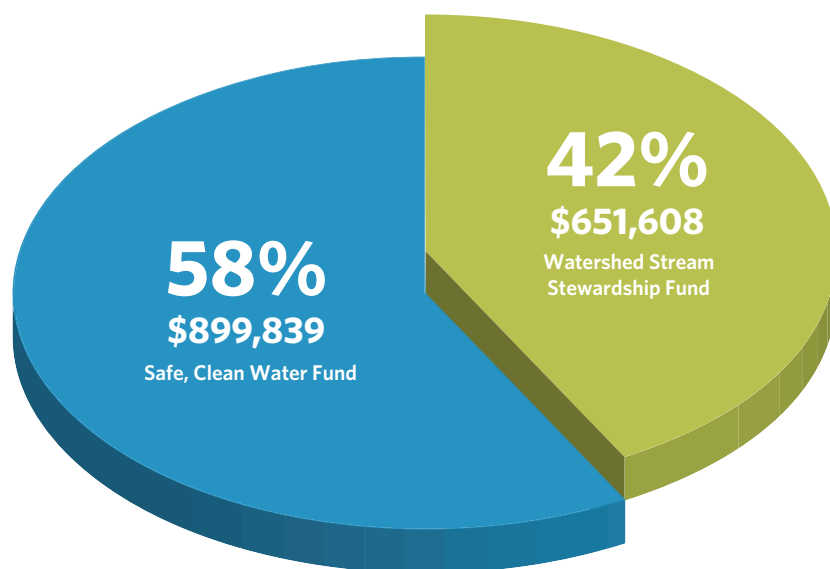
The over-expenditure was due to a significant increase in riparian planting acreage to mitigate for the previous year's unplanned intensive vegetation removal effort on Guadalupe River from Tasman Drive to Highway 880.

Financial Summary (\$ Thousands)							
D1. Management of Revegetation Projects							
Fiscal Year 2020-2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$900	\$0	\$900	\$1,239	\$3	\$1,243	138%	\$22,259
							30%

Figure D1.2

D1 Management of Revegetation Projects

Total FY21 Project Budget: \$1,551,447



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure D1.2 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.

Opportunities and Challenges

Resources

In FY21, the KPI was met by supplementing available staff resources with a significant amount of outsourced labor. While this allowed Valley Water to meet its KPI, the use of outsourced labor is not sustainable. Five (5) positions were requested for FY21. These position requests were approved and will be filled early in FY22.

Phytophthora

In FY16, Valley Water informed the regulatory agencies that due to the drought and Phytophthora (plant pathogen) issues, Valley Water would not be installing new riparian planting sites. Despite this, increased maintenance is required at the existing sites to ensure survival of vegetation. In FY17, Valley Water began installing new riparian planting sites utilizing seeds, cuttings and container plants grown from nurseries that are following the Phytophthora working group's regional guidelines. Installation of pathogen free nursery plants and locally sources seeds and cuttings continued through FY21.

New Capital Project Mitigation

As the Safe, Clean Water capital projects are constructed, and after the initial 3-year plant establishment period, additional acreages of mitigation will become part of Project D1 and will require increased maintenance to meet their 10-year success criteria. This may require funding additional staff resources in the future.

Projections show that the following acres of mitigation will be transitioned into Project D1 resulting from the completion of specific capital project

- FY23 – An estimated 33 acres of mitigation from the Upper Guadalupe River, Upper Berryessa Creek, Lower Berryessa Creek, Permanente Creek and Cunningham Detention Basin Flood Protection projects.
- FY24 – An estimated 66.5 acres of mitigation from the Sunnyvale Channel, San Francisquito Creek, Upper Llagas Creek Phase 1, Lower Silver Creek Flood Protection projects and Hale Creek Enhancement Project.
- FY25 – An estimated 60 acres of mitigation from the Upper Llagas Creek Phase II Flood Protection Project.
- FY26 – An estimated 1.8 acres of mitigation from the Palo Alto Flood Basin Tidal Gate Project.
- FY27 – An estimated 3 acres of mitigation from the Almaden Lake Project.

This is an increase of 164 acres of mitigation that will require significant maintenance for these projects to successfully meet their success criteria. Valley Water plans to use a combination of new staff positions that were approved in FY22 and contract labor to supplement existing Valley Water labor resources to comply with the increased mitigation requirements.

Stream Maintenance Program (SMP2) Permits

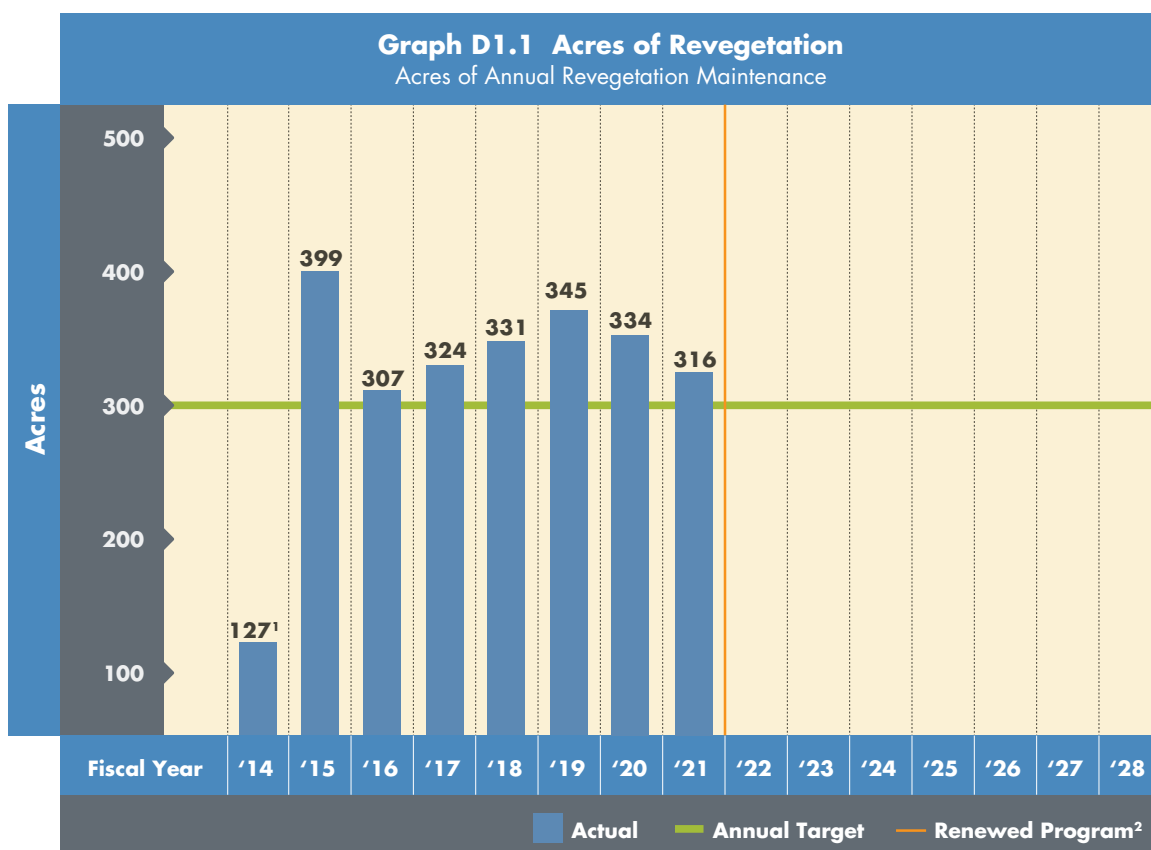
The SMP2 permits require a significant level of mitigation. Valley Water plans to use newly approved positions and additional contract labor to supplement existing Valley Water labor resources to comply with the increased mitigation requirements.



BEFORE: Guadalupe River upstream Blossom Hill, riparian planting.

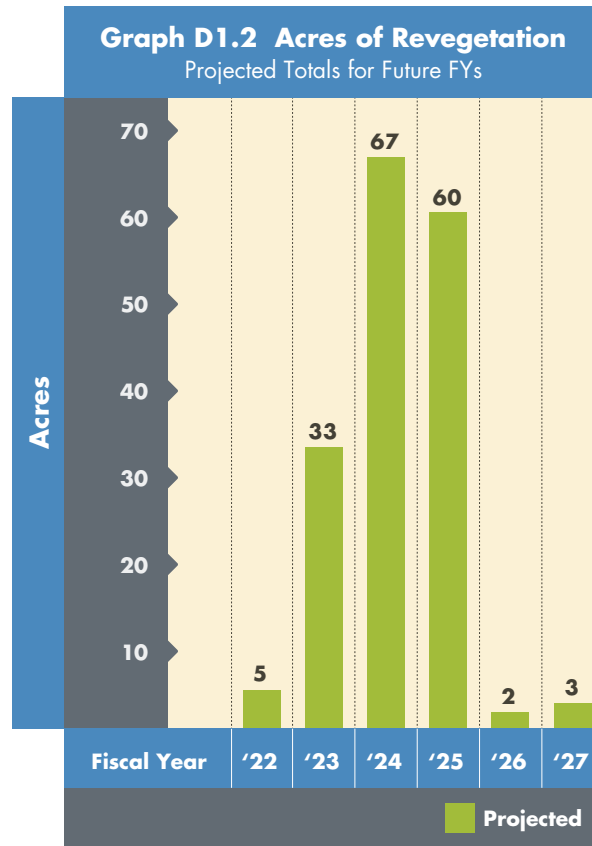


AFTER: Guadalupe River upstream Blossom Hill, riparian planting.



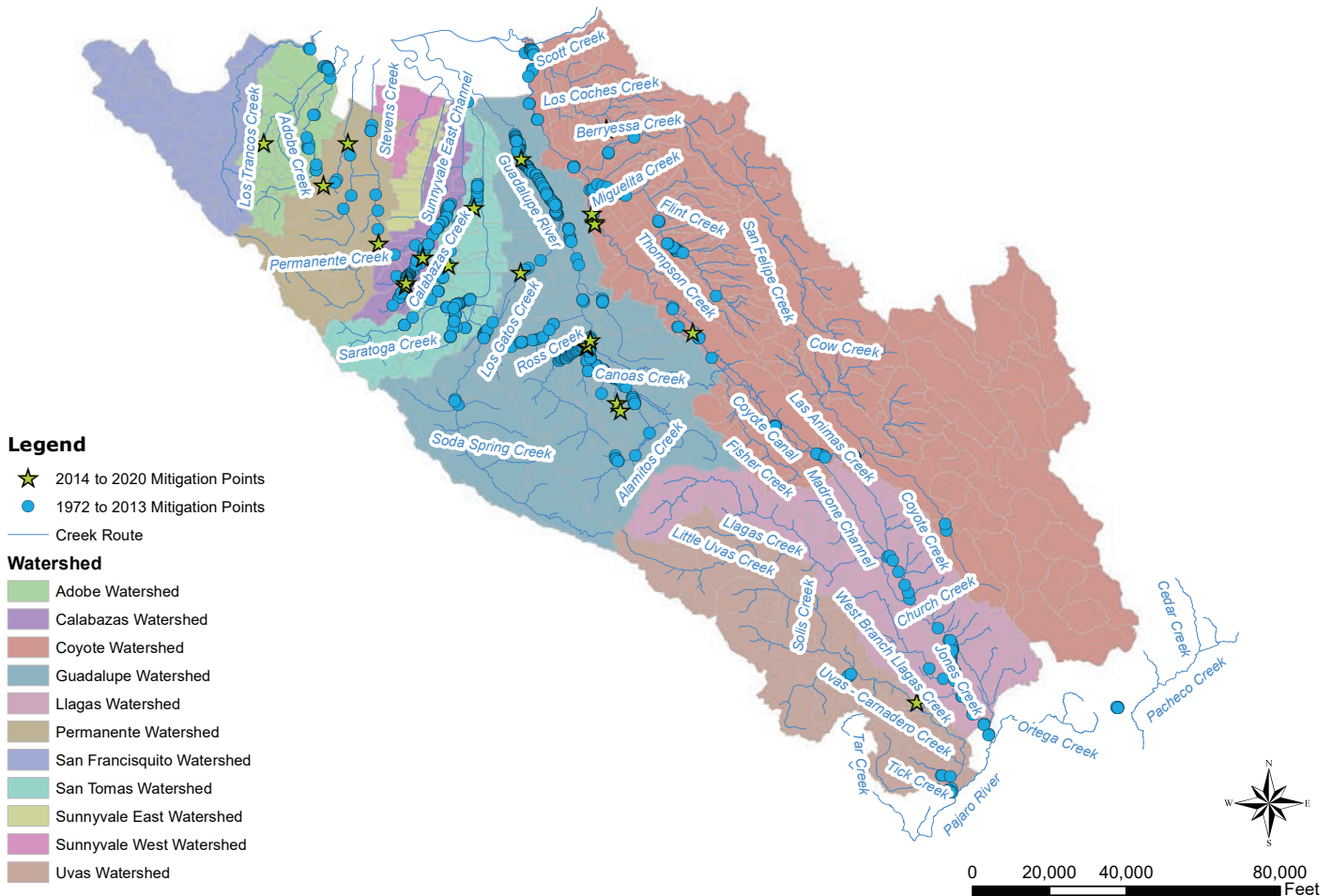
¹ In FY14, the drought required much more maintenance than planned on new or revegetated plantings and thus impacted Valley Water's ability to meet the annual maintenance target.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.



The graph above shows the projected new acreage to be maintained as a result of completion of new capital projects.

FY21 Revegetation Maintenance: 316 Acres



2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project D3

Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails

This project provides grants and partnerships for activities such as developing Stream Corridor Priority Plans; creating or enhancing wetland, riparian and tidal marsh habitat; protecting special status species; removing fish migration barriers; installing fish ladders; removing non-native, invasive plant species; and planting native species. The project includes 7 grant cycles, 1 held approximately every other year during the 15-year duration of the Safe, Clean Water Program, as well as funding for partnerships that restore stream and wetland habitat and provide open space access. This project also funds work that provides access to creekside trails or trails that provide a significant link to the creekside trail network, for example, the possible construction of a bridge over Coyote Creek in the Rock Springs neighborhood.

Benefits

- Enhances creek and bay ecosystems
- Improves fish passage and habitat
- Expands trail and open space access
- Leverages community funding through grants
- Increases collaborations and partnerships for stewardship activities with cities, the County, nonprofit organizations, schools and other stakeholders

Key Performance Indicators (15-year Program)

1. Develop 5 Stream Corridor Priority Plans to prioritize stream restoration activities.
2. Provide 7 grant cycles and additional partnerships for \$21 million that follow pre-established criteria related to the creation or restoration of wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife, and providing new public access to trails.

Geographic Area of Benefit: Countywide



New trail around Calero Reservoir .

ON TARGET

Project D3 FY21 Highlights

- Finalized the Coyote Creek Native Ecosystem Enhancement Tool (CCNEET) and made available to the public.
- 12 mini-grants were awarded for a total of \$59,959
- Closed nine (9) grant projects and 11 mini-grant projects.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

Progress on KPI #1:

- Stream Corridor Priority Plans identify habitat and trail enhancement opportunities of importance to Valley Water, to guide the development of D3 grant applications. The first Stream Corridor Priority Plan, for Stevens Creek, was finalized in FY19.
- The second Stream Corridor Priority Plan, the Coyote Creek Native Ecosystem Enhancement Tool (CCNEET), was completed in FY20 and finalized and made available to the public in FY21. The interactive online tool, as well as background information, data sources and instructions for use can be accessed at tinyurl.com/CCNEETlogin.

Progress on KPI #2:

- On February 23, 2021, the Board approved one (1) grant project for D3: Access to Trails and Open Space for a total of \$25,530:
 - Community Express – La Sendera Community Art Trail (\$25,530)
- FY21 was not a grant cycle year for D3: Restore Wildlife Habitat grants.
- In FY21, 12 mini-grants were awarded for a total of \$59,959:
 - Bay Area Older Adults - Watershed Appreciation Program
 - Bay Area Older Adults - Watershed Walk & Talk Program
 - Bay Area Ridge Trail Council - Ridge Trail Berryessa BioBlitz
 - City of Santa Clara Green - Infrastructure and Water, Wise Native Plant Demonstration Garden Design
 - City of Santa Clara - Adopt-a-Spot Tool Lending Program
 - City of Santa Clara - San Tomas Aquino Creek Trail Pet Waste Station and Public Litter Container Expansion Project

- o Gilroy After Hours Rotary Club - Gilroy Watershed Clean Up
 - o Keep Coyote Creek Beautiful - Empire Gardens Elementary School Mural
 - o Keep Coyote Creek Beautiful - Hellyer County Park Mural
 - o Latimer Home and School Club - Latimer Garden & Outdoor Classroom
 - o President and Board of Trustees of Santa Clara College - The Water Project
 - o Science is Elementary, Inc. - SiE Books Creek Cleanup
- From FY14-20, 10 Access to Trails and Open Space grants were awarded for a total of \$1,397,886 and Valley Water continues to administer these projects. Of these, two (2) projects have been completed or closed.
 - From FY14-20, 29 Wildlife Restoration grants were awarded for a total of \$5,465,802. Of these, 18 projects have been completed or closed. Two (2) were cancelled per grantee request. Valley Water continues to administer the remaining nine (9) projects.
 - From FY14-20, three (3) Wildlife Restoration partnerships were awarded for a total of \$764,450. One (1) has been completed.
 - From FY14-20, 41 mini-grants were awarded for a total of \$197,162. Of these, 24 projects have been completed or closed. Three (3) were cancelled per grantee request.

See Appendix C for a cumulative list of grants and partnerships awarded to date.

Financial Information

In FY21, 43% of the annual budget was expended.

The COVID-19 countywide guidance included a shelter-in-place order and other restrictions that impacted and delayed many grant projects, especially those interfacing with the public. The under-expenditure was due to delays in executing grant agreements. Due to CEQA compliance requirements and impacts from the COVID-19 public health orders, staff and grantees experienced delays in executing agreements for projects that were awarded funding. The grant funds that were budgeted for FY21 will be adjusted into FY22 to align with the agreements that need to be executed, per Board approval.

In addition, the Board awarded \$25,530 of the available \$571,000 in the FY21 grant cycle. A low number of grant applications were submitted in the FY21 cycle in part due to the impacts of COVID-19 on grantees' and applicants' financial and staffing resources created uncertainties for long-term project planning and inability to confidently commit to project performance and project schedules.

Financial Summary (\$ Thousands)							
D3. Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails							
Fiscal Year 2020-2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$1,727	\$1,681	\$3,407	\$397	\$1,065	\$1,462	43%	\$23,276
							39%

Opportunities and Challenges

Stream Corridor Priority Plans

In FY18, five (5) watershed creek reaches were selected for the development of the plans. The creek reaches selected are as follows:

1. Lower Peninsula Watershed - Stevens Creek;
2. Coyote Watershed - Coyote Creek (candidate reach is approx. Montague to Coyote Narrows);
3. Guadalupe Watershed - Guadalupe River;
4. Pajaro Watershed - Uvas Creek (downstream of Uvas Reservoir); and
5. West Valley Watershed - Saratoga Creek.

These creeks were selected based on various factors including habitat potential and quality and demonstrated public and volunteer interest. The list of selected creek reaches is subject to change as appropriate.

FY21 Safe, Clean Water Grant Program Audits and Improvements

The Board Audit Committee approved a desk audit of the grants program by an external auditor in FY20. The outcome of the desk audit was the recommendation for a subsequent performance audit for the grants program. In FY21, staff worked with the external auditor, subcontracted under TAP International, to identify streamlining opportunities and collect the IMC and Board's requested metrics. In early 2021, the auditor completed the full program audit and presented findings and recommendations to the Board Audit Committee and the entire Board for acceptance.

As a result of the audit and stakeholder feedback, the following improvements were implemented in FY21:

- Invoices are now reviewed within 10 days of receipt and paid out within 30 days of invoice approval.
- Staff tracks and monitors key administrative milestones, including application review status, agreement drafting and execution, invoicing, closeouts and outreach.
- Staff worked with internal stakeholders to develop standardized agreement templates for all grant types, retroactive start dates for projects, insurance waivers for low-risk mini-grant projects and electronic approval routing for agreement execution.
- Staff provides improved grantee guidance and assistance, including project and grant administration orientations for grantees; convenient meetings and coaching through online platforms like Zoom; 48-hour response time for email and telephone inquiries; and the use of DocuSign electronic signatures for agreements and invoices.
- Dashboards were created in the Fluxx Grants Management System (Fluxx) to streamline reviews for grant proposals, mini-grants, CEQA and Valley Water permits.
- Staff conduct virtual grant workshops that are posted on the website as a resource for potential applicants.
- Staff participated in grant training provided by recognized grant professional organizations, such as the National Grants Management Association (NGMA), PEAK Grantmaking and FluxxCon training through Fluxx.

As a result of the audit and stakeholder feedback, the following improvements were under development:

- Staff began developing a program policy and procedures manual, using Valley Water’s QEMS guidelines and NGMA best practices to ensure program consistency, efficiency and compliance. In addition, manuals and online resources are being developed for grantees.
- In June 2021, a consultant launched a robust survey of current and past grantees. Results will help develop program procedures, improve grantee experience and redesign the grants and partnerships program under the renewed Safe, Clean Water Program to incorporate best practices and any other improvements.
- In November 2020, staff began planning and developing a redesigned Safe, Clean Water grants and partnerships program under the renewed program. It included a transition program for FY22. Staff was interviewing stakeholders, collecting lessons learned, and procuring a consultant to create the redesigned program. This program will incorporate audit recommendations such as grant criteria, right-sizing grant policies and procedures, risk analysis, best practices, new grant opportunities and process improvements.

Staffing

Past staffing issues resulted in a backlog of invoices, agreements, mini-grant applications and project closeouts. However, a permanent Senior Management Analyst position was filled in June 2020 and temporary staffing resources were dedicated to supporting the program, addressing the backlog and updating Fluxx records.

The audit and IMC recommended increased staffing levels to address the growing need for program-dedicated staffing to manage the increasing number of grant projects. On May 11, 2021, the Board approved two additional staff positions for the program. Recruitment began in June 2021.

COVID-19 Impacts to Safe, Clean Water Grants Program

In March 2020, the Santa Clara County Public Health Officer issued countywide guidance to slow the spread of COVID-19 in our community. The countywide guidance included a shelter-in-place order and other restrictions, which impacted many grant projects, especially those interfacing with the public and involving work outdoors. Valley Water staff continued to support grantees in navigating project implementation during the pandemic in FY21. Grantees found creative ways to continue their project activities; however, many of the grantees could not perform many project tasks due to social distancing mandates in FY21.

Staff continues to receive and process several time-extension requests, schedule adjustment inquiries and delays to agreement executions due to the impacts of COVID-19. The Board approved longer agreement terms for FY21 grants to account for COVID-related delays. Staff will continue to monitor these projects and work with grantees to address these unforeseen changes.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water

Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project D4

Fish Habitat and Passage Improvement

This project helps restore and maintain healthy steelhead trout populations by improving fish passage and habitat. Possible work sites include Alamitos Creek at Lake Almaden and Ogier Ponds in the Coyote watershed, where man-made creek alterations disrupt fish migration. The project also includes studies of steelhead streams throughout the county to determine where improvements are needed to support spawning, rearing and migration. Funding also pays for the development of a program to use large woody debris to create fish habitat.

Benefits

- Improves spawning and rearing habitat within the Coyote, Guadalupe and other watersheds
- Improves steelhead trout habitat
- Helps provide required mitigation for environmental impacts of reservoir and recharge operations and for countywide Stream Maintenance Program

Key Performance Indicators (15-year Program)

1. Complete planning and design for 2 creek/lake separations.
2. Construct 1 creek/lake separation project in partnership with local agencies.
3. Use \$6 million for fish passage improvements.
4. Conduct study of all major steelhead streams in the county to identify priority locations for installation of large woody debris and gravel as appropriate.
5. Install large woody debris and/or gravel at a minimum of 5 sites (1 per each of 5 major watersheds).

Geographic Area of Benefit: Countywide



Large woody debris at Los Gatos Creek (post-construction).

ADJUSTED

Project D4 FY21 Highlights

Creek/Lake Separation:

- Valley Water Board certified the Final EIR for Almaden Lake Improvement Project.
- Completed 60% design for the Almaden Lake project.
- Board selected the Almaden Lake project as the project to be constructed under KPI #2.
- Valley Water provided County Parks a preliminary plan to remove Coyote Creek from the Ogier Ponds complex.

Fish Passage Improvements:

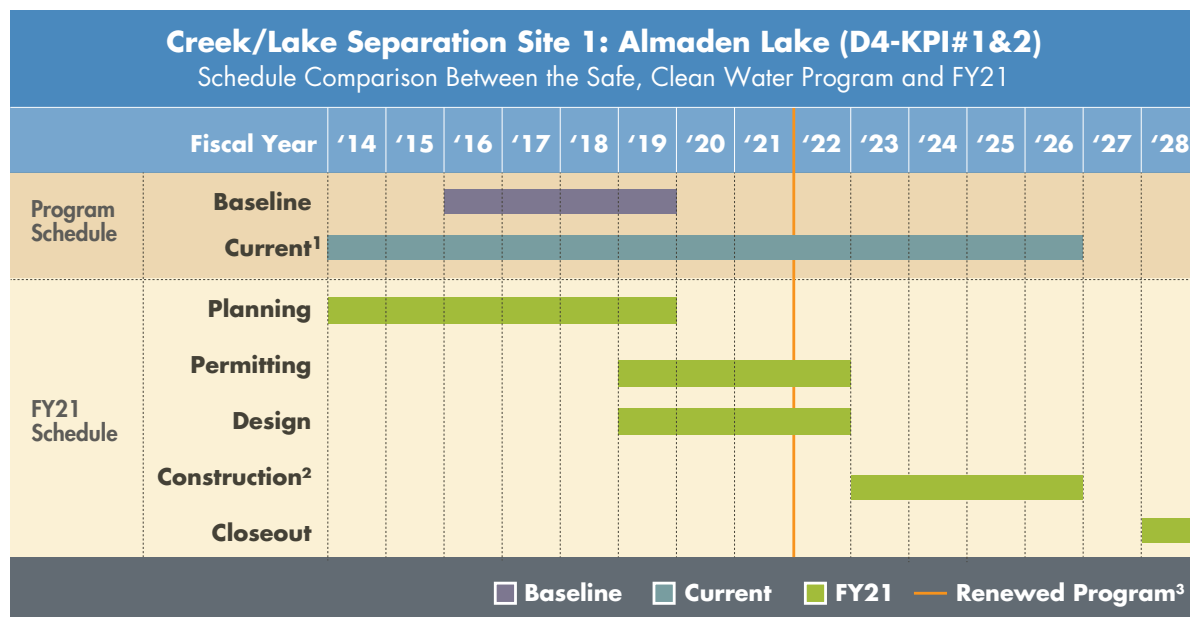
- Board approved a \$1 million cost-share agreement with the City of San José to fund construction of the Singleton Road Fish Passage Project.
- The City of San José advertised the Singleton Road Fish Passage Project for construction.
- Bolsa Road Fish Passage Project construction to begin in FY22.

Fish Habitat Improvements:

- Second phase of the large woody debris and gravel augmentation study completion delayed to FY22 due to COVID-19.
- Completed 30% design for the Uvas Creek Fish Habitat Improvement Project.

Schedule

Site 1: Almaden Lake

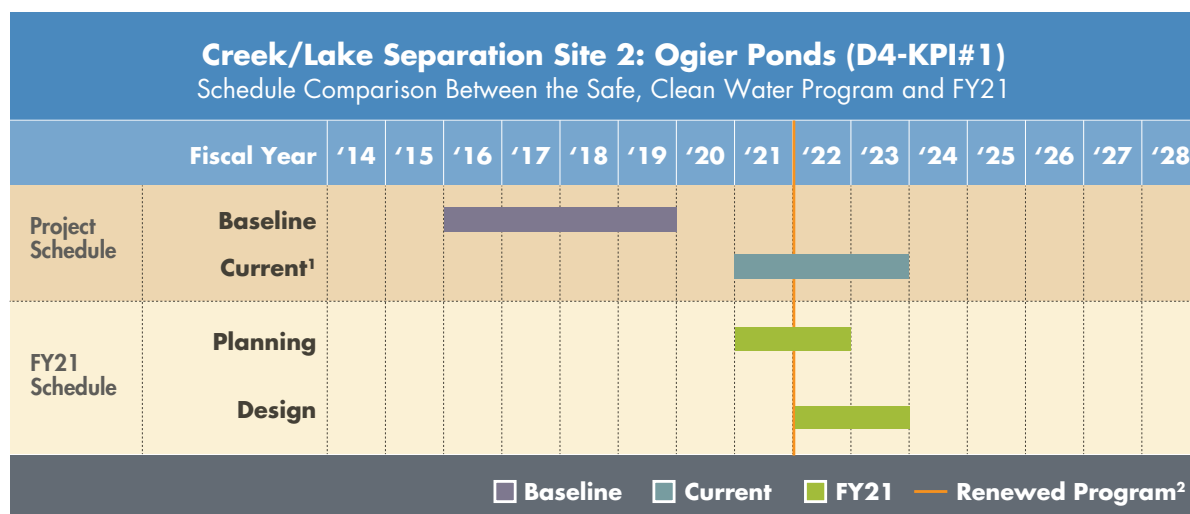


¹ Board approved a schedule adjustment through the change control process in FY19, FY20 & FY21.

² Construction also includes a 3-year revegetation establishment period, not shown.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 Program. The project schedule after this point is determined by activities in the renewed program.

Site 2: Ogier Ponds



¹ Board approved a schedule adjustment through the change control process in FY19 and FY20.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 Program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ADJUSTED
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ADJUSTED



View of the existing Almaden Lake Park, looking north at Coleman Road bridge, along approximate proposed new levee location.

Status for FY21: **ADJUSTED**

(Schedule Adjustment)

Progress on KPI #1:

Creek/Lake Separation Site 1: Almaden Lake

The Valley Water Board certified the Final EIR in May 2021. At that time, the Board also selected the Almaden Lake Improvement Project as the project to be constructed under Project D4 KPI #2. In FY21, Valley Water completed the 60% design plans, specifications and cost estimate. With the Board's approval for the project to be constructed, staff will be submitting resource agency permit applications and continue to work with the City of San José on the project design and the new park area. Valley Water will continue to proceed to 90% and 100% design. Pending permit acquisition, construction could start in FY23.

Creek/Lake Separation Site 2: Ogier Ponds

Valley Water agreed to a final Memorandum of Agreement (MOA) provided by County Parks in September 2020. However, in January 2021, the MOA was not completed as County Parks was considering Ogier Ponds with respect to other projects, including the Anderson Dam Retrofit Project. In May 2021, Valley Water provided County Parks with a preliminary conceptual plan to separate Coyote Creek from the Ogier Ponds complex. Valley Water is targeting County approval of the MOA in FY22. The project team has started preliminary planning tasks in advance of the executed MOA. Meanwhile, the project, which is continued in the renewed Safe, Clean Water and Natural Flood Protection Program, has a new implementation target under the 5-Year Implementation Plan Fiscal Years 2022-2026 ([tinyurl.com/SCW5YrPlanFY22-26](https://www.valleywater.org/SCW5YrPlanFY22-26)).

Progress on KPI #2:

On May 11, 2021, the Valley Water Board selected the Almaden Lake project to receive construction funding from the Safe, Clean Water Program. Valley Water completed the 60% design plans, specifications, and cost estimate in FY21, and staff will continue to proceed to 90% and 100% design. Pending permit acquisition, construction could start in FY23.

Progress on KPI #3:Fish Passage Improvements

- In FY19, Valley Water fully developed design plans, conducted the CEQA analysis and applied for permits to implement the Bolsa Road Fish Passage Project. While the project maintains its fish passage benefits, as a result of consultations with in-house fisheries biologists and environmental planners as well as the regulatory permitting agencies, the project design was changed to include geomorphic design features that will restore stability and stream function. In response, the Board approved funding construction through Project D6 Creek Restoration and Stabilization.
- The project consists of the installation of a gradually sloped riffle-pool system along approximately 1,700 linear feet of Uvas-Carnadero Creek to restore the stream invert due to decades of channel incision and base lowering, and to steadily elevate the stream over existing fish passage barriers, including a Union Pacific Railroad (UPRR) crossing support slab and a dysfunctional Denil fish ladder that was previously installed to bypass the UPRR crossing. This stream channel restoration approach to improve the fish passage also avoids retrofitting the existing slab associated with the Union Pacific Railroad (UPRR) bridge, i.e., no excavation near the bridge foundations.
- In FY21, the project construction was pushed back by a year to begin construction in FY22 due to design changes necessary to incorporate the permanent access ramps required by Valley Water Operations and Maintenance (O&M) for maintenance purposes. The design change required a tree survey, which was delayed due to poor air quality associated with the fires in the summer. As a result, the design staff did not have adequate time to coordinate with O&M and survey teams to design and determine the location of the permanent access ramps, renegotiate the permits to update from temporary to permanent ramps, update the bid documents, and release the bid in FY21. The project construction is now scheduled to begin in spring of 2022 (FY22) and be completed in FY23.
- In FY21, Valley Water provided engineering design and environmental permitting assistance to the City of San José for the Singleton Road Fish Passage Project on Coyote Creek. The interim project will replace a significant fish passage barrier at Singleton Road and Coyote Creek with a flat car bridge to improve steelhead migration and improve the City of San José's trail system. The project will be owned and maintained by the City of San José.
- In May 2021, Valley Water Board approved a \$1,000,000 cost-share agreement between Valley Water and the City of San José to fund project construction.
- In May 2021, the City of San José advertised the project for construction in summer 2021.

Progress on KPI #4:Fish Habitat Improvements

The second phase of the study to identify priority locations for gravel augmentation and large woody debris placement is underway and completion of the study is delayed till FY22 because the COVID-19 pandemic impacted field work scheduled during spring and summer 2020. The consultant nearly completed with identification of recommended high-priority locations for future large woody debris and gravel augmentation (LWDGA) projects

using selection criteria based on biological, geomorphic and flood risk consideration as well as site visits, for recommended locations covering Llagas, Pacheco, Los Trancos, San Francisquito, and Calero Creeks and Pajaro River.

Progress on KPI #5:

Fish Habitat Improvements

In August 2019, Valley Water completed the construction of the Los Gatos Creek Large Woody Debris Placement and Gravel Augmentation Project, located just downstream of Highway 17, in the City of Campbell. The project is among the priority locations recommended in Phase 1 of the LWDGA study. At the June 23, 2020, meeting, the Board approved recommended amendment to the existing consultant agreement with AECOM for the second phase study of LWDGA to provide additional funding for AECOM to provide design and construction support for the implementation of LWDGA projects along Uvas Creek and other fish habitat improvement projects. AECOM has submitted the 30% design plans for the Uvas Creek Fish Habitat Improvement Project and is expected to complete the rest of the design work in early FY22. Implementation, which was originally targeted for summer 2021, has moved to FY22 or FY23 in order to receive the USACE Section 408 permit approval that was not previously required for SMP projects.

Financial Information

In FY21, 76% of the annual project budget was expended.

The Almaden Lake Improvement Project (KPI #1) expended 102% of its annual budget with certification of the Final EIR and 60% design completed.

The Ogier Ponds Planning Study (KPI #1) expended 9% of its annual budget, as the Memorandum of Agreement with the County is yet to be completed. In FY18, the Board approved a budget adjustment to complete the study.

KPI #2 to construct one (1) creek/lake separation project had no expenditure in FY21 because it was in May 2021 that the Board decided that the Almaden Lake Improvement Project will receive construction funding from the Safe, Clean Water Program.

The Fish Passage Improvement Project (KPI #3) expended approximately 91% of its annual budget. The under expenditure was due in part to the delay in starting construction of the Bolsa Road Fish Passage Project resulting from a change in design. Construction on the Bolsa Road Fish Passage Project is expected to begin in FY22 and be completed in FY23.

The Fish Habitat Improvement project (KPIs 4 and 5) expended 42% of its annual budget. Due to Section 408 permitting challenges, construction funds for the Uvas Creek Fish Habitat Improvement Project were not utilized in FY21.

Financial Summary (\$ Thousands)										
D4. Fish Habitat and Passage Improvements										
Fiscal Year 2020-2021									15-year Program	
Project No. and Name	Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
					Actual	Encumbrance	Total			
26044002 Fish Passage Improvement	\$0	\$1,930	\$0	\$1,930	\$1,755	\$0	\$1,756	91%	\$8,770	59%
26042002 Fish Habitat Improvement	\$696	\$0	\$0	\$696	\$243	\$48	\$290	42%	\$5,828	48%
26044001 Almaden Lake Capital Project	\$1,710	\$0	\$0	\$1,710	\$1,341	\$411	\$1,751	102%	\$31,314	21%
26044003 Ogier Ponds Planning Study	\$0	\$739	\$0	\$739	\$65	\$0	\$65	9%	\$4,253	10%
Total	\$2,407	\$2,669	\$0	\$5,076	\$3,404	\$459	\$3,862	76%	\$50,165	30%

Opportunities and Challenges

Schedule Adjustments

Site 1: Almaden Lake

Valley Water completed the Final EIR in FY21. The COVID-19 pandemic caused delays in FY20 to complete the necessary geotechnical investigations that are required to complete the project design, which delayed project 60% design completion in FY21. With certification of the Final EIR and approval of the project for construction, resource agency permit applications will be submitted in summer 2021. Valley Water will continue to progress design to 90% and 100%. Final construction documents will need to incorporate any permit requirements. Pending permit acquisition, construction will start in FY23.

Site 2: Ogier Ponds

On March 23, 2019, the Board approved the Ogier Ponds schedule with planning and design to be completed in FY23. This completion date is contingent on the execution of a Memorandum of Agreement with the landowner, Santa Clara County Parks. The Board recommended moving the project into planning provided, the landowner agree to continue the partnership into the next phase of planning. In FY21, Valley Water continued working with County staff on such an agreement. Once the agreement is executed, formal planning work will commence, followed by design work.

Resource Needs

Fish barrier mitigation and creek/lake separation projects will continue to require a high amount of resources to maintain the level of stakeholder engagement necessary for project success.

Fish Habitat Improvements

The placement of any additional gravel or large woody debris (LWD) structures has the potential to increase water surface elevation in a stream. One of the challenges for considering gravel and LWD additions for habitat improvements is that for channel reaches in a Federal Emergency Management Agency (FEMA)-designated regulatory floodway, any changes to the channel configuration must not increase the water surface elevation beyond existing condition, irrespective of the proximity to structures or bank elevations. This restriction may make the design and construction of habitat enhancement more difficult, requiring the production of a “No Rise” certification. This certification is often costlier as it will require more detailed hydraulic evaluation and may also require more earthwork to meet the “No Rise” certification standards.

Confidence Levels

Site 1: Almaden Lake

Schedule: Moderate confidence

Valley Water completed the Final EIR in FY21. The COVID-19 pandemic caused delays in FY20 to complete the necessary geotechnical investigations that are required to complete the project design, which delayed project 60% design completion in FY21. Resource agency permit applications will be submitted in summer 2021. Valley Water staff will continue to progress design to 90% and 100%. Final construction documents will need to incorporate any permit requirements. Pending permit acquisition, construction to start in FY23.

Funding: High confidence

The Safe, Clean Water funding covers the cost of the planning, design and construction phases.

Permits: Moderate confidence

Valley Water anticipates some challenges with the acquisition of the regulatory permits for this project and is moderately confident it will receive the permits necessary to complete construction of this project. Valley Water will conduct stakeholder meetings with the regulators.

Jurisdictional Complexity: High confidence

Coordination with the City of San José is ongoing. This project is located on City of San José and Valley Water property and these entities have a longstanding partnership for the operation and maintenance of Almaden Lake and Almaden Lake Park.

Site 2: Ogier Ponds

Schedule: Moderate confidence

Valley Water does not own the property and cannot proceed with the planning phase until an MOA with County Parks is signed. The planning study area will be affected by the Anderson Dam project, which is expected to convey higher than typical creek flows and deliver higher than typical sediment during the multi-year dam reconstruction.

This will significantly complicate the planning and design phases for the Ogier Ponds project and may delay approval of the MOA

Funding: High confidence

The Safe, Clean Water funding covers the cost of the planning and design phases.

Permits: N/A

The confidence level for permits will be determined if the project moves past the planning phase.

Jurisdictional Complexity: Moderate confidence

The project includes a high level of regulatory engagement as there are numerous listed species at the site; however, the primary objective is stream restoration, which is expected to reduce regulatory challenges. The project is dependent on an MOA with County Parks.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project D5

Ecological Data Collection and Analysis

This project creates a comprehensive watershed database that tracks stream ecosystem conditions to help Valley Water, other County agencies and organizations make informed watershed and asset management decisions. This new information integrates and enhances Valley Water’s stewardship actions through a standardized, repeatable and defensible approach that guides, organizes and integrates information on stream conditions.

This ecological monitoring and assessment is conducted on an ongoing basis and is shared with land use agencies, environmental resource groups, and the public to support efficient restoration decisions throughout the county.

Benefits

- Improves watershed and asset management decisions
- Provides a systematic, scientific guide for decisions and actions to improve stream conditions
- Supports effective design options for capital projects
- Maximizes the impact of restoration dollars with more reliable data on countywide stream conditions

Key Performance Indicators (15-year Program)

1. Establish new or track existing ecological levels of service for streams in 5 watersheds.
2. Reassess streams in 5 watersheds to determine if ecological levels of service are maintained or improved.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET



Conducting CREAM in the Coyote Creek watershed, summer 2020.

ON TARGET

Project D5 FY21 Highlights

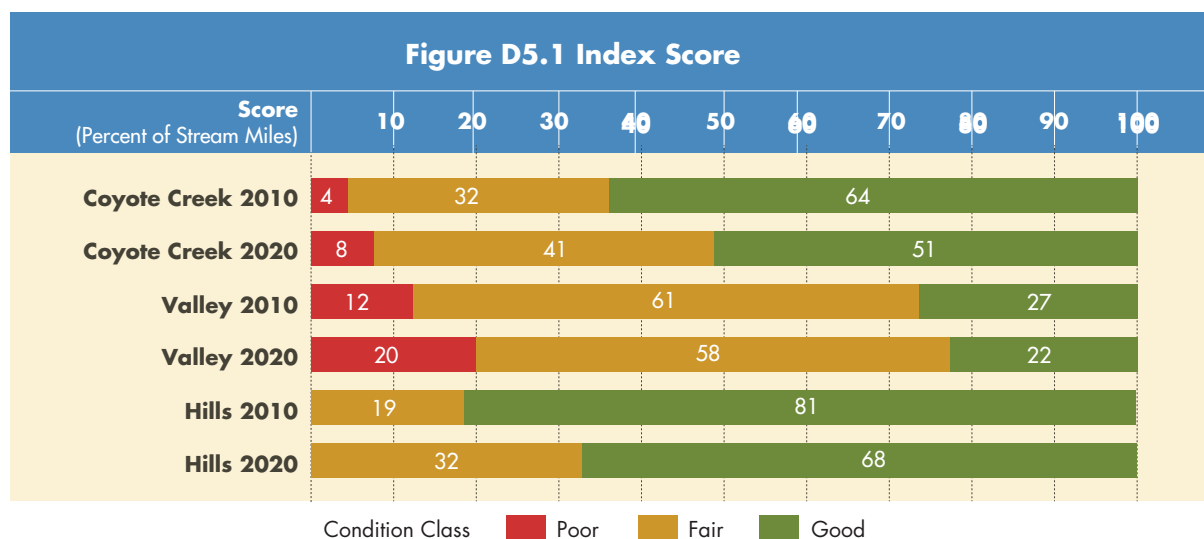
- Completed the first reassessment of the Coyote Creek Watershed.

Progress on KPI #1: (Completed in FY18)

From 2010 to 2018 (FY11 to FY19), baseline ecological conditions were measured across Valley Water's five watersheds (Coyote, Guadalupe, Lower Peninsula, Pajaro (Uvas/Llagas), and West Valley) using the California Rapid Assessment Method (CRAM, see <https://www.cramwetlands.org>). In FY20, Valley Water and the San Francisco Estuary Institute evaluated the 325 field assessments from all five watersheds done over the eight years in a comprehensive synthesis report. All six (6) of the watershed assessment reports and more information are available on the project webpage (<https://www.valleywater.org/project-updates/creek-river-projects/d5-ecological-data-collection-and-analysis>), under the News & Updates section. Stream ecological condition assessments and data conducted by others throughout California are also available under the Reports & Documents section.

Valley Water implements the project in accordance with the Wetland and Riparian Area Monitoring Plan (WRAMP) framework recommended by the United States Environmental Protection Agency and endorsed by the California Water Quality Monitoring Council. The results are entered on EcoAtlas, which allows the public to view the proportion of stream resources in good, fair or poor condition for a watershed or any area of interest of choosing using its Landscape Profile tool (<https://www.ecoatlas.org/>).

Figure D5.1 Percent of stream miles in good, fair and poor condition through the Coyote Creek watershed in 2010 and 2020.



Progress on KPI #2:

The first reassessment of the Coyote Creek watershed was completed in FY21 with field work from July through October of 2020, 10 years after its first assessment in August and September 2010. This is the first ambient watershed reassessment conducted using CRAM in the state. Statistically, overall stream conditions in the Coyote watershed did not change from 2010 to 2020. It remains in good condition at the watershed scale, but barely. Conditions appeared to decline slightly, however, change was within the 95% confidence levels, thus not statistically significant. Figure D5.1 shows the proportions or percent of stream miles in poor, fair and good ecological condition in 2020 compared to 2010. The watershed was divided into the headwaters and lower urban and agricultural areas, where Valley Water primarily works, as defined by the Stream Maintenance Program (SMP) permitted limit below the 1,000-foot elevation contour (SMP Area). Similar to watershed-wide conditions, there were no statistical differences in the overall condition of the SMP Area from 2010 to 2020. The

Coyote watershed reassessment report on the project webpage has more detailed analyses and information.

The CRAM data collected under the project was fundamental to developing CCNEET, described as the Coyote Creek Stream Corridor Priority Plan in Project D3: Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails. CCNEET, which is also hosted on EcoAtlas, was motivated by a recognized need for a coordinated, science-based process to identify and justify where and how to conduct habitat improvements along the creek with the goal of using a watershed approach to environmental protection, permitting and stewardship. It also fulfills two priority actions identified in the One Water Coyote Creek Watershed Plan - Enhance Riparian and Aquatic Habitat along Upper Coyote Creek and Enhance Riparian and Aquatic Habitat along Middle Coyote Creek. FY21 work on CCNEET included maintenance, enhancements, partner training and outreach. Continued advancements involved coordination with Santa Clara County Parks, CCNEET introductions and trainings with the Santa Clara Valley Habitat Agency, Guadalupe Coyote Resource Conservation District and the Loma Prieta Resource Conservation District.

Financial Information

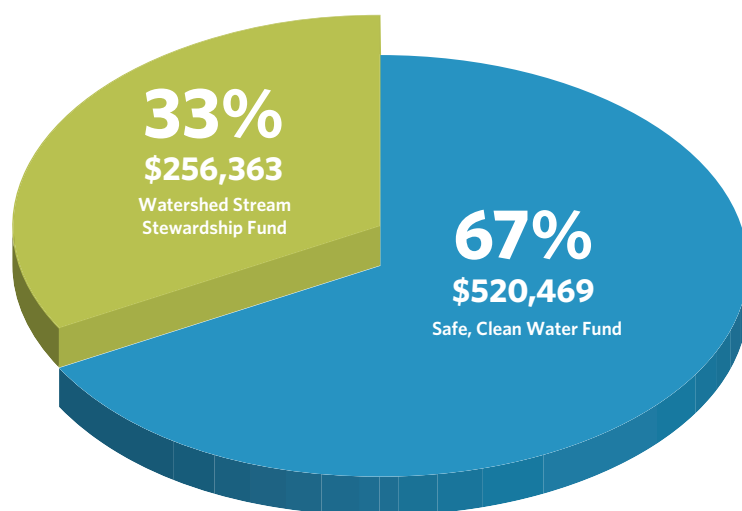
In FY21, approximately 115% of the annual project budget was expended.

The project was overspent due to the utilization of FY21 funds for the partnership agreement with the Aquatic Science Center/San Francisco Estuary Institute and having a larger volume of work to reassess the Coyote watershed, the first to be reassessed under KPI #2. The partnership agreement was approved in March 2020, however, payments were made from the FY21 budget. This resulted in underspending in FY20 (38%) and overspending in FY21.

Financial Summary (\$ Thousands)								
D5.2 Ecological Data Collection and Analysis								
Fiscal Year 2020-2021						15-year Program		
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$520	\$0	\$520	\$548	\$49	\$596	115%	\$9,020	37%

Figure D5.3**D5 Ecological Data Collection and Analysis**

Total FY21 Project Budget: \$776,859



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure D5.3 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.

Opportunities and Challenges

Watershed Approach to Environmental Permitting, Impact Assessments and Mitigation

Valley Water has been applying CRAM to assess flood and restoration projects, starting with pre-project stream condition scores and planning post-project comparisons. The assessments align closely with the State Water Resources Control Board (SWRCB) Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), which became effective on May 28, 2020, to regulate work in streams and their wetlands under Section 401 of the Clean Water Act, and Porter-Cologne Water Quality Control Act. The Procedures ensure that mitigation planning is based on a watershed approach. Information and analysis of the abundance, distribution, diversity and condition of aquatic resources is required, and CRAM is considered an appropriate assessment method to provide some of these required data. The watershed reports and EcoAtlas provide this information to resource agencies and the public and have watershed-specific stream condition statistics that can be compared to CRAM results.

Several of Valley Water's One Water Plan targets are closely aligned with the Project D5 watershed assessments and CRAM metrics. One Water is used to plan projects, grants and other activities with D5 data presenting how environmental uplift or improvement may be achieved. The CRAM results can also predict potential environmental degradation, then be applied to avoid, minimize or mitigate impacts.

Partnerships, Resource Agency, Conservation Group and Landowner Coordination

Valley Water does not own substantial amounts of land at the watershed scale. Only 8% of the Coyote watershed stream miles are Valley Water owned or under easement. Also, Valley Water can only manage creek flows in the SMP Area below Coyote and Anderson Reservoirs within flow limitations of the infrastructure, compliance with water rights and resource agency permits, while providing adequate water supply for multiple users and

the environment. As a result, Valley Water needs the assistance of, and to work cooperatively with water users, landowners, land managers, creekside neighbors, resource agencies, environmental organizations, stakeholders, and citizen groups to maintain and improve ecological conditions and watershed health.

Climate Change, Drought and Wildfire

The frequency and intensity of drought increased from 2000 to 2021. Mega-droughts spanning multiple decades have occurred in California's past and the 2012 to 2016 drought was likely the most severe drought in the last 1,200 years (see Valley Water's Climate Change Action Plan at <https://www.valleywater.org/your-water/water-supply-planning/climate-change-action-plan>.)

From August 18 to October 1, 2020, the SCU Lightning Complex wildfires burned approximately 28,000 acres, 12% to 13% of the Coyote watershed. The watershed reassessment had either completed field work prior to the wildfires or could not access a few sites, so assessed statistically selected replacement sites where landowner permission was granted. Despite the large area burned, mostly in the headwaters, soil burn severity measured by CalFire was low to very low (90%) with moderate (10%) and high severity (two acres) not so widespread. Valley Water has been examining wildfire effects in cooperation with the California Department of Fish and Wildlife, California Native Plant Society, and University of California. Understanding the impacts or benefits to watershed condition from the wildfires depends on years of vegetation regrowth and any possible erosion, sedimentation, nutrient inputs to creeks, etc. Observing long-term effects will be part of the next Coyote watershed reassessment in 2030 or 2035 under the renewed Safe, Clean Water and Natural Flood Protection Program.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project D6

Creek Restoration and Stabilization

This project will use geomorphic data to design and construct projects to increase the stability of eroding creek banks and help restore the natural functions of stream channels. Possible work may include the removal of Comer Debris Basin on Calabazas Creek in Saratoga, and activities to reduce and prevent incision and promote sediment balance in Stevens and Uvas creeks.

Benefits

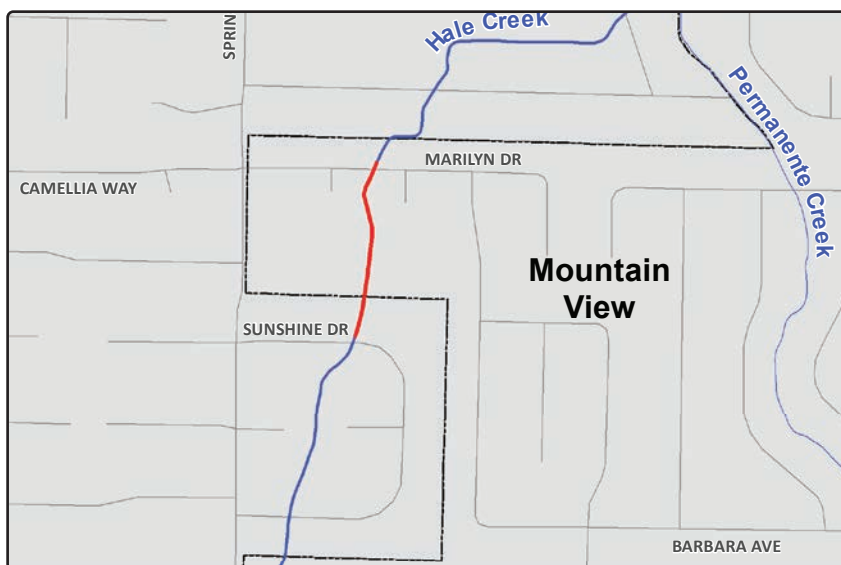
- Uses scientific principles to restore sediment balance and reduce erosion, instability and sedimentation in creeks
- Helps restore stream functions and improves recharge capacity of channels by decreasing sedimentation
- Protects roads from damage caused by eroding channel banks
- Reduces annual maintenance cost for sediment removal

Key Performance Indicator (15-year Program)

1. Construct 3 geomorphic designed projects to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed.

Geographic Area of Benefit: Countywide

Project Location



Legend

- Hale Creek Project Location
- Santa Clara County Cities



Rendering of the Hale Creek pilot project's natural channel design.

ADJUSTED

Project D6 FY21 Highlight

Site 1: Hale Creek Enhancement Pilot Project

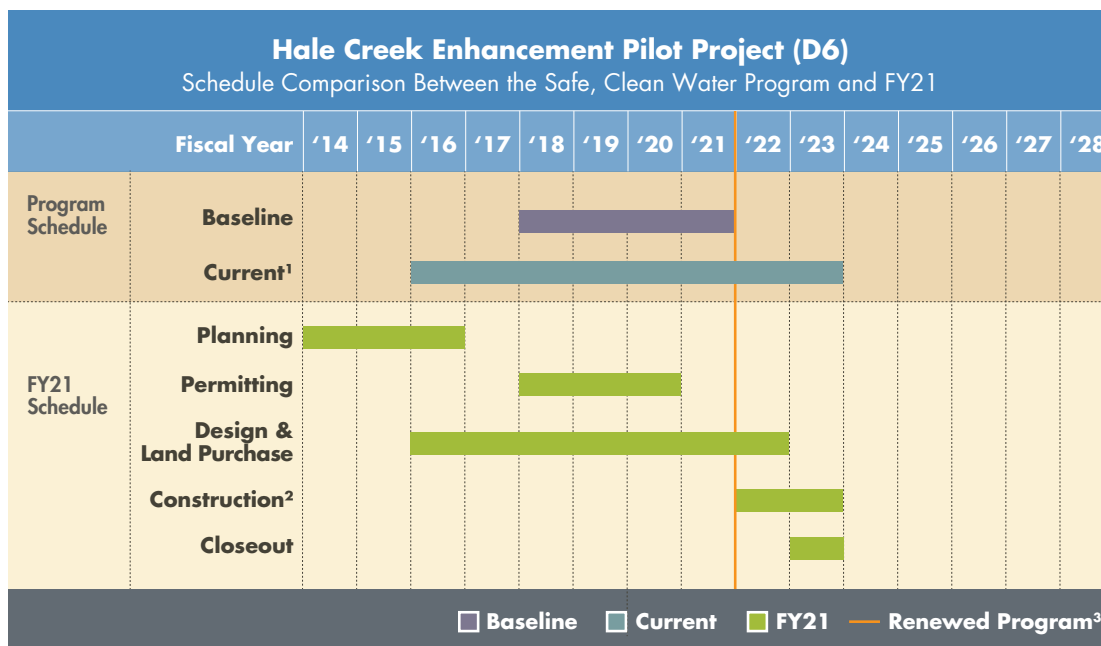
- Completed 100% plans and specifications as part of the design process by implementing design changes to minimize impacts to adjacent residents.
- Obtained Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board; and a Lake or Streambed Alteration Agreement from the California Department of Fish and Wildlife.

Site 2: Bolsa Road Fish Passage Project

- Because of required design changes for maintenance purposes, construction rescheduled to begin in FY22.

Schedule

Site 1: Hale Creek Enhancement Pilot Project

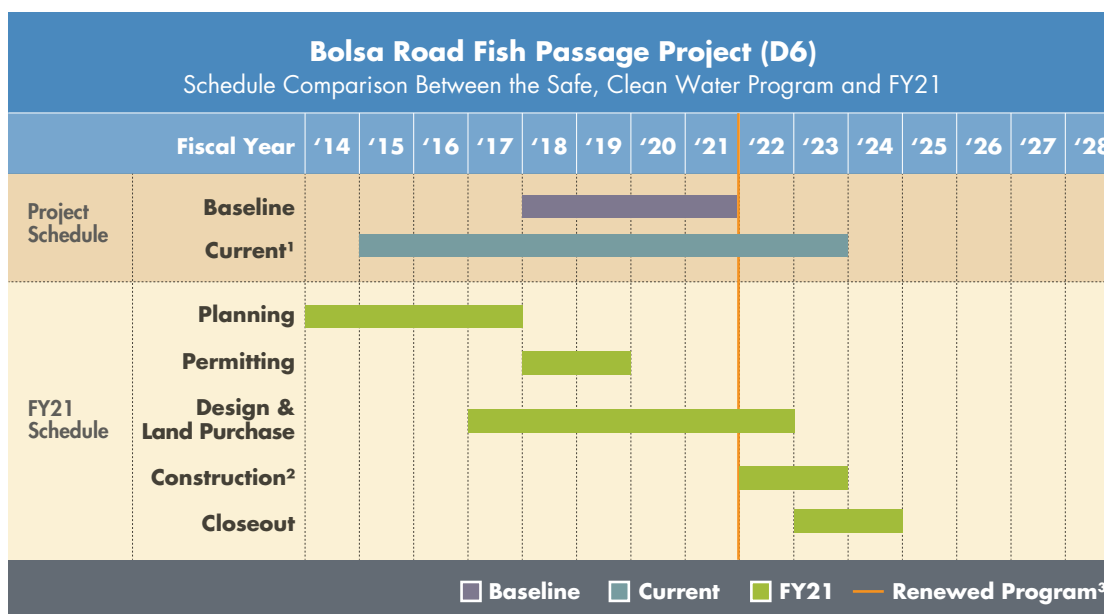


¹ Board approved a schedule adjustment through the change control process in FY20 & FY21.

² Construction also includes a 3-year revegetation establishment period, not shown.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 Program. The project schedule after this point is determined by activities in the renewed program.

Site 2: Bolsa Road Fish Passage Project



¹ Board approved a schedule adjustment through the change control process in FY20 & FY21.

² Construction also includes a 3-year revegetation establishment period, not shown.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 Program. The project schedule after this point is determined by activities in the renewed

Status History

Fiscal Year	Status
FY 14	SCHEDULED TO START
FY 15	SCHEDULED TO START
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ADJUSTED

Status for FY21: **ADJUSTED** (Schedule Adjustment)

Progress on KPI #1:

- In FY16, Valley Water selected the Hale Creek Enhancement Pilot Project as the first of three (3) geomorphic designed projects to be constructed.
- In FY19, Valley Water selected the Bolsa Road fish passage project on Uvas Creek as the second design project to restore stability and stream function.

Site 1: Hale Creek Enhancement Pilot Project

- The first of the geomorphic designed projects is the Hale Creek Enhancement Pilot Project, which includes restoration and stabilization of a 650-foot section of the concrete-lined channel on Hale Creek, between Marilyn Drive and North Sunshine Drive on the border of Mountain View and Los Altos. In coordination with the San Francisco Bay Regional Water Quality Control Board (RWQCB), this project has been prioritized and selected for a pilot study to restore geomorphic creek features in a confined urbanized setting. In FY21, Valley Water completed 100% plans and specifications as part of the design process by implementing design changes to minimize impacts to adjacent residents. For detailed information about the geomorphology and project design, view the Hale Creek Enhancement Pilot Project planning study memo online: www.valleywater.org/HaleCkPlanningMemo
- The project will be advertised for construction in 2022, with construction expected to begin in spring 2022 (FY22) and be completed by the end of 2022 (FY23).

Site 2: Bolsa Road Fish Passage Project

- This project was originally planned and designed as one of the fish passage improvement projects under Project D4: Fish Habitat and Passage Improvement. While the project maintains its fish passage benefits, as a result of consultations with in-house fisheries biologists and environmental planners as well as the regulatory permitting agencies, the project design was changed to include geomorphic design features that will restore stability and stream function. In response, the Board approved funding construction through Project D6: Creek Restoration and Stabilization.
- The Bolsa Road Fish Passage Project consists of the installation of a gradually sloped riffle-pool stream complex along approximately 1,700 linear feet of Uvas-Carnadero Creek in unincorporated Santa Clara County, just

south of Gilroy. The purpose of the project is to restore the stream invert due to decades of channel incision and channel bottom lowering and to steadily elevate the stream bottom over existing fish passage barriers, including a Union Pacific Railroad (UPRR) crossing support slab as well as a dysfunctional Denil fish ladder that was previously installed to bypass the UPRR crossing.

- In FY21, the project construction was pushed back by a year to begin in FY22 due to design changes necessary to incorporate the permanent access ramps required by Valley Water Operations and Maintenance (O&M) for maintenance purposes. The design change required a tree survey, which was delayed due to poor air quality associated with the fires in the summer. As a result, the design staff did not have adequate time to coordinate with O&M and survey teams to design and determine the location of the permanent access ramps, renegotiate the permits to update from temporary to permanent ramps, update the bid documents, and release the bid documents in FY21.
- The project construction is now scheduled to begin in FY22 and be completed in FY23. For detailed information about the geomorphology and project design, view the Bolsa Road Fish Passage Improvement Project Basis of Design report at tinyurl.com/BolsaRdBasisOfDesign.
- Meanwhile, the San Francisco Bay Regional Water Quality Control Board (RWQCB) issued a Water Quality certification on April 26, 2019, the U.S. Army Corps of Engineers (USACE) issued a permit on June 6, 2019, and the California Department of Fish and Wildlife (CDFW) issued the final Streambed Alteration Agreement on January 23, 2020.

Financial Information

Site 1: Hale Creek Enhancement Pilot Project

In FY21, 22% of the annual project budget was expended.

The under expenditure was because the FY21 project budget included funds for construction, which was pushed back by a year to begin in FY22. Delay was caused by the need to finalize construction coordination with some property owners.

Financial Summary (\$ Thousands)									
D6. Hale Creek Enhancement Pilot Project									
Fiscal Year 2020–2021								15-year Program	
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total			
\$170	\$2,719	\$0	\$2,889	\$644	\$0	\$644	22%	\$8,993	31%

Site 2: Bolsa Road Fish Passage Project

Since the planning and design for this project was carried out under D4: Fish Habitat and Passage Improvement, the

FY21 budget allocation for construction was included under Project D4, which was to be reimbursed in accordance with the Board's FY19 decision that the project construction be funded by D6. In FY21, the project construction schedule was pushed back by a year to begin in FY22 in order to incorporate in the bid documents the design for the permanent access ramps required for maintenance purposes.

Opportunities and Challenges

Site 1: Hale Creek Enhancement Pilot Project

Schedule Adjustment

In FY21, the project schedule was adjusted, pushing the project construction by a year to begin in FY22 and complete in FY23. The project construction was deferred due to several reasons listed below:

1. Allow time for coordination with property owners to obtain temporary construction easements; and
2. Find solutions in coordination with PG&E to minimize or eliminate loss of power to adjacent properties during construction.

Confidence Levels

Schedule: Moderate confidence

This section of Hale Creek is bordered by seven (7) private residential properties and a church parking lot. The ability to resolve potential mis-aligned fences and obtain the necessary temporary easements for construction will be critical for project success. Valley Water conducted outreach to the project neighbors and continues to work closely with them to obtain temporary construction easements.

Funding: High confidence

Project funding has been secured through the Safe, Clean Water Program.

Permits: High confidence

Valley Water has received the RWQCB permit for this project.

Jurisdictional Complexity: High confidence

This project is on the border of Mountain View and Los Altos, and both cities have been supportive of the project. During the design phase, Valley Water has coordinated with both cities on an as needed basis, and as the project transitions into the construction phase, Valley Water will collaborate more closely with both cities.

The work is being done on existing Valley Water right-of-way and easements and additional temporary construction easements will be required to build the project from adjacent property owners. Furthermore, PG&E overhead electric lines cross and run along the creek in several locations. Valley Water continues to coordinate with PG&E and revise the design as necessary to ensure this project can be constructed while minimizing impacts to utility services to adjacent residents.

Site 2: Bolsa Road Fish Passage Project

Schedule Adjustment

In FY21, the project construction schedule was adjusted, delaying construction start by a year to begin in FY22 and complete in FY23. The schedule was adjusted primarily due to design changes to incorporate the permanent access ramps required by Valley Water O&M.

Confidence Levels

Schedule: High confidence

All work items for the Bolsa Road Fish Passage project are within Valley Water’s maintenance easement. Permission to Enter agreements with adjoining commercial properties were executed in May 2019 for the contractor to access the project site safely on the south bank to avoid the busy traffic along Bolsa Road. Valley Water has received cooperation from the adjoining project neighbors.

Funding: High confidence

Project funding has been secured through the Safe, Clean Water Program.

Permits: High confidence

Valley Water has received permits from the RWQCB, USACE, and CDFW has issued the final Streambed Alteration Agreement for the project. Permit amendments to include the O&M permanent access ramps in the design will be secured in FY22.

Jurisdictional Complexity: High confidence

Valley Water has received cooperation from the adjoining project neighbors and secured Permission to Enter agreements for construction from project neighbors that will be extended to the end of 2025 to cover postponement of the project construction to next season and post-construction vegetation management. This project footprint was modified slightly to avoid encroaching on UPRR right-of-way as the UPRR disagreed with Valley Water’s evaluation of impact to drainage under the UPRR bridge.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project D8

South Bay Salt Ponds Restoration Partnership

This project reuses local sediment from streams flowing into San Francisco Bay to create and rehabilitate habitat in the South Bay Salt Ponds Restoration. Valley Water reuses sediment that has to be removed from streams to maintain their capacity to carry floodwaters. In partnership with the U.S. Fish and Wildlife Service (FWS), clean sediment is applied to appropriate locations to improve the success of the South Bay Salt Ponds Restoration effort.

Benefits

- Accelerates progress of an important tidal wetland restoration project
- Reduces disposal costs for sediment that has been removed from local channels to maintain flood carrying capacity
- Increases space availability in local landfills

Key Performance Indicators (15-year Program)

1. Establish agreement with FWS to reuse sediment at locations to improve the success of Salt Pond restoration activities.
2. Construct site improvements up to \$4 million to allow for transportation and placement of future sediment.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ADJUSTED
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET



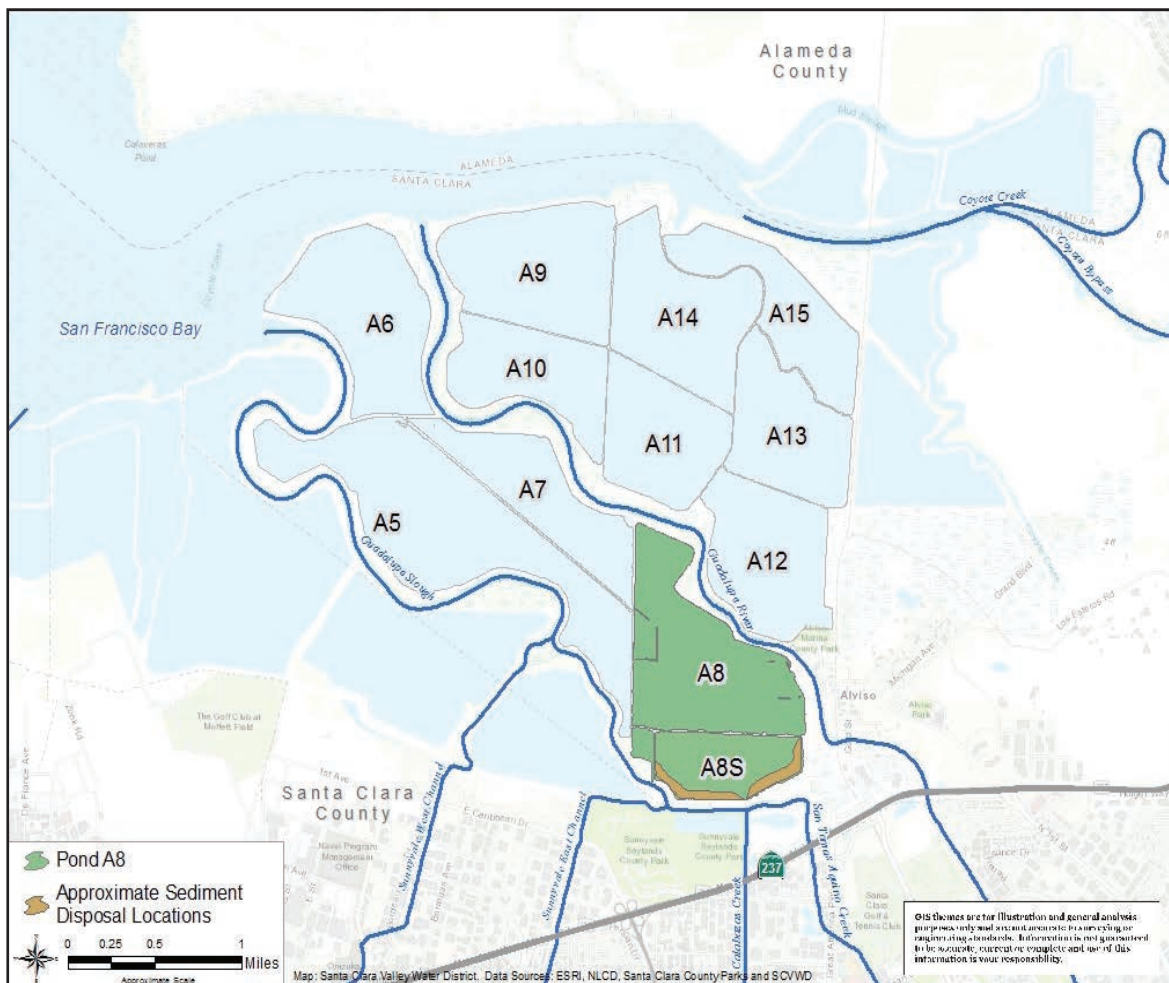
Sediment stockpile to Pond A8.

ON TARGET

Project D8 FY21 Highlights

- Added 9,300 cubic yards of soil to the existing 10:1 slope at Pond A8 to protect the clay liner of the former landfill and support future 30:1 slope ecotone.

Project Location



Progress on KPI #1: (Completed in FY14)

In May 2019, Valley Water signed a new agreement with USFWS to replace the initial agreement that was signed in March 2014.

Progress on KPI #2:

In FY21, 9,300 cubic yards of soil from the SMP was added to the existing 10:1 slope at Pond A8 to protect the clay liner of the former landfill as well as support future 30:1 slope ecotone, gentle slope that will be a good substrate for marsh vegetation to grow.

Financial Information

In FY21, 105% of the annual project was expended.

Financial Summary (\$ Thousands)									
D8. South Bay Salt Ponds Restoration Partnership									
Fiscal Year 2020–2021							15-year Program		
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total			
\$0	\$24	\$0	\$24	\$25	\$0	\$25	105%	\$4,398	7%

Opportunities and Challenges

Coordination with Project E1.2: Sediment Removal for Capacity

To the extent possible, Valley Water coordinates its sediment removal activities, funded in part by Sub-Project E1.2, with Project D8: South Bay Salt Ponds Restoration Partnership. More specifically, removed sediment that meets specific re-use criteria is delivered to USFWS-owned Pond A8 to provide suitable substrate (e.g. dirt, gravel, sand, etc.) on which marsh vegetation can grow.

Habitat Improvement

This project provides an important opportunity to assist the South Bay Salt Pond Restoration Program. The sediment is being used to construct a broad, gentle slope that will increase marshland acreage that absorbs energy during storm surges providing resilient flood protection and protects adjacent property, a former landfill from erosion, while providing habitat for many wetland species. After the slope is constructed, it will be revegetated with an appropriate array of native tidal marsh plant species and planting methods developed by the San Francisco Bay Bird Observatory with Valley Water funding.

Maximize Sediment Reuse

Because of the higher standards required to meet under the new Quality Assurance Project Plan (QAPP), Valley Water is unable to find enough soil that meets the thresholds as cover material. There is limited amount of soil that meets the foundation criteria and even less for cover and that limits our ability to deposit the soil at Pond A8. SBSRP, USFWS and Valley Water staff are working with the Water Board to modify criteria for reuse material. Furthermore, Valley Water may also consider purchase of cover material.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 Program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

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Priority E:

Provide flood protection to homes,
businesses, schools and highways

**Safe, Clean Water
and Natural Flood Protection**

Priority E

Provide Flood Protection to Homes, Businesses, Schools and Highways

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, Valley Water 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, Valley Water also leverages funds from the state, local municipalities and other stakeholders.

Project E1: Vegetation Control and Sediment Removal for Flood Protection

Project E2: Emergency Response Planning

Project E3: Flood Risk Reduction Studies

Project E4: Upper Penitencia Creek Flood Protection
Coyote Creek to Dorel Drive – San José

Project E5: San Francisquito Creek Flood Protection
San Francisco Bay to Middlefield Road – Palo Alto

Project E6: Upper Llagas Creek Flood Protection
Buena Vista Avenue to Llagas Road – Morgan Hill,
San Martin, Gilroy

Project E7: San Francisco Bay Shoreline Protection
Milpitas, Mountain View, Palo Alto, San José,
Santa Clara and Sunnyvale

Project E8: Upper Guadalupe River Flood Protection
Highway 280 to Blossom Hill Road – San José



Sediment removal at Sunnyvale East Channel.

ON TARGET

Project E1 FY21 Highlights

- Maintained 90% of improved channels at design capacity.
- Completed 1,124.2 acres of in-stream vegetation management on 133.9 miles of streams countywide.
- Completed 12 sediment removal projects, removing 55,878 cubic yards of sediment to maintain design capacity.
- Completed 28.5 acres of in-stream vegetation management on Newly Improved Creeks to reduce flood risk on 1.2 miles of streams.
- Completed 2,948 acres of upland vegetation management.

Project E1

Vegetation Control and Sediment Removal for Flood Protection

This project supports Valley Water'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 trees, and performing weed abatement and pruning to provide maintenance access and establish firebreaks. Before carrying out maintenance activities, Valley Water 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 Valley Water's ongoing vegetation control and sediment removal activities. 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

Benefits

- Ensures that existing flood protection projects continue to provide maximum flood protection
- Provides safe access for maintenance of creek channels
- Reduces fire risk along creeks and maintains compliance with fire codes
- Improves water quality

Key Performance Indicators (15-year Program)

1. Maintain 90% of improved channels at design capacity.
2. Provide vegetation management for 6,120 acres along levee and maintenance roads.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21:

ON TARGET

Progress on KPI #1:

In FY21, 90% of improved channels were estimated as having been maintained at design capacity. Improved channels are those channels where Valley Water has fee or easement land rights and have been modified for flood protection purposes. This estimated percentage is based upon the identification of sediment and vegetation that compromise the flow conveyance capacity of channels. This identification occurs through routine maintenance inspections, following operations and maintenance manuals and stream maintenance guidelines, and review of as-built plans and specifications.

Valley Water continues to update stream maintenance guidelines, which will provide improved thresholds for sediment removal and vegetation management. These updated guidelines will better inform the inspection and maintenance process for Valley Water's flood protection assets. By the end of FY21, Valley Water completed 29 guidelines. Another 10 guidelines are anticipated to be completed by FY23, and Valley Water is currently on track to complete or update 40 stream maintenance guidelines by 2023.

E1.1 Vegetation Control for Capacity

Completed 1,124.2 acres of in-stream vegetation management to reduce flood risk on approximately 133.9 miles of streams throughout the county using an integrated combination of mechanical, hand labor and herbicide methods (Graph E1.1).

E1.2 Sediment Removal for Capacity

Completed 12 sediment removal projects, removing 55,878 cubic yards (CY) of sediment to maintain design capacity (Graph E1.2). The Safe, Clean Water Program funds 14% of this work. The following table includes the quantities of sediment removed from each watershed/creek, and a corresponding map can be found at: <https://www.valleywater.org/project-updates/e1-vegetation-control-and-sediment-removal-flood-protection> under "Reports and Documents."

Watershed	Creek	Sediment removed (CY)
Lower Peninsula	Stevens Creek	7,850
Lower Peninsula	Permanente Creek	50
West Valley	Regnart Creek (2 sites)	790
West Valley	San Tomas Aquino Creek	2,920
West Valley	Saratoga Creek	9,598
Guadalupe	Ross Creek	55
Coyote	Calera Creek	2,295
Coyote	Los Coches Creek	560
Coyote	Lower Silver Creek	22,680
Coyote	Thompson Creek	4,917
Uvas/Llagas (Pajaro)	Llagas Creek	4,163
TOTAL:		55,878

E1.3 Maintenance of Newly Improved Creeks

Completed 28.5 acres of instream vegetation management on Newly Improved Creeks to reduce flood risk on 1.2 miles of streams throughout the county using an integrated combination of mechanical, hand labor and herbicide methods.

Progress on KPI #2:

E1.4 Vegetation Management for Access

- Completed 2,948 acres of upland vegetation management to maintain access and provide fire protection using an integrated combination of mechanical, grazing, hand labor and herbicide methods. Of this total acreage, 15% of the completed work was funded by Safe, Clean Water for a total of 442 acres towards the 15-year goal of 6,120 acres. (Graph E1.3)
- During the first eight (8) years of the Safe, Clean Water Program, Valley Water managed a cumulative total of 3,591 acres of vegetation, compared to the 8-year target of 3,264 acres.

Financial Information

E1.1 Vegetation Control for Capacity

In FY21, 86% of the annual project budget was expended.

The under-expenditure was because nesting bird and endangered species issues limited the footprint of instream removal that was planned on Guadalupe River from Tasman Drive to Highway 880.

Financial Summary (\$ Thousands)								
E1.1. Vegetation Control for Capacity								
Fiscal Year 2020-2021							15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$2,529	\$0	\$2,529	\$2,162	\$0	\$2,162	86%	\$24,571	49%

E1.2 Sediment Removal for Capacity

In FY21, 107% of the annual project budget was expended.

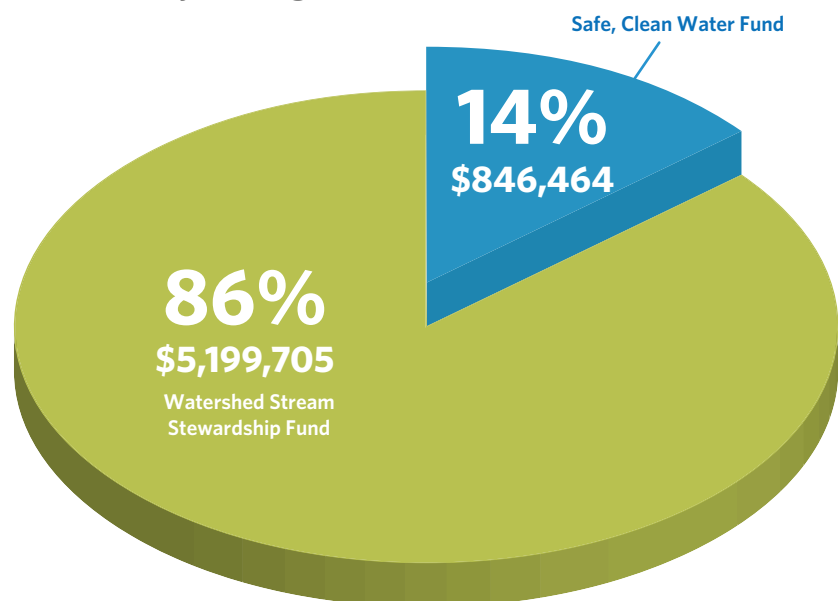
The over-expenditure was because much of the sediment exceeded the criteria for reuse and delivery to Pond A8. The sediment was instead delivered to landfills, thereby incurring additional disposal costs.

Financial Summary (\$ Thousands)								
E1.2. Sediment Removal for Capacity								
Fiscal Year 2020-2021							15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$846	\$0	\$846	\$908	\$0	\$908	107%	\$9,848	49%

Figure E1.2.1

E1.2 Sediment Removal for Capacity

Total FY21 Project Budget: \$6,046,169



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure E1.2.1 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.

E1.3 Maintenance of Newly Improved Creeks

In FY21, 262% of the annual project budget was expended.

The over-expenditure was because unplanned instream vegetation management was necessary on a newly improved creek immediately following transition from capital to operations and maintenance.

Financial Summary (\$ Thousands)								
E1.3. Maintenance of Newly Improved Creeks								
Fiscal Year 2020-2021							15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$65	\$0	\$65	\$171	\$0	\$171	262%	\$19,051	2%

E1.4 Vegetation Management for Access

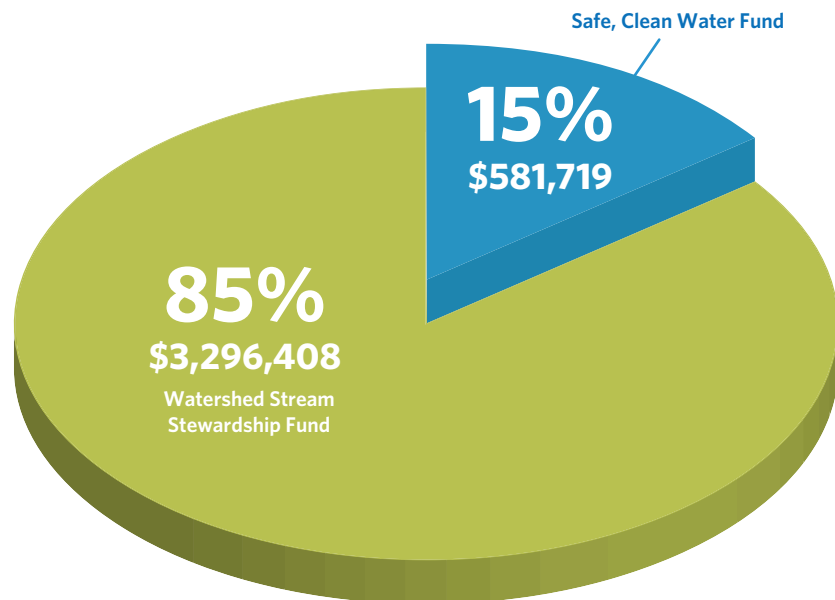
In FY21, 105% of the annual project budget was expended.

The over-expenditure was because late season rains invigorated weed growth and certain creek reaches required multiple weed abatement treatments.

Financial Summary (\$ Thousands)								
E1.4. Vegetation Management for Access								
Fiscal Year 2020-2021							15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$582	\$0	\$582	\$622	(\$12)	\$610	105%	\$6,156	61%

Figure E1.4.1**E1.4 Vegetation Management for Access**

Total FY21 Project Budget: \$3,878,127



Valley Water funds this project with more than the Safe, Clean Water Program fund (Fund 26). Figure E1.4.1 shows the project's total adjusted annual budget inclusive of all Valley Water funding sources.

Opportunities and Challenges**Coordination with Project D8: South Bay Salt Ponds Restoration Partnership**

To the extent possible, Valley Water coordinates its sediment removal activities, funded in part by Sub-Project E1.2, with Project D8: South Bay Salt Ponds Restoration Partnership. More specifically, removed sediment that meets specific re-use criteria is delivered to the U.S. Fish and Wildlife Service (USFWS)-owned Pond A8 to provide suitable substrate on which marsh vegetation can grow. In FY21, a limited quantity of sediment was placed at Pond A8, as the majority of sediment did not meet specific re-use criteria and was therefore delivered to appropriate landfills.



BEFORE: Sunnyvale East Channel before sediment removal.



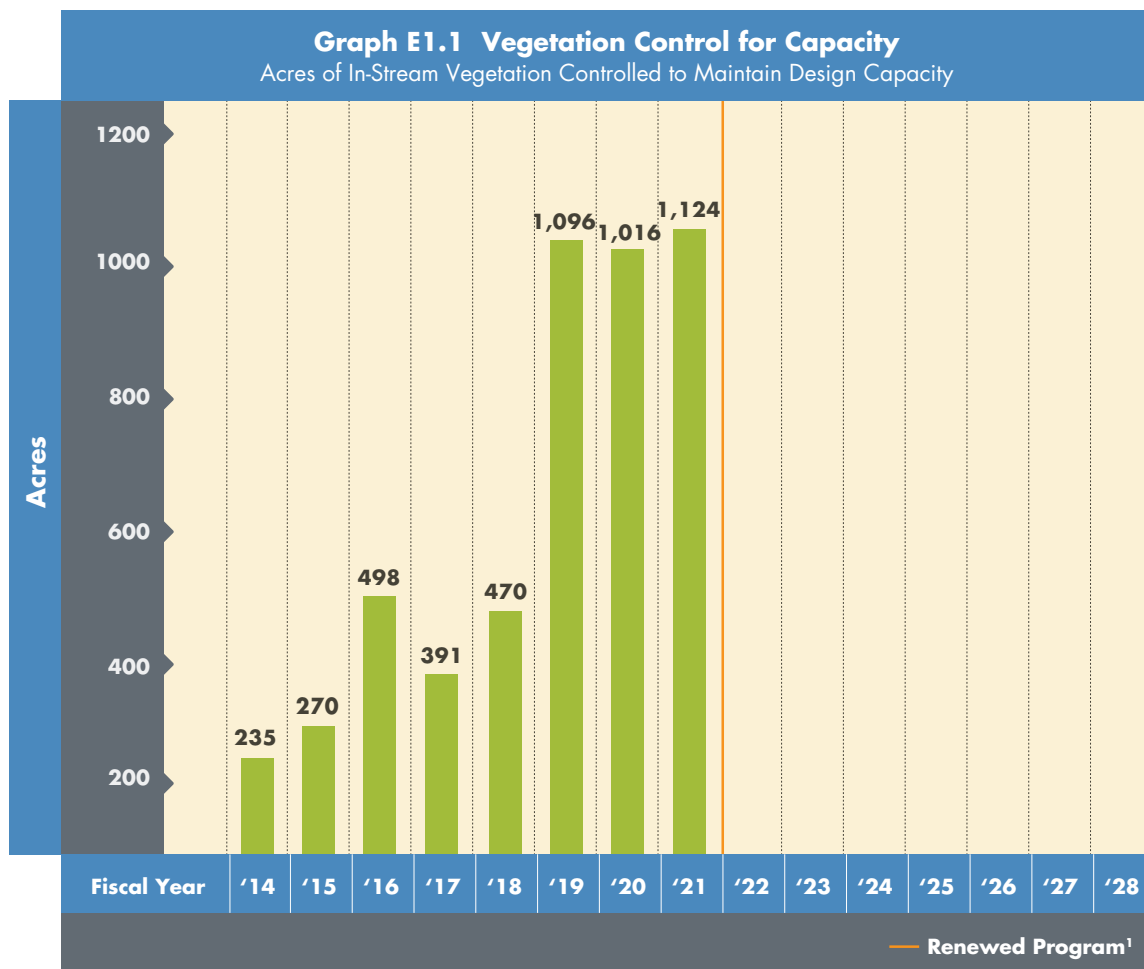
AFTER: Sunnyvale East Channel after sediment removal.

Restoring Flow Conveyance Capacity

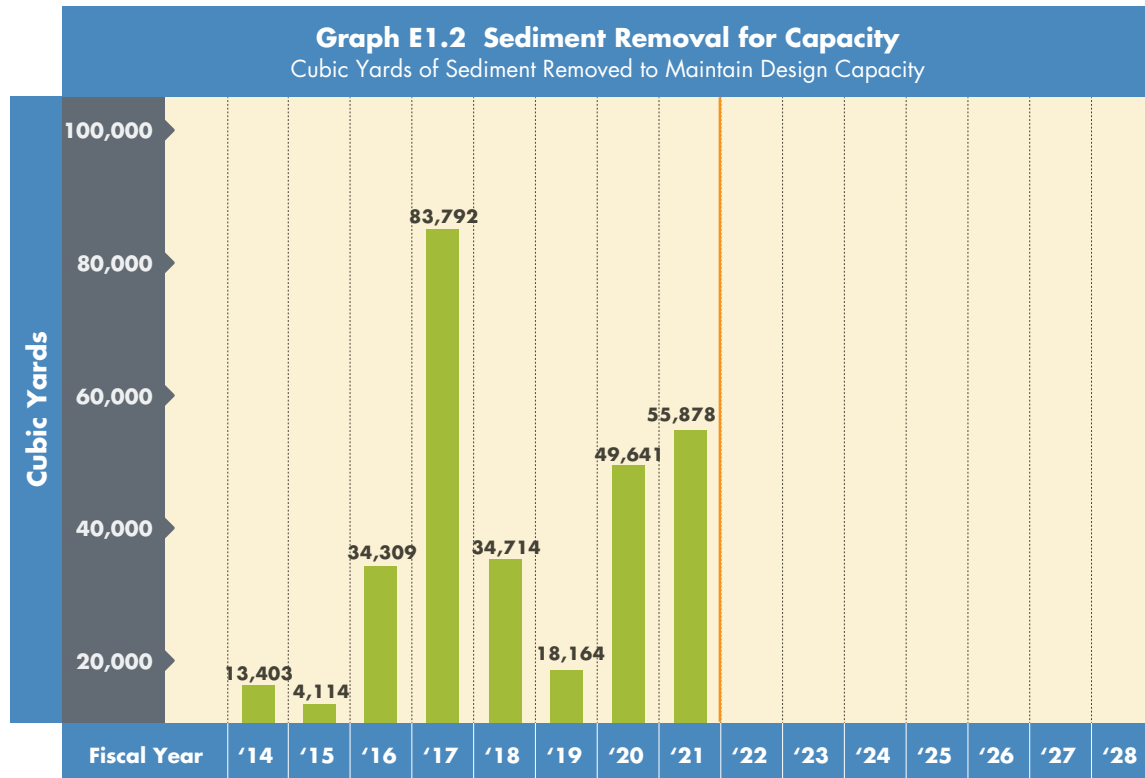
Sediment removal activities were performed at 12 sites along 11 creeks during the FY21 summer Stream Maintenance Program (SMP) season (generally, June 15 through October 15, 2020). Approximately 55,878 cubic yards of sediment were removed to restore flood conveyance capacity. Sediment removal helped keep these reaches of creek flowing adequately during the following winter season to minimize potential for flooding.

Regulatory Agencies' Permit Approvals

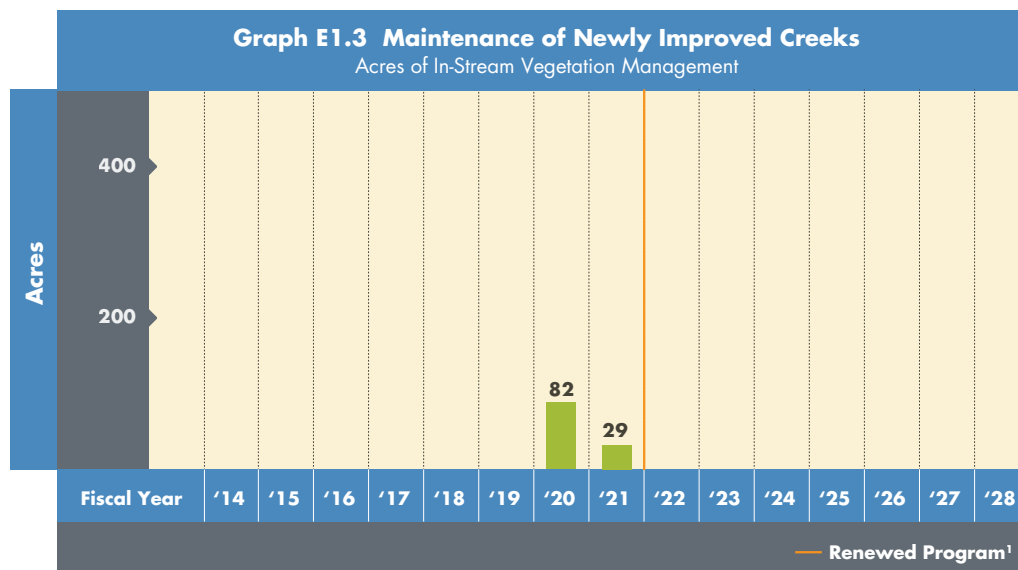
Obtaining regulatory agencies' permit approvals continues to be a challenge for Valley Water, affecting both the ability and cost to perform routine stream maintenance work. Valley Water continues to coordinate with regulatory agencies on mutually acceptable mitigation to offset impacts associated with recurrent sediment removal, vegetation management and other stream maintenance activities.



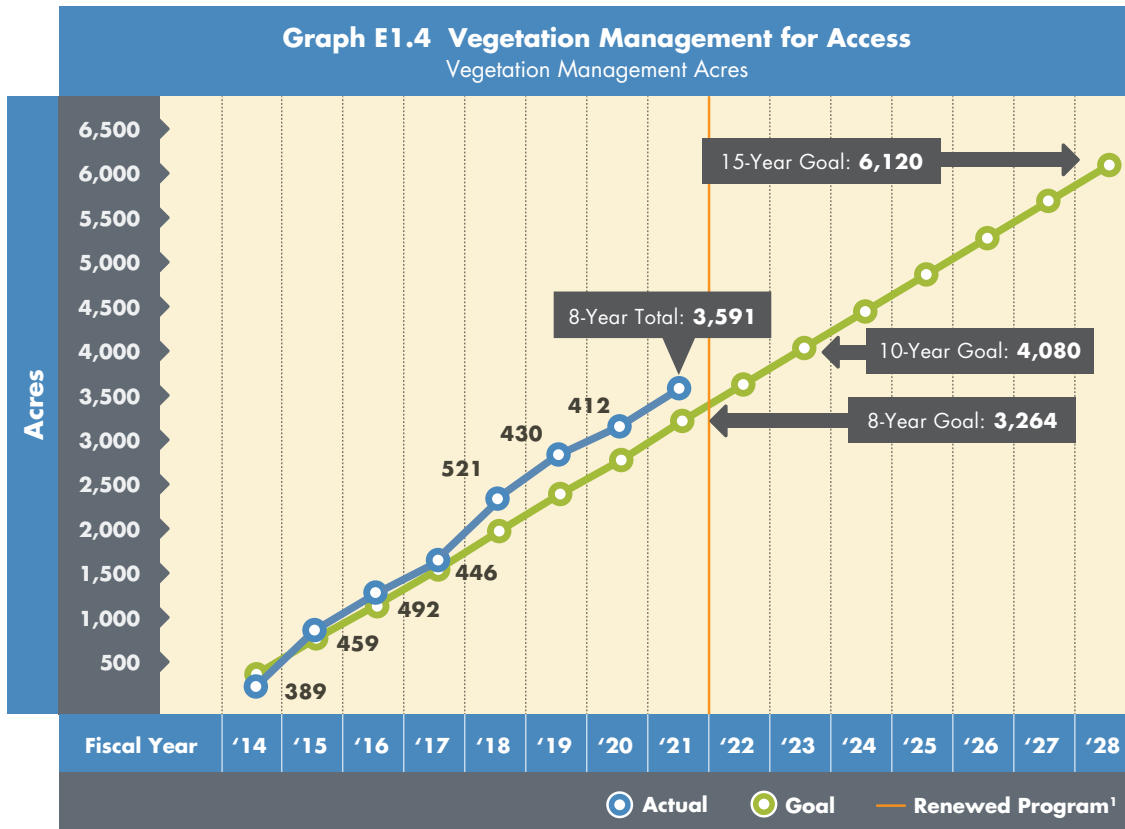
¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.



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¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project E2

Emergency Response Planning

This project allows Valley Water to work with local municipalities to clearly identify roles and responsibilities for floodplain management and flood emergency management and increase awareness of Valley Water'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 Valley Water'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

Benefits

- Reduces flood damage
- Provides effective coordinated response to storm-related emergencies
- Improves community awareness about flood risks

Key Performance Indicators (15-year Program)

1. Coordinate with agencies to incorporate Valley Water-endorsed flood emergency procedures into their Emergency Operations Center plans.
2. Complete 5 flood-fighting action plans (1 per major watershed).

Geographic Area of Benefit: Countywide



Valley Water and City of San José testing JEAP at Ross Creek.

ON TARGET

Project E2 FY21 Highlights

- Continued engagement with the emergency management community by attending monthly meetings and hosting the annual Winter Preparedness workshop with attendees from various cities and the county.
- Tested the West Little Llagas and Uvas Creek emergency response procedures in collaboration with South County stakeholders.
- Completed annual collaboration with the City of San José to update the Joint Emergency Action Plan.
- Completed the San Tomas Aquino Creek flood response plan.
- Began development of the Lower Peninsula Emergency Action Plan.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

Progress on KPI #1:

E2.1 Coordination with Local Municipalities on Flood Communication

Valley Water continues to work with local municipalities to plan and exercise response plans to best communicate and coordinate during an emergency. In addition, further collaboration with municipalities takes place when updates to current plans are accomplished (e.g. Joint Emergency Action Plan City of San José accomplished annually). The highlights of FY21 efforts follow:

- On April 15, 2021, Valley Water tested its West Little Llagas and Uvas Creek emergency response procedures in collaboration with South County stakeholders. The virtual exercise, due to COVID-19, was attended by representatives from Gilroy, Santa Clara County, Morgan Hill and Cal-Fire as well as a large cross-section of Valley Water staff with EOC Responder responsibilities. The brief hotwash at the end of the exercise yielded invaluable feedback for Valley Water staff to incorporate into internal plans and processes.
- Valley Water attended (virtually) the February, 2021 San Francisquito Creek Managers meeting. The meeting touched on the topics of winter preparedness and Valley Water's emergency action response processes. This effort will continue periodically to ensure communication of Valley Water's flood planning and response practices to all the Joint Powers Authority agencies.
- In February 2021, Valley Water completed its annual collaboration with the City of San José to update the Joint Emergency Action Plan (JEAP). Valley Water staff from vegetation management, engineering maintenance support, hydraulics/hydrology & geomorphology, emergency management and others collaborated with city staff to complete this project. The key updates to the JEAP included the addition of Lower Silver Creek, Lake Cunningham, an attachment for creek hot-spots (where periodic flooding is common) and the Guadalupe River appendix to address pumping in the lower reaches. The updated plan was signed off by the city general manager and Valley Water's CEO.
- The annual Winter Preparedness Symposium was held in October 2020. Due to the virtual format, the time was truncated to accommodate attendees. However, external agencies like National Weather Service and Santa Clara County and internal Valley Water business units (e.g. Water Supply, Office of Emergency Services) presented to the multiple agencies in virtual attendance. This effort annually kicks-off the winter collaboration between Valley Water and external agencies with an effort to maximize effective

communication and a goal of protecting our communities not only as a matter of organizational mission, but also as an employee commitment to public service that protects all our communities within Valley Water's jurisdiction.

Progress on KPI #2:

E2.2 Flood-Fighting Action Plans

In FY21, Valley Water worked on the following action plans:

- Completed the San Tomas Aquino Creek flood response plan, which was incorporated as an appendix into the West Valley Watershed Emergency Action Plan (Plan). The Plan was developed simultaneously with the creek response procedure thus providing a systematic structure for all response plans within the West Valley Watershed. External stakeholder input was incorporated as appropriate to ensure the plans and procedures are better aligned with respective jurisdictions. The development process included two cycles of stakeholder reviews with final executive approval and completion in December 2020.
- Valley Water began the initial preparation of the Lower Peninsula Emergency Action Plan in anticipation of the flood response procedures for Permanente Creek and the Palo Alto Flood Basin to be developed next fiscal year.

Financial Information

In FY21, 59% of the annual project budget was expended.

The under-expenditure was largely due to the 'virtualization' of coordination and exercise activities during the pandemic. An example, planning for the tabletop exercise and deployment of the actual exercise with the cities of Morgan Hill and Gilroy where both were held via Zoom (virtually) given the COVID-19 pandemic.

Financial Summary (\$ Thousands)							
E2. Emergency Response Planning							
Fiscal Year 2020-2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$236	\$0	\$236	\$56	\$84	\$140	59%	\$3,891
							30%

Opportunities and Challenges

Coordination with Project C2: Emergency Response Upgrades

When applicable, the flood forecasting products and data collected under Project C2: Emergency Response Upgrades are being incorporated into Project E2: Emergency Response Planning documents to help inform decision-makers. For example, technical mapping and flood-warning baselines produced under Project C2 were used while developing the Guadalupe River flood-fighting action plan and in updating the action plan for San Francisquito Creek, which was developed in FY17. Project C2 focuses on developing flood-warning system infrastructure to assist flood responders by providing forecasted rainfall and streamflow and potential flooding information. Project E2 focuses on pre-event planning and collaboration with other agencies to develop flood response procedures that clarify roles and responsibilities before a flood event arises.

Community Rating System Scores

Project E2 offers an opportunity to meet certain National Flood Insurance Program's (NFIP) Community Rating System (CRS) criteria and potentially increase CRS scores for participating cities in the County. NFIP, administered by the Federal Emergency Management Agency (FEMA), offers flood insurance to all properties in communities that comply with minimum standards for floodplain management. CRS encourages and incentivizes communities to exceed the minimum NFIP requirements by offering discounts on flood insurance premiums. CRS credit points are earned for meeting the following three goals:

1. Reduce flood damage to insurable property;
2. Strengthen and support the insurance aspects of the NFIP; and
3. Encourage a comprehensive approach to floodplain management.

In August 2019, FEMA conducted a review of Valley Water's Community Rating System (CRS) program as part of its 5-year verification cycle visit. As part of the verification cycle visit, Valley Water included the EAPs to increase CRS points. In August 2020, Valley Water received the results of the review. Although Valley Water increased the rating score to the next CRS class, as a non-regulatory agency, it did not receive any CRS credits for the EAP.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project E3

Flood Risk Reduction Studies

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 José, from Guadalupe River to Blossom Hill Road
- Adobe and Barron Creeks in Palo Alto, between Highway 101 and Middlefield Rd.



High-water marker on Alamitos Creek.

ON TARGET

Project E3 FY21 Highlights

- Completed Ross Creek engineering feasibility study.
- Made substantial progress on a study to identify hydraulically feasible alternatives to provide flood protection on South Babb Creek.

The engineering studies include hydrology, hydraulics, geotechnical, and remapping work of the floodplain areas to provide a more accurate reflection of the floodplain. If the outcome of the engineering studies results in updates to the parcels that fall within the effective Federal Emergency Management Agency (FEMA) floodplain, the updated maps and parcel count summaries will be submitted to the impacted city/cities. It is each impacted city's responsibility to determine how best to inform its community and whether to submit the updated maps to FEMA. If the impacted city decides to hold public meetings, Valley Water will provide support materials and offer technical support to address questions from the community. To revise the effective FEMA floodplain, the impacted city would be required to submit the updated maps through FEMA's formal Letter of Map Revision (LOMR) process. Valley Water's role in the LOMR process is to provide technical support and background on the analysis performed during the engineering study. If the impacted city chooses not to submit the updated maps to FEMA, the maps can still be useful to the city in planning efforts and for residents in determining whether or not to purchase flood insurance. Valley Water's updated maps will be made available to the public on valleywater.org.

Flooding History and Project Background

In 1997, the Rock Springs neighborhood suffered severe flood damages to approximately 25 low-income apartment buildings. A subsequent study investigated the flooding problem and offered possible solutions.

Alamitos and Calera Creeks were modified with levees and floodwalls about 30 years ago, but their designs do not meet current FEMA guidelines which were published after the projects were built. Both the Alamitos and Calera neighborhoods are mapped as regulatory floodplains. In 2012, FEMA released new draft technical guidance for mapping floodplains behind levees; these new guidelines may significantly reduce the size of the regulatory floodplains for Alamitos and Calera Creeks, but a study is needed to qualify for updated regulatory mapping.

Every winter, thousands of households, schools and businesses in San José are susceptible to flood damage in the Lower Silver Creek watershed. While Valley Water is improving the flood carrying capacity of Lower Silver Creek itself, the smaller tributaries continue to pose a flood risk. Project E3 would map and quantify these flood risks and identify possible solutions that may also provide environmental or recreational benefits.

Benefits

- Provides more accurate mapping of areas at risk of flooding
- May add or remove parcels from the FEMA regulatory floodplain, based on updated mapping standards
- Information can be integrated into flood warning program to provide advance, real-time warnings of impending flood events
- Provides technical basis for developing future flood protection plans, and for potential funding partnerships

Key Performance Indicators (15-year Program)

1. Complete engineering studies on 7 creek reaches to address 1% flood risk.
2. Update floodplain maps on a minimum of 2 creek reaches in accordance with new FEMA standards.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

Progress on KPI #1:

In FY21, work included completion of the Ross Creek engineering feasibility study and substantial progress on a study to identify hydraulically feasible alternatives to provide flood protection on South Babb Creek.

The Ross Creek engineering feasibility study was completed and has been posted to the E3 webpage. In FY21, work on the study included:

1. Finalizing the unsteady-state and 1-D HEC-RAS models, which represent various feasible alternative conditions, including various combinations of proposed detention ponds, floodwalls and bridge modifications; and

2. Finalizing the draft feasible alternatives report.

This alternatives analysis will result in a potential flood protection design for the reach. The project explores two different flood protection targets- 25- year (4%) and 100- year (1%) flood protection.

The South Babb study included analyses to explore both flood mitigation and 100-year flood protection projects on South Babb Creek. Work in FY21 included refining the FY20 hydraulic modeling to identify alternatives for flood mitigation and 100-year flood protection and estimating costs. A feasibility analysis of each identified flooding solution, which is also underway, will identify other issues, such as constructability.

So far, Valley Water has completed engineering studies on five (5) reaches of creeks. These are on Ross Creek (Guadalupe River to Blossom Hill Road in San José), Coyote Creek (Bay to Anderson Dam, including Rock Springs Neighborhood); Adobe and Barron Creeks tidal flood protection (Highway 101 to Middlefield Road in Palo Alto); and Alamitos Creek (upstream of Almaden Lake in San José). Another engineering study on Lower Silver Tributaries (focused mainly on South Babb) is underway and expected to be completed in FY22. Valley Water plans to complete the remaining study on Calera Creek under the renewed Safe, Clean Water Program.

Progress on KPI #2: (Completed)

- In FY21, the model was further refined to represent proposed alternative solutions for deeper flooding (> 1 ft) observed for the 100-year floodplain near South Babb Creek.
- Remapping of Alamitos Creek per the updated FEMA methodology was completed in FY19. Valley Water reached out to the City of San José in FY19 to discuss the remapped areas. So far, the city is using this information to better understand flooding risks for their area.
- An ICM model (urban hydrology) for the Lower Silver and Thompson Creeks watershed was developed in 2016 for a previous FEMA study. That model represents the storm drains with diameters greater than 24" explicitly so that storm drain routing and storage is accounted for directly. The model has been further developed to understand flooding risks along the Lower Silver and Thompson Creek tributaries. A few smaller storm-drain pipes were added to refine the floodplain in key areas.

Financial Information

In FY21, 98% of the annual project budget was expended.

Financial Summary (\$ Thousands)							
E3. Flood Risk Reduction Studies							
Fiscal Year 2020–2021						15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan
			Actual	Encumbrance	Total		% of Plan Spent
\$1,184	\$0	\$1,184	\$1,118	\$38	\$1,157	98%	\$9,374
							68%

Opportunities and Challenges

Nexus to Other Valley Water Projects

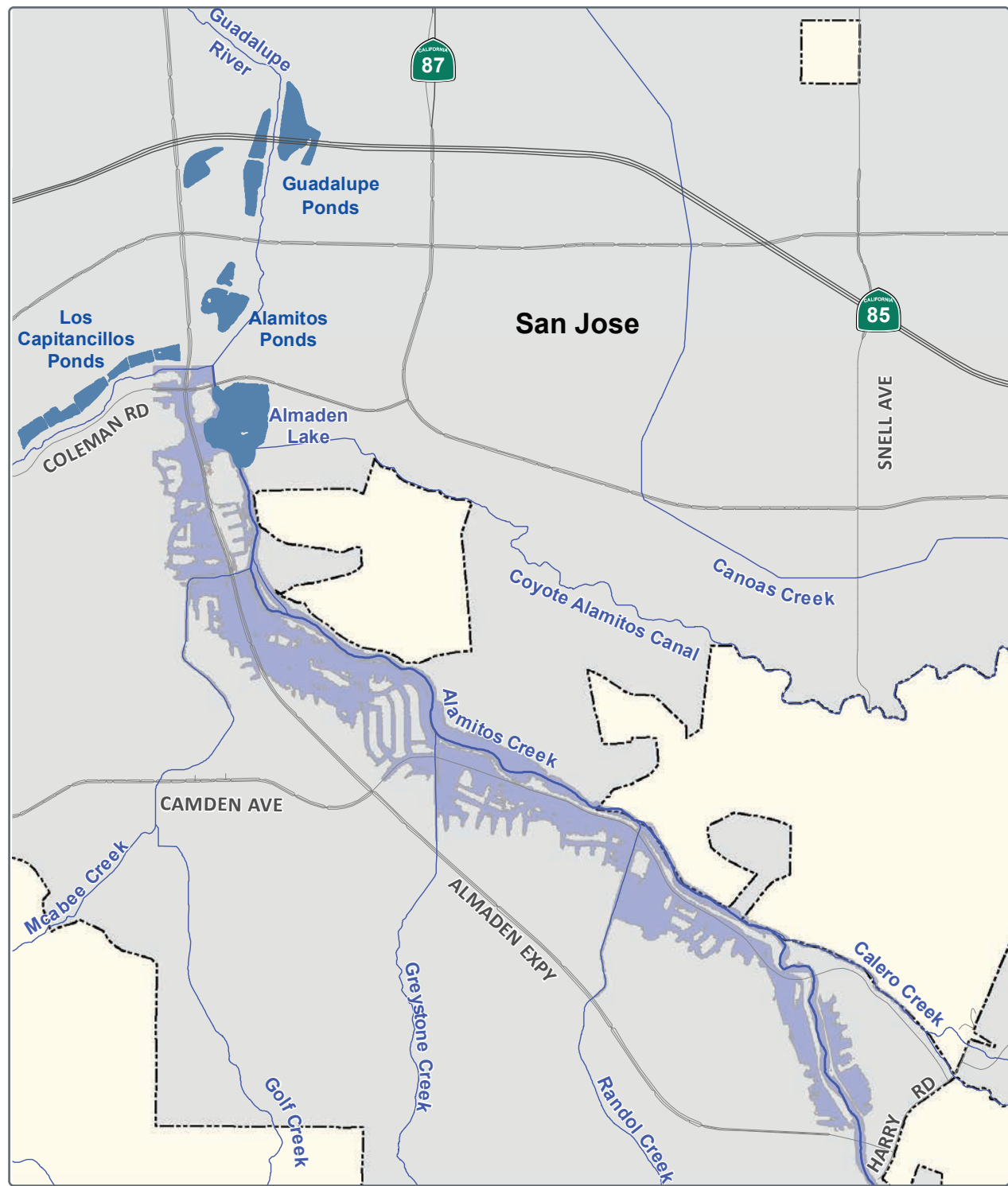
One of the first tasks of an engineering study is to evaluate and, if needed, update the existing floodplain or flood risk areas. These refined floodplain risks and/or maps are incorporated into our emergency action plans, which are used by both Valley Water and the cities during flood events. The maps are shared with the cities directly as additional information to use when regulating development within the floodplain.

Updated flooding risk is also used to help prioritize projects, noting that flooding risk is one factor of many. If the engineering study is picked up as a capital project, the data collected from the engineering study forms the starting point for that project- providing key background information, updated hydraulic models, and some feasible alternatives for further development. For example, the Coyote Creek study completed under this project was utilized to develop the short-term flood relief measures that Valley Water constructed under the Coyote Creek Flood Protection Project.

Figure 1 below shows a simplified version of the Coyote Creek (Rock Springs neighborhood) study map.



Figure 2 below shows a simplified version of the Alamos Creek study map.



2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project E4

Upper Penitencia Creek Flood Protection Coyote Creek to Dorel Drive – San José

Preferred project: A federal-state-local partnership

This project continues a partnership with the U.S. Army Corps of Engineers (USACE) to plan, design and construct improvements along 4.2 miles of Upper Penitencia Creek from the confluence with Coyote Creek to Dorel Drive. Part of the project will protect the area around the Bay Area Rapid Transit's Berryessa station near King Road, which would otherwise be subject to flooding.

The natural creek channel will be preserved while adjacent existing open space and parkland will remain as recreational areas, only rarely taking the role as a temporary floodplain so that floodwaters do not enter surrounding neighborhoods and commercial areas. Proposed construction measures may include modified floodplains, levees, flood walls, bypass channels, and fish passage improvements. Existing Valley Water water supply facilities may also be modified to protect habitat and improve water supply reliability.

The local funding from Safe, Clean Water Program allows Valley Water to move ahead with the planning, design and construction of the project.

Flooding History and Project Background

Upper Penitencia is a major tributary of Coyote Creek, flowing westerly from Alum Rock Park through the residential neighborhoods of Berryessa and Alum Rock in San José. More than 5,000 homes, schools and businesses are located in this floodplain, including many high-tech and commercial industries supporting the greater Silicon Valley.

With the capacity to carry less than a 10-year event, Upper Penitencia Creek has spilled its banks at least 7 times since Valley Water began preparing flood reports in 1967. Damaging flood events occurred in 1978, 1980, 1982, 1983, 1986, 1995, and 1998, impacting many homes, businesses and surface streets.

Potential damages from a 1% (or 100-year) flood event are estimated at \$455 million (in 2004 dollars, according to a USACE economic analysis), with average annual damages estimated at \$30.5 million for the full reach from the Coyote Creek confluence to Dorel Drive.

The preferred project would build on a 1981 tri-party agreement between Valley Water, the City of San José, and Santa Clara County to preserve open land and provide flood protection along the Upper Penitencia Creek corridor. As a result of the agreement, 78 acres have been permanently preserved as Penitencia Creek



Upper Penitencia Creek along Commodore Park.

ON TARGET

Project E4 FY21 Highlights

- Continued work on the planning study, focusing on a multi-purpose project.
- Obtained a consultant to help conduct a Geomorphology Study.

County Park and Penitencia Creek Trail. A 4-mile, intermittent trail follows Upper Penitencia Creek from 700-acre Alum Rock Regional Park to its confluence with Coyote Creek. In addition to much-needed flood protection, this project will help provide the opportunity for the City of San José and Santa Clara County to complete the long-planned trail and linear park.

Benefits

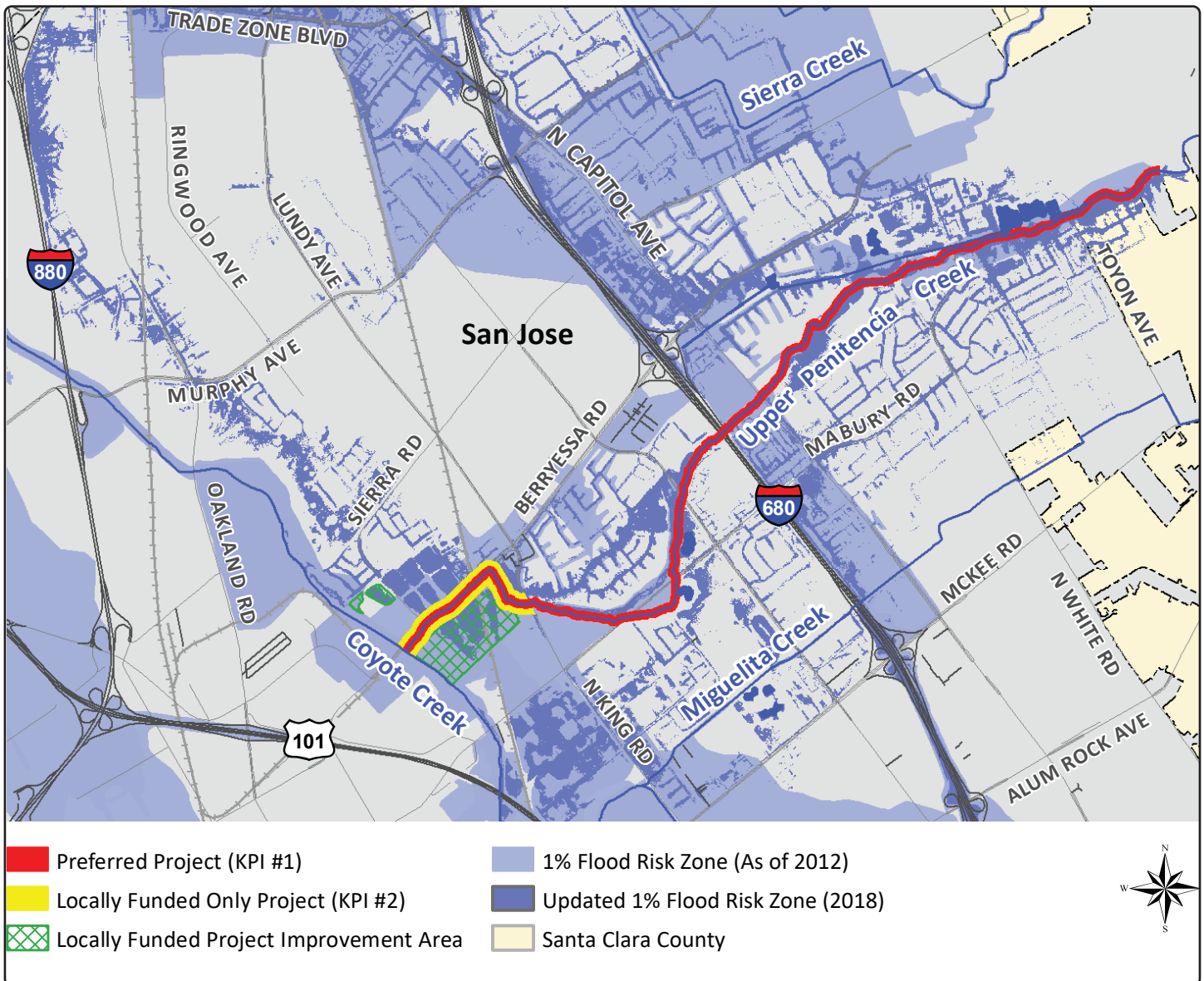
- Preferred project provides 1% flood protection to approximately 5,000 homes, schools and businesses. Locally funded-only project provides 1% flood protection to the proposed rapid transit station and areas downstream from King Road
- Reduces sedimentation and maintenance requirements
- Improves water quality in Coyote Creek
- Provides opportunities for recreation improvements consistent with the City of San José and Santa Clara County Park master plans

Key Performance Indicators (15-year Program)

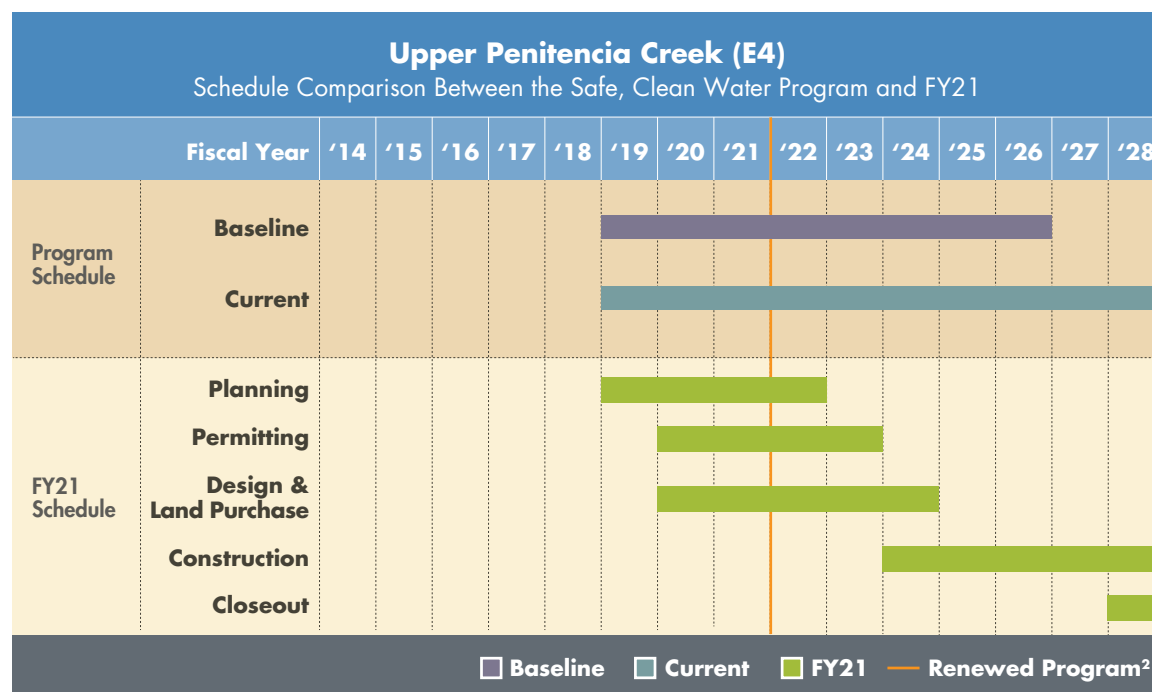
1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 5,000 homes, businesses and public buildings.
2. With local funding only: Acquire all necessary rights-of-way and construct a 1% flood protection project from Coyote Creek confluence to King Road.

Geographic Area of Benefit: San José and Milpitas

Project Location



Schedule



¹ Board approved a schedule adjustment through the change control process in FY20.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ADJUSTED
FY 15	ADJUSTED
FY 16	ADJUSTED
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ADJUSTED

Status for FY21:

ON TARGET

Progress on KPI #1 and #2 (combined):

In FY21, Valley Water continued working on and finalizing the planning study, focusing on a multi-purpose project that would provide long-term benefits for flood protection, fish and wildlife, riparian vegetation, water supply and recreation. This followed the December 2019 Board direction to staff to use local funding to proceed with the design and construction of the lower reaches of the project, from Coyote Creek up to Capitol Avenue. These lower reaches include Phase I of the project, which addresses the local-funding only KPI #2 of Coyote Creek confluence to King

Road, and Phase II of the project of up to Capital Avenue, which is part of the preferred project KPI #1. The Board decision maximizes the flood protection provided to the community with local dollars, as these reaches would protect 1,250 parcels

In June 2020, Valley Water finalized the Feasible Alternatives and Staff Recommended Project Report, and also completed the draft Planning Study Report (PSR) late in the year. In FY21, Valley Water hired the consultant ESA to help conduct a Geomorphology Study to develop geomorphic and ecological restoration/enhancement details of the preferred project. The study will be completed early in FY22 and will be the last step needed to formulate the recommended project for the planning study report as the project moves into the design phase. Conducting the geomorphology study delayed the completion of the PSR by nearly a year, but the result will be a more reliable recommended project. The COVID-19 pandemic also caused the project lead to work a reduced schedule in FY21. As a result, the completion of the planning phase was delayed until FY22. However, there is no change in the overall project completion schedule and the project is still expected to be completed in FY28.

Financial Information

Financial Summary (\$ Thousands)									
E4. Upper Penitencia Creek									
Fiscal Year 2020–2021								15-year Program	
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total			
\$1,382	\$3,546	\$2,516	\$7,444	\$866	\$0	\$866	12%	\$24,999	8%

In FY21, 12% of the annual project budget was expended.

The under-spending was due to the geomorphology study added to the planning phase as well as reduced available staff resulting from impacts of the COVID-19 pandemic and staff promotion to other units. The project did not move to the design phase this fiscal year as previously projected, and, therefore, the significant design and CEQA/permitting budget was not utilized in FY21. A consultant for the CEQA process is expected to be obtained in FY22.

Opportunities and Challenges

Water Supply

There are a number of water supply facilities along the project reaches, including groundwater percolation ponds. Project alternatives should not reduce recharge operations in the watershed and should look for the opportunity to preserve water supply functions.

Ecosystem Restoration

The natural corridor at Upper Penitencia Creek is considered to be among the best remaining habitat areas in the Santa Clara Valley between Coyote Creek and the Diablo Range. Habitat in Upper Penitencia Creek could support several special-status species, including steelhead trout, California red-legged frog, California tiger salamander,

and Western pond turtle. The upstream portion of the project area contains valuable and relatively undisturbed native California sycamore alluvial woodland.

Recreation

There are several parks and open spaces along the creek, as well as the Penitencia Creek Trail. These recreational features are well-used by the community, and there are opportunities for this project to work jointly with its partners to improve these resources. A significant benefit the project will provide is to build and extend the Penitencia Creek Trail down to the Coyote Creek confluence and connect it to the Coyote Creek Trail system.

Confidence Levels

Schedule: Moderate confidence

In FY21, the project team completed the final Planning study Report and will transition into design in July 2021. The majority of the preferred project is on public land and the project team has been working closely with the public entities to get the project built on schedule. A portion of the preferred project is on private land and Valley Water has been working closely with the owner to get a dedication for the project. There is the potential of finding cultural artifacts along the project site during construction, which may result in schedule delays.

Funding: Moderate confidence

In FY14-18, Valley Water aggressively pursued federal funding for the project. The USACE scope of the project was limited to a single-purpose flood risk reduction project, while the community and environmental regulatory agencies advocated for a multi-purpose project. In support of a multi-purpose project, Valley Water decided to move forward with planning, which would also facilitate a local funding-only project aimed at meeting multiple beneficial goals, including water quality and providing opportunities for recreation improvements and habitat restoration.

Permits: High confidence

The resource agencies have been brought in very early in the planning process and will continue to be engaged during planning and design. This will help shape a true watershed project with associated ecosystem restoration measures and facilitate the acquisition of regulatory permits for project construction.

Jurisdictional Complexity: Moderate confidence

The project is entirely within the City of San José. A tri-party agreement between the City of San José, Santa Clara County and Valley Water to jointly use mutual resources along the creek for recreation, flood protection and water supply purposes aligns the local jurisdictions well with the project. Coordination with the City and County has gone well regarding the Coyote Creek to Capitol Avenue reaches. If and when Valley Water moves forward with the upper reaches, Capitol Avenue up to Dorel Drive, Valley Water will have to conduct significant coordination efforts with the City and County to develop plans and land-use agreements for flood detention on public land.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.



Friendship Bridge on San Francisquito Creek.

ON TARGET

Project E5 FY21 Highlights

S.F. Bay to Highway 101:
Completed in FY19

Upstream of Highway 101:

- Continued to work on the 95% design document for channel constrictions upstream of Highway 101.
- The City of Palo Alto Council has certified the Environmental Impact Report and approved the Newell Road Bridge Replacement project.
- Construction of the Pope/Chaucer Street Bridge to begin after construction of the Newell Road Bridge and channel improvements.
- Pope-Chaucer Street Bridge is currently at 80% design and going through the Palo Alto Architectural Review Board process.

Project E5

San Francisquito Creek Flood Protection San Francisco Bay to Middlefield Road – Palo Alto

The project is sponsored by the San Francisquito Creek Joint Powers Authority (SFCJPA), of which Valley Water is a member agency, in partnership with the U.S. Army Corps of Engineers (USACE). The project builds on the planning and design tasks initiated as part of the Clean, Safe Creeks plan.

Preferred project: A federal-state-local partnership

This project will complete construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 1% (or 100-year) flood protection and ecosystem benefits. Upstream of Highway 101 the project will provide 1% flood protection, ecosystem protection, and recreational benefits.

The work upstream of Highway 101 will remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street, and include; a combination of: modified bridges at University Avenue and Middlefield Road; upstream detention; under-ground bypass channels; and floodwalls.

Local-state-funding-only project:

The local-state-funding-only project will be the same as the preferred project downstream of Highway 101; but upstream of Highway 101, the project will remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street to allow the channel to contain flood waters equal to the channel's capacity of 7,000 cubic feet per second, approximately a 30-year event. Allowing this level of water to flow through the channel will protect approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record. Currently the channel can only convey a 15-year flood event.

The Newell Road bridge replacement, unlike the rest of the upstream project, is sponsored by the City of Palo Alto, who has applied for funding through Caltrans' Highway Bridge Program. The project has been programmed by Caltrans to fund approximately 89% of the total cost for replacing the Newell Road bridge. The local match funds, approximately 11% of the total cost, will be funded through Valley Water's Safe, Clean Water Program. The City of East Palo Alto and the SFCJPA continue to provide input on the Newell Road bridge replacement.

If sufficient funding becomes available, a 1% flood protection project upstream of Highway 101, including some combination of: modifications to the University Avenue and Middlefield Road bridges; upstream detention; underground bypass channels; and floodwalls, could be built.

Flooding History and Project Background

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to 1 of the few remaining viable steelhead trout runs. The creek can cause severe flood damage with very little warning and has overflowed 7 times since 1910.

During the February 1998 El Niño event, record flooding caused an estimated \$28 million in damages in Palo Alto, East Palo Alto and Menlo Park. More than 1,100 homes were flooded in Palo Alto, and Highway 101 was closed, as were numerous other roadways. The largest flood on record prior to 1998 occurred in December of 1955 when the creek overtopped its banks in several locations, inundating about 1,200 acres of commercial and residential property. Damages were estimated at nearly \$2 million in 1956 dollars. Total damages from a 1% flood event are estimated at \$300 million in Santa Clara and San Mateo Counties, as calculated by the USACE in 2011.

Benefits

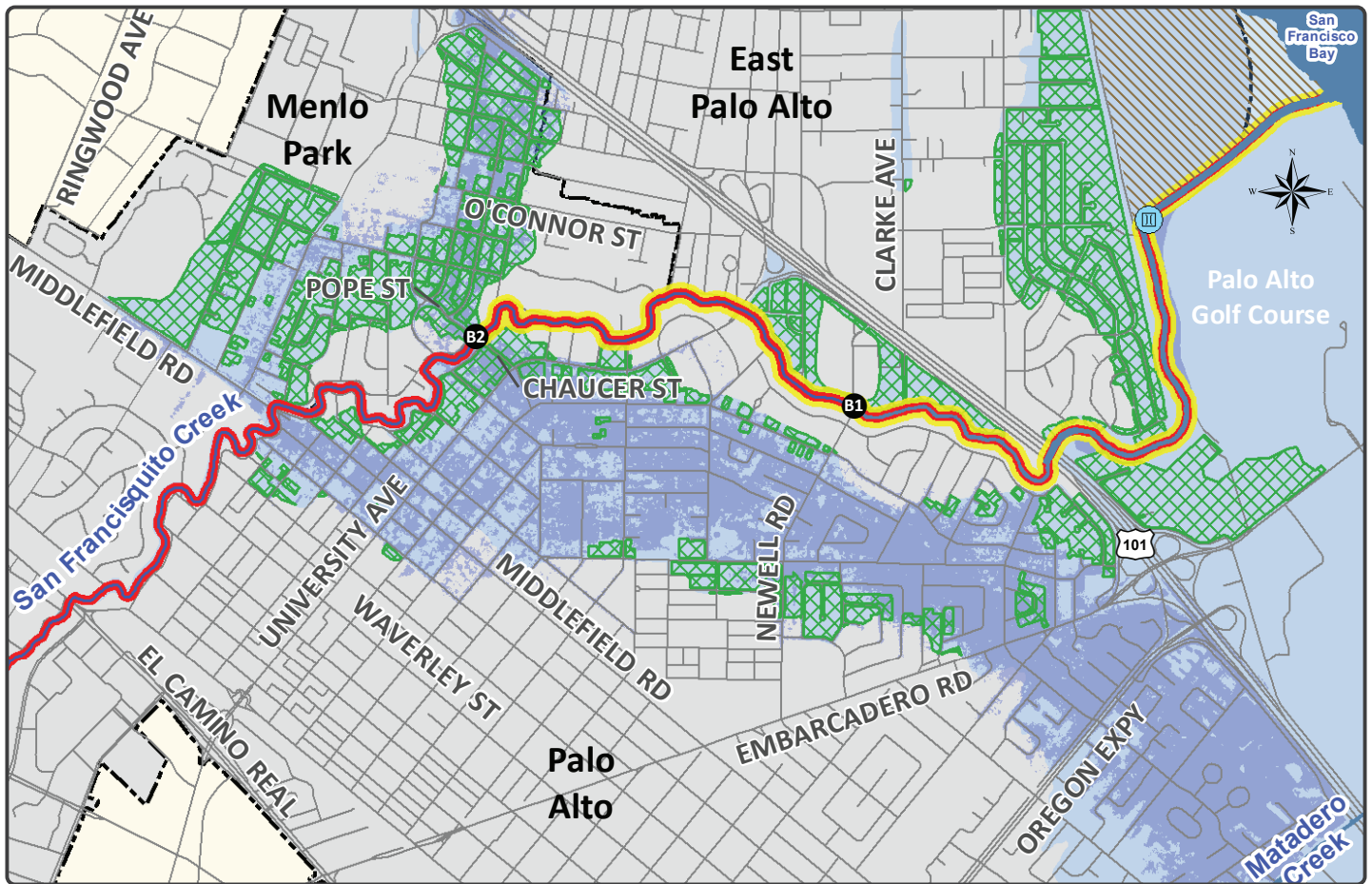
- Provides 1% flood protection for approximately 3,000 homes and businesses in Palo Alto
- Reduces bank erosion and sedimentation-related impacts along San Francisquito Creek
- Provides new or improved habitats for endangered species
- Improves water quality
- Enhances recreational opportunities for the community
- Leverages dollars via cost-shares and grants from the state Department of Water Resources and the California Department of Transportation

Key Performance Indicators (15-year Program)

1. Preferred project with federal, state and local funding: Protect more than 3,000 parcels by providing 1% flood protection.
2. With state and local funding only: Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and approximately 30-year protection upstream of Highway 101).

Geographic Area of Benefit: Palo Alto

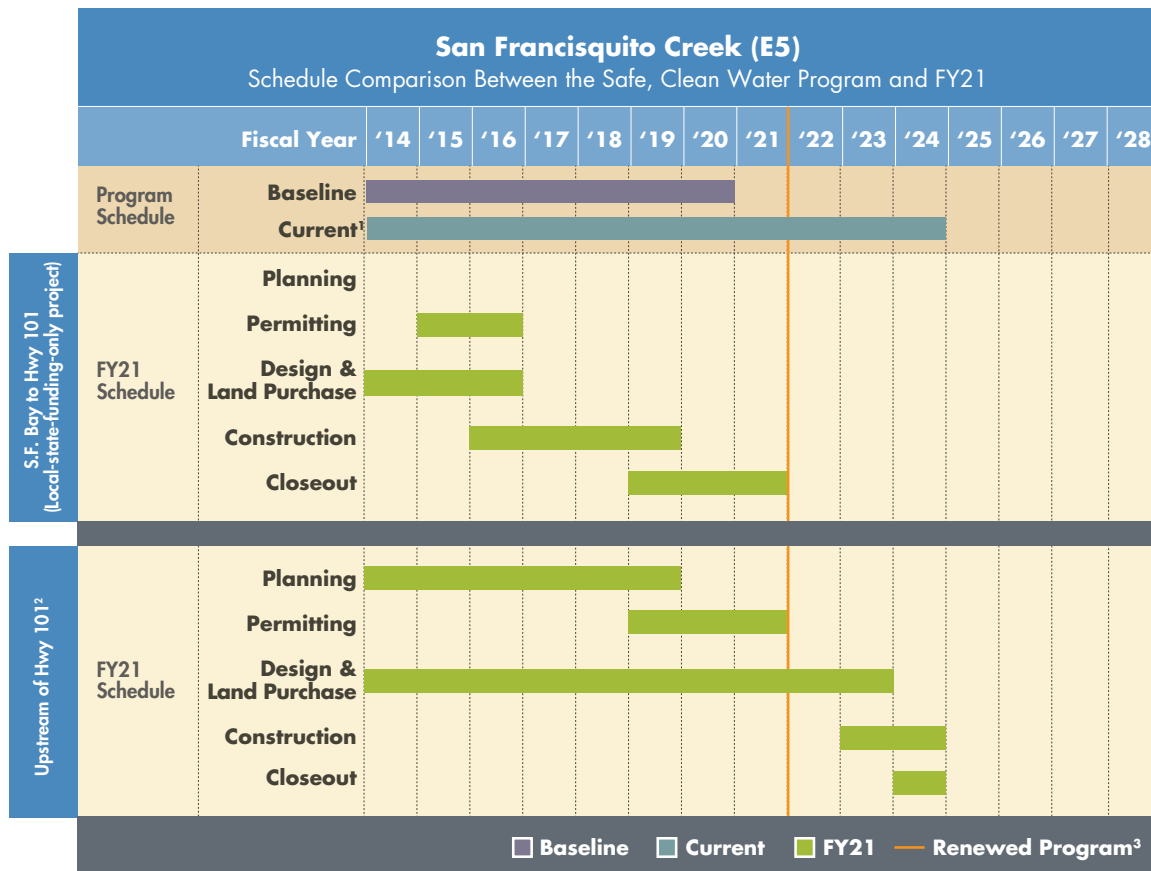
Project Location



LEGEND

- | | | |
|---|--|--|
| ■ Preferred Project (KPI #1) | ■ 1% FEMA Flood Risk Zone | III Friendship Bridge |
| ■ Local-State Funded Only Project (KPI #2) | ■ Updated 1% Flood Risk Zone (2016) | Bridge Modification Projects: |
| ■ Locally Funded Project Improvement Area | ■ Cities | ● Newell Rd (Palo Alto) |
| Faber Tract Marsh | ■ California Counties | ● Pope/Chaucer St (Valley Water) |

Schedule



¹ Board approved a schedule adjustment through the change control process in FY19 & FY20.

² Federal SFCJPA has not yet determined if pursuing federal funding for upstream of project.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	MODIFIED
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ADJUSTED
FY 19	ADJUSTED
FY 20	ADJUSTED

Status for FY21:

ON TARGET

Progress on KPI #1 and #2 (combined):S.F. Bay to Highway 101 Project*Local-state-funding only - design and construction of 1% flood protection project*

- Construction of flood protection improvements for this reach was completed on May 14, 2019, which included construction of approximately 4,000 feet of floodwall; excavating sediment and degrading the existing levee from East Bayshore Road to Geng Road; degrading approximately 600 feet of levee on the East Palo Alto side of the creek adjacent to the Faber Marsh; and completing approximately 800 feet of the new offset levee on the Palo Alto side of the creek. Installation of mitigation planting was completed in the summer of 2019.

Upstream of Highway 101 Project*Federal, state and local funding - planning and design of 1% flood protection project*

- Based upon the impacts to the project's timeline and funding, on June 27, 2019, the SFCJPA Board approved staff's recommendation to pursue options for USACE funding that does not require Congressional authorization through the USACE Continuing Authorities Program Section 205 (CAP 205) process. The SFCJPA and USACE worked to move forward with closing the project under the GI Study and formally initiated the CAP 205 process in early FY20. After the adoption of the SFCJPA FY21/22 Operation Budget, the SFCJPA anticipates entering into a Feasibility Cost Share Agreement (FCSA) with the USACE in the summer of 2021.

*Local-state-funding-only - construction of approximately 30-year flood protection project*Channel constrictions

- Continued to work on the 95% design document for channel constrictions upstream of Highway 101. The design continues to be optimized with additional alternatives analysis to address community feedback, including minimizing tree impacts and removals, and construction impacts to adjacent properties.
- The design documents are being coordinated with the SFCJPA and are expected to be completed in the summer of 2022. Construction is expected to begin in the late spring of 2023 and be completed by December 2023 (FY24).
- The Final Environmental Impact Report (EIR) was completed and certified by the SFCJPA board in September 2019.

Newell Road Bridge

- The City of Palo Alto is responsible for planning, permitting, design and construction of the Newell Road Bridge Replacement project. The planning, permitting and design phases are primarily funded by a Caltrans grant. Valley Water is contributing the required local cost-share for the grant. The City of Palo Alto Council certified the Final Environmental Impact Report and approved the proposed project in June 2020. The design is scheduled to be completed by the end of 2022. Construction is anticipated to begin in spring of 2023 and the in-channel

work must be completed by October 2023, with any remaining work outside top-of-bank completed by winter 2023 (FY24).

Pope/Chaucer Street Bridge

- Pope-Chaucer Street Bridge is currently at 80% design and going through the Palo Alto Architectural Review Board (ARB) process. After receiving input from the ARB at its December 17, 2020 study session, the SFCJPA and Valley Water are preparing for the hearing scheduled in July 2021. The design documents are expected to be completed by late 2022. Because the Pope/Chaucer Street Bridge is located further upstream of the Newell Road Bridge and because both bridges cannot be replaced in the same construction season due to negative traffic impacts, construction of the Pope/Chaucer Street Bridge would begin after the construction of the Newell Road Bridge and channel improvements are completed
- Any delays in the construction of the Newell Road Bridge would delay the construction schedule for the Pope/Chaucer Bridge. However, staff is considering the option of advancing the construction of Pope/Chaucer Bridge replacement ahead of the construction of the Newell Road Bridge. Under this option, the flow conveyance capacity would be temporarily constricted to maintain the existing capacity to avoid transference of risk of additional flooding downstream. The temporary flow constrictions at Pope/Chaucer Bridge would be removed once the Newell Road Bridge is replaced. Staff will continue to assess this option in FY22.

Financial Information

In FY21, approximately 33% of the annual project budget was expended.

The underspending was primarily due to design delays caused by the need for additional alternative analysis to address community feedback as well as the ongoing regulatory permit acquisition process.

Currently, the funding shortfall for the upstream of Highway 101 project construction is estimated to be between \$5.2 million to \$8.2 million, which assumes the award of multiple grants. The SFCJPA and Valley Water, in conjunction with USACE and FEMA, continue to seek federal funding through the CAP 205 process and by expanding the Hazardous Mitigation Grant Program grant. In addition, the SFCJPA and Valley Water are in the process of evaluating the possibility of deferring a project element to a later time, which could save over \$6 million.

Financial Summary (\$ Thousands)										
E5. San Francisquito Creek										
Fiscal Year 2020–2021									15-year Program	
Project No. and Name	Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
					Actual	Encumbrance	Total			
26284001 Planning and Design (Highway 101 to Searsville Dam)	\$0	\$112	\$0	\$112	\$0	\$0	\$0	0%	\$28,843	16%
26284002 Construction (SF Bay to Highway 101 and Upstream Elements)	\$370	\$2,299	\$0	\$2,669	\$922	\$0	\$922	35%	\$51,535	93%
Total	\$370	\$2,411	\$0	\$2,781	\$922	\$0	\$922	33%	\$80,378	65%

Opportunities and Challenges

Refined Modeling Shows Higher Flood Protection

As more years of data become available, flood estimates are refined and result in revisions of design flows. With several storm events in recent years and additional stream gauge data becoming available, Valley Water has updated its hydrology that now shows that improving stream channel capacity upstream of Highway 101 to contain 7,200 cubic feet per second (cfs) would protect the community from an approximately 70-year flood event instead of previously estimated 30-year event. To accommodate further inflow downstream of Middlefield Road, Valley Water is using 7,500 cfs as a design flow for the project.

Confidence Levels

Upstream of Highway 101 Project

Schedule: Low confidence

Prior to constructing the local-state-funding-only project, the CAP 205 study must be completed and state and federal regulatory permits must be secured.

Due to the complexities and uncertainties related to securing regulatory permits and funding shortfalls for a multi-jurisdictional project, project completion could be pushed to FY25.

Funding: Moderate confidence

There is a funding shortfall due to increasing construction costs and currently unknown design elements for the local-state-funding-only project. Valley Water's funding contribution has been secured through the renewal of the Safe, Clean Water Program. Additionally, the project is expected to receive between \$5.9 million and \$14.8 million in grants, while continuing to seek additional grant funding. As the funding shortfall narrows the SFCJPA member agencies plan to enter into a construction funding agreement to close any remaining funding gap. Additionally, the SFCJPA, in conjunction with USACE, continues to seek federal funding, through the CAP 205 process for the 1% flood protection project upstream of Highway 101.

Permits: Moderate confidence

Valley Water does not expect any significant challenges with the acquisition of the regulatory permits for the upstream Highway 101 project and is moderately confident it will receive the permits necessary to complete construction of the local-state-funding-only project by the Safe, Clean Water Program's identified completion date. The SFCJPA has conducted stakeholder meetings with regulators to address their concerns and has incorporated their comments in the EIR to facilitate the permitting process. The SFCJPA continues its effort in preparing applications for regulatory permits to construct the upstream of Highway 101 project. Permit applications will be submitted in summer 2021 to acquire permits by the fall of 2022.

Jurisdictional Complexity: High confidence

The jurisdictional complexity of this project is unparalleled among Safe, Clean Water projects, as this project requires cooperation with the SFCJPA and its member agencies, which include Valley Water, the cities of Palo

Alto, East Palo Alto and Menlo Park and the San Mateo County Flood and Sea Level Rise Resiliency District (previously known as San Mateo County Flood Control District). In addition, there are key project stakeholders, including USACE and Stanford University's Searsville Dam Project. Despite this, Valley Water has high confidence that the jurisdictions will continue to work together to accomplish the common goal of providing flood protection along San Francisquito Creek. The SFCJPA continues to work very closely with its member agencies to further this project along, and staff from all member agencies meet regularly ensure a strong collaborative relationship is maintained.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.



BEFORE: View of SF Creek from East Bayshore.



AFTER: View of SF Creek from East Bayshore.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.



Upper Llagas Creek flooding.

ON TARGET

Project E6 FY21 Highlights

- Began Phase 1 construction in September 2019.
- Phase 2A construction was awarded in April 2021. Construction is expected to be completed in FY24.
- Working with the National Resources Conservation Service of the U.S. Department of Agriculture to possibly secure grant funding for Phase 2B construction.

Project E6

Upper Llagas Creek Flood Protection Project Buena Vista Avenue to Llagas Road – Morgan Hill, San Martin, Gilroy

Preferred project: A federal-state-local partnership

This project continues a Clean, Safe Creeks project in partnership with the U.S. Army Corps of Engineers (USACE) and the state to plan, design, and construct improvements along 13.9 miles of channel. The project extends from Buena Vista Avenue to Wright Avenue, including West Little Llagas Creek in downtown Morgan Hill. The federally authorized preferred project protects the urban area of Morgan Hill from a 1% (or 100-year) flood, and reduces the frequency of flooding in surrounding areas. Construction includes channel modifications and replacement of road crossings. Valley Water continues to work with Congress to aggressively pursue federal funds to bring this project to full fruition. In 2012, project limits were extended 2,700 feet upstream to Llagas Road to address public concerns.

Flooding History and Project Background

The area sustained damage in 1937, 1955, 1958, 1962, 1963, 1969, 1982, 1986, 1996, 1997, 1998, 2002, 2004, 2008, 2009, 2011 and 2017. In 2009, many businesses and residences in downtown Morgan Hill were flooded under 1 foot of water. The project builds on the planning, design and property acquisition initiated under the Clean, Safe Creeks plan of 2000.

Benefits

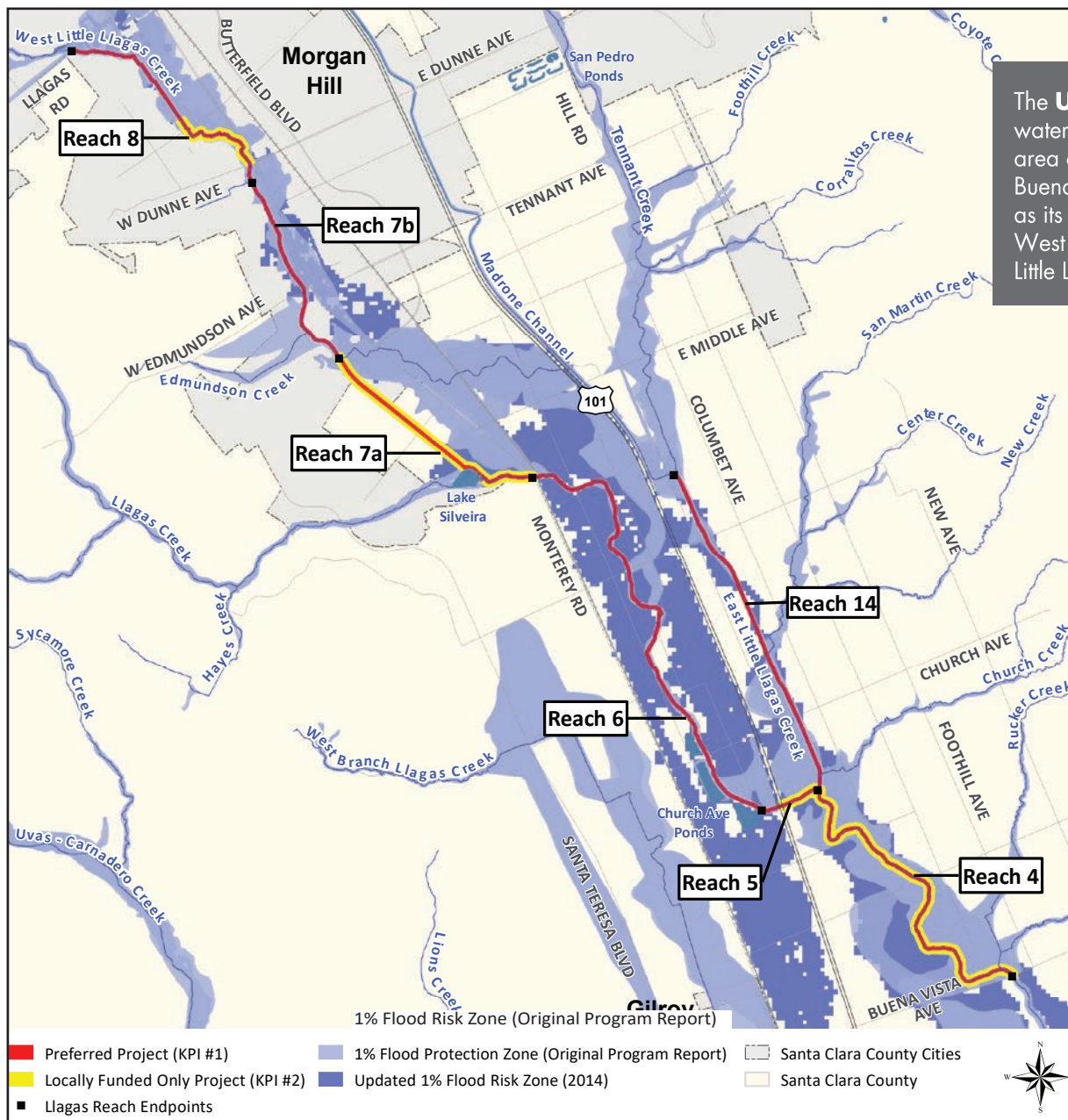
- Preferred project provides 1% flood capacity for 4 miles of channel in downtown Morgan Hill, protecting approximately 1,100 homes and 500 businesses
- Preferred project provides 10-year flood protection to approximately 1,300 agricultural acres in Morgan Hill, Gilroy and San Martin
- Locally-funded-only project provides 1% flood protection for a limited number of homes and businesses in Morgan Hill
- Improves stream habitat and fisheries
- Creates additional wetlands
- Improves stream water quality
- Identifies opportunities to integrate recreation improvements with the City of Morgan Hill and others as appropriate

Key Performance Indicators (15-year Program)

1. Preferred project with federal and local funding: Provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat.
2. Construct flood protection improvements along Llagas Creek from Buena Vista Avenue to Highway 101 in San Martin (Reaches 4 and 5 (portion), Monterey Road to Watsonville Road in Morgan Hill (Reach 7a), approximately W. Dunne Avenue to W. Main Avenue (portion of Reach 8), and onsite compensatory mitigation at Lake Silveira .

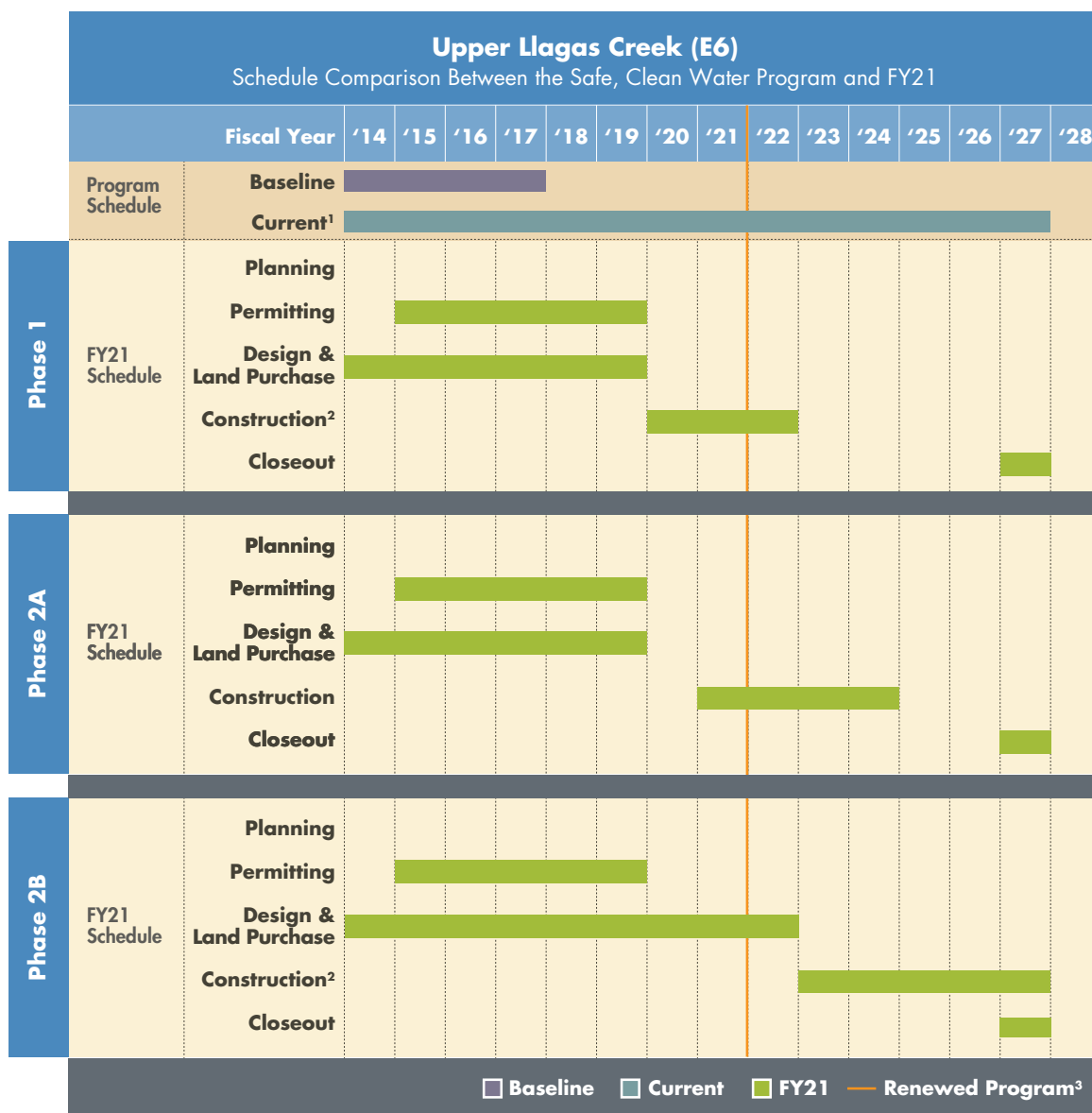
Geographic Area of Benefit: Morgan Hill, San Martin and Gilroy

Project Location



The **Upper Llagas Creek** watershed encompasses the area of Llagas Creek north of Buena Vista Avenue as well as its tributaries, including the West Little Llagas and East Little Llagas Creeks.

Schedule



¹ Board approved schedule adjustments through the change control processes in FY16, FY17 & FY19.

² Construction also includes a 3-year revegetation establishment period, not shown.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ADJUSTED
FY 16	ADJUSTED
FY 17	ADJUSTED
FY 18	ON TARGET
FY 19	ADJUSTED
FY 20	ADJUSTED

Status for FY21: ON TARGET

Progress on KPI #1 and #2 (combined):

In FY20, the Board approved a modification to the local-funding-only project resulting in the current KPI #2, which is being implemented in two phases of Phase 1 and Phase 2A.

Phase 1 – Reaches 4, 5 (portion), and 7A (Buena Vista Avenue to Highway 101 in San Martin and from Monterey Road to Watsonville Road in Morgan Hill)

- Construction of Phase 1 began in FY20. Flood protection improvements are expected to be completed in FY22, followed by a three-year plant establishment period.

Phase 2A --- A portion of Reach 8 from Ciolino Avenue upstream to approximately 300 feet north of the existing West Main Avenue and Hale Avenue intersection. It also includes constructing the proposed approximately 2,300 linear feet horseshoe-shaped underground high-flow diversion tunnel and approximately 1,600 linear feet of twin reinforced concrete box culverts (10 ft x 10 ft) upstream and downstream of the proposed tunnel.

- Phase 2A right-of-way has been acquired.
- Phase 2A construction was advertised for construction on January 12, 2021, and the project was awarded on April 13, 2021, to Flatiron West, Inc. for the bid of \$43,989,600. Construction is expected to be completed in FY24.

Phase 2B --- Construction of the remaining portion of Reach 5 and all of Reach 6 (Highway 101 upstream to Monterey Road), Reach 7B (Watsonville Road to Ciolino Avenue), the remaining portion of Reach 8 (approximately West Main Avenue to Llagas Road), and Reach 14 (confluence with Reach 4 upstream to Sycamore Avenue).

Phase 2B construction consists of approximately 1,900 linear feet of twin reinforced concrete box culverts (10 ft x 10 ft), creek modifications and excavation by widening and deepening, installation of culverts at various street crossings, construction of an inlet basin weir split-flow structure, bridge underpinning work, installation of instream complexities, removal of plantings and non-native plantings, habitat enhancements, revegetation, utility relocations and coordination, outfall modifications, aggregate base maintenance roads, access ramps, traffic controls/

detours, fencing, soil testing as required for off-site disposal, concrete and other miscellaneous work, community outreach and coordination.

- Construction is anticipated to take approximately three (3) years to complete, followed by a three-year plant establishment period.
- Phase 2B right-of-way requires the acquisition of seven (7) additional parcels and six (6) temporary construction easements. These acquisitions are anticipated to be completed in FY22.
- Phase 2B construction is anticipated to cost approximately \$80 million.
- Phase 2B is still pending funding and Valley Water is seeking external funding, including a National Resources Conservation Service (NRCS) grant, as well as a low-cost federal loan under the Water Infrastructure Finance and Innovation Act of 2014. The project is near shovel-ready and the current estimated schedule is for construction to begin in FY23.

Upon completion of Phases 1, 2A and Phase 2B, the project will provide flood protection to 1,100 homes, 500 businesses and 1,300 agricultural acres while improving stream habitat.

Phase 1 and Phase 2 Combined

- FEMA accepted the Conditional Letter of Map Revision package on October 19, 2016. After the project is constructed, Valley Water will prepare a Letter of Map Revision for the city to submit to FEMA to initiate a revision to the flood maps.
- Valley Water has acquired approximately 2,000 linear feet of stream channel and present-day Lake Silveira to implement the compensatory mitigation recommended by the U.S. Fish and Wildlife Service (USFWS). The construction of this mitigation element began on May 1, 2020.
- The project has received all permits from state and federal regulatory agencies.
- The project was approved and the Final Environmental Impact Report was certified by the Valley Water Board on June 10, 2014. Valley Water will utilize the results of the California Rapid Assessment Method (CRAM) analysis to provide an assessment of the pre- and post-project environmental conditions within the project reaches, including the compensatory mitigation site, Lake Silveira. The analysis will also provide an assessment of the performance/success of the revegetation sites, and demonstrate compliance with regulatory performance criteria and requisite targets. A draft report was completed and received by Valley Water in May 2016 for review. The final pre-project environmental condition report was completed in March 2017.

Financial Information

In FY21, 92% of the annual project budget was expended.

The underspending was due to delays in the start of construction for Phase 2A. Phase 2A construction start was delayed by several months due to efforts to coordinate and incorporate a portion of the City of Morgan Hill's Hale Avenue Extension Project (the portion that overlaps Valley Water Phase 2A) into the Valley Water construction documents.

Financial Summary (\$ Thousands)										
E6. Upper Llagas Creek										
Fiscal Year 2020-2021									15-year Program	
Project No. and Name	Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
					Actual	Encumbrance	Total			
26174051 Real Estate Acquisitions	\$0	\$2,703	\$0	\$2,703	\$2,530	\$0	\$2,530	94%	\$73,606	51%
26174052 Construction	\$46,274	\$953	(\$47)	\$47,180	\$35,461	\$9,225	\$44,686	95%	\$169,879	54%
26174054 Design	\$0	\$1,856	\$0	\$1,856	\$494	\$0	\$494	27%	\$19,587	57%
Total	\$46,274	\$5,512	(\$47)	\$51,739	\$38,485	\$9,225	\$47,710	92%	\$263,071	54%

Opportunities and Challenges

Environmental Impact Statement

The USACE issued the Final Environmental Impact Statement in November 2018. The USACE signed the Record of Decision and issued a 404 permit to enable construction to proceed on March 26, 2019.

Confidence Levels

Phase 1, Phase 2A, and Phase 2B of the project will be constructed independently.

Phase 1

Schedule: High confidence

Phase 1 construction began in FY20 and is anticipated to be completed in FY22, not including the post-construction three-year native plant revegetation maintenance establishment period.

Funding: High confidence

Fully funded through the Safe, Clean Water Program.

Jurisdictional Complexity: High confidence

Cooperation on the Project has included, U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Central Coast Regional Water Quality Control Board, California Department of Water Resources (DWR) (state subventions), City of Morgan Hill and the County of Santa Clara.

Phase 2A

Schedule: High confidence

Phase 2A construction was awarded on April 13, 2021 and construction is expected to begin in late FY21 and is anticipated to be completed in FY24.

Funding: High confidence

Fully funded through the Safe, Clean Water Program.

Jurisdictional Complexity: High confidence

Given the successful start of Phase 1 construction, confidence is high that cooperation on Phase 2A of the project will continue with the USACE, CDFW, Central Coast Regional Water Quality Control Board, DWR (state subventions), City of Morgan Hill and the County of Santa Clara.

Phase 2B

Schedule: Moderate confidence

Valley Water continues to work on the remaining Phase 2B acquisitions. Valley Water must obtain the necessary rights-of-way to be able to advertise Phase 2B of the project for construction. Valley Water is moderately confident that property acquisitions will be completed in FY22. Funding for Phase 2B is still pending. The current estimated schedule is for construction to begin in FY23. The project will take three (3) years to construct, followed by a three-year native plant revegetation establishment period.

Funding: Moderate confidence

Valley Water will meet KPI #1 with the completion of Phase 2B construction. Valley Water continues to pursue approximately \$80 million in external funding through state and federal funding opportunities. It includes an NRCS grant, as well as a low-cost federal loan under the Water Infrastructure Finance and Innovation Act of 2014. Valley Water is hopeful the Federal Government may pass a stimulus bill to fund shovel ready projects to restart the U.S. economy and Phase 2B may qualify as a shovel ready project.

Jurisdictional Complexity: High confidence

Given the successful start of Phase 1 construction and the successful award of Phase 2A construction, confidence is high that cooperation on the Phase 2B of the project will continue with the USACE, CDFW, Central Coast Regional Water Quality Control Board, DWR (state subventions), City of Morgan Hill and the County of Santa Clara.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.



Chicago Marsh - S.F. Bay Shoreline

ON TARGET**Project E7 FY21 Highlights**

For EIAs 1-10:

- Contributed \$850,000 towards the local cost share for Phase II Feasibility Study.
- Continued to coordinate with the South Bay Salt Pond Restoration Phase 2 Project for Mountain View, EIAs 4 and 5, flood risk management levee.

Project E7

San Francisco Bay Shoreline Protection Milpitas, Mountain View, Palo Alto, San José, Santa Clara and Sunnyvale

This project is a partnership with the California State Coastal Conservancy, the U.S. Army Corps of Engineers (USACE), and regional stakeholders to provide tidal flood protection, restore and enhance tidal marsh and related habitats, and provide recreational and public access opportunities. Initial construction for flood protection is planned for Economic Impact Area (EIA) 11, which is the urban area of North San José and the community of Alviso.

This project relies on federal participation from USACE to review and approve the plans. Without federal participation, Valley Water cannot implement additional planning, design and construction due to limited available funding. The proposed Safe, Clean Water funding provides Valley Water's cost share to complete the planning study for EIAs 1-10, and provides a portion of Valley Water's cost share toward design and construction of flood protection improvements in the North San José area (EIA 11), in and near Alviso.

Flooding History and Project Background

This project stems from the 2003 acquisition of thousands of acres of former South Bay salt production ponds, purchased for restoration with combined public and private funding. The South Bay Shoreline Protection Project is an important component of the South Bay Salt Ponds Restoration Project, a large, multi-agency effort to restore 16,500 acres of tidal wetlands which involves all South Bay cities that meet the San Francisco Bay. Without incorporating flood protection measures, proposed recreational use and environmental restoration is likely to reduce the effectiveness of existing shoreline levees formerly maintained for salt production. Project E7 would upgrade levees to protect Silicon Valley's "Golden Triangle," bounded by Highways 101, 237 and 880, and extending north into the Baylands of Milpitas. Multiple flood events since the mid-1990s have damaged business operations in this area, now home to major high-tech corporations including Intel, Google, Yahoo, Cisco, and others. The project would also protect Alviso neighborhoods, as well as important infrastructure such as airports and sewage treatment plants.

The existing multi-agency partnerships for the South Bay Salt Ponds Restoration project and the San Francisco Bay Shoreline Study ensure that all goals for this largest wetland restoration on the West Coast will be incorporated. The Safe, Clean Water measure provides a share of the total funding needed for planning

and design phases for the full shoreline project area. It also provides the funding needed to purchase lands, easements and rights-of-way as necessary to construct improvements in EIA 11, and a share of the construction costs for that portion of the project.

Benefits

- Protects more than 1,000 residential structures and 100 non-residential structures (EIA 11)
- Provides planning and design to protect nearly 4,700 acres and more than 5,000 structures, including roads, highways, parks, airports and sewage treatment plants in all of Santa Clara County
- Allows for the restoration of 2,900 acres of tidal marsh and related habitats (EIA 11)
- Provides educational, recreational and public access opportunities

Key Performance Indicators (15-year Program)

1. Provide portion of the local share of funding for planning and design phases for the former salt production ponds and Santa Clara County shoreline area.
2. Provide portion of the local share of funding toward estimated cost of initial project phase (EIA 11).

Geographic Area of Benefit: Milpitas, Mountain View, Palo Alto, San José, Santa Clara and Sunnyvale

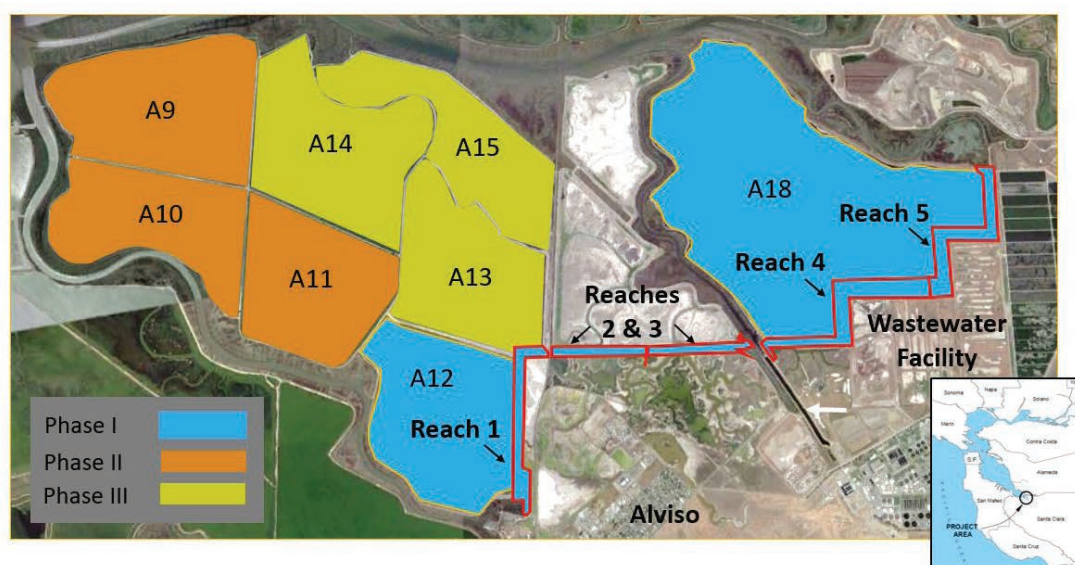
Project Location

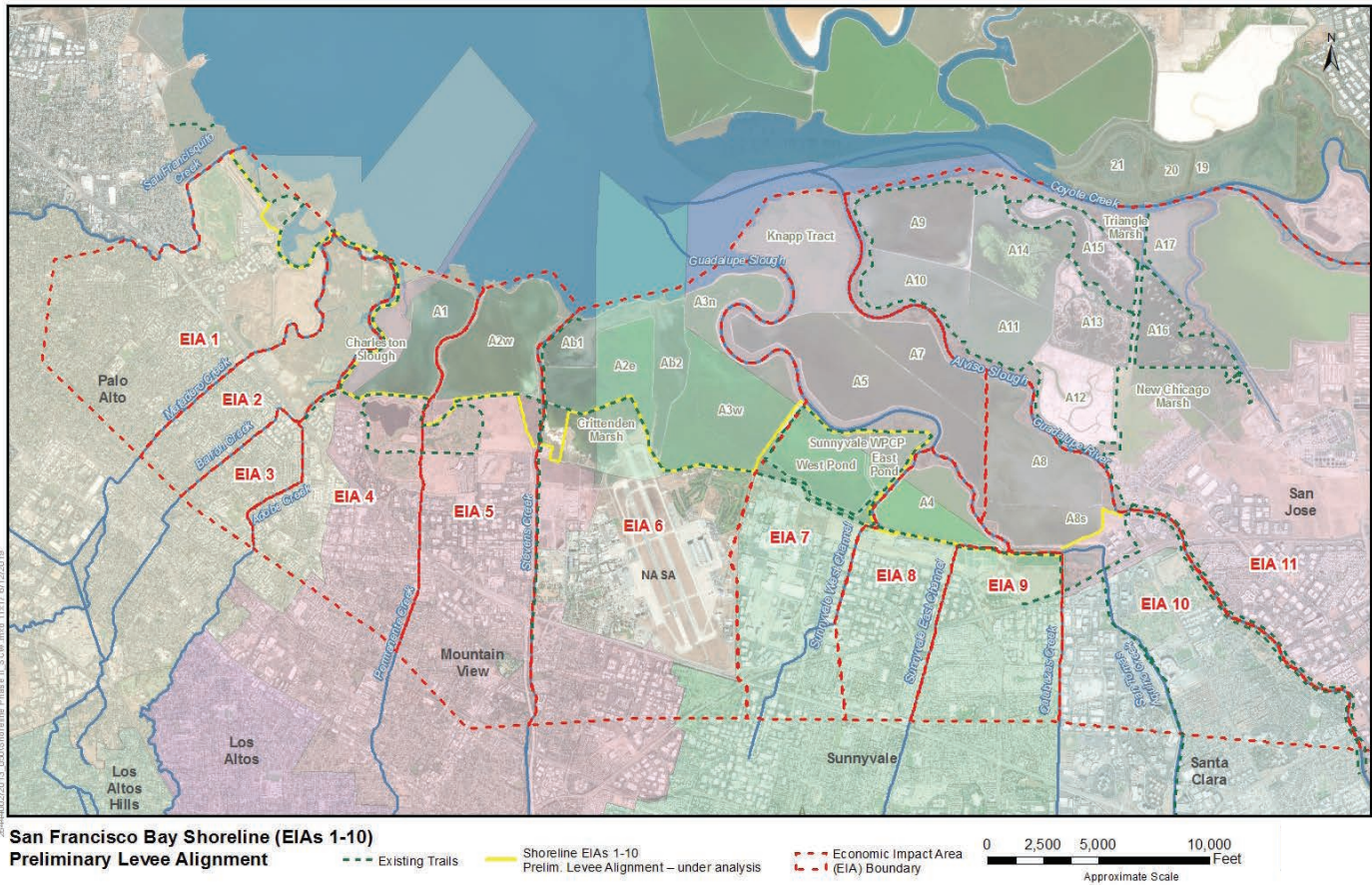
South San Francisco Bay Shoreline Protection
EIA 11 Project Construction Phases

Phase 1
(2021–2024)

Phase 2
(2027)

Phase 3
(2032)





Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ADJUSTED
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ON TARGET

Progress on KPI #1:

San Francisco Bay Shoreline Protection – San Francisquito Creek to Guadalupe River (EIAs 1-10)

- In FY20, Valley Water, the State Coastal Conservancy and USACE entered into a Feasibility Cost Share Agreement (FCSA) for the South San Francisco Bay Shoreline Phase II Feasibility Study (Phase II Feasibility

Study). The USACE Phase II Feasibility Study focuses on EIAs 1-4, from San Francisquito Creek in Palo Alto to Permanente Creek in Mountain View. In FY21, Valley Water contributed \$850,000 towards the local cost-share for the Phase II Feasibility Study.

- In FY21, the USACE submitted an exemption request to their USACE Headquarters to extend the feasibility study schedule and budget. An exemption from the USACE standard three-year feasibility study is required due to California's more stringent environmental requirements. Upon approval of the exemption request, the next Phase II Feasibility Study milestone (Tentatively Selected Plan) is scheduled for 2022.
- The USACE will seek funds for a future Phase III Feasibility Study focusing on the remaining EIAs 5-10, from Permanente Creek in Mountain View to Guadalupe River in San José.
- Valley Water continued to coordinate with the South Bay Salt Pond Restoration Phase 2 Project (SBSPRP) for the Mountain View, EIAs 4 and 5, flood risk management measures. Valley Water is also working with the SBSPRP for EIA 10, including exploring the re-routing of San Tomas and Calabazas creeks into Pond A8.

Progress on KPI #2: (Completed in FY20)

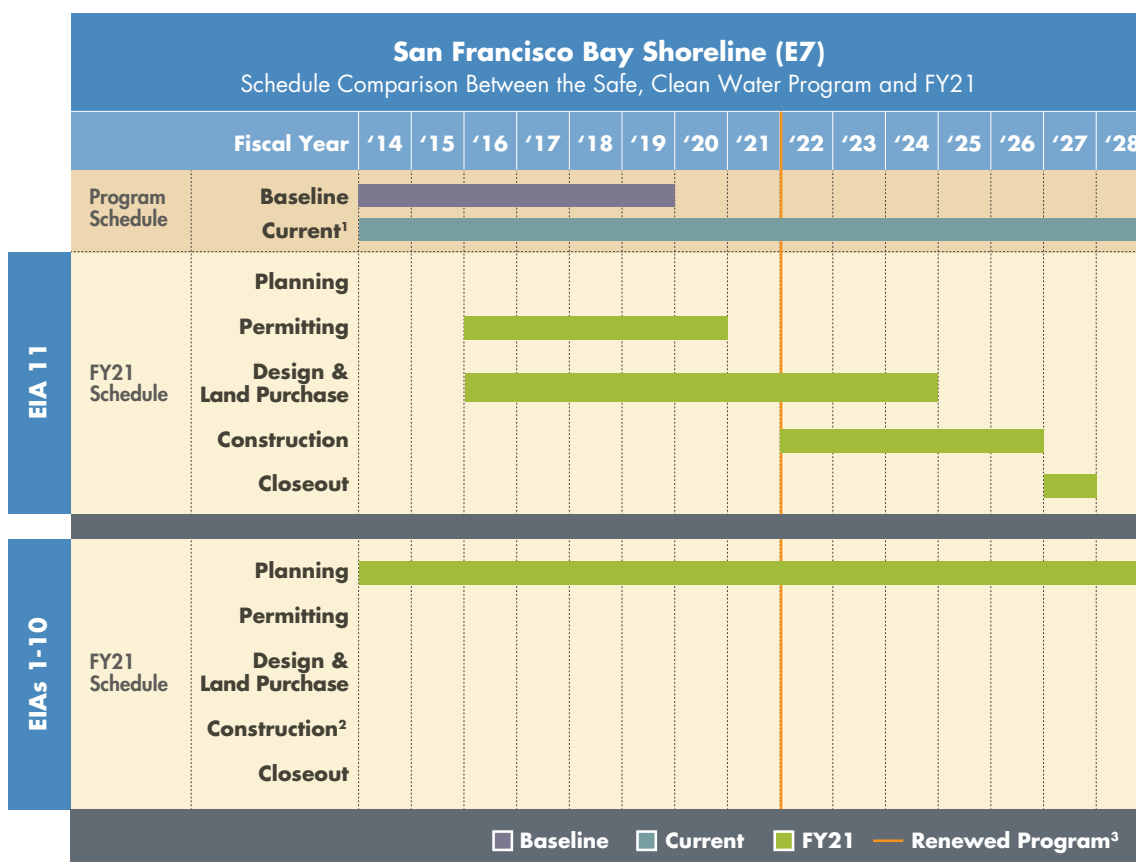
San Francisco Bay Shoreline Protection – Urban area of North San José/Alviso/San José-Santa Clara Regional Wastewater Facility (EIA 11)

- In December 2019, Valley Water fully utilized all the Safe, Clean Water Program funds allocated to KPI #2 and delivered the KPI.

Financial Information

In FY21, for KPI #1, 87% of the annual budget was expended. Valley Water provided a total of \$850,000 in Safe, Clean Water Program cash to USACE as Valley Water's local cost-share for the Phase II Feasibility Study.

Specific activities included biweekly project team meetings, plan formulation workshops, ecosystem restoration workshops, ecological modeling, hydraulic modeling, resource agency and local jurisdiction meetings and engagement, and supporting USACE efforts to prepare the materials for the Tentatively Selected Plan milestone.



¹ Board approved a schedule adjustment through the change control process in FY17.

² Construction phases are not funded by the Safe, Clean Water Program.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

Financial Summary (\$ Thousands)										
E7. San Francisco Bay Shoreline Protection										
Fiscal Year 2020-2021									15-year Program	
Project No. and Name	Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
					Actual	Encumbrance	Total			
26444002 EIAs 1-10	\$0	\$754	\$530	\$1,284	\$1,122	\$0	\$1,122	87%	\$6,363	65%
26444001 EIA 11	\$5	\$19	\$0	\$24	\$24	\$0	\$24	100%	\$17,516	100%
Total	\$5	\$772	\$530	\$1,308	\$1,146	\$0	\$1,146	88%	\$23,879	91%

Opportunities and Challenges

Confidence levels

San Francisco Bay Shoreline Protection – San Francisquito Creek to Guadalupe River (EIAs 1-10)

Schedule: Moderate confidence

The USACE initiated the Phase II Feasibility Study in September 2019 and additional time is required to complete the study effort because the Bay Area is one of the most stringent regulatory environments in the nation and required more time to complete the coordination and due diligence work that the resource agencies have come to expect to have a permissible project. An exemption request has been submitted to USACE Headquarters for approval to increase the study phase from three (3) years to five-and-a-half years.

Funding: Moderate confidence

Additional federal funds are also required to complete the extensive analysis required to meet both regulatory and USACE requirements. The exemption request submitted to USACE Headquarters increases the feasibility cost from \$3 million to \$5.9 million. Since Valley Water shares 50% of the cost, our share will increase from \$1.5 million to \$2.95 million when the exemption request is approved. Meanwhile, USACE Headquarter approval of additional federal funding continues to be a challenge.

Permits: N/A

KPI #1 efforts do not require permits.

Jurisdictional Complexity: Moderate confidence

The confidence level is moderate due to the complexity involved with extensive regional coordination for a significant coastal flood protection project with an estimated price tag of nearly \$800 million. In FY20, the USACE, Valley Water and State Coastal Conservancy agreed to continue a phased study approach in which USACE will study EIAs 1-4 in the Phase II Feasibility Study, followed by seeking federal funds to study the remaining EIAs 5-10 in a future Phase III Feasibility Study. Other agencies that Valley Water is continuing to work with includes the cities of Palo Alto, Mountain View and Sunnyvale, along with the National Aeronautics and Space Administration's (NASA) Ames Research, United States Fish and Wildlife Service, and Midpeninsula Regional Open Space District. Currently Safe, Clean Water provides approximately \$5 million for a portion of the local share of funding to support only planning efforts.

See Appendix D: Capital Projects Jurisdictional Complexities for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.



Upper Guadalupe River Reach 12.

ADJUSTED

Project E8 FY21 Highlights

- For Reach 6, construction contract awarded for the gravel augmentation project, Aquatic Habitat Improvement Project. Construction is expected to be completed in FY22.
- The USACE 's General Re-evaluation Study began in January 2021 and will take approximately three (3) years to complete. A new project schedule will be developed following the completion of the General Re-evaluation Study.

Project E8

Upper Guadalupe River Flood Protection Highway 280 to Blossom Hill Road – San José

Preferred project: A federal-state-local partnership

This federally authorized project continues a Clean, Safe Creeks project in partnership with the U.S. Army Corps of Engineers (USACE) to plan, design and construct improvements along 5.5 miles of channel extending from Interstate 280 to Blossom Hill Road. Improvements include channel widening, construction of floodwalls and levees, replacement of road crossings and planting of streamside vegetation. Reducing flood frequency and bank erosion will improve water quality, while planned mitigation measures will give fish access to an additional 12 miles of habitat within and upstream of the project reach.

Flooding History and Project Background

Damaging flood events occurred in 1982, 1983, 1986, 1995 and 1998. Severe flooding in 1995 damaged more than 150 homes in the Gardner, Willow Glen, and South San José residential districts, and shut down Highway 87 and the parallel light rail line – both major commuter thoroughfares. Freeway and light rail flooding occurred again in 1998.

The Upper Guadalupe River Flood Protection project was authorized construction by the USACE in 1999 and received local funding in 2000, followed by the start of construction in 2008. Fish passage, erosion protection and other components were constructed earlier.

To increase the level of flood protection while keeping the preferred project viable, the local-only plan funded by Clean, Safe Creeks was modified by Valley Water Board in March 2012 to provide a basis to advance the full federal project as soon as funds become available. The plan is now to acquire all necessary rights-of-way and relocate bridges and utilities in preparation for the full, preferred project. The modified plan also includes design and construction for both Reach 6 (Interstate 280 to the Union Pacific Railroad crossing) and Reach 12 (Branham Lane to Blossom Hill Road).

Benefits

- Preferred project will construct 1% (or 100-year) flood conveyance capacity for 5.5 miles of channel in San José, protecting approximately 6,280 homes, 320 businesses and 10 schools/institutions
- Local funding only constructs improvements to 4,100 linear feet to convey 1% flow

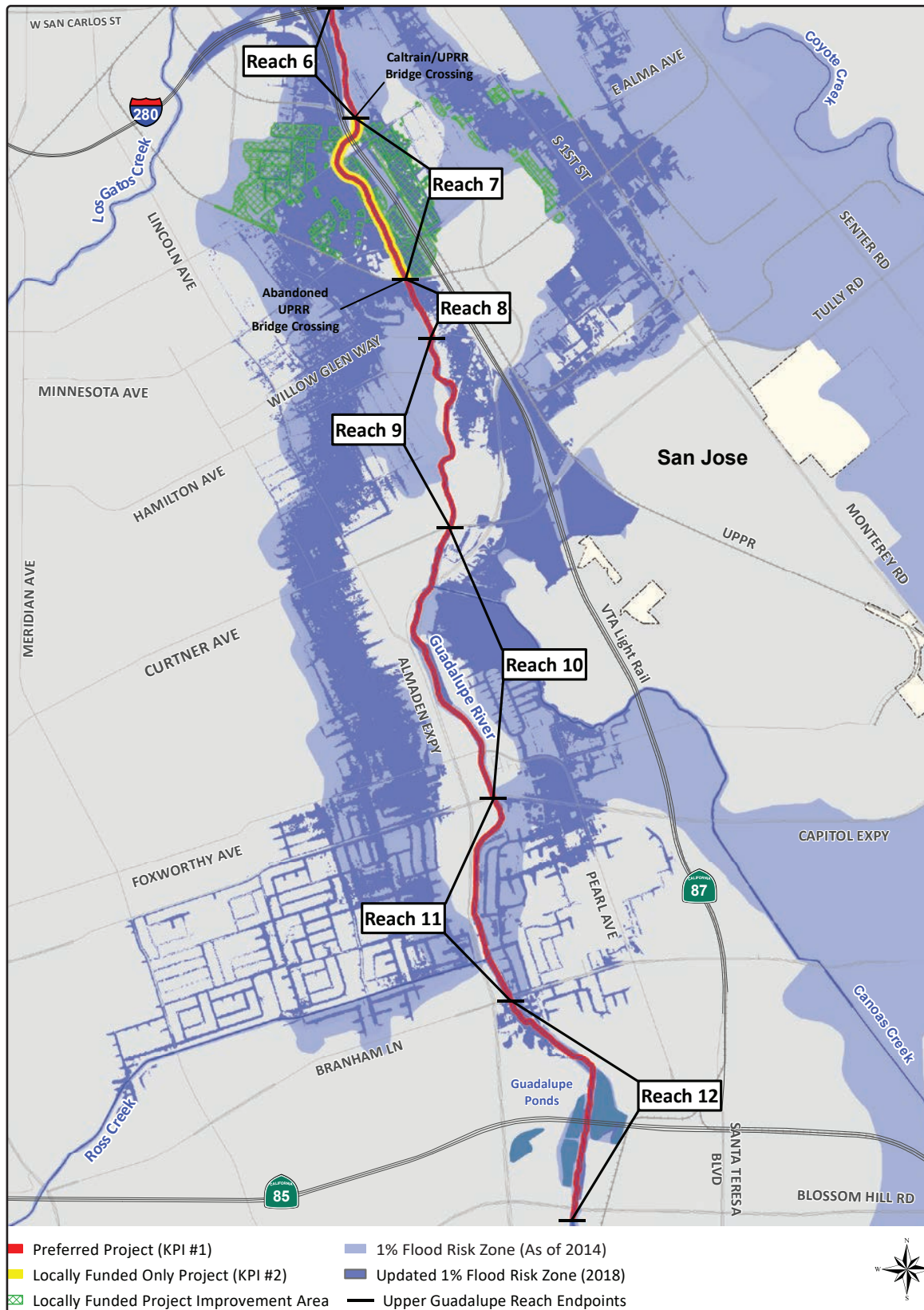
- Improves stream habitat values and fisheries
- Improves stream water quality
- Allows for creekside trail access

Key Performance Indicators (15-year Program)

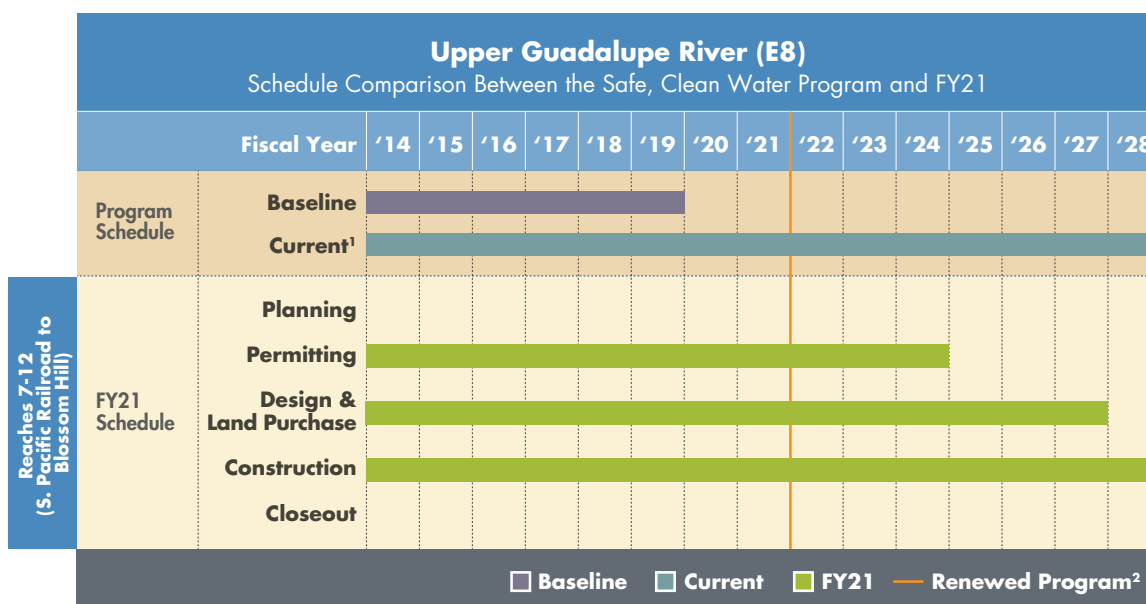
1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 6,280 homes, 320 businesses and 10 schools and institutions.
2. With local funding only: Construct flood protection improvements along 4,100 feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to Union Pacific Railroad (UPRR) crossing, downstream of Padres Drive. Flood damage will be reduced; however, protection from the 1% flood is not provided until completion of the entire Upper Guadalupe River Project.

Geographic Area of Benefit: San José

Project Location



Schedule



¹ Board approved a schedule adjustment through the change control process in FY16, FY20 & FY21.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ADJUSTED
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21: ADJUSTED (Schedule Adjustment)

While the locally funded project requires Valley Water to only construct flood protection improvements along Reach 7, Valley Water has used local funding under the Safe, Clean Water Program (and the preceding Clean, Safe Creeks Program) to complete Reaches 6, 10B and 12 and move the project forward. For more details, see Opportunities and Challenges segment.

Progress on KPI #1 and #2 (combined):Reach 6 (from Interstate 280 to the UPRR bridge crossing downstream of Willow Street)

- In June 2021, Valley Water awarded the construction contract for the gravel augmentation project. Construction is expected to begin in July 2021 and be completed in December 2021 (FY22).

Reaches 7 to 12 (from the UPRR bridge crossing downstream of Willow Street to Blossom Hill Road)

- Reach 7, stretching from UPRR bridge crossing downstream of Willow Street to the abandoned UPRR bridge upstream of Alma Avenue, is the local funding only project, KPI #2. Valley Water has adequate local funding to complete this reach. Furthermore, Reaches 6, 10B and 12 of the project were completed by 2015.
- Since FY15, lack of federal funding has stalled the design and construction of the flood protection elements of Reaches 7-11 (excluding Reach 10B). USACE has completed 65% design documentation for Reaches 7 and 8 and has been waiting for federal funds to complete the design and begin construction. Due to project construction cost estimate increases, in FY20, USACE received funding to perform a General Re-evaluation Study, a study to re-evaluate the scope of the project and the associated benefits and costs that can help make the project more competitive for federal funding. The General Re-evaluation study began in January 2021 and will take approximately three (3) years to complete. A new project schedule will be developed following the completion of the General Re-evaluation Study.

Financial Information

Reach 6 (I-280 to Southern Pacific Railroad) project (KPIs #1 and #2) expended 86% of its FY21 budget. The under-expenditure was because construction of the gravel augmentation project will begin in July 2021 and anticipated labor costs for construction oversight allocated for FY21 will be spent in FY22.

Reaches 7-12 (Southern Pacific Railroad to Blossom Hill Road) project (KPIs #1 and #2) expended 25% of its FY21 budget. The under-expenditure in FY21 was due to Valley Water's decision not to move forward with designing and constructing Reach 7 using local funding at this time. Valley Water and the USACE worked together to move forward with the General Re-evaluation Study that received \$1.5 million in federal funding. Valley Water will also contribute \$1.5 million to fund the local share of the General Re-evaluation Study.

Financial Summary (\$ Thousands)										
E8. Upper Guadalupe River										
Fiscal Year 2020-2021								15-year Program		
Project No. and Name	Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
					Actual	Encumbrance	Total			
26154002 Reach 6 (I-280 to S. Pacific Railroad)	(\$0)	\$209	\$0	\$209	\$179	\$0	\$179	86%	\$7,627	34%
26154003 Reaches 7-12 (S. Pacific Railroad to Blossom Hill)	(\$0)	\$9,194	\$0	\$9,194	\$992	\$1,325	\$2,317	25%	\$89,987	41%
Total	(\$0)	\$9,403	\$0	\$9,403	\$1,171	\$1,325	\$2,496	27%	\$97,614	41%

Opportunities and Challenges

Schedule Adjustment and Lack of Federal Funding

In FY21, the Board adjusted the construction schedule for the local funding only project (KPI #2) with the project completion pushed back by three years from FY26 and now estimated to occur in FY29. This was necessary to allow USACE to conduct the General Re-evaluation Study for completion in FY24. Following the completion of the study, a new preferred project (KPI #1) will be developed. Meanwhile, if Valley Water were to assume the responsibility of continuing the design of the local funding only project in FY24, project construction could be completed in FY29.

Since FY15, lack of federal funding has stalled design and construction on the federal flood protection elements of the preferred project (KPI #1), comprising Reaches 7 to 11 (excluding 10B). Reaches 10B and 12, which are the mitigation elements of the project, were completed between 2012 and 2015 and Valley Water contributed local funding to complete these reaches.

Reach 7, stretching from the UPRR bridge crossing downstream of Willow Street to the abandoned UPRR bridge upstream of Alma Avenue, is the local funding only project (KPI #2) and Valley Water has adequate local funding to construct the project.

Meanwhile, due to the lack of federal funding, USACE has been focused on updating the total project costs to determine a path for future federal funding. In January 2021, the USACE began the General Re-evaluation Study, which is expected to take approximately three (3) years to complete. A new preferred project (KPI #1) schedule will be developed following the completion of the General Re-evaluation Study.

Confidence Levels

Reach 6 (I-280 to S. Pacific Railroad) Project

Schedule: High confidence

Valley Water obtained the Reach 6 gravel augmentation project regulatory permits in summer 2020, advertised and awarded the project in early 2021 and is expected to begin construction in summer 2021.

Funding: High confidence

This project is fully funded by the Safe, Clean Water Program.

Permits: High confidence

Valley Water obtained the state and federal regulatory permits for the project in summer 2020.

Jurisdictional Complexity: High confidence

Valley Water has jurisdiction over this reach and all the design elements.

Reaches 7-12 (S. Pacific Railroad to Blossom Hill) Project*Schedule: Low confidence*

The schedule has been affected due to USACE not receiving federal funding for many years, which has delayed design and construction efforts for Reaches 7 & 8.

Funding: Low confidence

Federal funding appropriation continues to be the main challenge for this project. The project did receive federal funds in FY20 for General Re-evaluation Study of all elements of Reaches 7 to 12. The USACE will be evaluating the entire project to determine the preferred scope of work. Valley Water will need to continue working with USACE leadership and federal elected officials to encourage federal appropriations for the design and construction of the remaining project reaches.

Permits: Moderate confidence

USACE will acquire all the required permits once the General Re-evaluation Study is concluded and a path forward for the project is determined.

Jurisdictional Complexity: Low confidence

As a local sponsor, Valley Water is responsible for acquiring all the right-of-way and relocation of utilities. Even after Valley Water acquires easements or joint-use agreements for the project from Caltrans, the Joint Power Board/Caltrain and the City of San José, these agencies will continue to have jurisdiction over the Upper Guadalupe Flood Protection Project. Cooperation between the City of San José and the Joint Power Board/Caltrain has been satisfactory. Valley Water and City of San José were able to complete the purchase of right-of-way for the Willow Street and Alma Avenue bridge extension elements of the project. The Joint Power Board/Caltrain has been coordinating with Valley Water for their railroad bridge replacement project just upstream of Reach 6.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Other Capital Flood Protection Projects and Clean, Safe Creeks Grants Projects

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 Clean, Safe Creeks and Natural Flood Protection Plan, which voters approved in November 2000.

The following projects below were carried forward and fully transitioned into the Safe, Clean Water Program. The financial information reported herein includes only the funds that were carried forward and the expenditures made since the onset of the Safe, Clean Water Program.

Permanente Creek Flood Protection Completed (See Completed Projects, page 195)

San Francisco Bay to Foothill Expressway – Mountain View

Sunnyvale East and Sunnyvale West Channels Flood Protection

San Francisco Bay to Inverness Way and Almanor Avenue – Sunnyvale

Berryessa Creek Flood Protection (See Completed Projects, page 199)

Calaveras Boulevard to Interstate 680 – Milpitas and San José

Coyote Creek Flood Protection

Montague Expressway to Tully Road – San José

Calabazas Creek Flood Protection (See Completed Projects, page 203)

Miller Avenue to Wardell Road

Clean, Safe Creeks Grants Projects (See Completed Projects, page 206)

Sunnyvale East and Sunnyvale West Channels Flood Protection Projects

San Francisco Bay to Inverness Way and Almanor Avenue – Sunnyvale

In the early stages of the project design process, Valley Water project team decided to join both improvement projects into a single flood protection project with a single Environmental Impact Report (EIR) to reduce construction costs and minimize construction coordination issues between the 2 channels.

The West Channel extends approximately 3 miles and upgrades existing channel capacity to provide 1% (or 100-year) riverine flood protection for 47 acres of highly valuable industrial lands, including the Onizuka Air Force Base. The East Channel extends approximately 6.4 miles and upgrades existing channel capacity to provide 1% riverine flood protection for 1,618 parcels. Both projects decrease channel turbidity and sediment by repairing erosion sites, thereby improving water quality.

Benefits

- Provides 1% flood capacity for approximately 6.5 miles of channel along Sunnyvale East and approximately 3 miles of channel along Sunnyvale West within the City of Sunnyvale, protecting 1,618 properties (Sunnyvale East) and 47 acres (11 properties) of industrial land (Sunnyvale West)
- Improves stream water quality, by providing erosion control measures to decrease sediment and turbidity
- Identifies opportunities to integrate recreation improvements with the City of Sunnyvale and others as appropriate

Key Performance Indicator (5-year Implementation Plan)

1. Provide riverine flood protection for 1,618 properties and 47 acres (11 parcels) of industrial land, while improving stream water quality and providing for recreational opportunities.

Geographic Area of Benefit: Sunnyvale



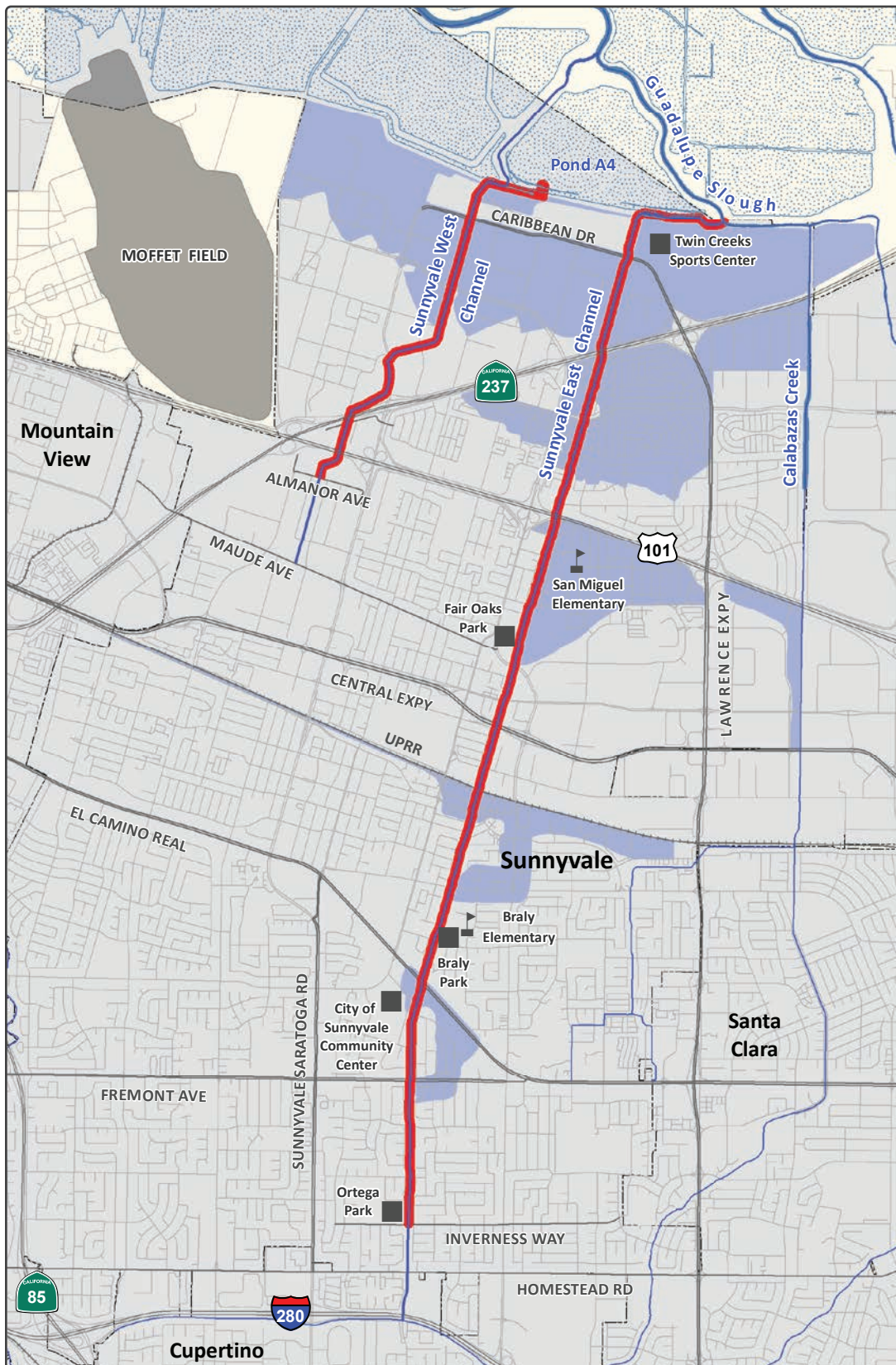
Southern view of the Sunnyvale East Channel.

ADJUSTED

Project FY21 Highlights

- Continued work on the final design that is expected to be completed in FY22.
- Continued work on acquiring a parcel or leasing agreement from the adjacent properties owner for construction staging, as well as temporary construction easements.
- Finalized a costsharing agreement amendment with the City of Sunnyvale for construction of recreational trails, extending an original 2016 cost sharing agreement to December 2025.

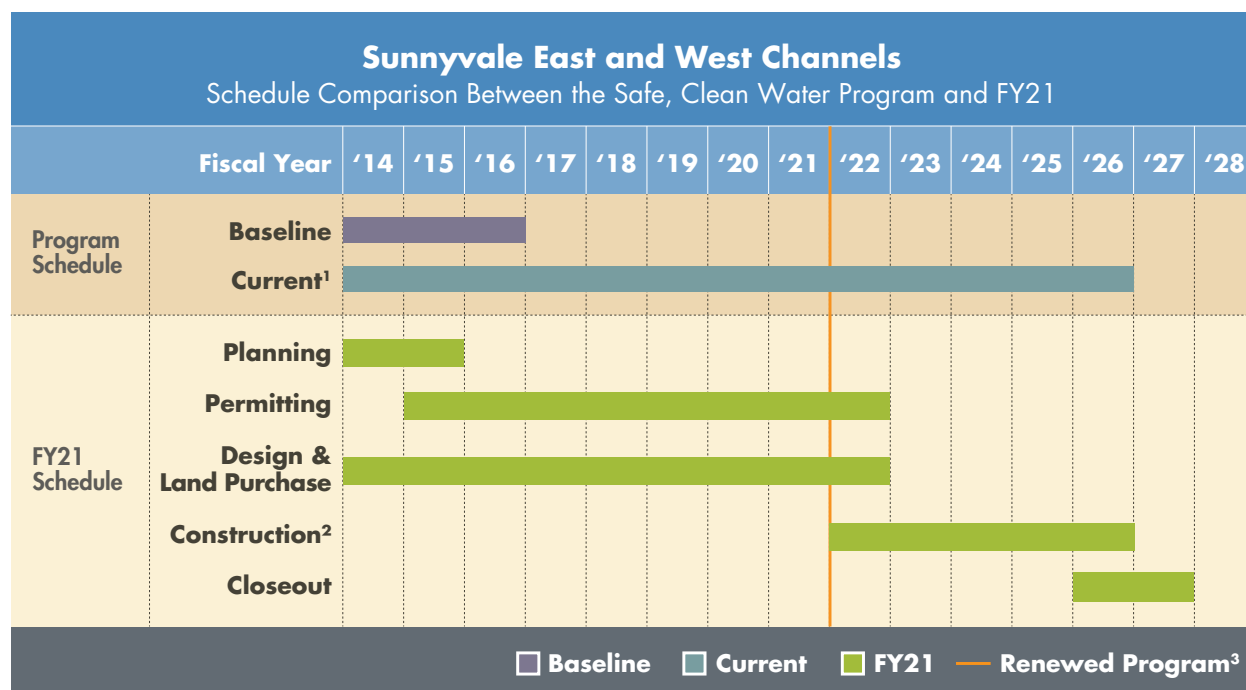
Project Location



Legend

- Project Location
- 1% Flood Risk Zone (As of 2014)
- Santa Clara County Cities
- Santa Clara County

Schedule



¹ Board approved schedule adjustments through the change control process in FY16, FY18, FY20 & FY21.

² Construction also includes a 3-year revegetation establishment period, not shown.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ADJUSTED
FY 15	ADJUSTED
FY 16	ADJUSTED
FY 17	ON TARGET
FY 18	ADJUSTED
FY 19	ADJUSTED
FY 20	ADJUSTED

Status for FY21: ADJUSTED (Schedule Adjustment)

Progress on KPI #1:

- The final design is underway and is expected to be completed in FY22 when the City of Sunnyvale and Resource Agency permit comments are incorporated.

- Most right-of-way and temporary staging area easements for project construction have been acquired. Valley Water continues to work on executing leasing agreements from the adjacent property owners, Santa Clara County and the San Francisco Public Utilities Commission (SFPUC), for temporary construction staging and temporary construction easements. All leasing agreement acquisitions are anticipated to be executed in FY22, prior to construction advertisement.
- Valley Water submitted all required permit applications in FY17 to the various state and federal regulatory agencies and is currently in negotiations with these agencies to acquire the necessary permits. These activities are expected to be finalized in FY22, which would allow project construction to begin in FY22, with anticipated completion in FY26.
- On April 24, 2018, Valley Water’s Board of Directors approved a Memorandum of Understanding (MOU) with Google, LLC (Google) to form a partnership. Subsequently, a cost-sharing agreement with Google will be negotiated after Google has complied with California Environmental Quality Act (CEQA) requirements for their proposed project alterations. The City of Sunnyvale is acting as the lead agency for CEQA for these proposed alterations. Google has acquired property on both sides of a segment of the Sunnyvale West Channel upstream of Caribbean Drive. Google is proposing a design change along approximately 1,100 linear feet of the Sunnyvale West Channel as part of its proposed site development for the Google Caribbean Campus Project. This Google project creates on-site and in-kind mitigation opportunities by constructing a wider channel with larger setback levees without floodwalls. The Google project would enhance public access and possibly accelerate receipt of regulatory permits while maintaining Valley Water’s project objectives. Valley Water’s project is delayed due to the additional time needed to incorporate potential design changes as a result of the Google MOU, determination of the amount of excess mitigation available for Valley Water’s use, and continuing negotiations with the various regulatory agencies.
- In December 2020, an amendment to a cost-sharing agreement between Valley Water and the City of Sunnyvale for the construction of recreational trails was finalized, extending an original 2016 cost-sharing agreement to December 2025. This extension accommodates the delayed construction timeline for the project. A related and preceding Joint Use Agreement (JUA) between Valley Water and the City of Sunnyvale for recreational trail use and maintenance remains in place, as enacted in 2016 for a term of 25 years (until the year 2041).

Financial Information

In FY21, 4% of the annual project budget was expended.

Financial Summary (\$ Thousands)									
Sunnyvale East & West Channels Flood Protection									
Fiscal Year 2020–2021								15-year Program	
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total			
\$2,033	\$16,08	\$0	\$18,118	\$811	\$0	\$811	4%	\$60,444	17%

The project was underspent due to a delay of the start of construction and FY21 funding attributed to construction not being utilized. The delay in the start of construction is due to finalizing discussions with Google regarding their Caribbean Campus Project, determining suitable and appropriate project mitigation to address comments by the various Resource agencies, completing ongoing negotiations with the various Resource Agencies to secure permits, and incorporating various design changes as a result of securing permits.

Opportunities and Challenges

Schedule adjustment

With the passage of the FY2022-26 Capital Improvement Program, the Board approved a schedule adjustment for this project, pushing the construction to begin in FY22 instead of FY21, and be completed in FY26 instead of FY24. The construction schedule has been adjusted to account for continued discussions with Google regarding their Caribbean Campus Project, which will enhance approximately 1,100 linear feet of the Sunnyvale West Channel and generate on-site mitigation for use by Valley Water. Valley Water has completed the design and continues efforts to acquire the various regulatory agency permits required for construction. The City of Sunnyvale certified the Final Environmental Impact Report (FEIR) for Google's Caribbean Campus Project in May 2020. Subsequent to Google's receipt of regulatory permits, negotiations need to take place with the various regulatory agencies to secure the required project permits. These activities are expected to be finalized by mid FY22 (December 2021), which would allow project construction to begin in late FY22.

Confidence Levels

Schedule: Moderate confidence

Valley Water continues to work on acquiring the temporary rights-of-way acquisitions needed for construction and executing the necessary relocation agreements with the various utility owners. These activities are expected to be finalized in FY22, which would allow project construction to begin in FY22. The design is 100% complete, with the exception of incorporation of the pending permit conditions into the construction documents.

Permanent rights-of-way required for the project have been acquired.

Sunnyvale East Channel

The most significant schedule challenge is the phased construction timeline to replace the existing Caribbean Drive Bridge with a new triple-reinforced concrete box (RCB) culvert and relocate existing utility crossings on the bridge. The Caribbean Bridge currently conveys multiple utilities, including 12-inch water and reclaimed water lines, multiple AT&T fiber-optic lines and PG&E power lines. Coordination with AT&T and PG&E to relocate fiber-optic lines and temporary relocation of power lines is ongoing and expected to be finalized before construction begins. Valley Water had previously requested the City of Sunnyvale to consider allowing a complete closure of Caribbean Drive to avoid a two-year construction window, expensive detours, lane closure, public safety and other concerns that are involved with a partial closure. The City of Sunnyvale elected to require Valley Water to phase the construction with a partial closure of Caribbean Drive, thus requiring a two-year construction window.

Sunnyvale West Channel

The most significant schedule challenge is the coordination of the Carl Road RCB culvert construction with the City of Sunnyvale Water Pollution Control Plant (WPCP). Carl Road crossing serves as the only access to portions of

the WPCP outlet pond facilities and the west landfill. In addition, vital landfill gas extraction lines and city sanitary sewer vitrified clay pipe (VCP) mains cross the existing Carl Road culvert and are required to remain in service 24 hours/7 days a week. To minimize the risk of damaging the two existing VCP sewer lines during the construction of the RCB, the sewer lines will be replaced with a single 36-inch sewer line.

In addition, Valley Water continues to work and coordinate with Google on a proposed enhancement effort along 1,100 linear feet of the Sunnyvale West Channel as part of the proposed site development of Google's Caribbean Campus Project. The City of Sunnyvale, as the CEQA lead agency, certified the FEIR for Google's Caribbean Campus Project in May 2020. Valley Water and Google continue to work on an Authorization Agreement (cost-sharing agreement) for Valley Water Board approval for this enhancement project along the West Channel.

Also, Valley Water and the City of Sunnyvale are partnering for a cost-sharing agreement for a shared portion of a perimeter wall (floodwall/security) around the city's wastewater Water Pollution Control Plant, located along the Sunnyvale West Channel. The shared portion of the wall would act as a floodwall and security wall for the Water Pollution Control Plant. This shared portion of the wall would be constructed by the City of Sunnyvale, with a design review by Valley Water. The city is currently working on finalizing the design for the shared portion of the perimeter wall and estimates construction to begin in 2023.

These partnerships between Valley Water and the city and Valley Water and Google described above will result in minor Project changes that will require Valley Water staff to prepare an EIR addendum, which is currently underway.

Funding (combined): High confidence

This project is fully funded by the Safe, Clean Water Program. The potential Valley Water/Google cost-sharing agreement will have Valley Water agree to contribute to the Google project the estimated amount Valley Water would have spent to construct that reach, including the costs associated with acquiring mitigation, if Google had not proposed their project. Therefore, the Valley Water/Google cost-sharing would result in no additional construction costs for the Valley Water project.

Also, Valley Water is working with the City of Sunnyvale to finalize the terms of a cost-sharing agreement for the shared portion of the new perimeter wall around the city's Water Pollution Control Plant. Similar to the Google cost-share agreement, the upcoming cost-share agreement between Valley Water and the city would only include the cost that Valley Water would have spent to construct the Valley Water design for the shared length of the wall.

Permits (combined): Moderate confidence

The most significant overall challenge to the project is securing the necessary regulatory agency permits in a timely manner to proceed with construction. Valley Water submitted all the required permit applications in June 2017 to the various state and federal regulatory agencies and is currently in negotiations with these agencies to acquire the necessary permits. Google has submitted their required permit applications to the required resource and regulatory agencies for the enhancement of their portion of the West Channel.

There is an ongoing discussion with the regulatory agencies regarding the nature and origin of the Sunnyvale East and West Channels. The channels are storm drain systems constructed by Valley Water in the 1950s and 1960s. Both channels have no naturally occurring headwaters, resulting in extremely limited existing channel vegetation;

the project's environmental impacts are expected to be minimal. Valley Water's recent discussions with the San Francisco Bay Regional Water Quality Control Board (RWQCB) indicate there are some significant differences of opinion regarding the existing beneficial uses and overall project impacts of Sunnyvale East and West Channels. Valley Water is actively working with the RWQCB to attempt to resolve these differences and reduce the project impacts to the extent possible.

Upon receipt of the various regulatory agency permits, permit conditions and requirements will be incorporated into the Final Construction Documents before the project can be advertised for construction.

Jurisdictional Complexity (combined): High confidence

The entire project is within the limits of the City of Sunnyvale. Valley Water has coordinated the planning and design efforts by forwarding to the city the 30%, 60%, 90% and 100% design submittals for review and comment. Valley Water has worked with the city to purchase the necessary project rights-of-way, including temporary staging areas. Valley Water and the city have also executed a cost-sharing agreement for the construction of public trails as part of the project and have executed a Joint Use Trail Agreement. Google and Valley Water continue to work together on the coordination of this project as well as several other Google-Valley Water projects by meeting monthly to address and coordinate the planning, design, and construction of these projects.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.



Construction of short-term improvements at the Rock Springs neighborhood.

ON TARGET

Project FY21 Highlights

- Approximately 40% of the Coyote Creek Flood Protection Project (CCFPP) became the newly created Coyote Creek Flood Management Measures Project (CCFMMP) being funded by the Water Utility Enterprise. CCFMMP is necessary as avoidance and minimization measures for the Anderson Dam Tunnel Project (ADTP).
- Began design phase of both the CCFPP and CCFMMP.
- Began outreach to property owners adjacent to the creek/project to obtain Permission to Enter documents necessary for design.

Coyote Creek Flood Protection

Montague Expressway to Tully Road – San José

The project is located in the central portion of the Coyote Watershed and extends approximately 9 miles between Montague Expressway and Tully Road in San José.

Preferred project: A federal-state-local partnership

The primary project objective is to reduce the risk of flooding to homes, schools, businesses, and highways in the Coyote Creek floodplain for floods up to the level of flooding that occurred on February 21, 2017, approximately a 20 to 25 year flood event, and includes planning, design, and project construction. Alternative funding sources, including federal funding, state grants, and additional local funding sources, are being explored and will need to be secured for full construction of the project.

Local funding only project:

The local funding only option includes identifying short-term flood relief solutions that are permissible and do not exacerbate flooding elsewhere, with implementation to begin prior to the 2017-2018 winter season. In addition, under the local funding only option, Valley Water will complete the planning and design phases of the preferred project, and identify prioritized elements of the project for construction with the remaining local funds.

Flooding History and Project Background

Flooding has occurred many times within the Coyote Creek Watershed, including along portions of Coyote Creek in 1911, 1917, 1931, 1958, 1969, 1982, 1983, 1997, 1998, and 2017. The largest flow recorded on Coyote Creek was 25,000 cubic feet per second in 1911, prior to construction of the current 2 water-supply reservoirs in the upper watershed. The worst flooding in the project reach since Anderson Reservoir was constructed in 1950, occurred in February 2017. Coyote Creek overtopped its banks at several locations between Montague Expressway and Tully Road. Businesses and hundreds of homes were inundated by creek waters for many hours. Highway 101 near Watson Park and various local streets were closed due to flooding, and thousands of residents had to be evacuated and sheltered.

The Coyote Creek Project is located in the central portion of the Coyote Watershed on the mainstem of Coyote Creek, within the City of San José. The original project reach extended approximately 6.1 miles between Montague Expressway and Highway 280; however, the project reach was extended approximately 2.9 miles upstream to Tully Road in 2017 to include the Rock Springs neighborhood and incorporate the areas impacted by the February 21, 2017 flood event. In addition to the primary objective of reducing the risk of flooding to homes, schools, businesses, and highways from Coyote Creek flood events, the project may evaluate opportunities to improve fisheries, stream habitat values, and public access.

Benefits

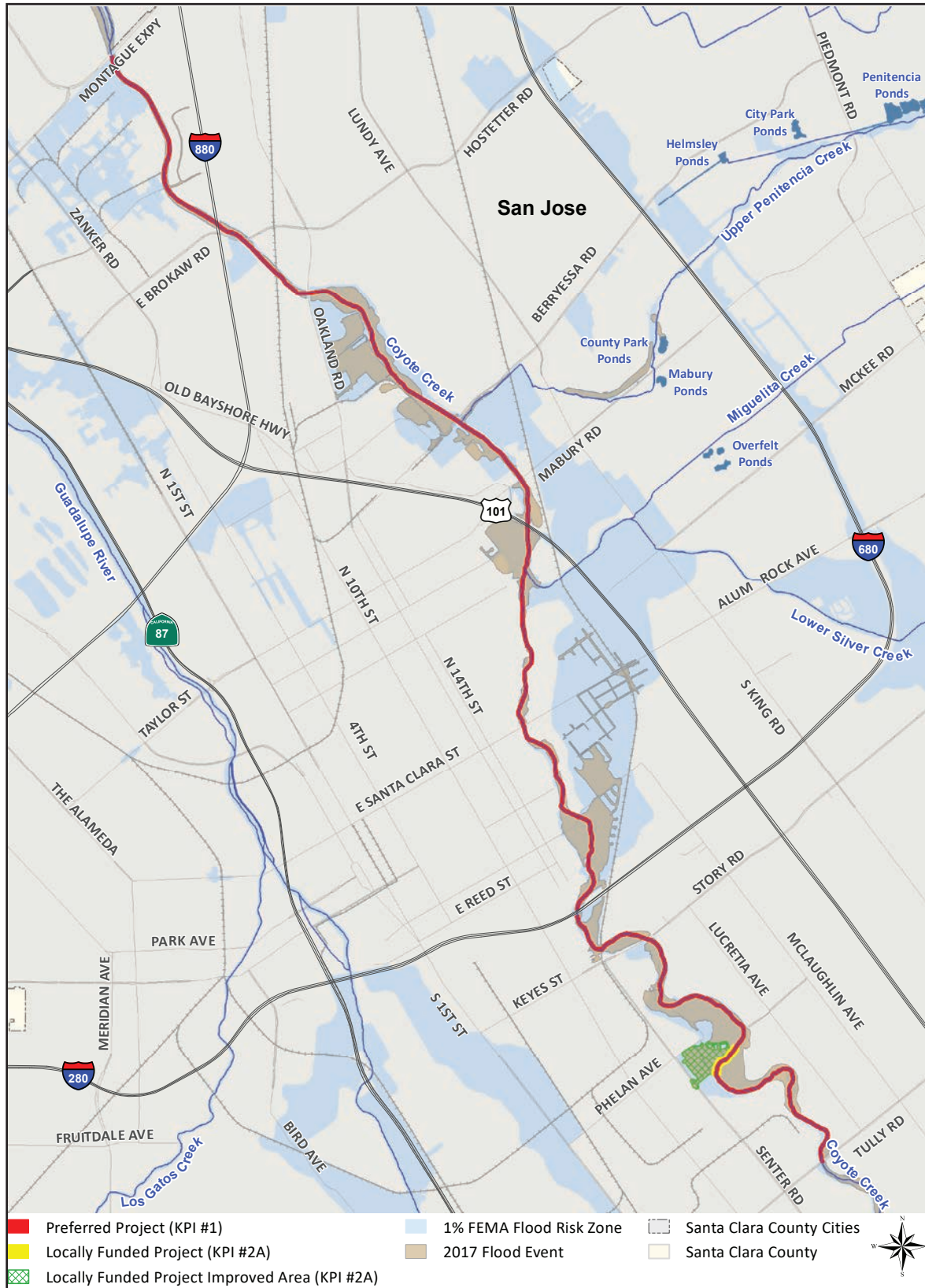
- Implements short-term flood relief solutions
- Provides flood risk reduction for approximately 1,000 parcels from the level of flooding that occurred on February 21, 2017, approximately a 20 to 25 year flood event, when the entire project from Montague Expressway to Tully Road is constructed
- Improves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

Key Performance Indicators [5-year Implementation Plan (FY19-23)]

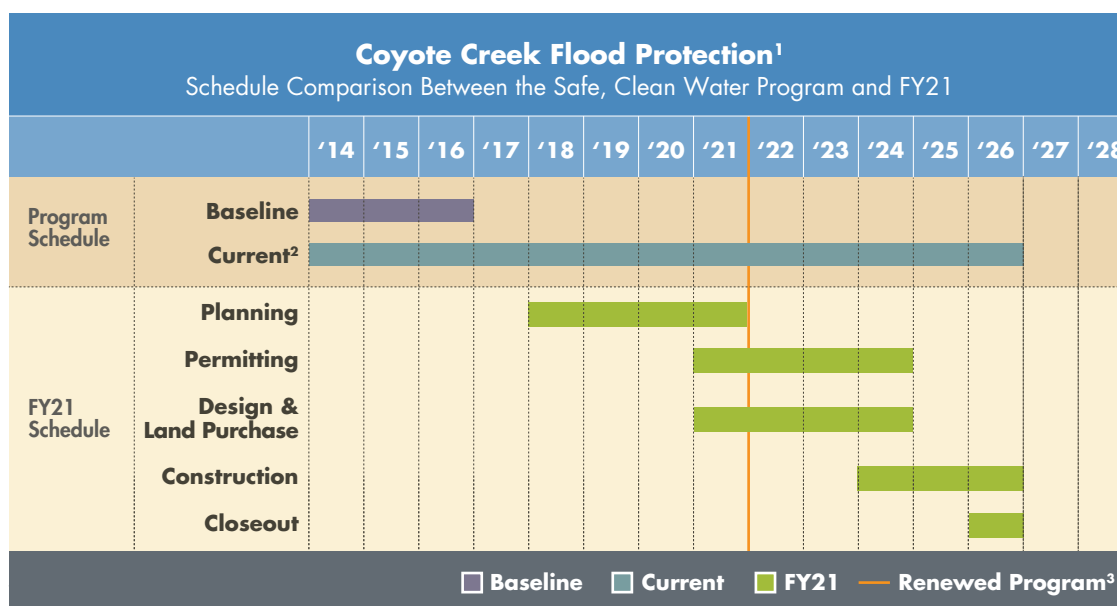
1. Preferred project with federal, state, and local funding: Secure alternative funding sources to construct a flood protection project that provides flood risk reduction from floods up to the level of flooding that occurred on February 21, 2017, approximately a 20 to 25 year flood event, between Montague Expressway and Tully Road.
2. With local funding only: (a) Identify short-term flood relief solutions and begin implementation prior to the 2017-2018 winter season; (b) Complete the planning and design phases of the preferred project; and (c) With any remaining funds, identify and construct prioritized elements of the preferred project.

Geographic Area of Benefit: San José

Project Location



Schedule



¹ 40% of the project is being constructed as part of the FERC-ordered compliance project for Anderson Reservoir and Dam and, therefore, the schedule for those elements is shown under the Project C1: Anderson Seismic Retrofit.

² Board approved a schedule adjustment through the change control process in FY16 & FY20.

³ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ADJUSTED
FY 15	NOT ON TARGET
FY 16	ADJUSTED
FY 17	MODIFIED
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ADJUSTED

Status for FY21: ON TARGET

Progress on KPI #1 & #2:

- The Federal Energy Regulatory Commission (FERC) has jurisdiction over Anderson Dam, located on Coyote Creek in Morgan Hill. In February 2020, FERC directed Valley Water to immediately implement risk reduction measures to protect the public from the risk of Anderson Dam failure due to seismic activity and develop and implement necessary avoidance, minimization and mitigation measures. In compliance with the FERC order, Valley Water took several actions, including the construction of the Anderson Dam Tunnel Project (ADTP), an element of a part of the Anderson Dam Seismic Retrofit Project.
- Approximately 40% of the Coyote Creek Flood Protection Project (CCFPP) is necessary to be designed and constructed as avoidance and minimization measures in anticipation of the construction of the ADTP. The tunnel project is scheduled to be completed in December 2023 and these measures are required to prevent flooding within the urbanized areas of San José as a result of water releases from the new tunnel. Therefore, Valley Water created the Coyote Creek Flood Management Measures Project (CCFMMP), which is now being funded by Water Utility Enterprise Fund (Fund 61).
- The remaining approximately 60% of the CCFPP continues to be designed and constructed and funded by the Safe, Clean Water Program.
- In FY21, Valley Water began the design phase of both the CCFPP and CCFMMP. The effort included hiring a consultant to design the CCFPP and the CCFMMP.
- In the spring of 2021, Valley Water also began the outreach efforts with the property owners adjacent to the creek and the project elements to obtain the required Permission To Enter documents necessary to allow collecting the initial project data needed for design.

Financial Information

In FY21, 25% of the annual project budget was expended.

A significant part of the staff effort was focused on the CCFMMP, which was funded by Water Utility Enterprise Fund (Fund 61).

Financial Summary (\$ Thousands)									
Coyote Creek Flood Protection Study and Partial Construction									
Fiscal Year 2020–2021								15-year Program	
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total			
\$2,199	\$802	\$0	\$3,002	\$812	\$900	\$1,712	57%	\$56,091	10%

Opportunities and Challenges

Some Coyote Creek Flood Protection Measures expedited as part of FERC Order Compliance Project for Anderson Reservoir and Dam

FERC has jurisdiction over Anderson Dam, located on Coyote Creek in Morgan Hill, and its associated safety measures. In February 2020, FERC ordered Valley Water to immediately implement risk reduction measures to protect the public from the risk of Anderson Dam failure due to seismic activity, and develop and implement necessary avoidance, minimization and mitigation measures. Anderson Dam is situated on Coyote Creek and creates the Anderson Reservoir. In compliance with the FERC Order, Valley Water took several steps, including proposing a project described in the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) Engineer's Report. On June 23, 2020, following a public hearing, the Board approved the Engineer's Report, which is available on Valley Water's website:

<https://www.valleywater.org/project-updates/public-review-documents>. The proposed project would:

1. allow Valley Water a way to safely, reliably and expeditiously drawdown Anderson Reservoir (Reservoir) and help to maintain the Reservoir at a required lower elevation;
2. minimize risks associated with exceeding the restricted Reservoir level with the existing outlet structure by constructing a new, low-level outlet;
3. prioritize the interim downstream protection of certain residents and property; and
4. minimize the public health and safety and environmental impacts of the Reservoir drawdown.

Valley Water has identified areas within Coyote Creek to reduce flood risk as a result of implementing the FOCP, namely from the operation of the FERC Ordered expedited construction of the Anderson Dam Tunnel Project new low-level outlet. As a result, the FOCP includes the construction of some elements of the Coyote Creek flood protection measures (item 3 above) as avoidance and minimization measures to reduce flood risk within certain urbanized areas of Coyote Creek.

Consequently, some (approximately 40%) of the CCFPP elements are being expedited as part of the FOCP. These measures constitute the CCFMMP and consist of acquisition or elevation of up to 10 structures on nine (9) parcels and construction of up to six (6) spans of off-stream floodwalls or levees to reduce flood risks arising from higher maximum Anderson Dam low-level outlet flows, flows from the existing outlet, and Coyote Creek inflows resulting from storm events. The FOCP Coyote Creek Flood Management Measures must be constructed by the end of 2023, or the same time as the Anderson Dam low-level outlet construction is completed, to prevent flooding within urbanized areas of San José as a result of the water releases from the tunnel. These measures will be implemented along Mid-Coyote Creek in San José, between Highway 280 and Oakland Road.

The remaining elements of the CCFPP (approximately 60%) will be known as the non-FOCP flood management elements and will cover the construction of flood protection elements necessary to handle similar flows as the 2017 flood event. The non-FOCP flood management elements will need to be constructed by fall 2025, the same time as the completion of the Anderson Dam high-level outlet.

Funding Opportunities

There are many funding opportunities that are being evaluated for the Coyote Creek project. Alternative funding sources, including federal funding, state grants and additional local funding sources, are being explored and may need to be secured for full construction of the project. For this project, Valley Water will also seek a low-cost federal loan under the Water Infrastructure Finance and Innovation Act of 2014.

Construction Schedule Challenge

An important challenge is that the CCFPP needs to be implemented by fall 2025, the same time as the completion of the Anderson Dam high-level outlet. This allows approximately four years for the project to be designed and constructed, which is an ambitious target for a large and complicated project.

Partnership with USACE

In August 2019, Valley Water and the USACE agreed on an initial task under the Section 1126 MOA developed in 2018. This initial task was for the USACE to produce a project management plan (PMP) that provided a comprehensive description of how the USACE would go about producing a Feasibility Study to USACE standards. In May 2020, the USACE delivered a draft PMP to Valley Water. In March 2021, the PMP was finalized and the task was completed. This effort was to explore Valley Water conducting a USACE-style feasibility study for a higher level of flood protection from the level of flooding that occurred on February 21, 2017, approximately a 20 to 25-year flood event (a flood event that has 4% to 5% chance of occurring in any given year).

Confidence Levels

Schedule: Moderate confidence

Based on the expedited adjusted schedule with a target completion date of FY26, Valley Water should be able to complete the local funding only option (KPI #2) given successful permitting.

Funding: Moderate confidence

Initially, the Safe, Clean Water Program fully funded the “local funding only” project’s planning and design phases and the identification of prioritized elements of the project for construction. Following the Board’s decision in 2019 to fund the preferred project with local dollars, the project has been provided additional funding. However, completion of the project may require further additional funding. Valley Water continues to explore alternative funding sources, including federal funding, state grants and other local funding sources.

Permits: Moderate confidence

The preferred project has been designed to minimally impact creek resources, with almost all elements outside the creek banks. By minimizing in channel work and its impacts, the permit application and acquisition process should be able to proceed more expeditiously.

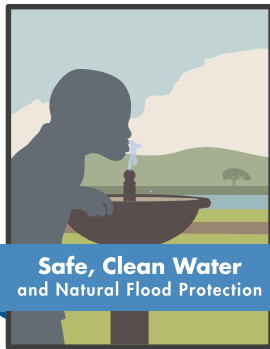
Jurisdictional Complexity: High confidence

All local agencies, the City of San José and the County of Santa Clara, are fully cooperating due to the significant need for the project.

See *Appendix D: Capital Projects Jurisdictional Complexities* for a list of confidence levels for each project by outside agency for funding, regulatory permitting, cities, counties and other agencies.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.



Completed Projects

Project A1

Main Avenue and Madrone Pipelines Restoration

Project D2

Revitalize Stream, Upland and Wetland Habitat

Project D7

Partnerships for the Conservation of Habitat Lands

Permanente Creek Flood Protection

San Francisco Bay to Foothill Expressway – Mountain View

Berryessa Creek Flood Protection

Calaveras Boulevard to Interstate 680 – Milpitas and San José

Calabazas Creek Flood Protection

Miller Avenue to Wardell Road

Clean, Safe Creeks Grants Projects



Main Ave. pipeline installation.

COMPLETED**Project A1 FY20 Highlights**

- Restored the transmission pipeline from Anderson Reservoir to full operating capacity of 37 cfs in June 2019.
- Restored the transmission pipeline to deliver 20 cfs to Madrone Channel in January 2019.

Project A1

Main Avenue and Madrone Pipelines Restoration

This project will restore the Main Avenue and Madrone pipelines to full operating capacity of conveying 10 cubic feet per second (cfs) and 27 cfs, respectively, for a total of 37 cfs from Anderson Reservoir or the Santa Clara Conduit for groundwater recharge via the Main Avenue Recharge Ponds and the Madrone Channel. The project will plan, design, and construct approximately 14,000 linear feet or 2.6 miles of 30-inch to 36-inch diameter pipeline and associated appurtenances.

Benefits

- Increases groundwater recharge by about 2,000 acre-feet per year in South County's Llagas Groundwater Sub-basin, a sufficient water supply for 4,000 families of 5
- Improves operational flexibility
- Maximizes the delivery of imported water to treatment plants supplying drinking water to North County
- Saves energy, reduces operating costs, and cuts CO₂ emissions by reducing dependence on Coyote Pumping Plant

Key Performance Indicators (15-year Program)

1. Restore transmission pipeline to full operating capacity of 37 cfs from Anderson Reservoir.
2. Restore ability to deliver 20 cfs to Madrone Channel.

Geographic Area of Benefit: Countywide

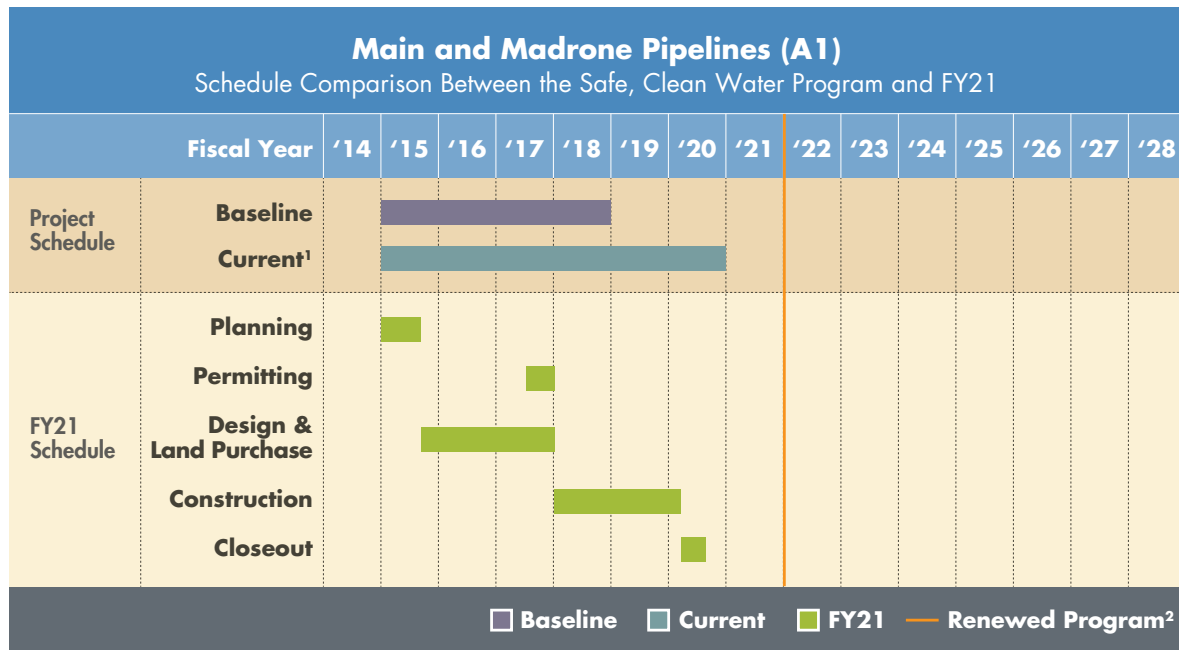
Project Location



Legend

—	Pipeline Alignment
	Santa Clara County Cities
	Santa Clara County

Schedule



¹ Board approved schedule adjustments through the change control process in FY16 & FY19.

Status History

Fiscal Year	Status
FY 14	SCHEDULED TO START
FY 15	ON TARGET
FY 16	ADJUSTED
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	COMPLETED

Status for FY20: COMPLETED

Financial Information

Financial Summary (\$ Thousands)										
A1. Main Avenue and Madrone Pipelines Restoration										
Fiscal Year 2020-2021								15-year Program		
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Bduget	Budgetary Actual			% of Budget Spent	15-Yr Plan & FY13 Enc Bal & Cap Proj Resrvs	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total				
\$0	\$225	\$0	\$225	\$13	\$0	\$13	6%	\$8,303	\$17,570 ¹	98%

¹ Cost of the project is \$17.6 million. The Water Utility fund pays \$11.4 million via transfer; net cost to Safe, Clean Water Program is \$6.2 million.

Project D2

Revitalize Stream, Upland and Wetland Habitat

This project allows Valley Water to remove non-native, invasive plants and revegetate habitat with native species when needed. Funding also restores degraded habitat between revegetated sites to create a more contiguous habitat corridor for wildlife. This project includes targeted control of especially damaging non-native, invasive plant species such as *Arundo donax*, and education for nearby landowners and other stakeholder groups on the control of harmful species. This project also helps implement the Stream Corridor Priority Plans developed in Project D3.

Benefits

- Increases viability of native riparian species by reducing competition from non-native, invasive species
- Improves habitat by installing tidal and riparian plant species
- Improves ecological function of existing riparian and wetland habitats to support more diverse wildlife species
- Improves patchy wildlife corridors by increasing connectivity of habitat
- Increases community awareness about the damaging impact that non-native, invasive plants have on local ecosystems

Key Performance Indicators (15-year Program)

1. Revitalize at least 21 acres, guided by the 5 Stream Corridor Priority Plans, through native plant revegetation and removal of invasive exotic species.
2. Provide funding for revitalization of at least 7 of 21 acres through community partnerships.
3. Develop at least 2 plant palettes for use on revegetation projects to support birds and other wildlife.

Geographic Area of Benefit: Countywide



Volunteers remove invasive periwinkle at Bear Creek Redwoods Open Space Preserve.

COMPLETED

Project D2 FY21 Highlights

- Along with partners, removed approximately 7.7 acres of invasive and non-native vegetation stands in FY21.
- With partners, removed a total of approximately 87 acres of invasive and non-native vegetation stands from FY14 to FY21.

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	ON TARGET

Status for FY21:

COMPLETED

Progress on KPI #1 : (Completed in FY21)

Valley Water and its D2 Project partners – the City of San José, California State Coastal Conservancy (Conservancy), and Midpeninsula Regional Open Space District (Midpen) – exceeded the KPIs by removing approximately 87 acres of invasive and non-native vegetation stands (10.7 acres by Valley Water and 76.3 acres in partnerships under KPI #2) through FY21. Successfully controlling invasive vegetation often requires repeated treatments at infested sites over multiple years. This is especially necessary for giant reed (*Arundo donax*) and invasive cordgrass (*Spartina alterniflora*) control. For example, giant reed sites on Coyote Creek, initially treated by Valley Water’s Stream Maintenance Program (SMP) in FY18 and FY19, continue to be managed by the City of San José for successful habitat revitalization. Of the approximately 3.3 acres of giant reed removal started by Valley Water under SMP along Coyote Creek upstream of Oakland Road, the City of San José cut and treated 0.5 acres in FY21. More work will be conducted at the site, and therefore, the acreage is not counted under KPIs #1 or #2 at this time. The three (3) partnership agreements will extend into the renewed Safe, Clean Water and Natural Flood Protection Program, as described for KPI #2 below. Decreasing the extent of invasive vegetation is an objective of the Coyote Creek Native Ecosystem Enhancement Tool (CCNEET) with opportunity areas based on invasive plant mapping by Valley Water and the City of San José, among other data sources. See Project D3 description for more details.

Maps showing the invasive and non-native vegetation stands controlled, locations and additional information are provided on the Safe, Clean Water webpage under Project D2: <https://www.valleywater.org/project-updates/d2-revitalize-stream-upland-and-wetland-habitat>.

Table D2.1 summarizes the acres of invasive and non-native plant species removed by the various D2 partners and efforts through FY21, including carryover of a Clean, Safe Creeks and Natural Flood Protection Program grant. Vegetation species controlled are shown on maps found on the Safe, Clean Water webpage under Project D2 (see above). The acres are based on the canopy cover of the target plant species removed.

Progress on KPI #2: (Completed in FY19)

In FY21, Valley Water’s partners continued to exceed the KPIs by removing invasive vegetation at approximately 7.7 new acres, bringing the total to date to 76.3 acres through community partnerships. Midpen cleared approximately 7.7 new acres and maintained control on 20.9 acres. The Conservancy continued to aggressively manage the

ongoing infestation of invasive cordgrass and its hybrids in South San Francisco Bay, using D2 funds to spot-treat 5.0 acres of emerging invasive *Spartina* across over 4,492 acres of tidal wetland in the bay within and adjacent to Santa Clara County.

- **City of San José** – The city’s contractors managed vegetation at the Coyote Creek site east of Oakland Road through December 2020. Careful planning was required due to the presence of camps and the inability to clean them during the COVID-19 pandemic. Work was focused on safe areas at the eastern third of the site, where highly dense stands of *Arundo donax* existed. Human refuse was removed. Giant reed was treated, cut, and removed. Then, a native seed mix of local genotypes of eight plant species was sown, and erosion control measures were installed. A total of approximately 21,600 square feet (0.5 acres) of *Arundo donax* was cut and removed and a total of 316 cubic yards of cut and chipped material was off-hauled and disposed. As mentioned, more work is necessary to completely remove giant reed and other non-native vegetation at the 3.3-acre site. The City of San José partnership has just over 40% of its funding remaining for 2021 and 2022, when its 5-year duration ends.
- **California State Coastal Conservancy** – The Conservancy’s invasive *Spartina* work was successfully implemented in FY21, even with the need for revised plans, adjusted dates, permit amendments due to COVID-19 restrictions, and wildfire smoke in the summer and fall of 2020. The Conservancy retreated 5.0 acres of invasive *Spartina* within a matrix tidal marsh and ecotone habitats in Valley Water’s service area, ensuring that this aggressive invader and ecosystem engineer does not regain a foothold in our sensitive bayland habitats, imperiling endangered species such as the Ridgway’s rail.
- **Midpeninsula Regional Open Space District (Midpen)** – In FY21, this partnership continued its focus on removing invasive and non-native vegetation at the Bear Creek Redwoods Open Space Preserve while expanding efforts to an additional preserve, protecting sensitive upper-watershed species and habitats, and continuing to conduct outreach on native habitat revitalization where possible during the COVID-19 pandemic. In FY21, Midpen removed invasive plants from Bear Creek Redwoods Preserve and expanded efforts into Picchetti Ranch Open Space Preserve. A 1.25-acre patch of *Clematis vitalba* was treated around a spring near Picchetti Ranch’s main parking lot, and a mature Eucalyptus tree and several saplings were removed near the parking lot for a treatment area of 0.04 acres. Follow-up will continue at this site for several years. Midpen treated 7.7 new acres and maintained treatment on 20.9 acres in FY21, bringing the total acreage of invasive plants removed by Midpen over the Safe Clean Water partnership period to 71.3 acres. (see also: [tinyurl.com/BearCkRedwoods](https://www.valleywater.org/project-updates/d2-revitalize-stream-upland-and-wetland-habitat) and the Midpen map on the D2 webpage <https://www.valleywater.org/project-updates/d2-revitalize-stream-upland-and-wetland-habitat>).
- **Valley Water** continues to work with partners in the Santa Clara County Wildlife Corridors Working Group on restoring habitat connections between the Santa Cruz and Diablo mountain ranges, especially crossing Highway 101, Monterey Road, and Pacheco Pass (State Route 152). Not only does this work benefit wildlife and their genetic integrity, but also reduces vehicle impacts protecting drivers. In FY21, Valley Water provided direct assistance to the working group on the following projects:
- Partnering with Caltrans to clear out numerous US-101 culverts in Coyote Valley with varying degrees of blockage (Valley Transportation Authority, Valley Water, Valley Habitat Agency, Peninsula Open Space Trust, Pathways for Wildlife, and County Parks). For this ongoing effort, Valley Water is providing technical expertise.

- Partnering with Caltrans on a pilot fence realignment project at a US-10 culvert in Coyote Valley at the Safe, Clean Water D2 restoration site (Valley Transportation Authority, Valley Water, Valley Habitat Agency, Peninsula Open Space Trust, and Pathways for Wildlife). For this ongoing effort, Valley Water is providing technical expertise and may provide skilled field staff to construct the fence realignment in FY22.
- Alma Bridge Road Newt Mortality Study (Midpeninsula Regional Open Space, Peninsula Open Space Trust, Valley Water, County Parks, County Roads and Airports, and H.T. Harvey and Associates). For this study, Valley Water provided technical expertise, biologists for field work, an encroachment permit to conduct the study on Valley Water property.

The working group is involved in several other ongoing projects as well with multiple partners, including the following (major partners in parentheses): Coyote Valley Road Ecology Study (Peninsula Open Space Trust, Valley Habitat Agency, and Pathways for Wildlife), Southern Santa Cruz Mountains Wildlife Connectivity Study (Peninsula Open Space Trust and Pathways for Wildlife), Badger and Burrowing Owl Habitat Study (Midpeninsula Regional Open Space, Pathways for Wildlife, and San Francisco Bay Bird Observatory), and the SR-152 Pacheco Creek Wildlife Connectivity and Corridor Enhancement Project (Valley Habitat Agency, Pathways for Wildlife, and H. T. Harvey and Associates).

Table D2.1 Invasive and non-native vegetation removed for D2 FY14–21

Agency / Partner	Location / River / Creek	FY21 Acres	Total Acres
Valley Water	Coyote Valley		0.5
	Lower Guadalupe River		2.5*
	Saratoga Creek		5.5
	Stevens Creek		2.2
	Subtotal		10.7*
California State Coastal Conservancy	South San Francisco Bay in Santa Clara County, Coyote Creek estuary, Faber and Laumeister marshes		5.0*
City of San José	Oakland Road, Coyote Creek	0.5**	0.0**
Midpeninsula Regional Open Space District	Bear Creek Redwoods and Picchetti Ranch Open Space Preserves	7.7	71.3
Total		8.2	87.0*

*2.0 and 4.0 acres completed under Clean, Safe Creeks and Natural Flood Protection grants

**Needs additional vegetation management

Progress on KPI #3: (Completed in FY15)

The two (2) plant palettes required to meet KPI #3 were created in FY15. In FY16, three (3) more palettes were developed, two (2) of which were in response to an IMC recommendation for plants that support birds and other wildlife. With the decline and concern for pollinators, Valley Water added a Santa Clara County native plant palette for bees and butterflies. All five (5) palettes are updated and available on the Project D2 webpage.

Financial Information

In FY21, 95% of the annual project budget was expended.

The COVID-19 pandemic reduced field work and in-person outreach activities, resulting in less spending on D2 than budgeted. While the pandemic did not suspend all work, field work was more difficult to accomplish, and habitats with camps were inaccessible for habitat management.

Financial Summary (\$ Thousands)									
D2. Revitalize Stream, Upland and Wetland Habitat									
Fiscal Year 2020-2021							15-year Program		
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	15-Yr Plan & FY13 Enc Bal & Cap Proj Resrvs	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total				
\$980	\$0	\$980	\$637	\$298	\$935	95%	\$18,190	\$15,190	31%

Opportunities and Challenges

Early Detection and Rapid Response (EDRR)

The California Invasive Plant Council (Cal-IPC) and Calflora are improving their statewide invasive plant detection and mapping systems. Valley Water, Midpen, and resource agencies are using Calflora more extensively. CalWeedMapper, WHIPPET and Calflora are now integrated and available to the public, including access via a cell phone application. Cal-IPC and Valley Water encourage land managers to submit their invasive plant management records once a year and early-detection observations immediately. Valley Water is maintaining a list of high-priority emerging invasive weeds not yet present in the county but present in neighboring counties or known to be particularly damaging in wildlands, as a preliminary step in developing a comprehensive EDRR program that would allow periodic surveying and treatment of new high-impact infestations. We continue to convene the Santa Clara Weed Management Area (SCWMA) working group meeting bimonthly, though virtually since March 2020, hosting conversations about emerging weed concerns, treatment options, regional eradication priorities, and collaboration opportunities among members from Santa Clara County Parks, California State Parks, County of Santa Clara Division of Agriculture, Caltrans, and other area partners. When the renewed Safe, Clean Water and Natural Flood Protection Program begins in FY22, work will intensify on formalizing and permitting a Valley Water EDRR program.

COVID-19 Pandemic Impacts

The County of Santa Clara Public Health and Governor of California shelter-in-place orders temporarily stopped D2 field work at the end of FY20 and slowed work through FY21. Encampments in areas where invasive vegetation control was desired could not be evacuated, thus access for work was not possible. Restrictive procedures developed for conducting field work to protect people from infection were less efficient with social distancing, common vehicles, equipment disinfection, and personal protective equipment is uncomfortable, especially in hot weather. Partners such as MidPen delayed field work and community volunteer events. However, creative problem solving allowed much work to continue with the implementation of new protocols and practices, with the end result that by the end of FY21, both California Coastal Conservancy and Midpen were able to fulfill most or all of their planned field work using updated COVID-19 protocols.

Education and Outreach

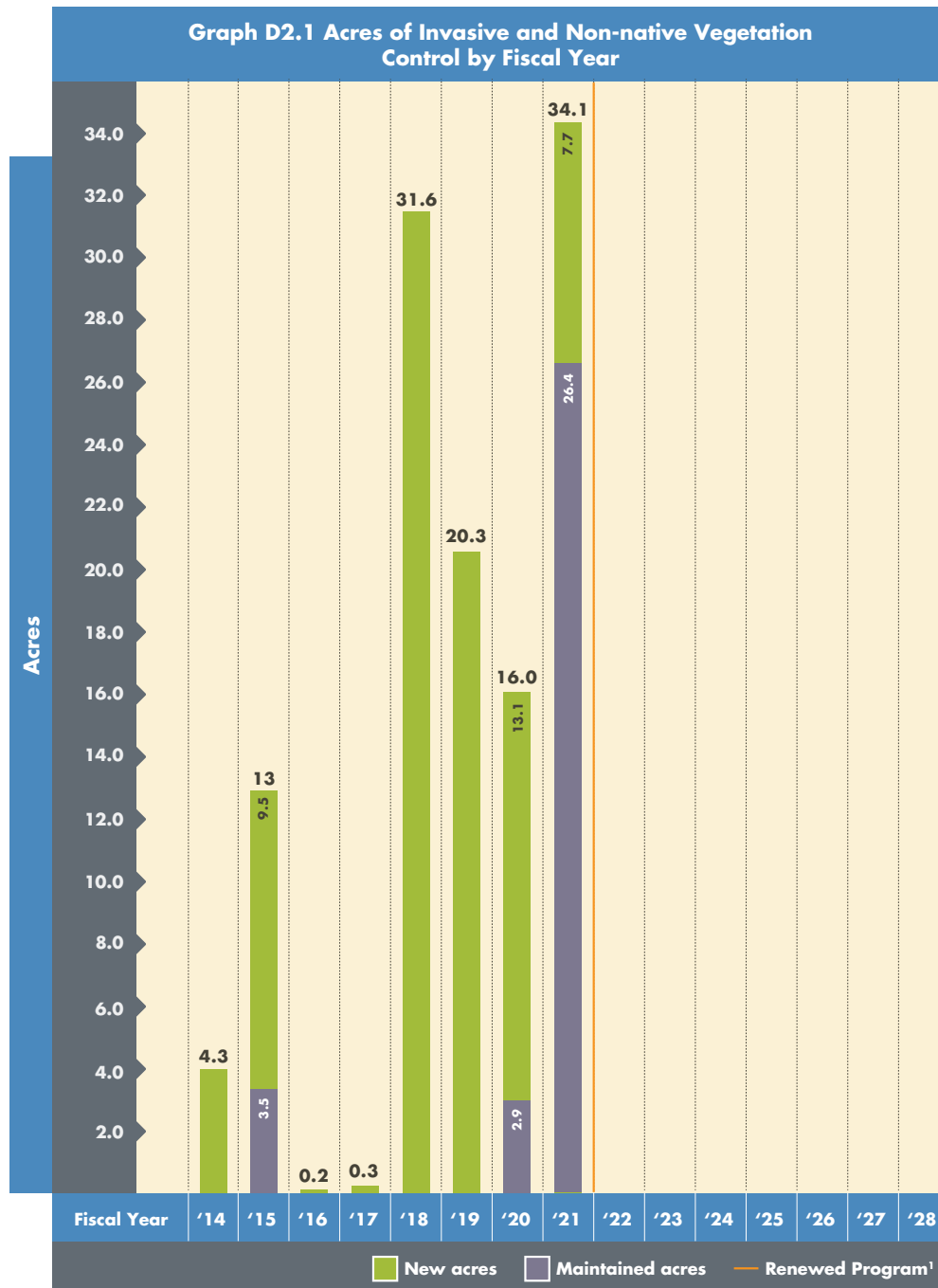
Valley Water participates in scientific conferences and works with resource agencies and partners, particularly Midpen, Coastal Conservancy, City of San José, SCWMA, Calflora and Cal-IPC. Valley Water's Invasive Plant Management Plan (IPMP) under SMP was approved by Federal, State and regional resource agencies, and is known by some local conservation organizations and members of the public. The D2 partnership with Midpen is important for increasing public awareness and education. Midpen normally organizes and participates in community and children-oriented events, docent-led activities, outdoor service projects, nature hikes and field tours, posts educational trail signs, operates a nature center and farm. Due to COVID-19, large group service-learning events and most volunteer events were canceled. However, in the later part of the fiscal year, smaller group events and events with trained and protected volunteers were able to begin again. Through their programs with Grassroots Ecology, the Preserve Partners program, and Advanced Resource Management Stewards Projects, MidPen was able to continue their volunteer field work with a total of 191 volunteers and 918 hours in FY21. More D2 outreach could be done with schools, conservation groups, municipal park and landscape agencies. Internet sites are increasingly valuable with more in-home, distance and virtual learning. Online resources and mobile applications continue to expand on the subjects of native plant and wildlife gardening, landscaping, and plants for pollinators. Several links on these and other related subjects are available on the D2 webpage.

Water Molds (*Phytophthora* spp.) and Drought

Water molds, such as sudden oak death, and other *Phytophthora* species continue to infest Santa Clara County and California. Other plant pathogens exist and there have been recently reported vegetation die-offs in the State and region. Valley Water, Midpen, and others continue to study, plan, and experiment with remediating sites infested by water molds (*Phytophthora* spp.). Infection by *Phytophthora* species can lead to root rot, which induces drought-like symptoms from reduced water uptake, and ultimately plant death may occur. Infected plants may not show any initial signs of the disease or stress. Water molds are a complex challenge to restoring native habitats, especially combined with other stressors, the aggressive nature and abundance of invasive plants, water supply with drought and climate change, disturbed site conditions and other plant pathogens. Improper irrigation techniques can exacerbate water mold impacts. Plant nurseries have implemented procedures to prevent *Phytophthora* infestations, planting techniques and best management practices to control the spread of plant pathogens. For more information, see the Working Group for *Phytophthoras* in Native Habitats (Calphytos). Collaborative efforts must continue to better understand and reduce the spread of water molds and all plant pathogens. The Project D2 webpage has several links about water molds (see <https://www.valleywater.org/project-updates/d2-revitalize-stream-upland-and-wetland-habitat>.)

Santa Clara County was in drought conditions through most of FY21, beginning abnormally dry in July, progressing to moderate drought in August through November, and extreme drought in May. The frequency and severity of droughts appear to be increasing, as they have been since 2000 in Santa Clara County. Drought conditions increase wildfires, as dramatically witnessed on both sides of the county in FY21, as well as the need for irrigation, pathogen and weed management at newly planted native habitat restoration sites. These challenges increase the cost and labor requirements for site maintenance. Drought also challenges the long-term sustainability of native habitats existing today, decreasing their resilience to the stresses of climate change, habitat loss, invasive species, fire and other factors.

Graph D2.1 summarizes the amount of invasive and non-native vegetation removed and maintained by Valley Water, and its D2 partners each fiscal year. Maintained acres are where initial invasive and non-native plant removals required follow-up controls to be effective.



¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

* The amount of acres in FY19 has been corrected.

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.

Project D7

Partnerships for the Conservation of Habitat Lands

Funding from this project helps the community acquire important habitat land to preserve local ecosystems. The project supports implementation of the Valley Habitat Plan, a multi-agency agreement that pools mitigation dollars to purchase large areas of habitat land for conservation.

Benefits

- Fulfills a portion of Valley Water’s acre allocation to the Valley Habitat Plan
- Protects, enhances and restores natural resources in Santa Clara County
- Contributes to the recovery of special status species
- Coordinates regional mitigation projects to create larger, less fragmented conservation lands that are more beneficial for wildlife and the environment
- Provides for endangered species and wetlands mitigation for future water supply and flood protection projects

Key Performance Indicator (15-year Program)

1. Provide up to \$8 million for the acquisition of property for the conservation of habitat lands.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ON TARGET
FY 20	COMPLETED

Status for FY21:

COMPLETED

A partnership agreement (www.valleywater.org/Agreement4208SCVHA) with the Santa Clara Valley Habitat Agency (VHA) was fully executed in January 2019, which established criteria for the allocation of partnership funding for the conservation of habitat lands. The VHA evaluated Valley Habitat Plan conservation objectives and identified a high-priority land acquisition that met the established



Coyote ceanothus plant

COMPLETED

Project D7 FY20 Highlights

- Provided \$8 million to fund the acquisition of property for the conservation of the endangered Coyote ceanothus.
- This project was completed in FY20.

criteria. Acquisition of the property preserved a population of the endangered Coyote ceanothus, providing necessary mitigation for impacts to this species resulting from the Anderson Dam Seismic Retrofit Project. In FY20 Valley Water provided \$8 million to VHA to acquire the property, thus completing the project. The property will be enrolled into the VHA reserve system and managed in perpetuity to maintain its conservation values and preserve this endangered plant species. A copy of the agreement with VHA can be found on the D7 webpage: <https://www.valleywater.org/project-updates/2012-d7-partnerships-conservation-habitat-lands>.

Financial Information

Financial Summary (\$ Thousands)									
D7. Partnership for the Conservation of Habitat Lands									
Fiscal Year 2020-2021						15-year Program			
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	15-Yr Plan & FY13 Enc Bal & Cap Proj Resrvs	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total				
\$0	\$0	\$0	\$1	\$0	\$1	0%	\$10,524	\$10,524	76%

2012 Safe, Clean Water Program replaced by the renewed Safe, Clean Water Program on July 1, 2021

In November 2020, county voters approved the renewal of the Safe, Clean Water and Natural Flood Protection Program approved in 2012. On July 1, 2021, the renewed Safe, Clean Water Program replaced the 2012 program in its entirety. While almost all the active projects were carried into the renewed Safe, Clean Water Program, some of the project KPIs and schedules were realigned. This project is included in the renewed Safe, Clean Water Program. For details on the renewed Safe, Clean Water Program, its project KPIs and schedules, visit www.valleywater.org/safe-clean-water-and-natural-flood-protection-program.



McKelvey Ballpark and Detention Basin

COMPLETED

Project FY21 Highlights

- Completed project construction with the completion of the Rancho San Antonio Park Flood Detention Facility.

Permanente Creek Flood Protection

This project will provide flood protection for thousands of homes and businesses in Mountain View and Los Altos, create recreational opportunities and enhance the environment. The project spans 10.6 miles of Permanente Creek, from San Francisco Bay's southwest shoreline through Mountain View to Foothill Expressway in Los Altos. The project uses a natural flood protection approach to prevent potential flooding damages in excess of \$48 million (1999 value). The project includes multiple elements: channel improvements; flood detention area and recreational improvements at City of Mountain View's McKelvey Park; and flood detention areas, recreational improvements and enhanced habitat at County of Santa Clara's Rancho San Antonio Park.

Benefits

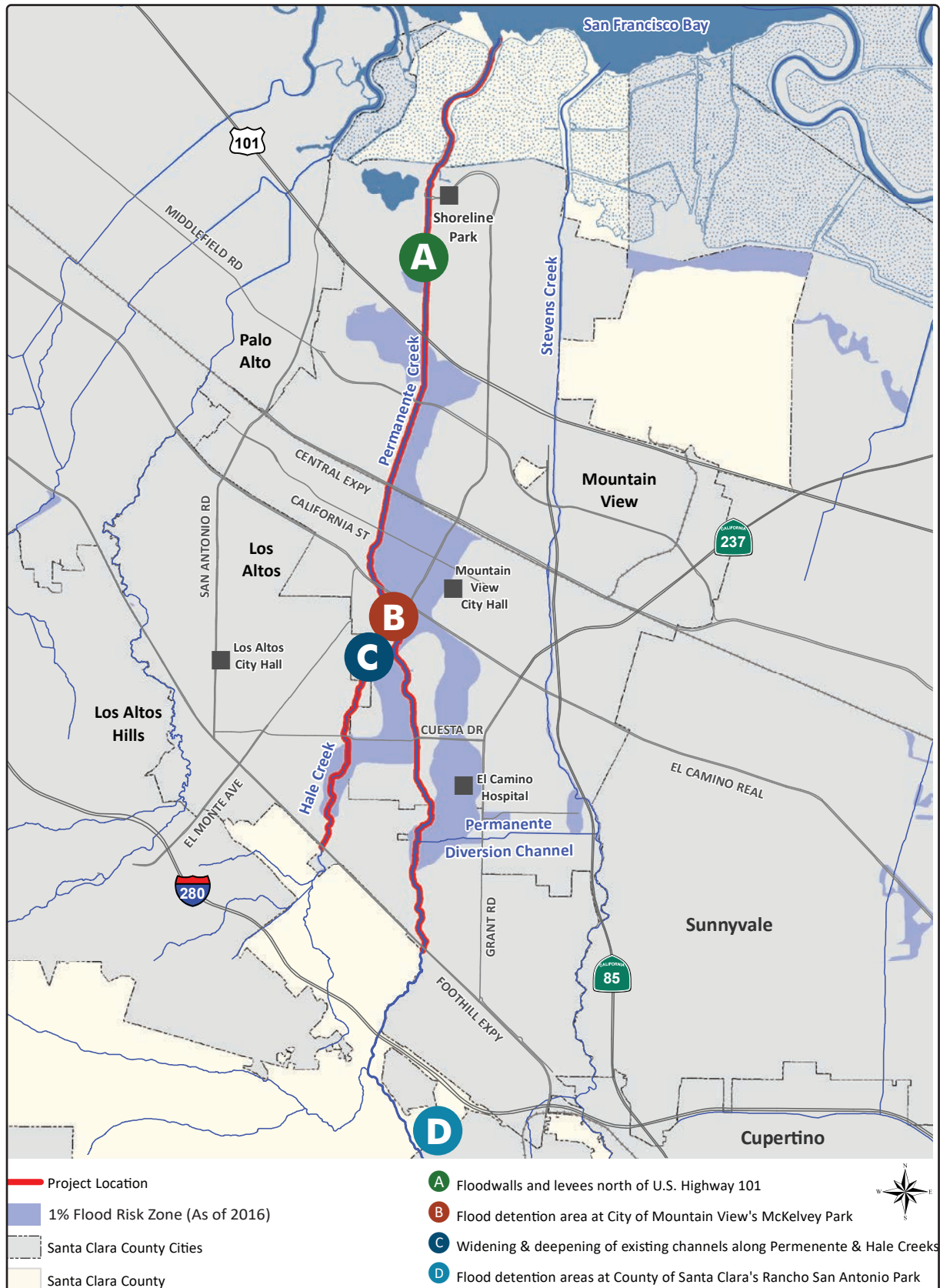
- Provides flood protection to a minimum of 1,664 parcels (1,378 homes, 160 businesses and 4 schools/institutions) downstream of El Camino Real from a 1% (or 100-year) flood
- Prevent flooding of Middlefield Road and Central Expressway
- Minimize the future cost for maintenance
- Provide opportunities for environmental enhancements and trail extension

Key Performance Indicator (5-year Implementation Plan)

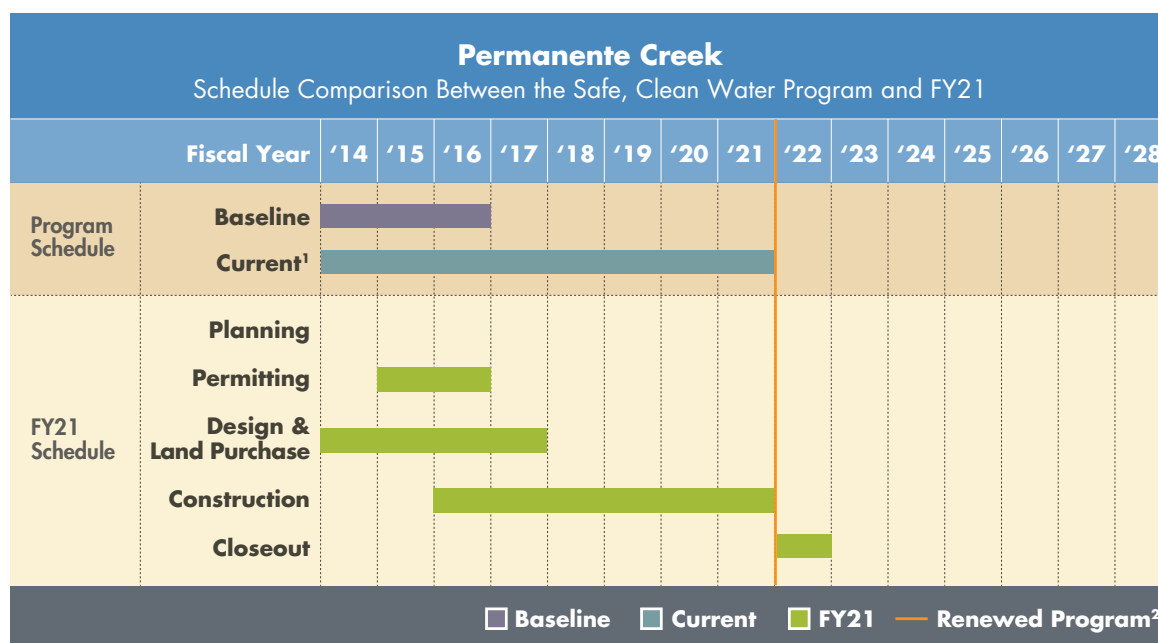
1. Provide flood protection to 1,664 parcels downstream of El Camino Real, including Middlefield Road and Central Expressway.

Geographic Area of Benefit: Mountain View and Los Altos

Project Location



Schedule



¹ Board approved a schedule adjustment through the change control process in FY16, FY19 & FY20.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program. The project schedule after this point is determined by activities in the renewed program.

Status History

Fiscal Year	Status
FY 14	ADJUSTED
FY 15	ADJUSTED
FY 16	ADJUSTED
FY 17	ON TARGET
FY 18	ON TARGET
FY 19	ADJUSTED
FY 20	ADJUSTED

Status for FY21:

COMPLETED

Progress on KPI #1:

- With the completion of the Rancho San Antonio Park Flood Detention Facility in April 2021, Valley Water has completed the KPI of providing flood protection downstream of El Camino Real, including Middlefield Road and Central Expressway. Discovery of a sensitive environmental resource and its recovery had required additional time to complete construction of this project. A final report on the environmental resource will be prepared to close out the USACE permit. Therefore, the project close out is anticipated in FY22.

- McKelvey Park Flood Detention Facility construction was completed in February 2020.
- Channel improvements construction was completed in 2018.

Financial Information

In FY21, 82% of the annual project budget was expended.

During the year, the project budget was increased due to unanticipated costs resulting from the discovery and recovery of a sensitive environmental resource, which delayed construction of the Rancho San Antonio Park Flood Detention Facility. On January 12, 2021, the Board approved a budget adjustment for \$3,886,677 to increase the construction contract contingency sum for the Rancho San Antonio Park Flood Detention Facility Project and included additional funds to cover unanticipated labor, services and supplies costs for the overall Permanente Creek Project. The contractor for the Rancho San Antonio Flood Detention Facility construction has submitted a number of claims for additional cost to complete the project. Valley Water staff continues to evaluate the information submitted and negotiate the additional cost with the contractor. Furthermore, the budget adjustment included funds to support a three-year plant establishment period at Rancho San Antonio, especially considering the current drought conditions.

Financial Summary (\$ Thousands)										
Permanente Creek Flood Protection										
Fiscal Year 2020–2021								15-year Program		
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	15-Yr Plan & FY13 Enc Bal & Cap Proj Resrvs	Adjusted 15-year Plan¹	% of Plan Spent
				Actual	Encumbrance	Total				
\$0	\$2,394	\$3,887	\$6,280	\$3,667	\$1,455	\$5,122	82%	\$31,509	\$81,706	105%

¹ The FY21 annual report is the final report for the 2012 Safe, Clean Water Program. The 15-Year Adjusted Plan for capital projects is based on the FY2021–25 Five-Year Capital Improvement Program (CIP) and its FY21 implementation. It does not reflect the funding allocations developed as part of the FY2022–26 Five-Year CIP, which marked the start of the renewed Safe, Clean Water that replaced the 2012 Program.



Completed Trestle Bridge along Upper Berryessa Creek.

COMPLETED

Project FY21 Highlights

- Valley Water reconciled the Montague Expressway bridge replacement cost balance with the partner agencies in December 2020.
- In February 2021, Valley Water and the San Francisco Bay Regional Water Quality Control Board settled on the off-site mitigation requirement.
- The USACE completed and submitted to Valley Water the Operations and Maintenance Manual (O&M) in March 2021.
- In FY22, the USACE is planning to complete construction of a few items that were identified as needing correction at the final inspection of the construction, after which Valley Water will finalize the project cost with the USACE.

Berryessa Creek Flood Protection

Calaveras Boulevard to Interstate 680

This project is a partnership with the U.S. Army Corps of Engineers (USACE) to plan, design and construct flood improvements to protect homes in Milpitas and San José, as well as Silicon Valley's commercial district, from a 1% (100-year) flood flow. The Bay Area Rapid Transit (BART) 10-mile extension project spans from Warm Springs Station in Fremont to the North San José Berryessa area. The new Milpitas Station is underground and is located in the Berryessa Creek floodplain. The Berryessa Creek project's completion is critical to the BART extension's planned operations.

Benefits

- Protects up to 1,662 businesses and homes in Milpitas and San José from a 1% flood, saving potential damages in excess of \$527 million
- Provides protection for more than 30 miles of streets including Highway 237 and Montague Expressway

Key Performance Indicators (5-year Implementation Plan)

- Local and federal funding flood damage reduction for 1,662 parcels, including 1,420 homes, 170 businesses, and 5 schools/institutions.
- Using local funds only, a reduced project would extend from the confluence with Lower Penitencia upstream to Montague Expressway, modifying 2 miles of channel and protecting approximately 100 parcels.

Geographic Area of Benefit: Milpitas and San José

Status History

Fiscal Year	Status
FY 14	ADJUSTED
FY 15	ON TARGET
FY 16	ADJUSTED
FY 17	ON TARGET
FY 18	COMPLETED
FY 19	COMPLETED
FY 20	COMPLETED

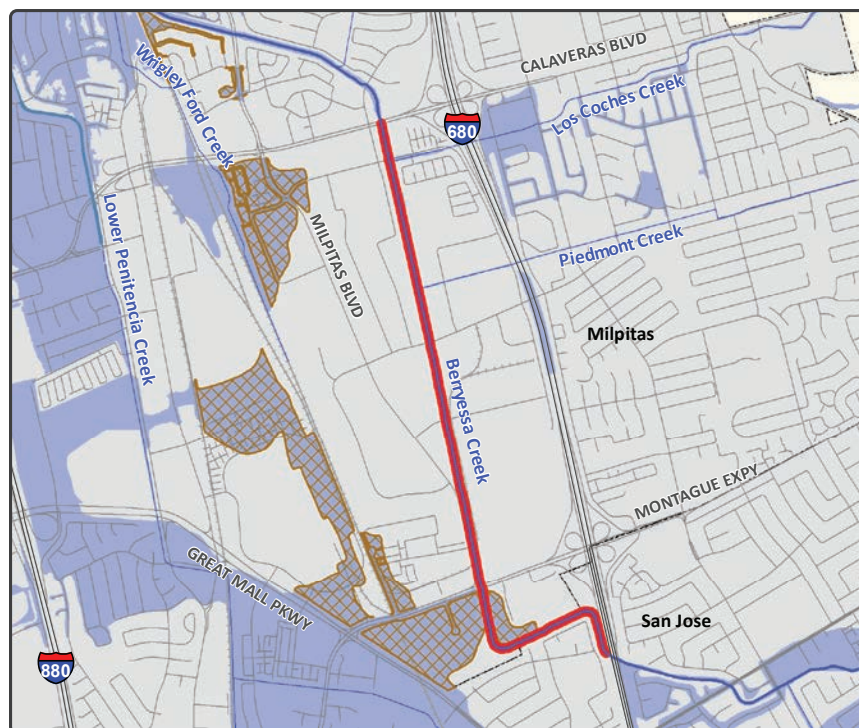
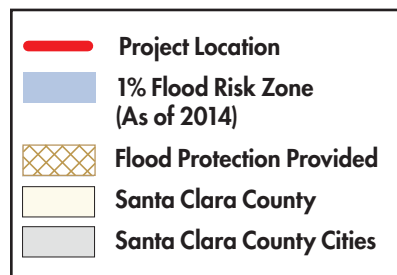
Status for FY21:

COMPLETED*

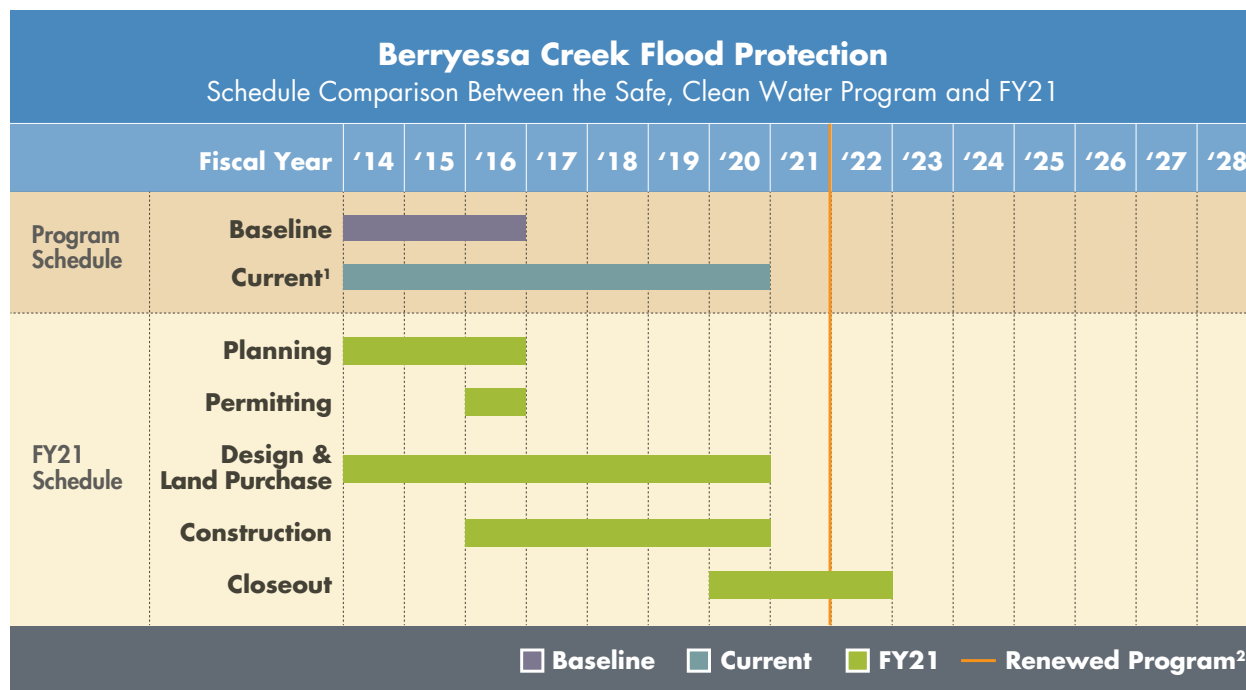
* In FY18, the project KPI was delivered and, therefore, project status is identified as completed. However, in FY21, the USACE had yet to complete final close out of Valley Water's share of design and construction costs.

Project Location

Legend



Schedule



¹ Board approved a schedule adjustment through the change control process in FY16.

² The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 program.

Progress on KPI #1 and #2 (combined):

This project was completed in FY18 with delivery of KPI #1, which included the channel improvements and the Montague Expressway bridge replacement as the two main elements of the project. In January 2019, the USACE installed the on-site mitigation planting. In FY22, the USACE plans to complete construction of a few items needing correction that were identified during final inspection of construction. In FY19, FY20, and FY21, Valley Water continued working with the San Francisco Bay Regional Water Quality Control Board (RWQCB) on permit requirements regarding off-site mitigation. In February 2021, Valley Water and the RWQCB settled on the off-site mitigation requirement.

The USACE completed and submitted to Valley Water the Operations and Maintenance Manual (O&M) in March 2021. Valley Water reconciled the Montague Expressway bridge replacement cost balance with the partner agencies in December 2020. However, finalizing the project cost with the USACE is not possible in FY21 since the USACE is planning to complete construction of the few items needing correction in FY22.

Financial Information

In FY21, 5% of the annual project budget was expended.

KPI #1 was delivered in FY18 and the mitigation planting was completed in FY19. The project's balance reconciliation and agreement obligations for the Montague Expressway bridge replacement was completed with the project partners in December 2020. The project partners are Santa Clara Valley Transportation Authority, Santa Clara County, and City of Milpitas. The budget reconciliation with the USACE for the channel improvements work is anticipated to be completed by the end of FY22.

Financial Summary (\$ Thousands) Berryessa Creek Flood Protection											
Fiscal Year 2020–2021									15-year Program		
Project No. and Name	Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	15-Yr Plan & FY13 Enc Bal & Cap Proj Resrvs	Adjusted 15-year Plan ¹	% of Plan Spent
					Actual	Encumbrance	Total				
26174041 Design and Construction	\$27	\$12,712	\$0	\$12,738	\$535	\$0	\$535	4%	\$2,492	\$17,194	95%
26174042 Real Estate Acquisitions	\$0	\$1,432	\$0	\$1,432	\$111	\$0	\$111	8%	\$29,554	\$29,554	57%
Total	\$27	\$14,144	\$0	\$14,170	\$647	\$0	\$647	5%	\$32,045	\$46,747	71%

¹ The FY21 annual report is the final report for the 2012 Safe, Clean Water Program. The 15-Year Adjusted Plan for capital projects is based on the FY2021–25 Five-Year Capital Improvement Program (CIP) and its FY21 implementation. It does not reflect the funding allocations developed as part of the FY2022–26 Five-Year CIP, which marked the start of the renewed Safe, Clean Water that replaced the 2012 Program.

Opportunities and Challenges

The original Clean, Safe Creeks Plan for flood protection along Berryessa Creek stretched from Lower Penitencia Creek to Old Piedmont Road, protecting 1,814 parcels. After USACE completed its benefit-to-cost assessment, it was determined that the federal criterion was not met for the reach that lies upstream of Interstate 680. The portion of the

project that was constructed under the Safe, Clean Water Program is the preferred project with local and federal funding (KPI #1), as depicted by the project map. The remainder of the original Clean, Safe Creeks Plan project elements are being constructed by Valley Water with local funding only through the Watershed Stream Stewardship Fund. The portion of Berryessa Creek between Lower Penitencia Creek and Calaveras Boulevard is being constructed in two (2) phases. Phase 1, which spans between Lower Penitencia Creek and just downstream of North Abel Street, was completed in December 2016. Phase 2, which spans between North Abel Street and Calaveras Boulevard, was completed in December 2020.



Project completion celebration.

COMPLETED

Project FY14 Highlights

- Provided flood damage reduction for 2,483 parcels that included: 2,270 homes, 90 businesses, and 7 schools/institutions.

Calabazas Creek Flood Protection

Miller Avenue to Wardell Road

The project's objective was to provide 1% (or 100-year) flood protection to 2,483 parcels in the Calabazas Creek watershed between Miller Avenue and Wardell Road. A long detention basin parallel to the creek was built to capture high storm flows, preventing the creek from overtopping its banks in a 1% flood.

Valley Water repaired 14 severely eroding banks, using as little "hardscape" as possible. The project incorporated environmental stewardship principles to reduce erosion with vegetation to enhance habitat for wildlife. Valley Water reduced the cost of the project by collaborating with the City of San José, which rebuilt a bicycle motocross (BMX) park at Calabazas Park.

On November 20, 2012, Valley Water and the cities of Saratoga, San José, and Cupertino received notification from the Federal Emergency Management Agency (FEMA) that the Letter of Map Revision (LOMR) submittal for the Calabazas Creek Flood Protection Project had been approved resulting in a revision of the Flood Insurance Rate Map for the requested area upstream of Miller Avenue. The project objectives have been met.

Benefits

- Provide flood protection on Calabazas Creek from Miller Avenue to Wardell Road
- Protect 2,483 parcels from 1% flooding
- Provide erosion protection measures to improve stream quality
- Identify environmental restoration and enhancement and recreational enhancements, where opportunities exist

Key Performance Indicator (Completed)

1. Flood damage reduction for 2,483 parcels that include: 2,270 homes, 90 businesses, and 7 schools/institutions.

Geographic Area of Benefit: Saratoga, San José and Cupertino

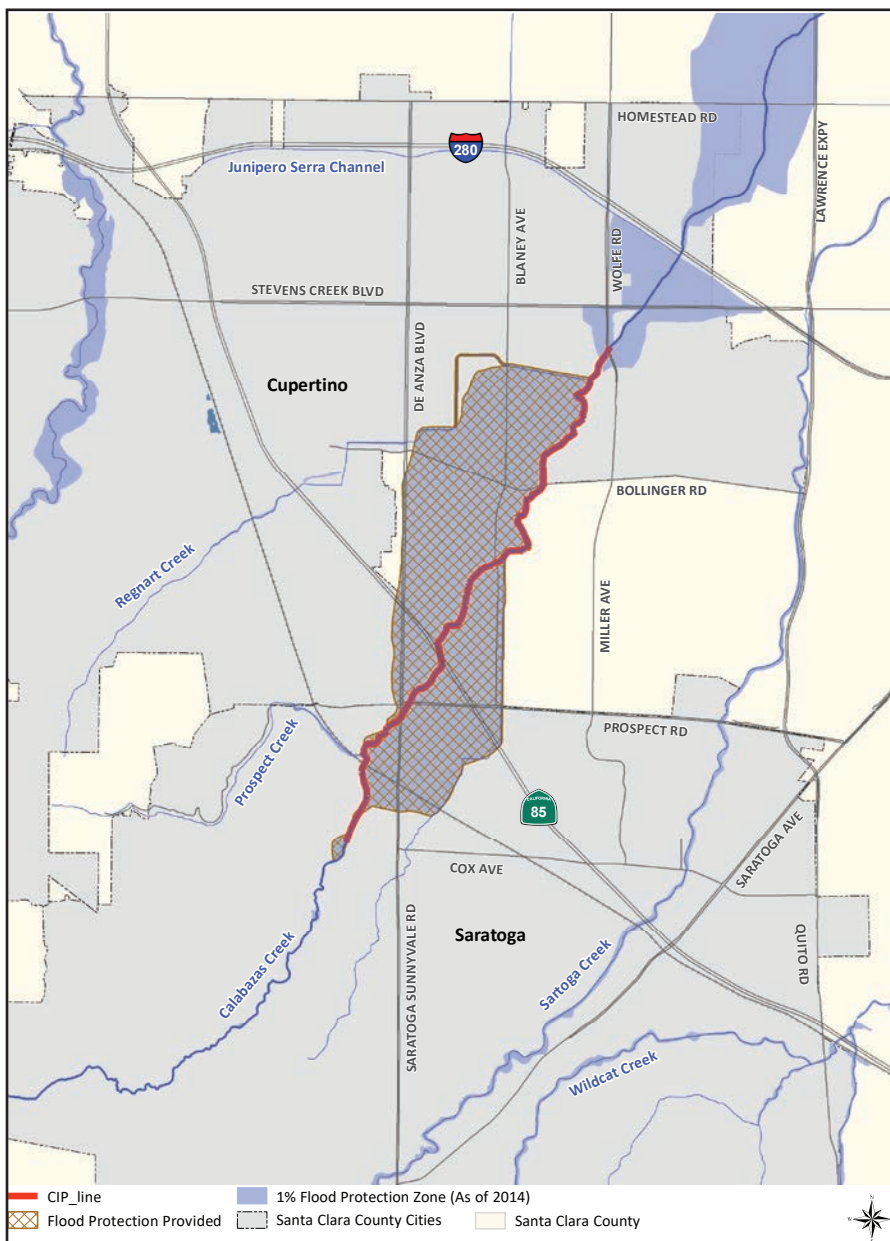
Project Status:

COMPLETED

Status History

Fiscal Year	Status
FY 14	COMPLETED
FY 15	COMPLETED
FY 16	COMPLETED
FY 17	COMPLETED
FY 18	COMPLETED
FY 19	COMPLETED
FY 20	COMPLETED

Project Location



Financial Information

The project is closed out and there was no budget or expenditure FY21.

Financial Summary (\$ Thousands)										
Calabazas Creek Flood Protection										
Fiscal Year 2020–2021								15-year Program		
Adopted Budget	Project Carryforward	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	15-Yr Plan & FY13 Enc Bal & Cap Proj Resrvs	Adjusted 15-year Plan	% of Plan Spent
				Actual	Encumbrance	Total				
\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%	\$1,223	\$1,223	5%



Penitencia Creek Trail

COMPLETED**Project FY21 Highlights**

- All 46 of the Clean, Safe Creeks grant projects have been completed and closed.

Clean, Safe Creeks Grants Projects

The Clean, Safe Creeks (CSC) Program awarded grants in 3 categories to encourage community involvement in protecting and enhancing the environment. Valley Water awarded grants for 45 projects under the Clean, Safe Creeks Program between FY10 and FY13. As reported in the FY13 Clean, Safe Creeks report, all KPIs have been met as per the executed agreements. However, some grant projects have yet to be completed.

Benefits

These grant agreements address:

- CSC Outcome 2.1: Pollution prevention
- CSC Outcome 3.2: Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Board
- CSC Outcome 4.1: There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate

Key Performance Indicators [5-year Implementation Plan (FY19-23)]

1. CSC 2.1: Reduce urban runoff pollutants in south county cities.
2. CSC 3.2: Creation of additional wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife. (Equivalent of 100 acres of tidal or riparian habitat created or restored).
3. CSC 4.1: Community partnership to identify and provide public access to 70 miles of open space or trails along creeks.

Geographic Area of Benefit: Countywide

Status History

Fiscal Year	Status
FY 14	ON TARGET
FY 15	ON TARGET
FY 16	ON TARGET
FY 17	ON TARGET
FY 18	ADJUSTED
FY 19	ADJUSTED
FY 20	COMPLETED

Status for FY21:

COMPLETED

Progress on KPI #1 - #3 (combined):

As of the end of FY21, all 46 of the Clean, Safe Creeks (CSC) grant projects were completed and closed.

Closed: Project completed – Final project report provided and invoice paid.

Completed: Project completed – Final project report and invoice pending.

In-Progress: Project on schedule for completion by end date.

Cancelled: Project cancelled by grantee.

Extended: Project schedule or scope is being amended.

CSC Grant Table

No.	Grantee Organization	Project Name	Grant Amount Total	Project Start Date	Project End Date	Status
1	City of Saratoga	Village Creek Trail Planning	\$39,000	7/1/2011	7/25/2015	Closed
2	Acterra	Adobe Creek Restoration: Redwood Grove to Shoup Park	\$46,365	6/28/2011	12/30/2015	Closed
3	City of Cupertino	Stevens Creek Corridor Park and Restoration Project, Phase 2	\$285,000	6/28/2011	12/30/2015	Closed
4	City of Cupertino	Stevens Creek Corridor Park and Restoration, Phase 2	\$565,000	6/28/2011	12/30/2015	Closed
5	City of San José	Penitencia Creek Trail, Reach 1	\$300,000	6/15/2010	12/30/2017	Closed
6	City of San José	Three Creeks Trail – Trestle and Interim Improvements	\$450,000	6/28/2011	03/20/2020	Closed
7	City of Santa Clara- Parks & Recreation Department	City of Santa Clara – Ulistac Natural Area Environmental Enhancement	\$106,976	6/28/2011	12/30/2015	Closed

CSC Grant Table

No.	Grantee Organization	Project Name	Grant Amount Total	Project Start Date	Project End Date	Status
8	City of Saratoga	Village Creek Trail, Phase 1	\$27,000	6/28/2011	12/30/2015	Cancelled
9	SCVWD with: CA Wildlife Fndn, S.F. Estuary Invasive Spartina	Invasive Spartina Monitoring & Control in South Bay Marshes & Creeks	\$75,000	6/28/2011	12/30/2015	Closed
10	Town of Los Altos Hills	Adobe Creek Restoration Project at Edith Park	\$83,960	9/27/2011	12/30/2015	Closed
11	Town of Los Gatos	Creekside Sports Park Pedestrian Bridge	\$300,000	6/28/2011	12/30/2015	Cancelled
12	Trout Unlimited	Little Arthur Creek Streamflow Stewardship Implementation Project	\$220,500	6/28/2011	12/30/2017	Closed
13	West Valley College	Tennis Court Wetland Enhancement Project	\$109,000	6/28/2011	12/30/2015	Closed
14	West Valley College	Vasona Creek Enhancement Project: Bridge #3 Replacement and Channel Stabilization	\$200,000	6/28/2011	12/30/2015	Closed
15	West Valley College	Vasona Creek Native Vegetation Enhancement Project	\$180,000	6/28/2011	12/30/2015	Closed
16	Acterra	San Francisquito Creek	\$80,000	10/19/2013	6/30/2016	Closed
17	City of Gilroy	Ronan Channel Trail – Interim Project, Phase 1	\$190,000	1/29/2014	12/31/2019	Closed
18	City of Los Altos	Adobe Creek Restoration at Redwood Grove – Phase 2	\$90,000	12/27/2013	6/30/2016	Closed
19	City of San José	Los Alamitos Creek – Coleman Road Under-Crossing	\$62,727	1/8/2014	12/31/2017	Closed
20	Downtown Streets Team	Coyote Creek Encampment Cleanup	\$197,848	1/8/2014	6/30/2016	Closed
21	Save the Bay	Palo Alto Baylands Tidal Marsh Transition Zone Restoration	\$75,000	12/27/2013	6/30/2016	Closed
22	Town of Los Altos Hills	O’Keefe Preserve Purissima Creek Habitat Restoration Project	\$98,425	10/19/2013	6/30/2016	Closed

Financial Information

In FY21, there was no budget.

Financial Summary (\$ Thousands)								
CSC Environmental Enhancement and Open Space Grant								
Fiscal Year 2020–2021							15-year Program	
Adopted Budget	Budget Adjustments	Adjusted Budget	Budgetary Actual			% of Budget Spent	Adjusted 15-year Plan	% of Plan Spent
			Actual	Encumbrance	Total			
\$0	\$0	\$0	\$0	\$0	\$0	0%	\$2,864	124%

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Appendices

Appendix A

Financial Information **A-1**

Appendix B

Inflation Assumptions **B-1**

Appendix C

Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3 **C-1**

Appendix D

Capital Projects Jurisdictional Complexities (Confidence Levels Regarding Outside Agencies) **D-1**

Appendix E

Cumulative Trash Removal Data for Projects B1-B4, B6 and B7 **E-1**

Appendix F

Schedule Comparison for Projects **F-1**

Appendix G

Projects by Organizational Structure **G-1**

Appendix H

Projects by Valley Water Mission Area **H-1**

Appendix I

Countywide Map of Projects **I-1**

Appendix J

Glossary **J-1**

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Appendix A

Financial Information

To maintain transparency with members of the public the Appendix A section is prepared annually to complement the Safe, Clean Water and Natural Flood Protection Annual Report. The Annual Report provides a wealth of information for individual program priorities and projects; the financial appendices summarize data for the entire program. The following schedules are included:

A-1.1 ANNUAL FINANCIAL SUMMARY highlights Safe, Clean Water projects by Priority for the year of the report (i.e. Fiscal Year 2020-2021). Information includes total program funding sources, annual adopted budget, any Board-approved budget adjustments and actual expenditures.

A-1.2 CUMULATIVE FINANCIAL SUMMARY complements Appendix A-1.1, comparing the original Safe, Clean Water 15-year plan with cumulative program funding sources and expenditure costs. Similar to Appendix A-1.1, information includes total program funding sources, the adjusted 15-year plan by Priority (including any Board-approved budget adjustments), and actual program expenditures to date.

A-2.1 CURRENTLY AUTHORIZED PROJECT RESERVES shows current project reserve balance and increases to project reserves, if any. This appendix is focused on the report year only (i.e. Fiscal Year 2020-2021).

A-3.1 OTHER REVENUE compares other revenue sources by project, for the 15-year Safe, Clean Water Program. Other revenue includes grants, state subventions, rental income and cost-share agreements or reimbursements. Program tax revenue is leveraged to bring in additional local, state and federal dollars, maximizing taxpayer dollars. Actuals to date and a forecast for remainder of the program are included. Other revenue sources are sorted by type and source.

A-3.2 TRANSFERS AND REFUNDING PROCEEDS identifies Safe, Clean Water transfers in, debt and refunding proceeds, and transfers out of the program. This appendix highlights activity to date and includes a forecast for the remaining 15-year program time frame. Where applicable, funds are identified by project.

Appendix A-1.1 Annual Financial Summary Fiscal Year 2020-2021 (\$ Thousands)

	Adopted Budget	Carry-forward	Budget Adjustment	Adjusted Budget	Budgetary Actual Total			% Received
Revenue								
Special Tax	45,537			45,537		46,095		101%
Interest	3,400			3,400		(1,310)		-39%
Other	12,178			12,178		8,843		73%
Subtotal	61,115			61,115		53,628		88%
Transfers and Refunding Proceeds	9,770			9,770		8,997		92%
Total Funding Sources	70,885			70,885		62,624		88%
Costs	Adopted Budget	Carry-forward	Budget Adjustment	Adjusted Budget	Budgetary Actual			% of Budget Spent
					Actual	Encumbrance	Total	
Priority A: Ensure a safe, reliable water supply								
A1 Main Avenue and Madrone Pipelines Restoration	0	225	0	225	13	0	13	6%
A2 Safe, Clean Water Partnerships and Grants	141	0	77	218	43	0	43	20%
A3 Pipeline Reliability Project	634	538	155	1,327	1,322	17	1,339	101%
Subtotal	774	763	232	1,769	1,378	17	1,395	79%
Priority B: Reduce toxins, hazards and contaminants in our waterways								
B1 Impaired Water Bodies improvements	1,776	0	41	1,817	952	382	1,334	73%
B2 Interagency Urban Runoff Program	856	0	0	856	703	0	703	82%
B3 Pollution Prevention Partnerships and Grants	356	0	435	791	229	235	463	59%
B4 Good Neighbor Program: Encampment Cleanup	922	0	0	922	301	0	301	33%
B5 Hazardous Materials Management and Response	32	0	0	32	24	0	24	76%
B6 Good Neighbor Program: Remove Graffiti and Litter	705	0	0	705	874	51	925	131%
B7 Support Volunteer Cleanup Efforts and Education	206	0	6	212	74	(0)	74	35%
Subtotal	4,851	0	482	5,334	3,156	668	3,825	72%
Priority C: Protect our water supply from earthquakes and natural disasters								
C1 Anderson Dam Seismic Retrofit	0	0	0	0	0	0	0	0%
C2 Emergency Response Upgrades	354	0	0	354	361	3	364	103%
Subtotal	354	0	0	354	361	3	364	103%
Priority D: Restore wildlife habitat and provide open space								
D1 Management of Revegetation Projects	900	0	0	900	1,239	3	1,243	138%
D2 Revitalize Riparian, Upland and Wetland Habitat	980	0	0	980	637	298	935	95%
D3 Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails	1,727	0	1,681	3,407	397	1,065	1,462	43%
D4 Fish Habitat and Passage Improvements	2,407	2,669	0	5,076	3,404	459	3,862	76%
D5 Ecological Data Collection and Analysis	520	0	0	520	548	49	596	115%
D6 Creek Restoration and Stabilization	170	2,719	0	2,889	644	0	644	22%
D7 Partnerships for the Conservation of Habitat Lands	0	0	0	0	1	0	1	0%
D8 South Bay Salt Ponds Restoration Partnership	0	24	0	24	25	0	25	105%
Subtotal	6,704	5,412	1,681	13,796	6,896	1,873	8,769	64%
Priority E: Provide flood protection to homes, business, schools, and highways								
E1.1 Vegetation Control for Capacity	2,529	0	0	2,529	2,162	0	2,162	86%
E1.2 Sediment Removal	846	0	0	846	908	0	908	107%
E1.3 Maintenance of Newly Improved Creeks	65	0	0	65	171	0	171	262%
E1.4 Vegetation Management for Access	582	0	0	582	622	(12)	610	105%
E2.1 Coordination with Local Municipalities on Flood Communication	236	0	0	236	56	84	140	59%
E2.2 Flood-Fighting Action Plans	0	0	0	0	0	0	0	0%
E3 Flood Risk Reduction Studies	1,184	0	0	1,184	1,118	38	1,157	98%
E4 Upper Penitencia Creek	1,382	3,546	2,516	7,444	866	0	866	12%
E5 San Francisquito Creek	370	2,411	0	2,781	922	0	922	33%
E6 Upper Llagas Creek	46,274	5,512	(47)	51,739	38,485	9,225	47,710	92%
E7 San Francisco Bay Shoreline Protection	5	772	530	1,308	1,146	0	1,146	88%
E8 Upper Guadalupe River	(0)	9,403	0	9,403	1,171	1,325	2,496	27%
Subtotal	53,474	21,645	2,999	78,117	47,628	10,660	58,288	75%
Permanente Creek Flood Protection	0	2,394	3,887	6,280	3,667	1,455	5,122	82%
Sunnyvale East and West Channels Flood Protection	2,033	16,085	0	18,118	811	0	811	4%
Berryessa Creek Flood Protection	27	14,144	0	14,170	647	0	647	5%
Coyote Creek Flood Protection	2,199	802	0	3,002	812	900	1,712	57%
CSC Environmental Enhancement and Open Space Grant	0	0	0	0	0	0	0	0%
Calabazas Creek Miller to Wardell	0	0	0	0	0	0	0	0%
Subtotal	4,259	33,424	3,887	41,570	5,936	2,355	8,292	20%
Subtotal of All Outcome Costs	70,417	61,244	9,280	140,941	65,355	15,577	80,932	57%
SCW Planning and Development	4,631	0	(12)	4,618	3,946	30	3,976	86%
Debt Proceeds	0	0	0	0	0	0	0	0%
Debt Service	1,750	0	0	1,750	722	157	879	50%
Management and Maintenance of Acquired Properties	244	0	0	244	234	0	234	96%
Total Program Cost	\$77,041	\$61,244	\$9,268	\$147,552	\$70,256	\$15,765	\$86,021	58%
Net Increase/(Decrease) to Reserves	(6,156)			(76,668)			(23,396)	

Appendix A-1.2 Cumulative Financial Summary Fiscal Year 2014-2021 (\$ Thousands)

		15-year Plan	FY13 Enc Bal & Cap Project Reserve	Board ¹ Approved Adjusted	Adjusted ² 15-year Plan	Program-To-Date Actual Total			
Revenue									
Special Tax		722,740		0	722,740			335,388	
Interest		11,676		0	11,676			18,165	
Other ³		79,714		106,576	186,290			72,117	
Total		814,130		106,576	920,706			425,669	
Beginning CSC Reserves		115,623	80,474		196,097			178,074	
Transfers and Refunding Proceeds ⁴		0		79,918	79,918			70,532	
Total Funding Sources		929,753	80,474	186,494	1,196,721			674,276	
		15-year Plan	FY13 Enc Bal & Cap Project Reserve	Board ¹ Approved Adjusted	Adjusted ² 15-year Plan	Program-To-Date Actual			% of Adj. Plan Spent
						Actual	Encumbrance	Total	
Priority A: Ensure a safe, reliable water supply									
A1	Main Avenue and Madrone Pipelines Restoration ⁵	8,303	0	9,267	17,570	17,272	0	17,272	98%
A2	Safe, Clean Water Partnerships and Grants	2,360	0	(610)	1,751	981	138	1,119	64%
A3	Pipeline Reliability Project	12,923	0	(830)	12,093	2,268	21	2,290	19%
Subtotal		23,586	0	7,827	31,414	20,521	159	20,680	66%
Priority B: Reduce toxins, hazards and contaminants in our waterways									
B1	Impaired Water Bodies improvements	26,982	445	0	27,427	9,438	925	10,362	38%
B2	Interagency Urban Runoff Program	12,641	0	0	12,641	5,432	0	5,432	43%
B3	Pollution Prevention Partnerships and Grants	7,595	0	(244)	7,350	2,996	815	3,810	52%
B4	Good Neighbor Program: Encampment Cleanup	5,209	105	10,365	15,679	7,723	0	7,723	49%
B5	Hazardous Materials Management and Response	618	0	0	618	205	0	206	33%
B6	Good Neighbor Program: Remove Graffiti and Litter	10,036	2	0	10,038	4,627	93	4,719	47%
B7	Support Volunteer Cleanup Efforts and Education	2,430	0	(104)	2,326	1,335	147	1,482	61%
Subtotal		65,511	552	10,017	76,080	31,756	1,979	33,735	44%
Priority C: Protect our water supply from earthquakes and natural disasters									
C1	Anderson Dam Seismic Retrofit	67,053	0	0	67,053	14,000	0	14,000	21%
C2	Emergency Response Upgrades	3,357	0	0	3,357	2,525	3	2,528	75%
Subtotal		70,410	0	0	70,410	16,525	3	16,528	23%
Priority D: Restore wildlife habitat and provide open space									
D1	Management of Revegetation Projects	22,259	0	0	22,259	6,570	21	6,591	30%
D2	Revitalize Stream, Upland and Wetland Habitat	18,190	0	(3,000)	15,190	3,810	889	4,699	31%
D3	Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails	24,092	0	(816)	23,276	5,808	3,224	9,032	39%
D4	Fish Habitat and Passage Improvements	29,176	358	20,631	50,165	14,331	899	14,231	30%
D5	Ecological Data Collection and Analysis	9,020	0	0	9,020	3,243	50	3,293	37%
D6	Creek Restoration and Stabilization	16,719	0	(4,197)	12,522	2,779	6	2,779	22%
D7	Partnerships for the Conservation of Habitat Lands	10,524	0	0	10,524	8,013	0	8,013	76%
D8	South Bay Salt Ponds Restoration Partnership	4,694	0	(296)	4,398	309	0	309	7%
Subtotal		134,673	358	12,322	147,353	44,863	5,084	48,947	34%
Priority E: Provide flood protection to homes, business, schools, and highways									
E1.1	Vegetation Control for Capacity	24,560	11	0	24,571	11,853	103	11,956	49%
E1.2	Sediment Removal	9,832	16	0	9,848	4,753	18	4,772	48%
E1.3	Maintenance of Newly Improved Creeks	19,051	0	0	19,051	305	0	305	2%
E1.4	Vegetation Management for Access	6,156	0	0	6,156	3,749	(12)	3,737	61%
E2.1	Coordination with Local Municipalities on Flood Communication	2,530	0	0	2,530	1,074	98	1,172	46%
E2.2	Flood-Fighting Action Plans	1,361	0	0	1,361	0	0	0	0%
E3	Flood Risk Reduction Studies	9,374	0	0	9,374	6,233	99	6,332	68%
E4	Upper Penitencia Creek	59,413	0	(34,414)	24,999	2,038	0	2,038	8%
E5	San Francisquito Creek	47,740	2,907	29,731	80,378	51,371	961	52,332	65%
E6	Upper Llagas Creek	84,098	6,784	172,189	263,071	122,138	18,802	140,940	54%
E7	San Francisco Bay Shoreline Protection	22,288	0	1,591	23,879	21,635	4	21,640	91%
E8	Upper Guadalupe River	69,112	39,382	(10,880)	97,614	34,620	5,065	39,685	41%
Subtotal		355,515	49,100	158,217	562,832	259,770	25,139	284,909	51%
Clean, Safe Creeks Capital Flood Protection Projects									
	Permanente Creek Flood Protection	22,111	9,398	50,197	81,706	83,371	2,582	85,953	105%
	Sunnyvale East and West Channels Flood Protection	82,249	4,463	(26,268)	60,444	10,136	36	10,173	17%
	Berryessa Creek Flood Protection	25,288	6,757	14,702	46,747	29,686	3,538	33,224	71%
	Coyote Creek Flood Protection	18,663	5,757	31,671	56,091	4,804	903	5,707	10%
	CSC Environmental Enhancement and Open Space Grant	0	2,864	0	2,864	3,554	0	3,554	124%
	Calabazas Creek Miller to Wardell	0	1,223	0	1,223	66	0	66	5%
Subtotal		148,311	30,462	70,302	249,075	131,617	7,060	138,677	56%
Subtotal of All Outcome Costs		798,007	80,472	258,685	1,137,164	505,052	39,424	544,476	48%
SCW Planning and Development		31,999	2	0	32,002	21,599	39	21,637	68%
Cost of Financing		43,119	-	-	43,119	0	0	0	0%
Debt Proceeds		-	-	-	-	(30,000)	0	(30,000)	0%
Debt Service		0	0	0	0	2,637	157	2,794	0%
Management and Maintenance of Acquired Properties		0	0	0	0	967	0	967	0%
Overhead Adjustment		-	-	-	0	283	0	283	0%
Market Valuation Reserve		-	-	-	-	-	-	0	0%
Currently Authorized Projects ⁶		-	-	-	-	-	-	76,774	0%
Operating and Capital Reserve ⁷		56,627	(0)	(72,191)	(15,563)	-	-	57,345	0%
Total Program Cost		\$929,752	\$80,474	\$186,494	\$1,196,721	\$500,538	\$39,620	\$674,276	56%

¹ Board approved adjustments include changes to Safe Clean Water capital projects based on the Board approved FY21 CIP.

² The FY21 annual report is the final report for the 2012 Safe, Clean Water Program. The 15-Year Adjusted Plan for capital projects is based on the FY2021-25 Five-Year Capital Improvement Program (CIP) and its FY21 implementation. It does not reflect the funding allocations developed as part of the FY2022-26 Five-Year CIP, which marked the start of the renewed Safe, Clean Water that replaced the 2012 Program.

³ The \$186.3M projected Other Revenue includes \$100M in unsecured grant funding for the following: (1) \$80M for Upper Llagas Creek and (2) \$20M for San Francisquito Creek.

⁴ Transfers & Refunding Proceeds of \$70.5M consists of: \$16.1M for proceeds from the 2012 and 2017 refundings and \$54.4M from Transfers In for various Safe, Clean Water projects.

⁵ Cost of the project is \$17.6M. The Water Utility fund will pay \$11.4M via transfer; net cost to Safe, Clean Water is \$6.2M.

⁶ Currently Authorized Project Reserves represents unspent capital project budget that will be carried forward and spent in a future year; refer to Appendix A-2.1 for more detail.

⁷ Operating & Capital Reserves are to ensure adequate working capital for cash flow needs and to provide a funding source for operating and capital needs that arise during the year. A negative balance indicates funding needs are projected to exceed funding sources.

Appendix A-2.1 FY20 Currently Authorized Project Reserves (\$ Thousands)

	Currently Authorized Project Reserves			
	Unspent Capital Project Budget	Unspent FY20-21 Capital Project Reserves	Total Reserves	
Priority A: Ensure a safe, reliable water supply				
A3 Pipeline Reliability Project	(12)	0	(12)	
Priority D: Restore wildlife habitat and provide open space				
D4 Fish Habitat and Passage Improvements				
Almaden Lake Creek/Lake Separation (KPI 1&2)	(41)	374	333	
Ogier Ponds Creek/Lake Separation (KPI 1)	674	512	1,186	
Fish Passage Improvements (KPI 3)	175	0	175	
D6 Creek Restoration and Stabilization				
Hale Creek Enhancement	2,244	0	2,244	
D8 South Bay Salt Ponds Restoration Partnership	(1)	1	0	
Priority E: Provide flood protection to homes, business, schools, and highways				
E4 Upper Penitencia Creek Flood Protection Project	6,578	0	6,578	
E5 San Francisquito Creek Flood Protection Project	1,884	0	1,884	
E6 Upper Llagas Creek Flood Protection Project	4,165	4,470	8,635	
E7 San Francisco Bay Shoreline Protection	162	0	162	
E8 Upper Guadalupe River Flood Protection Project	6,907	15,239	22,146	
Clean, Safe Creeks Capital Flood Protection Projects				
Permanente Creek Flood Protection	1,322	0	1,322	
Sunnyvale East and West Channels Flood Protection	17,307	0	17,307	
Berryessa Creek Flood Protection	13,524	0	13,524	
Coyote Creek Flood Protection	1,289	0	1,289	
Total Currently Authorized Project Reserves	\$56,177	\$20,596	\$76,774	

Appendix A: Other Revenue (\$ Thousands)

Table A-3.1 Other Revenue Comparison — Original Program Forecast, Actuals to Date (FY14-20) and Forecast (FY21-28)

Other Revenue Sources	Project Numbers	Original Forecast 2012	Preliminary Actuals Program-to-Date (FY14-21)	Preliminary Forecast (FY22-28)
Capital Reimbursements				
State Subventions				
E6 - Upper Llagas Creek Flood Protection	26174051s	\$30,000	\$25,112	\$13,703
E8 - Upper Guadalupe River Flood Protection	26154001s	\$33,044	\$16,108	\$313
CSC - Berryessa Creek Flood Protection	26174041s	\$12,841	\$0	\$4,384
Grants				
National Resources Conservation Service Grant E6 - Upper Llagas Creek Flood Protection	26174051s		0	\$80,000 ¹
Department of Water Resources Prop. 84 Grant E7 - San Francisco Bay Shoreline Protection	26444001s		\$12,339	(\$3,190)
Department of Water Resources Prop 1E Grant CSC - Berryessa Creek Flood Protection	26174041s		\$1,950	(\$288)
Other				
City of Morgan Hill E6 - Upper Llagas Creek Flood Protection	26174051s	\$780	\$2,009	(\$749)
Certificate of Participation E-8 Upper Guadalupe River Flood Protection	26154001s		\$1,400	\$0
City of Mountain View CSC - Permanente Creek Flood Protection	26244001s		\$1,102	\$0
Cost Share Agreements				
San Francisquito Creek Joint Powers Authority E5 - San Francisquito Creek Flood Protection	26284002s		\$9,218	\$20,000 ¹
State Operating Grants				
B2 - Inter-Agency Urban Runoff Program	26771011		\$156	
Local Operating Grants				
Guadalupe River Coordinated Mercury Monitoring Plan B1 - Impaired Water Bodies Improvement	26752043		\$133	
Rental Income				
Fund 26		\$3,049	\$2,512	
Other²				
Fund 26			\$79	
Sub-total		\$79,714	\$72,117	\$114,173
Grand Total (Actuals + Forecast)			\$186,290	

¹ Unsecured.

² Includes: Miscellaneous 1-time receipts and other Non-Operating Income, Claims & Judgements, and Cost Recovery for the program.

Appendix A: Transfers and Refunding Proceeds (\$ Thousands)

Table A-3.2 Transfers and Refunding Proceeds — Actuals Program-to-Date (FY14–21) vs. Forecast (FY22–28)

	Preliminary Actuals Program-to-Date (FY14–21)	Preliminary Forecast (FY22–28)
Debt Proceeds		
Commercial Paper	\$30,000	\$60,000
Refunding Proceeds		
2012 and 2017 Debt Refunding	\$16,131	\$0
Transfers In		
Fund 61 Project A1: Main Avenue and Madrone Pipelines Restoration	\$11,378	\$0
Fund 12		
Special Tax Administration Expense	\$11,900	\$0
Permanente Creek Flood Protection Project	\$1,197	\$0
Project B4: Good Neighbor Program: Encampment Cleanup (90% of Rental Income)	\$1,146	\$6,822
Project E6: Upper Llagas Creek Flood Protection	\$23,690	\$0
Project E4: Upper Penitencia Creek Flood Protection	\$4,516	\$2,516
Project B4: Good Neighbor Program: Encampment Cleanup	\$575	\$0
	<u>\$54,402</u>	<u>\$9,338</u>
Subtotal for Transfers and Refunding Proceeds	\$70,532	\$9,338
Refund of Expenditures		
For Guadalupe River Invasive Exotic Vegetation ¹	\$48	\$0
Combined Subtotal for Transfers & Refunding Proceeds	\$79,918	
Transfers Out		
Fund 61 Project C-1 Anderson Dam Seismic Retrofit ²	(\$14,000)	(\$52,053)
Subtotal	\$86,533	\$17,285
Combined Grand Total	\$103,818	

¹ Refunds received in 2014 were for CSC work; refund is offsetting an expenditure.

² Captured as a Priority C-1 expense.

Appendix B: Inflation Assumptions															
	Actual FY14	Actual FY15	Actual FY16	Actual FY17	Actual FY18	Actual FY19	Actual FY20	Actual FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
COLA Increase %	1.5%	2.0%	3.0%	3.0%	3.0%	4.0%	4.0%	4.0%	4.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Step Increase %	0.2%	0.3%	0.3%	0.5%	0.5%	0.7%	0.6%	0.7%	1.5%	1.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Benefits Rate	52.7%	50.5%	49.6%	53.3%	53.1%	51.9%	52.5%	51.6%	51.0%	55.3%	56.4%	57.6%	57.7%	58.3%	59.5%
Supplies & Svcs Inflation*	3.0%	2.3%	2.7%	3.5%	3.9%	3.2%	1.6%	3.2%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
Construction Cost Inflation**	4.9%	2.3%	3.5%	1.5%	2.5%	2.8%	5.4%	3.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
* Actual supplies and services inflation based on the San Francisco-Oakland-Hayward Consumer Price Index for all urban consumers as of June 2021.															
** Actual construction cost inflation based on the City Cost Index of Engineering News Record results for the San Francisco Bay Area as of June 2021.															

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Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
A2	2014	City of Palo Alto	Business Water Use Reports	The project will research water use among small to medium businesses in the hospitality and food service industries in the Palo Alto area. The project will develop and pilot Business Water Reports that use behavioral science, data analytics and targeting, and informative graphics to communicate water consumption to these businesses.	\$45,000	N/A	Cancelled	
A2	2014	City of Palo Alto	Real-Time Water Use Monitoring - Optimal Utility Management Through Visibility to Water Consumption	The project will provide customers with information and tools to monitor their water use in real-time. The project seeks to encourage active water management at the customer's facilities by making them aware of potential anomalies in water usage. The project will contract with a vendor to provide setup, configuration, analytics, real-time data service, weekly and monthly reports, real-time alerts, ongoing software support, updates and maintenance. The vendor will work with CPAU staff to calibrate the sensing devices for each meter whenever necessary. The vendor will facilitate training on use of the software monitoring platform and assist CPAU staff with the final data evaluation to document program results.	\$30,000	N/A	Cancelled	
A2	2014	Our City Forest	Innovative Nursery Irrigation	The project will design and install a prototype of an innovative water-conserving irrigation system in an educational garden.	\$30,000	N/A	Cancelled	
A2	2015	City of Morgan Hill	Experimental Turf Irrigation Technology Evaluation at Morgan Hill Aquatics Center	The project will test KISSS, a new lawn irrigation technology system, on two lawn areas near swimming pool on Morgan Hill facility. This pilot project will be designed specifically to test the technology with experimental and control areas of turf.	\$48,500	\$64,900	Closed December 2017	<ul style="list-style-type: none">No water savings experienced with the KISSS system. Using a different species of grass in a different soil type or climate may conclude with a more positive result.Conclusion is that the system is appropriate only at sites that are very closely managed by a small number of people and in a low traffic area.
A2	2015	Deal Closet LLC DBA Bay Area Fresh	Low Cost Hydroponics for Cost Effective Growth of Leafy Vegetables	The project will study the efficiency of using farm wastewater for commercial growth of leafy vegetable crops through a hydroponic system in Santa Clara County. The project will use a method that captures wastewater from commercial Nutrient Film Technique (NFT) hydroponic systems and recycle it into another hydroponic method that requires no pumps or additional nutrients beyond those initially applied (Kratky's method).	\$25,000	\$42,144	Closed July 18, 2017	<ul style="list-style-type: none">Conducted 4 experiments to find out if recycling hydroponic wastewater statistically impacts the growth of food crops.Results showed that there was no effect between using recycled wastewater and using fresh water, and it's unlikely additional experiments would produce a result as extreme or more extreme than the one from this sample.Plant sizes were in favor of using the Kratky system over the NFT system. The NFT plants were smaller and slower growing, but had tighter clustering of sizes.The results showed the Kratky method outdoors outperforms NFT in all cases tested except in the case of heavily reused wastewater.
A2	2015	San Jose Water Company	Advanced Metering Infrastructure (AMI) Residential Pilot Program	The project will evaluate advanced metering infrastructure (AMI) systems for single family residential customers in the Willow Glen area. The project will measure the conservation benefits of an AMI cellular network technical system. The project will transmit data via existing cell network and provide real time data and leak detection to customers and utility staff.	\$50,000	\$120,015	Closed June 30, 2018	<p>Piloted the technologies on 2 meter reading routes in Willow Glen with approximately 800 customers. Real-time water usage data available via two online portals, for both the utility and customers.</p> <p>Major findings of the study:</p> <ul style="list-style-type: none">Both network systems worked well with no discernable performance differences.High water-consuming households were more likely to sign up for the portal than low.In the Badger route, households that signed up for the portal used 24% more water in the year preceding the pilot. In the Sensus route, households that signed up for the portal used 8% more water in the year preceding the pilot.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
A2	2015	San Jose Water Company	Advanced Metering Residential Pilot Program	The project will evaluate the water savings potential by using the new class of advanced water meters such as the ultrasonic E-Series from Badger Meter Inc. (Badger) and Sensus Iperl for SFR customers in San Jose. The new meters complement the proposed automated meter reading infrastructure (AMI) systems that are described in a sperarate grant proposal. The target audience for this project will be two meter reading routes of residential customers located in the Willow Glen neighborhood.	\$50,000	\$107,844	Closed June 30, 2018	Water conservation results varied by pilot area: <ul style="list-style-type: none">Customers in the Badger pilot area who signed up for the portal used 7% less water in the year after the pilot as compared to the control group.Customers in the Badger pilot area who did not sign up for the portal used 2% less water in the year after the pilot as compared to the control group.This information is calculated based on the total water use for one year before and after the Advanced Metering installation.
A2	2015	Bevilacqua-Knight, Inc.	Employee Rewards for Water and Energy Savings Program	The project will partner with large corporate employers in Santa Clara County to educate employees on water efficiency and conservation in their homes through an employee rewards program.	\$50,000	\$64,324	Closed August 2, 2017	<ul style="list-style-type: none">Ran a 3-month campaign which engaged 431 employees from eBay, VMware and BKi (4% of eligible employees at eBay, 8% at VMware, and 76% at BKi).Participants logged 59 projects and 3,590 actions that cumulatively were estimated to save more than 1.3 million gallons of water a year.97% of VMware participants and 95% of eBay participants thought the challenge was a helpful way to learn about ways to save water.Almost 90% of participants from VMware and eBay believed it was very important that their company provided opportunities to live a sustainable lifestyle at home and work.
A2	2016	Purissima Hills Water District	Residential Advanced Metering Program	The project will test the efficacy of advanced metering infrastructure (AMI) in reducing water use amongst Purissima Hills Water District customers.	\$50,000	\$99,200	Closed July 2, 2018	<ul style="list-style-type: none">Installed 400 Beacon end points and registers and compared water usage by Beacon to the Orion AMI.Customers with Beacon meters saved approximately 46,623 cubic feet of water over 2 years (a 32% reduction in water usage) vs. customers with Orion meters.
A2	2016	Velotron LLC	Micro Streams Faucet Adapter	The project will install micrometer sensors in businesses in Santa Clara County to determine water useage and detect leaks to help save water.	\$30,000	\$40,000	Closed June 2018	The 0.1 Gallon Per Minute (GPM) micro-stream faucet adapter developed by Velotron was proven to be capable of providing satisfactory sensation and efficiency for common washing activities with significantly lower water consumption.
A2	2016	City of Mountain View	Advanced Metering Infrastructure Feasibility Study and Pilot	The project will evaluate available Advanced Metering Infrastructure (AMI) systems and their ability to optimize meter reading efficiency, increase customer service, and promote water-use efficiency within Mountain View.	\$50,000	\$175,000	Completed March 2019	<ul style="list-style-type: none">7 customer side leaks were detected out of 150 accounts included in the program.Average water usage for the pilot accounts were compared during and prior to the pilot implementation and identified that AMI water savings could be as high as 41%.Implementation of this pilot program identified a useful and underutilized feature that notifies customers when 24 hours of continuous water use was detected.Recommended that the City continue with implemenation of the pilot program and move to full deploement so AMI to increase operational efficiencies.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
A2	2017	Ecology Action	Every Drop Counts – Investigation of Water Savings from Indoor, Non-Potable Rainwater Harvesting Systems	The project will partner with residential, commercial, and institutional property owners to construct and monitor water use and water quality of rooftop rainwater harvesting systems for indoor, non-potable uses, such as toilet flushing and clothes washing.	\$49,940	\$97,765	Closed July 24, 2020	<ul style="list-style-type: none">Both residential rainwater harvesting systems reduced the demand for municipal-potable water used for indoor purposes by 15-16% annually.Annual water savings from the rainwater harvesting systems ranging between 7,866 to 9,768 gallons.The Los Altos Hills combined rainwater and greywater system reduced municipal water use by 17,952 gallons (or 24 Centum Cubic Feet (CCF)) during the one-year monitoring period.Over 20 years, the Los Altos Hills residence combined rainwater/ greywater reuse system is estimated to conserve 1.1 acre feet, and the San Jose residence rainwater harvesting system is expected to conserve 0.48 acre feet.The study found no significant difference in E.coli levels between the minimum code required 100-micron filtration and ultra-violet disinfection.
A2	2017	Fisher Nickel, Inc.	Dipper Well Replacement	The project will measure existing dipper well(s) water use and verify the savings potential through a replacement with best available technologies in a real-world food service setting.	\$37,500	\$50,000	Closed November 2, 2020	<ul style="list-style-type: none">Between the 5 different test locations, the dipper well replacement technologies demonstrated an average water savings of approximately 250 gallons per day.This research will be shared with commercial foodservice facilities.
A2	2018	Purissima Hills Water District	Residential Advanced Metering Program	The project will purchase and install 600 advanced metering devices to demonstrate that Advanced Metering Infrastructure (AMI) is an efficient tool to achieve sustained water savings in Purissima Hills Water District (PHWD) service area. This follow-on program will provide the funds to substantially complete the AMI program throughout the PHWD system.	\$50,000	\$163,969	In progress	
A2	2018	Trust for Conservation Innovation DBA Multiplier	Beyond Leak Detection	The project will conduct a pilot study to characterize the typical water savings from leak detection and water conservation behavior – that households experience following installation of a next-generation leak detection device. The study will evaluate two devices found to have design features that encourages water conservation.	\$50,000	\$66,667	In progress	
A2	2018	PS Creations LLC	PlateScape	The project will pilot test the water and energy savings of the PlateScape technology. This device is built to pre-sanitize plates more efficiently and is estimated to use 75% less water than current spray off methods.	\$30,192	\$60,392	In progress	
A2	2019	Purissima Hills Water District	Echologics EchoSohre DX Leak Project	The project will test the efficacy of Echologics EchoShore DX Leak detection technology in reducing water throughout the distribution system.	\$30,000	\$111,530	Cancelled	
A2 Mini-Grant	2021	Association of the Los Altos Historical Museum	Conservation in the Commons: Comparing Methods	The project will install water conservation technology and appropriate explanatory signage in two distinct zones of the Los Altos Civic Center’s 10 acres of public land. The project will educate the public about several approaches to water conservation and enourage the adoption of these technologies. The project includes workshops, hands-on demonstrations, and video/photograph social media outreach led by staff and volunteer efforts at the Los Altos History Museum.	\$4,997	\$24,684	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
A2 Mini-Grant	2021	Environmental Volunteers, Inc.	EV Sprout Up Explores Water Conservation	This project will develop a three-part video series on the water cycle, water conservation practices, environmental justice, and water conservation advocacy. The videos will provide learning opportunities for kindergarten to fourth grade students in Santa Clara County and have corresponding worksheets, activities, and experiments for students. The video series will be developed by EV's Sprout Up college student volunteers.	\$4,998	\$7,608	Agreement execution in progress	
A2 Mini-Grant	2021	Bay Area Older Adults	Water Conservation Workshop Series for the Older Adult Community	The project will create, promote, and present eight live water conservation workshops for 220 seniors age 55 and over. The project will convey the urgent need for water conservation inside and outside of the home. The video recording of the program will also be shared with 3,500 members and partners.	\$5,000	\$14,490	Agreement execution in progress	
A2 Mini-Grant	2021	Ani & Cat LLC	Water Conservation in Our Neighborhoods	In conjunction with the "This is Neighborhoods... San Jose" documentary series, the project will include fun and educational video shorts, GIFs, and motion graphics encouraging children and their families to look for ways to conserve water in their homes and yards. The project will encourage participation through games and achievement awards for successfully completing goals.	\$5,000	\$15,000	Agreement execution in progress	
A2 Mini-Grant	2021	Evergreen Islamic Center	EIC Drinking Water Stations	The project will install two water stations at the EIC facility, one inside and one outside the building. The water stations will serve more than 3,000 people a month on average and will have touchless dispensing feature. The project will eliminate the use of plastic water bottles and paper cups at EIC's daily events.	\$5,000	\$8,730	Agreement execution in progress	
A2 Mini-Grant	2021	Friends of Master Gardeners of Santa Clara County	Drink What You Grow! Teaching and Demonstration Garden Foundation Project	The project will conduct virtual and hands-on outreach education activities for residents of the county. The project will take place in a 950 sqft. garden and will provide information about edible landscaping in small spaces. The garden will also feature information about a variety of topics including sustainable gardening, waste reduction, and water and aquifer conservaton.	\$5,000	\$10,666.24	Agreement execution in progress	
A2 Mini-Grants	2021	Smart Yards Education Foundation	Rebuilding Together Landscape Conversion Event	The project will be hosted in partnership with Rebuilding Together and Razing the Bar, and will support current and former foster youth in San Jose who are interested in pursuing a career in ecological lawn conversion. Razing the Bar's foster home will have their front yard landscaped with native plants and water conservation features such as a permeable gravel patio. Smart Yards Education will provide hands-on training and water conservation lessons during the lawn conversion.	\$5,000	\$6,700	Completed March 2021	Close out in progress.
Total					\$741,127	\$1,351,628		

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B3	2014	County of Santa Clara (Partnership)	Green Business Program	The partnership will fund Green Business certifications to promote the awareness and increase the number of certifications and re-certifications.	\$240,000	\$240,000	Closed June 30, 2016	<p>The partnership funded the certification of a maximum of 75 businesses over a 3-year period. Partnership achievements:</p> <ul style="list-style-type: none">• 90 business certified/recertified in FY14.• 75 businesses certified/recertified in FY15.• 103 businesses certified/recertified in FY16.• Advertisement campaign in FY16 about reducing urban runoff from businesses. <p>Partnership results:</p> <ul style="list-style-type: none">• 584,357 milligrams of mercury reduced.• 740,875,831 pounds of solid waste diverted from the landfill.• 955,408,254 pounds/tons of Greenhouse Gas Emissions reduced.• 7,075 gallons of fuel saved.• 530,483 gallons of grease recycled.• 137,936,466 gallons of water saved.• 410,335,999 kWh energy saved.
B3	2014	California Product Stewardship Council	Secure Pharmaceutical Collection Bin Expansion	The project will prevent residential pharmaceutical waste from contaminating waterways by establishing 50 new, convenient and secure pharmaceutical collection bins in pharmacies, hospitals and police stations in Santa Clara County.	\$206,417	\$276,352	Closed October 6, 2017	<ul style="list-style-type: none">• 29 collection sites installed in local pharmacies and a few fire and police departments.• More than a ton-and-a-half (3,280 pounds) of prescription medication was collected from the bins.• Produced a video to educate county residents about the consequences of improper medicine disposal as well as the appropriate disposal method.
B3	2014	San Jose Parks Foundation	Trash Free Coyote Creek Cleanup and Surveillance Project	The project will create a trash free zone in the Coyote Creek riparian corridor between Tully Road and Hellyer Park (including the park) to reduce trash and pollution and their associated impacts on water quality and fishery beneficial uses.	\$26,783	\$80,760	Closed September 30, 2015	<ul style="list-style-type: none">• 14 cleanups.• More than 80,000 pounds trash removed.• 1,296 volunteers participated in a 3-hour event.• Monthly coordination meetings with Park Rangers, Environmental Services and Valley Water.
B3	2014	West Valley College	West Valley College Parking Lot 2 Stormwater Pollution Reduction Project	The project will implement the West Valley College Stormwater Pollution Reduction Plan through installation of stormwater improvements within Parking Lot 2. Stormwater planters will be constructed in the northern sections of the existing parking lot landscape islands and in the northeastern corner of the parking lot. The planters will treat runoff from the parking lot asphalt, concrete, and interior landscaping areas. After treatment, the stormwater will discharge to existing storm laterals off of Allendale Avenue.	\$200,000	\$1,052,054	In progress	
B3	2015	Silicon Valley Senior Services	Environmental Assist Pharmaceutical Pick-Up (EAPP) Program	The project will help decrease the amount of pharmaceuticals in our drinking water. EAPP's volunteers and local police/sheriff departments will assist seniors and the disabled for safe pick-up of pharmaceutical waste; and provide information and education to Santa Clara County residents about safe disposal.	\$90,525	N/A	Cancelled	
B3	2015	City of San José (Partnership)	San José Watershed Community Stewardship & Engagement Project	The project will provide community engagement, outreach and education to engage the homeless population, and provide trash cleanup in both Coyote Creek and Guadalupe River. The work will be conducted in socio-economically diverse neighborhoods along two different watersheds.	\$546,250	\$1,090,000	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B3	2016	South Bay Clean Creeks Coalition	South Bay Creek Cleanup Program	The project will recruit volunteers through trail and park tabling, and canvassing adjacent neighborhoods. These volunteers will participate in the TEAM 222 Clean Up program, which conducts clean ups every other month at multiple sites, including corporate events; and work on a citizen monitoring network.	\$60,000	\$80,000	Closed July 21, 2017	<ul style="list-style-type: none">• 14 cleanups.• 9.9 tons of trash collected.• 442 volunteers; 946 volunteer hours.• 9 community presentations.• Developed outreach materials, including art work and video about spawning Chinook Salmon.• Conducted social media outreach.• Won the Governor’s Environmental and Economic Leadership Award.
B3	2016	County of Santa Clara (Partnership)	Pollution Prevention and Zero Waste Project	The project will implement the Green Business Program, a third-party verified compliance-based program addressing surface water quality, storm water protection, pollution prevention and education. The program will identify pollution sources and provide ways to reduce use of toxic materials, and implement stormwater protection practices.	\$200,000	\$690,000	Closed July 22, 2020	<ul style="list-style-type: none">• 259 businesses certified as Green Businesses.• 3 ads were run in local community newspapers annually• Attended a total of 38 outreach events.• Over 1,600 brochures were distributed throughout the community.• Over 150 posts on various social media platforms• Conducted over 400 business site visits to walk applicants through the certification process.
B3	2016	Acterra Stewardship (transferred to Grassroots Ecology)	Greening Urban Watersheds	The project will provide designs for 4 rain barrels, 2 cisterns and 4 bio-retention/rain garden projects; coordinate 12 hands-on workshops to install rain barrels/gardens on city properties, and conduct 21 community creek cleanup events along 3 creeks; and remove 13,000 pounds of trash from 4 miles of riparian corridors.	\$93,617	\$189,261	Closed June 29, 2020	<ul style="list-style-type: none">• Created 12 plans for 6 rain barrel installations, 2 cistern installations, and 4 bioretentions/rain garden installations.• 12 rain barrel workshops attended by 165 participants• Installed 6 rain barrel systems and 4 cisterns at 6 sites in Palo Alto with a total capacity of 2,055 gallons.• Installed 4 rain gardens.• 22 creek cleanups removed 23,770 lbs of trash along 29 miles of creek corridor with the help of more than 1,000 volunteers for a total of 3,066 volunteer hours.• Published 12 project-related articles (1 local television news.• Installed 508 native plants and 12 signs.• Worked with City of Palo Alto staff and other facility managers to ensure continued proper maintenance of installations.
B3	2016	Santa Clara County Creeks Coalition	Trash Free North Coyote Creek Watershed Stewardship and Engagement Project	The project will conduct 12 volunteer trash cleanups and outreach activities, recruit more than 700 volunteers from business and community organizations and implement a docent-led walks program along 5 miles of north Coyote Creek from Tasman Drive to Jackson Street.	\$89,399	\$142,239	Closed March 15, 2018	<ul style="list-style-type: none">• Conducted 24 cleanup events and removed more than 30 tons of trash from the banks of Coyote Creek in north San José.• Recruited more than 800 volunteers to assist with trash removal and learn about pollution prevention and ecological restoration of the creek.• Delivered 13 presentations to community organizations and attended 12 community events to inform the public about Coyote Creek and opportunities to be stewards of the creek.• Implemented a docent training program and led 10 public nature walks along Coyote Creek.• Documented changes in creek encampments along Coyote Creek, between Watson Park and Tasman Drive.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B3	2016	San Francisco Bay Wildlife Society	Don Edwards San Francisco Bay NWR Clean-Up 2016	The project will collaborate with the San José Conservation Center and volunteers from Don Edwards San Francisco Bay National Wildlife Refuge to remove trash from south San Francisco Bay tidal marshlands, mudflats and adjacent uplands in Santa Clara County. The project will integrate Litterati™ a social media technology, to create a litter database for long-term trash reduction and provide an interpretive display for education and outreach.	\$35,391	\$73,390	Closed March 22, 2018	<ul style="list-style-type: none">Removed 6,280.6 pounds (3.14 tons) of trash during 45 days of Litterati cleanups accomplished by 438 people.4,403 people were reached through 5 outreach events in Santa Clara County.Documented 13,002 photos with the Litterati app of every piece of trash collected and disposed of properly.Cleaned 79.95 linear miles of refuge land and cleaned 100% of each first priority location, including Pond A-8, Pond A-17, Pond A-5/A-7, and Pond A-16.Removed 509 bags of trash and cleaned 50% of a second priority area at Pond A-15.Provided 14 presentations about trash prevention and Litterati to community organizations and volunteer groups.
B3	2016	Regents of the University of California	Effective Storage and Composting of Livestock Manures	The project will establish demonstration sites at 4 locations at McClellan Ranch, Emma Prusch and Martial Cottle Parks and the South County Airport. The project will outreach to livestock owners for proper manure storage and safe composting. The work will minimize pathogens from manures from entering stormwater and creeks by demonstrating effective and safe composting.	\$60,000	\$213,845	Completed December 2019	Close out in progress.
B3	2016	West Valley College	West Valley College North Walk Storm Water Quality Improvements	The project will treat runoff from six acres in the North Walk and Parking Lot 6 sub-watersheds. The project includes the installation of storm water planters, rain gardens and bio-swales to promote infiltration and provide water quality treatment.	\$71,068	\$648,301	In progress	
B3	2018	City of San José (Partnership)	Pollution Prevention and Creeks Cleanup	The partnership will provide support to Downtown Streets Team, a local non-profit that engages the homeless community through outreach and education, to actively work to maintain litter free waterways.	\$195,000	\$495,000	Closed February 9, 2021	<ul style="list-style-type: none">Posted 12 social media posts about project activities.Presented to 4 community organizations.Educated 425 members of the public about pollution prevention.Attended 8 community events with approximately 770 attendees.Collected 13,868 yards of trash throughout Coyote, Guadalupe, and Los Gatos creeks.
B3	2018	City of Milpitas	Contaminant Overflow and Backflow Prevention Project	The project will install additional SmartCovers to equip the City with high-tech devices that will alarm City employees of any possible contaminants in waterways. The Contaminant Overflow and Backflow Prevention Program has, and will continue to, enrich the community with knowledge of the City waterways and City techniques to prevent contaminated overflow, or backflow, into City and nearby creeks.	\$30,745	\$85,383	Closed July 24, 2020	<p>Purchased and installed 30 SmartCover devices at strategic manhole locations adjacent to water bodies and creeks to prevent contaminants from entering nearby waterways in the event of a sanitary sewer overflow.</p> <p>Project resulted in:</p> <ul style="list-style-type: none">Proactive prevention and reduction of sanitary sewer overflows.Improved sanitary sewer overflow response time.Increased protection to the health and safety of the public and environment.
B3	2018	Loma Prieta Resource Conservation District	Reducing Pollutant Source Loads	The project will partner with the University of California Cooperative Extension (UCCE) and the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) to provide four-prong outreach and assistance to limited resource, socially disadvantaged Chinese-speaking farmers in Santa Clara County.	\$70,636	\$121,436	In progress	
B3	2018	Downtown Streets Team	El Camino Clean Up	The project will prevent litter from entering the water ways along El Camino Real, between Mary Ave and Wolfe Road in Sunnyvale. Volunteers will daily pick up litter daily in the gutters, pass out pocket ashtrays to smokers, and provide literature and education to the community.	\$122,280	\$190,828	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B3	2018	Downtown Streets Team	Penitencia Creeks Team	The project will improve water quality through reducing homelessness and the associated impacts of trash and debris on Penitencia Creek. The project will recruit and organize program participants living within the project area along the Penitencia Creek, to clean the Penitencia Creek riparian corridor of debris and trash. The project will also conduct peer-to-peer outreach to assist other individuals outside the program to transition to housing, to communicate water quality concerns, and to encourage environmentally responsible behavior in the homeless population.	\$122,280	\$196,816	In progress	
B3	2018	Santa Clara Valley Transportation Authority (VTA)	Keep Santa Clara Valley Beautiful	The project will develop a countywide program to reduce litter on Santa Clara County's freeways and prevent contaminants from entering nearby underground watersheds and creeks. The project will include the following key elements: <ul style="list-style-type: none">Partner with a national subject matter expert in the community environment preservation field, who will deliver a customized litter prevention program, develop a marketing campaign, and provide technical training for local staff and community leaders.Procure and install litter enforcement signs at "hot spot" locations.Organize two to three local volunteer litter clean-up events and one litter prevention summit.	\$78,285	\$104,380	In progress	
B3	2018	Grassroots Ecology	Westwind Barn Stormwater Infiltration Project	The project will bring together volunteers and community partners to increase stormwater infiltration at Westwind Community Barn in the upper Adobe Creek watershed at the site of a newly decommissioned horse paddock area. This site presents an opportunity to enhance stormwater infiltration and water pollution filtration above Moody Creek. The project will install a series of berms and contour plantings to slow and treat surface runoff as it approaches the creek, and densely plant low-lying areas to further slow and sink runoff. Volunteers will help create berms using nuisance vegetation removed from the project site, install strategically placed native plants along the contour and in topographic low points, and monitor progress by collecting data on water quality above and below the project site.	\$70,606	\$118,219	In progress	
B3	2019	City of San José (Partnership)	Tully Road Ballfields Creek Cleanup Project	The project will engage in a creek cleanup to address litter, trash and illegal dumping throughout San Jose Council District 7 to reduce trash-related blight. The Project will focus on removing debris that pollutes Coyote Creek by coordinating cleanups, abating homeless encampments, investigating the installation of barriers to reduce re-encampment and engaging the community to address litter and trash.	\$200,000	\$331,900	In progress	
B3	2020	Grassroots Ecology	Community Based Stewardship of Green Stormwater Infrastructure	The project will partner with the City of Palo Alto to develop a community-based stewardship effort for existing bioretention areas in the City's Southgate neighborhood. The objective of the program is to educate the community about green stormwater infrastructure (GSI) and to involve community members in the stewardship of bioretention areas in their neighborhood. The project will include neighborhood work parties to refurbish and replant existing bioretention areas with locally native plants; and a community adoption program to help monitor and clean bioretention areas; as well as hands-on training for San Jose Conservation Corps members in green stormwater infrastructure care and maintenance.	\$89,332	\$178,849	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B3	2020	West Valley Clean Water Program Authority	School Site Stormwater Pollution Prevention Plans	The project will educate middle and high school students about contaminants entering our water, and then empower them to make meaningful changes to improve water quality. This is accomplished through the structure of preparing a School Site Stormwater Pollution Prevention Plan (SWPPP). Using the school site as their focus, students will design and implement activities they have identified, using water quality goals, to reduce pollutants from flowing off their campus.	\$35,088	\$78,230	Agreement execution in progress	
B3	2020	County of Santa Clara	Green Business Program	The project is a compliance-based certification program operated in all 15 cities within Santa Clara County. Businesses seeking certification must meet the minimum requirements in order to achieve certification. The project requires businesses to reduce environmental impacts in areas of energy, water, solid waste, transportation and take initiatives on pollution prevention best practices. In addition to these requirements, businesses must remain in compliance with all federal and state regulations relating to hazardous waste, hazardous materials, wastewater, storm water, food permits, pool & spa safety, fire code, and all other permits as applicable to the business. The Green Business Program partners with city and county compliance inspection agencies to educate businesses as well as utility partners and haulers to help businesses look for rebate incentives to become more sustainable.	\$120,000	\$530,460	Agreement execution in progress	
B3	2020	Children’s Discovery Museum of San Jose	Exploration Portal: Preventing Pollution	The project will implement an Exploration Portal, a 4,000 square foot addition to the half-acre outdoor environmental education area at the Children’s Discovery Museum of San Jose, known as Bill’s Backyard: Bridge to Nature. This project provides the opportunity to design and build a public space that prevents toxic runoff to the Guadalupe River while also offering educational experiences and facilitated programs. The project will showcase natural and human-made methods to prevent contaminants and other pollution from running off the nearby streets and trails into the Guadalupe River.	\$144,500	\$3,155,938	In progress	
B3	2020	Guadalupe River Park Conservancy	Reducing the Impacts of Litter Along the Guadalupe River Trail	The project will provide stewardship along the four-mile segment of the Guadalupe River Trail between Virginia Street and Skyport Drive in downtown San Jose (Trail). The project will remove litter and debris along the Trail; provide rapid response to major pollutant threats; increase homeless outreach; create a more welcoming Trail environment; and provide education about the impacts of pollution reduction to the community.	\$90,049	\$225,100	In progress	
B3	2021	City of San José (Partnership)	Cash for Trash	The partnership will engage the homeless community to assist with creek cleanups by expanding the City’s current Cash for Trash Program to include encampment residents who reside along Valley Water creeks and waterways.	\$180,000	\$310,500	In progress	
Total					\$3,468,251	\$10,899,241		

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B7	2018	South Bay Clean Creeks Coalition	Los Gatos Creek TEAM 222	The project will recruit volunteers for stream cleanups addressing the on-going trash loads in the riparian corridors and creek created by homeless encampments and storm run-off. The TEAM 222 Program will conduct multiple events every other month on the second Saturday along stretches of Los Gatos Creek.	\$15,000	\$19,995	Closed December 8, 2020	<ul style="list-style-type: none">• Participated in 2 volunteer recruitment events.• Hosted 5 cleanup events with 276 volunteers.• 583 hours expended by volunteers at cleanups sites.• Collected 9.1 tons of trash.• Shared 4 social media posts and updated the website about the cleanup program.• Created a recycled art project.
B7	2014	Girl Scouts of Northern America	Girl Scouts Go Green in Santa Clara County	The project will implement an environmental outreach and education program focusing on “providing education and outreach for reducing pharmaceutical waste and other pollutants in our waterways (showing a benefit through awareness and engagement).”	\$44,116	\$56,205	Closed July 31, 2016	<p>The 10-week afterschool environmental stewardship program was held at 18 partner sites in Santa Clara County in which:</p> <ul style="list-style-type: none">• 487 girls participated.• At least 4-8 hours were spent on hands-on environmental learning.• At least 4-6 hours were spent on environmentally-focused field trip.• At each partner site girls engaged in 2 community action projects.• More than 7,500 community members were reached through each of the girl-led community action projects. <p>By the end of the program:</p> <ul style="list-style-type: none">• 82% of participating girls were able to name 2 or more actions they can personally take to prevent waste or pollutants from entering waterways, as measured by the post-program surveys.• 97% of participants were able to explain why mercury and pharmaceuticals are harmful when they enter our waterways, as measured by instructor observation.• 80% of participating girls reported that they could have a job that helps the environment, as measured by post-program surveys.• 91% of girls showed increased interest level in learning about environmental science, as measured by post-program surveys.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B7	2014	Clean Water Fund	ReThink Disposable: Preventing Riparian Trash at the Source	This project is the continuation and expansion of a public-private partnership project involving Clean Water Fund (the project lead), and local government. The project (originally Taking out the Trash, but renamed ReThink Disposable), is currently a partnership with the cities of Oakland, San José, South San Francisco, San Francisco, the County of San Mateo, and Stop Waste of Alameda County.	\$82,133	\$122,626	Closed July 6, 2017	<ul style="list-style-type: none">• Successful coordination with the cities of San Jose, Cupertino and Sunnyvale.• 91 food businesses and 8 institutions in the County received outreach and promotional materials to participate in the free ReThink Disposable audit and technical assistance.• 8 presentations were delivered to various business associations and corporations in the county to promote the program to the target food business.• Coordinated with the Green Business Program on outreach and adoption of waste prevention best management practices for food businesses, not just diversion by way of compostable and recycling single use food service ware.• 12 food businesses and 1 institution successfully completed the ReThink Disposable audit yielded the following annual impact numbers:<ul style="list-style-type: none">• 1,424,038 pieces of disposable foodware items eliminated.• 24,265 pounds of waste prevented.• \$5,963 average cost savings after payback period was met.• Hosted 4 creek cleanups with 127 volunteers removing almost 4,000 pieces of trash and debris (mainly plastics) from “hot spots” on Calabazas and Coyote Creeks.• Hosted 1 ReThink Disposable Free Community Workshop and Training with almost 60 attendees from watershed and creek groups, teachers, and local government staff.• Developed a new public education tabling pop-up display including researching, developing and designing 2 new life cycle impacts info-graphics on Disposable Cups and Straws.• Engaged almost 30,000 residents in the County with the new ReThink Disposable Source Reduction Pledge.• San Jose’s Hauler, Republic, promoted ReThink Disposable in a feature article in their quarterly newsletter mailed to 30,000 accounts.• Won the 2015 Governor’s Award for Environmental and Economic Leadership and the 2016 California Resource Recovery Association’s Excellence in Waste Prevention Award.• Resulted in 2 new contracts with the City of Palo Alto and the Santa Clara Recycling and Waste Reduction Commission totaling \$230,000 over the next three years. This will fund 60-80 more ReThink Disposable certified food businesses and 3-5 institutions in the county.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B7	2014	City of Sunnyvale	Schools Goin' Green	This project is a partnership between the cities of Sunnyvale and Cupertino, along with 2-3 middle schools and 2 high schools, through their service organizations or environmental clubs. The project will encourage students to clean up litter on and around their school campuses and neighborhoods and to implement student-led campaigns to change the littering behavior of fellow students.	\$32,250	\$47,448	Closed June 30, 2016	<ul style="list-style-type: none">6 schools participated, of which 5 schools also established ongoing campus Green Teams.3,421 youth participated in project events.98 cleanups over the course of the project.More than 4,189 pounds of litter collected.All teams participated in the City's Students Living Green App Challenge in April 2016.Youth designed a logo for Schools Goin' Green.The project was identified as an outstanding stormwater project by the California Stormwater Quality Association (CASQA).
B7	2014	Save the Bay	Clean Bay Project	The project will build on the strong track record of supporting municipalities and community groups to eliminate significant components of plastic trash in storm water and reduce highly toxic tobacco litter in the San Francisco Bay to benefit water quality and public health.	\$60,000	\$241,243	Closed June 30, 2016	<ul style="list-style-type: none">More than 2,200 pounds of micro-trash debris removed from Coyote Creek, through community-based restoration and trash removal projects.Successfully advocated for the San Francisco Bay Regional Water Quality Board adopting a stronger Municipal Regional Stormwater Permit in November 2016. The permit now includes additional trash reduction milestones and monitoring requirements, such as 70% trash reduction by 2017; 80% by 2018.Analyzed data from the 2015 annual reports submitted by cities, counties, and districts holding stormwater permits and using the information to support Santa Clara cities accelerate their progress towards the goal of Zero Trash by 2022.Created a Monitoring and Education Tool for Plastic Bag Ban Ordinances (and recently added one for Styrofoam bans).Carried out "Zero Trash, Zero Excuse" public education campaign.Successfully advocated Sunnyvale adopting and strengthening its smoking ordinance.
B7	2014	Environmental Volunteers	Education for Clean Water	The project will leverage the Environmental Volunteers' skilled and committed base of volunteer docents to deliver hands-on, Citizen Science based Water Resources education to school classrooms and the general public.	\$25,092	\$30,271	Closed June 30, 2015	<ul style="list-style-type: none">Conducted education activities in the Palo Alto Baylands Nature Preserve, utilizing the EcoCenter facility and the ecologically rich marshland surrounding it.Developed and produced site resource guide.35 volunteer docents trained in new curriculum.12 local elementary school classrooms (more than 300 students) participated in field study excursions.818 community members participated in clean water education program, including art showfeaturingthematic works bylocal school children; earth day event; Girls-in- Science forum; and drop in visitors at the EcoCenter.Citizen science data collection and data- sharingthrough Field Scope, a citizen science data sharing project.Youth Leadership Board developed a new website promoting wise water use.
B7	2018	Girl Scouts of Northern CA	Green By Nature in Santa Clara County	The project will provide a successful, meaningful watershed educational experience for students attending Title 1 schools and living in under-resourced neighborhoods in Santa Clara County using the Don't Waste that Watershed series curriculum.	\$16,951	\$23,384	Closed May 5, 2021	<ul style="list-style-type: none">A total of 267 girl scouts participated across 7 school sites in Santa Clara County.Post-survey results indicated that 80% of participants plan to take actions to protect the environment and encourage others to do the same, demonstrating environmental stewardship.75% of participants can explain why pollution is harmful when it enters our waterways.80% of participants developed resourceful problem- solving skills, and are willing to seek challenges, and collaborate with others, and feel empowered to make a difference in the world.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B7	2018	Save the Bay	Zero Trash Campaign	The project will evaluate annual trash reduction reports, educate and inform residents on the results of those reports, and provide particular feedback to two priority cities. The project will implement an effective outreach and communications strategy to increase and shape priority of Santa Clara County communities' understanding of storm water pollution threats and opportunities. The project will engage 4,000 adults, teens, and children in wetland habitat restoration and/ or trash cleanup projects.	\$15,000	\$122,051	Closed November 30, 2020	<ul style="list-style-type: none">• Educated the community about non-municipal sources of pollution, emphasizing the importance of controlling trash generated on the highways, for meeting zero trash goals and protecting watersheds across the Bay.• Provided the City of San Jose with feedback and guidance to support their adoption of a citywide, cross-departmental urban greening program, which will integrate trash flow and water quality infrastructure concerns across multiple ongoing projects.• Hosted 1,123 student and adult volunteers at Adobe Creek Trail and the native plant nursery at the Palo Alto Baylands habitat restoration site and completed 3,186 total hours of environmental stewardship activities. The program was designed to increase awareness of the about the impact of toxic pollutants on local Santa Clara County watersheds.• Shared 4 blog posts on their website about trash prevention with a total of 1,622 page views.
B7	2014	San Jose Parks Foundation	Trash Free Coyote Creek Education and Outreach Project	The project will reach out to neighborhood and civic groups, trail users and businesses to educate them about the potential for cleaning up and keeping the Coyote Creek clean through volunteer cleanups; and enlist their participation in creek cleanups and weekly creek inspections to create a Trash Free Coyote Creek.	\$42,199	\$59,339	Closed September 30, 2015	<ul style="list-style-type: none">• 150 people attend a day-long Coyote Creek Howl conference held at San José State University.• 9 informative brochures produced on topics such as birds, plants, geology of Coyote Creek.• 32 presentations to community organizations.• 1-2 email newsletters a month to about 1,000.
B7	2014	Acterra	Acterra Lower Peninsula Healthy Creeks Project	The project will bring together the resources and talents of nonprofit organizations, academic institutions, municipalities, government agencies, and the general public to provide a variety of hands-on creek stewardship activities and watershed education events designed to attract participants of all ages.	\$68,600	\$179,910	Closed September 30, 2016	<ul style="list-style-type: none">• 4,225 participants (1,305 volunteers and 2,920 education participants).• 24 volunteer water quality monitoring events on Stevens, San Francisquito (and its tributaries), Matadero, Barron, and Adobe Creeks. 17 events on Permanente Creek.• High quality data for 23 water monitoring sites and 7 benthic macroinvertebrate sites.• 14.75 miles of riparian areas cleared of trash.• 18,180 pounds of trash collected.• 10 World Water Monitoring Challenge events.• 8 quarterly Watershed Forums.• 10 newsletters.
B7	2018	Guadalupe River Park Conservancy	Guadalupe Watershed Education Campaign	The project will enhance awareness of the biodiversity nurtured by Guadalupe River through programs for K-12 students, the annual Water Festival for 5thgrade students, activation of a 180-gallon aquarium, and the creation of a mural underneath the Coleman Ave. bridge.	\$28,410	\$47,450	Completed December 2020	Closeout in progress
B7	2018	Breathe California of the Bay Area	Youth for a Cool Earth (Y4CE)	The project will empower youth to become environmental leaders and advocates to their peers, school, family, and community to do the same. The unique feature of the Y4CE program is that it is youth-determined and youth-directed. The project will target marginalized/low-income youth.	\$35,000	\$47,023	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B7	2018	Gilroy Compassion Center	South County Creeks Team	The project will be a partnership between Gilroy Compassion Center and Downtown Streets Team, local jurisdictions, and other organizations to provide year-round outreach to homeless individuals living at target hot spots along South County Creeks. The outreach teams will provide information, encouragement, and incentives for homeless individuals to keep toxic materials, garbage, and waste out of the waterways.	\$15,000	\$40,973	In progress	
B7	2018	City of Campbell	Los Gatos Creek Trail Interpretive Signage and Receptacle Expansion	The project will install ten environmental outreach stations along the Los Gatos Creek Trail, which parallels Los Gatos Creek and related percolation ponds. The stations, spaced along approximately 5.7 miles of the trail, would include educational interpretive signs with environmental stewardship messages related to trash and general health of riparian corridors.	\$33,731	\$80,563	In progress	
B7	2018	South Bay Clean Creeks Coalition	Friends of Coyote Creek Watershed North Coyote Creek Stewardship Project	The project will recruit volunteers for stream cleanups to address the ongoing trash loads in the riparian corridor and creek created by homeless encampments and storm run-off. The project will conduct monthly cleanups with the goal of restoring stretches to trash free levels.	\$35,000	\$46,655	In progress	
B7	2018	Grassroots Ecology	Stevens Creek Monitoring & Education Project	The project will engage the local community in stewardship and hands-on learning. The project will provide creek-based volunteer and educational opportunities for all ages. The project will engage 750 or more individuals and approximately 15 organizations including schools, colleges, nonprofits, and community groups.	\$34,459	\$69,900	Completed May 4, 2021	Close out in progress.
B7	2018	South Bay Clean Creeks Coalition (Partnership)	Guadalupe River/ Coyote Creek Watershed Community Engagement Project	The project will conduct volunteer cleanups and educational stewardship opportunities around the Guadalupe River/Coyote Creek Watershed.	\$199,353	\$199,353	In progress	
B7	2019	Gilroy Compassion Center	South County Creeks Team	The project will engage local homeless individuals to go out to encampments along the creek areas of Gilroy providing services such as: outreach, education, and disposal of garbage. The project aims to reduce contaminants that are entering Santa Clara County waterways and groundwater that poses an environmental threat to communities. Creek Team members will visit different hot spots in Gilroy identified by Valley Water to clean garbage and debris from creek beds. Homeless individuals will receive case management services and will be entered into the Homeless Management Information System (HMIS) and they will be given a VISPADT survey where they will be prioritized for permanent supportive housing.	\$30,000	\$38,590	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B7	2019	Grassroots Ecology	Young Watershed Stewards Project	The project will engage the local community in stewardship and hands-on learning that benefits the Stevens Creek, San Francisquito, and Matadero Creek watersheds within Santa Clara County. The project will update and expand on Grassroots Ecology's high school stewards' programs based at Arastradero Preserve and McClellan Ranch Preserve to include watershed stewardship topics and add a community outreach component. High school stewards will engage with their local creeks through activities such as water quality testing, riparian planting, trash removal, and education on pollution entering these waterways. These stewards will take what they've learned into the broader community through a project at their school, presentations at community events, or other outreach.	\$44,301	\$167,781	In progress	
B7	2019	The Tech Museum of Innovation	Down the Drain	The project will provide Down the Drain Science Labs to Title I field trip groups during the 2019-2020 and 2020-2021 school year. The project will focus on offering resources to educators and modeling facilitation of watershed lessons. The project will also include remediation to align educator resources to the water-related exhibits in the Tech Museum's new Solve for Earth exhibition.	\$21,811	\$29,121	In progress	
B7	2021	Bay Area Older Adults	Watershed Waste Reduction Program	The project will reduce pharmaceutical waste in Santa Clara County's waterways and groundwater. The project will educate and outreach to a multi-cultural group of 6,600 low-income, homebound, and disabled adults age 60 and above, as well as tens of thousands of disadvantaged Santa Clara County residents of all ages. The project will teach participants about proper medicine disposal, including mail-back collection services, to help protect the quality of water and aquatic and riparian ecosystems around them. Participants will also learn the importance of preventing medication errors, a leading cause of death, hospitalization, and disability among older adults.	\$40,985	\$137,769	Agreement execution in progress	
B7	2021	Grassroots Ecology	Coyote/Stevens Creek Watershed Community Engagement Project	The project will be a partnership between Grassroots Ecology and Keep Coyote Creek Beautiful to provide opportunities for watershed education and stewardship along the Coyote Creek and Stevens Creek watersheds. The project will help an estimated 750 - 850 community members connect with their watershed by learning about creek ecosystems through hands-on clean-up efforts and virtual lessons and lab investigations.	\$49,980	\$101,026	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
B7	2021	IISME, DBA Ignited	Santa Clara Water Weeks	The project will consist of two separate externship weeks, called “Water Weeks,” occurring over consecutive summers. The project will include a virtual Water Week with Valley Water for 33 Santa Clara County teachers. The project will leverage matching funds from the Jewish Vocational Service (JVS), which covers the second half of the project—a Water Week for 10 additional Santa Clara teachers with the City of Gilroy Public Works, City of San José Environmental Services, and City of Sunnyvale Environmental Services. Both weeks will also include representatives from Gavilan Community College’s Water Resources Management degree program, as an example of a potential next step for the teachers to promote to their high school students as a potential career pathway. In partnership with BAYWORK, a consortium of Bay Area water and wastewater utilities, the Water Weeks program helps bolster the workforce needed to serve customers and protect the environment.	\$47,593	\$66,057.92	Agreement execution in progress	
B7	2021	Silicon Valley Bicycle Coalition	Wheels and Waterways	The project will expand on the previous Wheels and Waterways Project series and hold a community bike ride that engages participants to learn about their role in environmental conservation. The project will include educational stops, clean ups, and expert speakers. The project will make a concerted effort to recruit new and beginner-level riders in an effort to encourage bike riding as a sustainable form of transportation.	\$50,000	\$81,213.96	Agreement execution in progress	
Total					\$1,066,964	\$2,055,948		

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2014	Acterra	McClellan Ranch Preserve Meadow Enhancement Project	The project will be collaborative and volunteer-based to remove invasive plants and establish an “island” of native plants within a riparian meadow adjacent to Stevens Creek.	\$164,200	\$426,452	Closed June 30, 2017	<ul style="list-style-type: none">• 3 years of vegetation survey data showing a decrease in invasive plant population, including Italian thistle.• Close to 12,000 native plants installed covering more than 1 acre of the meadow.• Increased habitat value and diversity as result of planting more than 30 different types of native plants. This has led to increased native wildlife (more native insects, birds, and pollinators have been seen).• More than 3,500 community members engaged through 352 volunteer events; contributing 7,427 volunteer hours.
D3	2014	Santa Clara County Open Space Authority	Coyote Valley Open Preserve South Valley Meadow Restoration Project	The project will restore the hydrologic function and habitat value to an 8.5 acre seasonal wet meadow and riparian complex by restoring more than 800 yards of altered drainages, reseeding approximately 4.5 acres with a climate-smart native plant palette, and providing an extension of connected lowland California Tiger Salamander habitat into Coyote Valley.	\$256,276	\$579,386	Closed June 30, 2017	<ul style="list-style-type: none">• 8.5-acre seasonal wet meadow and riparian complex recontoured and planted with perennial grasses and native plant species.• 0.1-acre pond created on-site.• 900 feet of incised channel raised and widened.• 7 granite rock weir grade control structures placed.• 1 loose rock head cut repair structure placed.• Roughly 20% of 50-acre watershed drainage reconnected to wet meadow valley floor.
D3	2014	Acterra	Foothills Park Riparian Enhancement Project	The project will monitor, restore and enrich wildlife habitat along the Park’s four miles of riparian corridors in the upper San Francisquito watershed, including Los Trancos Creek and Buckeye Creek.	\$126,300	\$293,753	Closed June 30, 2017	<ul style="list-style-type: none">• More than 1,300 community members engaged through 94 volunteer events; contributing 4,380 volunteer hours.• 4 miles of creek monitored during 21 sediment monitoring days.• 4 miles of creekside vegetation surveyed for pre- and post-project comparison.• 2,755 linear feet of invasives removed.• 1,025 native plants installed.• More than 24 native species planted.• 200 willow cuttings installed.• Increased native plant species richness along Los Trancos and Buckeye Creeks.• Decreased invasive plant populations including target noxious weeds.
D3	2014	West Valley College	Vasona Creek at West Valley College: Stream Stabilization and Habitat Enhancement Phase 2	The project will restore 400 linear feet of Vasona Creek within West Valley College Campus in order to eliminate gully erosion, protect heritage trees, and restore hydrology.	\$300,000	\$421,732	Closed November 15, 2016	<ul style="list-style-type: none">• 740 linear feet of severely eroded and deeply cut channel reconstructed.• 0.2 acres of native riparian vegetation seeded and planted.• 432 native plants installed, including 85 willows alongside channel.• 36 Dusky Footed Woodrat nests protected in construction area, 15 nests relocated.• 10-year Monitoring, Maintenance and Reporting Plan.• Created an active college administration/ faculty “Stream Team” integrating project into curriculum.• Created a natural outdoor “classroom” and living laboratory in newly restored creek corridor.• Raised student and public awareness of environmental issues and restoration.• Extensive public engagement with community workshops, and volunteer efforts.
D3	2014	Resource Conservation District of Santa Cruz County	Uvas Creek Steelhead Spawning Habitat	The project will improve in-stream habitat in multiple locations along a 3.7 mile reach 1 below Uvas Dam.	\$446,755	\$592,905	Closed November 30, 2017	<ul style="list-style-type: none">• Removed and disposed of approximately 175 acacia trees (a non-native, evergreen species which create creek habitat limitations) on 2 project sites. The project sites were continually monitored to assess acacia regrowth and the need for active revegetation.• About 1,800 linear feet of riparian habitat was restored.• Conducted 3 educational outreach to provide educational information for landowners, demonstrate riparian restoration efforts, and garner local support for continued efforts on Uvas Creek.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2015	Trout Unlimited (Partnership)	Lower Uvas-Carnadero Creek Agricultural Wet Fort Alternative Design	The partnership will result in the design of a free span bridge and the abandonment of the existing bridge. This would eliminate the fish migration barrier and improve water quality and riparian conditions. Valley Water's contribution will provide a matching fund for a state grant application.	\$24,450	\$107,115	Closed May 31, 2018	<ul style="list-style-type: none">Completed 100% design (civil, geotechnical, structural) of a free span bridge across Carnadero Creek which, when constructed, will allow for the abandonment of an existing agricultural "wet ford" and the abandonment of several hundred feet of existing dirt farm roads and accompanying access easement along the riparian corridor on lands owned by Valley Water. The bridge has the potential to provide improved habitat and migration conditions for threatened Steelhead Trout.
D3	2015	San Francisco Bay Bird Observatory (Partnership)	Active Vegetation Management at Levees around South Bay Salt Pond	The partnership will create transitional and upland habitats and provide the habitat structure needed by several federally listed species and state Species of Special Concern. Creating native plant communities on a 15-acre site will require two years of preparation and four years of phased implementation, maintenance, and monitoring. The project will restore wildlife habitat; strengthen the South Bay Salt Ponds Restoration Partnership and revitalize wetland habitat. The work will also build upon the strong existing partnership between Valley Water and the U.S. Fish and Wildlife Service to improve habitat on salt pond levees.	\$690,000	\$1,327,106	In progress	
D3	2015	County of Santa Clara	Calero County Park Oak Cove & North Shore Trails	The project will construct approximately five miles of natural-surface multi-use trails adjacent to Calero Reservoir.	\$125,980	\$212,738	Closed July 2020	<ul style="list-style-type: none">The Oak Cove Trail officially opened in April 2020.Constructed a natural surface and single-track trail approximately 5 miles in Calero County Park located in Santa Clara, California.Constructed one culvert, one free-span bridge, 22 rock fords and 24 drainage crossings.
D3	2015	Santa Clara County Open Space Authority	Outdoor Learning Center and Creek Side Valley Loop Trail	The project will construct an Outdoor Learning Center within the 348-acre Coyote Valley Open Space Reserve, to serve as an outdoor classroom, a meeting location for educational and interpretive programs. This project will also incorporate 0.6 miles of ADA accessible trail.	\$200,000	\$541,780	In progress	
D3	2015	West Valley College	Vasona Creek Trail	The project will provide 0.33 miles of new ADA accessible trails within the West Valley College Campus.	\$171,000	\$465,725	In progress	
D3	2016	Santa Clara Valley Chapter of the California Native Plant Society	Plant Pathogen Training and Education at CNPS Nursery	The project will develop instructional/training videos to educate nursery professionals in pathogen control Best management practices (BMPs); promote safe use of California native plants through outreach and education events hosted by the California Native Plant Society (CNPS) throughout Santa Clara Valley Watersheds, and provide demonstration and training sites at CNPS Nursery in Hidden Villa, Los Altos Hills, to implement plant pathogen control BMPs onsite, to share successes and lessons with other nurseries, and train volunteers and the larger community in pathogen control best practices.	\$50,574	N/A	Cancelled	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2016	San Francisco Bay Bird Observatory	Establishing Forster's Tern Nesting Colonies for the South Bay Salt Pond Restoration Project Using Innovative Technologies	The project will deploy and maintain 300 decoys and six electronic call systems during the 2017 and 2018 breeding seasons (March-August) to attract birds to nest. Findings will be shared with the Don Edwards San Francisco Bay National Wildlife Refuge and the South Bay Salt Pond (SBSP) Restoration Project's outreach program; through the project website, newsletter, and presentations at stakeholder meetings. Using innovative technologies, this project aims to re-establish a healthy nesting population of at-risk Forster's terns in Alviso Pond A16 on the Don Edwards San Francisco Bay National Wildlife Refuge. Benefits of this project include attraction of 50 or more Forster's tern breeding pairs to Alviso Pond A16 and establishment of nesting colonies with nest success rates of 60% or more.	\$217,032	\$294,074	Closed April 30, 2018	<ul style="list-style-type: none">• Deployed 300 Forster's tern decoys and 6 electronic call systems on 6 islands in Pond A16 during the 2017 breeding season.• Conducted bird surveys between March and August 2017 to evaluate bird response and the results of the project suggest that implementation of decoys and electronic call systems was successful in attracting Forster's terns in Alviso Pond A16.• 197% increase in the number of Forster's terns in the pond in May 2017 compared to similar results recorded in May of 2016.• More Forster's terns were observed around islands with decoys and electronic call systems compared to islands without them, an approximately 6:1 ratio.• 8 educational outreach activities were completed: a project website, 1 educational video, 3 public presentations, 1 publication of popular article, 2 visits with local elementary school students.
D3	2016	Save The Bay	Palo Alto Baylands Tidal Lagoon Transition Zone Habitat Restoration Project	The project will restore and enhance 1.25 acres of high value tidal marsh transition zone habitat at this site immediately adjacent to existing tidal salt marsh in the Palo Alto Baylands Nature Preserve. It will create or improve crucial habitat that provides connectivity and refugia for waterfowl, shorebirds, and other species such as the federally- endangered Ridgway's Rail and salt marsh harvest mouse. The project is ready to implement and will increase the adaptive capacity and resilience of tidal marsh species by enhancing the plant community and wildlife habitat both now and in light of future predicted sea level rise scenarios.	\$95,868	\$235,335	Closed December 14, 2020	<ul style="list-style-type: none">• Restored and enhanced approximately 1.25 acres of tidal marsh transition zone native coverage to help provide habitat and food source for sensitive wildlife species, including native birds, small mammals, and federally endangered species.• Collected site-specific seeds, propagated, and planted over 8,000 native wetland plants from Save The Bay's native plant nurseries.• Increased structural integrity and complexity to the transition zone and connectivity to the adjacent marsh by installing a suitable assemblage of plants that also contribute to the native seedbank.• Involved approximately 1,000 volunteers, including local students and community members.• Educated community groups, local businesses, and schools about the importance of critical wetland habitat for fish and bird species and engage them in habitat restoration and monitoring.
D3	2016	Friends of Stevens Creek Trail	Stevens Creek Steelhead Passage Improvement Project	The project will conduct a Phase 1 study plan to analyze alternatives and identify a preferred alternative for improving fish passage; and develop alternatives and identify a preferred alternative to improve fish migration at project sites.	\$52,162	\$75,332	Closed December 7, 2017	<ul style="list-style-type: none">• Identified potential engineering solutions to 8 fish passage impediments.• Provided hydraulic analysis, conceptual drawings, and estimated costs for projects at the selected locations.• Conducted 2 workshops to present the purpose of the study and the proposed solutions with stakeholders and community members.
D3	2016	Working Partnerships	Coyote Creek Invasive Plant Removal and Revegetation	The project will prepare a plan to remove invasive plants from the Coyote Creek Watershed and re-vegetate areas of the creek with native plants. The project will hire homeless individuals or formerly homeless individuals in transition housing to do the work.	\$24,750	\$33,000	Closed February 20, 2018	<ul style="list-style-type: none">• Identified and completed mapping of invasive plant species in 6 acres of private land along Coyote Creek.• Secured the California Conservation Corps as the employer of record to manage recruitment, selection, and social support for a crew of 10 formerly homeless or disadvantaged youth.• Developed a training and volunteer program, project cost estimate, and schedule to complete the work over a 5-year period.• Performed a biological assessment on the potential impacts of the project.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2016	Children’s Discovery Museum of San José	Bill’s Backyard: Bridge to Nature	The project will develop a 27,500 square foot outdoor space named Bill’s Backyard: Bridge to Nature. It will feature a tree structure to climb up, a hillside to roll down with tunnels to crawl through, a dig pit to shovel in, a dry creek bed to explore that mimics the adjacent Guadalupe River, and areas to build with natural materials like willows, reeds and grasses. Families will also have the chance to see demonstration projects and sustainability solutions up-close, providing xeriscape ideas to consider for use in their own backyards, such as permeable hardscape, drought-tolerant and native plants, rain gardens to retain surface water, water collection systems and solar panels. The project will fund the work for eliminating all grass and plant native plants for increased bio- diversity in the riparian environment and attract beneficial insects, migratory birds, small mammals and even Monarch butterflies.	\$142,771	\$404,240	Closed January 25, 2021	<ul style="list-style-type: none">Enhanced or restored 0.5 acres/linear feet of area.Converted 0.5 acres of grass to drought tolerant plants resulting in water savings.Planted more than 100 native plants, trees, shrubs, grasses and ground covers.
D3	2016	Acterra (transferred to Grassroots Ecology)	Arastradero Creek Watershed Enhancement	The project will install 2,000 linear feet of swale-and-berm structures on contour in the basin feeding Arastradero Creek, and low step structures to raise the groundwater table; and remove invasive plant species along 1,000 linear feet of Arastradero Creek and plant a diversity of native species in their place to increase native vegetation and support wildlife.	\$107,561	\$217,566	Closed July 21, 2020	<ul style="list-style-type: none">1,200+ community members engaged through 101 volunteer events.2,500 feet of berms and swales created along the contour of a large drainage to slow, spread, and sink stormwater runoff.50 young willow trees established along Arastradero Creek.Decreased invasive plant populations including 4 priority noxious weed species.Enhanced riparian corridor with thousands of newly installed native plants.Monitored project activities through vegetation surveys, photo-monitoring, and in-channel geometric surveys.
D3	2016	West Valley College	West Valley College Wildcat Creek Native Vegetation Enhancement	The project will remove approximately two acres of invasive, non-native vegetation within the WVC campus and re-vegetate the area with native species, propagated from a collection of native vegetation planted on campus during past native re-vegetation efforts on campus.	\$165,000	\$247,707	Closed July 22, 2020	<ul style="list-style-type: none">500 riparian plantings were installed in fall 2017, and received supplemental irrigation, weeding, maintenance, and monitoring through 2018.Areas where invasive plant species were removed in 2017 were re- checked and re-treated as needed. Engagement of college administration/faculty to integrate this project into their curriculum.72 polygons of invasive plants (approximately 4 acres) were checked in spring and fall 2018 for newly emerging/re-sprouting invasive plants.Creation of a natural outdoor “classroom” and living laboratory in newly restored creek corridor.In Spring 2019, a walkthrough of the creek corridor was conducted to locate and map occurrences of invasive species.Facilitated collaboration and over whelming support from City of Saratoga, neighborhood groups, and volunteers from local community groups and West Valley College students.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2016	Acterra (transferred to Grassroots Ecology)	Byrne Preserve Riparian Enhancement	The project will restore a degraded tributary to Moody Creek located in Byrne Preserve. The project includes community engagement and education, monitoring of vegetation and channel geometry, invasive plant removal, and native plant re-vegetation.	\$136,469	\$240,056	Closed July 24, 2020	<ul style="list-style-type: none">800 community members engaged through native plant installation and invasive species removal.2,000 feet of creek geometry monitored.2,000 feet of creek-side vegetation surveyed.12 photo-monitoring surveys to monitor project activities.8 noxious invasive plant species prioritized for removal resulting in reduced populations.Over 1,000 locally sourced native plants spanning 20+ species installed enhancing riparian corridor.Willow cuttings established along 600 feet resulting in increased canopy cover, sediment deposition, and reduced erosion.
D3	2016	Campus Community Association	Metcalf Ponds Parkway Lakes Steelhead Habitat and Passage Improvement Project	The project will conduct a planning study to evaluate alternatives to improve steelhead trout habitat and passage in the Metcalf Ponds reaches of Coyote Creek by separating the creek from the ponds, revegetating the restored creek with native riparian vegetation, and configuring the channel to optimize its habitat value while preserving the ponds' water management functions of Valley Water.	\$31,684	\$42,278	Closed July 26, 2018	The final results of the project found that it should be feasible to develop a beneficial restoration design for Coyote Creek and floodplain through the Metcalf Ponds reach, which would allow fish passage, improve ecological and geomorphic function, and contribute to reducing water temperatures, while maintaining the dominant portion of the current percolation capacity.
D3	2016	City of Santa Clara	Ulistac Restoration 2016 Project	The project will improve the Ulistac Natural Area by improving trails and ramp access to the levee, restoring 1.2 acres of riparian habitat along the Guadalupe River and enhancing 1.26 acres of Live Oak Woodland habitat through removal of invasive nonnative plants and trees, planting of native species, and documentation of tree survival. The project is in cooperation with Ulistac Natural Area Restoration & Education Project, Inc. and in partnership with Santa Clara University Department of Environmental Studies and Sciences and Santa Clara Audubon Society.	\$165,249	\$374,533	Closed April 21, 2021	<ul style="list-style-type: none">Access Improvement – Repaired 280 linear feet of pavement and concrete landings were installed at the base of two levee access ramps.Trail Connectivity – 370 linear feet of walking trails were connected and improved to prevent erosion. Interpretive sign panels were placed along the walking trails to enhance visitor education.Riparian Habitat Restoration – Planted 300 native riparian trees and 600 shrubs.Habitat Enhancement – 55,000 square feet of understory planting was enhanced, including removing exotic trees and non-native plants and planting 230 native plants.Monitoring and Maintenance – A plant database and GIS map were created for 623 of the new plants.Community Outreach and Education – Engaged in educational opportunities for San Jose State University, Santa Clara University, various day camps and elementary schools.Partnerships – Exceeded the matching grant requirement of 6,450 volunteer hours with 11,190 volunteer hours.
D3	2016	Loma Prieta Resource Conservation District	Sycamore Alluvial Woodland Restoration Phase II— Feasibility	The project includes a propagation study designed to test techniques to produce California sycamore seedlings vegetatively for use in a pilot restoration project. Study results will be shared through a high-quality PowerPoint presentation and distributed to all interested parties in the broader restoration and nursery community.	\$79,953	\$127,705	Completed December 31, 2019	Grantee will submit closeout material in FY22.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2016	City of Mountain View	Permanente Creek Watershed Enhancement Project	The project will involve the removal of trash and non-native invasive plants along 2,350 linear feet of Permanente Creek. 1,000 local watershed plants will be revegetated along the creek providing habitat enhancement for multiple riparian species, special emphasis will be placed on enhancing habitat for two special status species: burrowing owls (foraging habitat) and the San Francisco common yellowthroat (nesting and foraging habitat). The project will provide a unique educational opportunity for the local community, businesses and several educational establishments who will volunteer on this project along with Santa Clara Valley Audubon Society and Acterra.	\$43,920	\$64,582	Completed December 31, 2019	Grantee will submit closeout material in FY22.
D3	2016	Midpeninsula Regional Open Space District	Hendrys Creek Restoration Project	The project will enhance 3/4 miles of the watershed through removing 14 in-stream structures; invasive plants from 4.44 acres of canyon; and by installing 0.33 acres of watershed specific, contract grown riparian and upload plants along the impacted creek banks and former road; and seeding 1.5 acres with native grasses, acorns and buckeye seeds on the former building pads, and improving the road located along the creek and tributaries.	\$484,650	\$762,546	In progress	
D3	2016	City of San José	Evergreen Creek Corridor Restoration	The project will correct the poor placement of outlets in the sedimentation basin above the project sites and restore vegetation. The project will focus on removing 6.2 acres of non-native landscape; establishing irrigation and planting native plants along Quimby Creek and Upper Fowler Creek.	\$191,041	\$502,039	Cancelled	
D3	2018	San Francisco Bay Bird Observatory	Establishing Forster's Tern Nesting Sites Project	The project will use innovative technologies to establish a healthy nesting population of at-risk Forster's Terns in Alviso Pond A16 for the South Bay Salt Pond (SBSP) Restoration Project and Don Edwards San Francisco Bay National Wildlife Refuge. The project will directly impact two acres of island nesting habitat and 240 acres of wetland habitat within Alviso Pond A16, and indirectly impact up to 14,000 acres surrounding the Alviso Pond A16 nesting site through bird foraging behaviors.	\$164,000	\$218,674	Closed September 4, 2020	<ul style="list-style-type: none">• Re-establishment of nesting Forster's terns to Pond A16 with a nest success rate of 60% and 35 nests documented in 2019.• Direct support of two acres of island nesting habitat and 240 acres of wetland habitat within Alviso Pond A16.• In early 2020, SFBBO hosted a public webinar about the Project with 136 attendees.• SFBBO staff presented Project findings at the South Bay Salt Pond Restoration Project's annual stakeholder meeting on January 14, 2020.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2018	Midpeninsula Regional Open Space District	Webb Creek Bridge	The project will construct a new bridge over Webb Creek in Bear Creek Redwoods Open Space Preserve as part of a multi- phased plan to open the preserve for public access. The bridge will open approximately four miles of trails and facilitate a future regional multi-use trail connection between the Lexington Basin and Skyline, as well as ensure emergency service access is possible throughout the preserve.	\$149,500	\$316,650	Closed June 28, 2021	<ul style="list-style-type: none">Constructed a new bridge over Webb Creek that allows public access to four miles of trails and ensures emergency service access throughout the preserve.Removed the bridge in one piece to ensure environmental safety.Installed custom redwood guardrails.Widened the road to match the width of the abutment wing walls.Graded and restored the site, which included planting redwood trees and placing redwood mulch around the construction site.
D3	2018	Grassroots Ecology	Adobe Creek Corridor Extension Project	The project will be a partnership between Grassroots Ecology and the City of Los Altos to restore native vegetation along an approximately 500-foot reach of Adobe Creek extending from the southern gate of Redwood Grove Nature Preserve to Mansara Way. The project will include removal of invasive plant species, installation of native understory species with container plantings, maintenance of invasive plant removal and planting zones for four years, and community outreach and education.	\$150,753	\$236,777.50	In progress	
D3	2018	Grassroots Ecology	Matadero Creek Corridor Project	The project will be a partnership between Grassroots Ecology and the City of Palo Alto to restore native vegetation along a reach of Matadero Creek forming the northeastern boarder of Bol Park. The grant will support a more intensive effort to increase the habitat quality on this creek corridor.	\$49,356	\$83,918	In progress	
D3	2019	San Jose Conservation Corps	Coyote Creek Vegetative Restoration and Disadvantaged Youth Career Path Project	The project will remove 111,000 sq. feet of invasive plants and replace them with native plants on seven acres of private property along Coyote Creek north of Berryessa Road in San José. The project will restore a native plant assemblage on this section of Coyote Creek and have watershed scale benefits by preventing reinfestation by invasive species of downstream properties for which invasive plant removal has recently been effected by Valley Water.	\$389,024	\$533,115	In progress	
D3	2018	South Bay Clean Creeks Coalition	Los Gatos Greek Trestle Area Restoration Project	The project will be implemented on a reach of Los Gatos Creek centered on the historic trestle accessible from Lonus Street in the City of San José to restore riparian habitat through the removal of invasive plants and the installation of native vegetation.	\$229,923	\$462,323	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2018	Santa Clara Valley Habitat Agency	Pacheco Creek Stream and Riparian Restoration Project	The project will involve restoration of riparian and protected species habitat in the Pacheco Creek Reserve. The project will focus on five specific restoration activities; bank stabilization; riparian restoration to filter runoff and control erosion; riparian planting and management; floodplain function restoration and instream structures; as well as management and monitoring. The project will also include preliminary project planning, design and permitting, as well as mapping and wildlife surveys.	\$500,000	\$1,774,400	In progress	
D3 Mini-Grant	2018	Guadalupe River Park Conservancy	Next Generation Science Standards Curriculum Development and Training	The project will update curriculum to support Next Generation Science Standards that will help emphasize the importance of healthy watershed and support the training of guides to lead field trips for approximately 2,000 K-8 students.	\$4,976	\$6,634	Closed April 15, 2021	<ul style="list-style-type: none">• Prepared and delivered training for Guadalupe Guides (part-time field trip staff) to serve 1,928 students.• 3,405 students participated in 2 field trip programs with BEETLES activities, which were supported through trained field staff.• Aligned river field trip, homeschooling, Boys & Girls curricula and learning stations with NGSS standards that emphasize the importance of a healthy watershed.
D3 Mini-Grant	2018	Living Classroom	Development and Implementation of “Sustainable Soil and Water” Lesson	The project will engage 5th graders in “Sustainable Soil and Water” lessons that will allow them to learn about the local watershed and how they can play a role in protecting the water quality and conserving the quantity.	\$5,000	\$7,000	Closed April 2019	<ul style="list-style-type: none">• Served a total of 125 fifth grade students.• 90% of students surveyed gave the new curriculum a passing or satisfactory response to questions that evaluated their understanding of the lesson objectives.• 100% of the teachers strongly agreed that the lesson met their expectations, objectives, included all necessary materials, and that the lesson delivery was effective and done well in engaging students.
D3 Mini-Grant	2018	Oster Elementary Home & School Club	Oster Elementary School Gardens	The project will increase students’ knowledge and awareness of watershed stewardship through the renovation and implementation of a native garden as a living outdoor classroom.	\$5,000	\$6,250	Closed April 2019	<ul style="list-style-type: none">• Volunteers installed drip line irrigation in raised beds and controller setup.• Conducted a total of 3 volunteer workdays, which included a total of 44 total volunteers made up of students and parents.• Garden visits for the 2018-19 school year surpassed garden visits from past years.
D3	2018	City of Morgan Hill	West Little Llagas Creek Interpretive Wildlife Trail Project	The project will construct a two-mile trail that will extend from Watsonville Road south and around the southeastern end of Lake Silveira near Monterey Road and California Avenue. The project will also connect to the existing trail system that runs north, thus creating a continuous, uninterrupted pedestrian and bicycle pathway from the Lake Silveira Park area to Morgan Hill’s downtown core. Trail users will have access to a unique interpretive experience of local wildlife and wetlands.	\$200,000	\$998,800	In progress	
D3	2018	West Valley College	West Valley College Vasona Creek Trail Phase 2	The project will complete the design and construction of Phase 2 of the Vasona Creek Trail providing access to more than 20 acres of recently restored riparian corridor on the West Valley College campus.	\$221,500	\$655,214	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2018	Grassroots Ecology	Grassroots Ecology College Internship Program	The project will educate and train college students to restore open spaces and creeks through a combination of field work, interpretive hikes, independent study, and capstone projects. The interns will work on restoration projects throughout the county watersheds and also learn about fish passage issues.	\$5,000	\$34,360	Closed August 30, 2018	<p>The 8 interns taking part in the program achieved the following results:</p> <ul style="list-style-type: none">• 150 total learning hours.• 50 hours of invasive plant removal and native plant care• 8 hours of channel surveying.• 5 hours of vegetation monitoring.• 3 hours of water quality monitoring• Enhancement of 7 Santa Clara County open space sites.
D3 Mini-Grant	2018	Bay Area Older Adults	Watersheds & Wildlife Education Project	The project will engage older adults (50 yrs+) in watershed stewardship by: 1. Volunteering to remove invasive plants in the areas of Don Edwards Wildlife Refuge to improve the habitat in the marshlands. 2. Lead 4.5 mile walks at Rancho San Antonio Open Space Preserve to educate and engage participants about flood protection. 3. Lead 3-mile walk along Uvas Creek to educate participants about wildlife preservation in the creek and reservoirs.	\$5,000	\$6,650	Closed December 11, 2018	<ul style="list-style-type: none">• Majority of the 77 participants rated the program as “Extremely Satisfied” or “Very Satisfied.”• 97% of the participants said their knowledge about the watershed and/or wildlife project was improved by the program.• 100% of those surveyed answered the educational multiple-choice watershed and wildlife question correctly.
D3 Mini-Grant	2018	Stanford Conservation Program	Matadero Creek Cape Ivy Removal	The project will remove cape ivy that was introduced to California in the 1950s and have since displaced native plants in the area. If it isn’t removed it can cause serious soil erosion problems on the hillside. Grassroots Ecology will be supporting the efforts.	\$5,000	\$10,400	Closed February 23, 2021	<ul style="list-style-type: none">• Removal of over 5,000 sq. ft. covered in cape ivy along San Francisquito Creek.• 4 botanical surveys to monitor plant communities and assess re-growth of cape ivy.• Both the Stanford Conservation Program and Grassroots Ecology described their cape ivy removal efforts in an e-newsletter that reaches over 4,000 community members.
D3 Mini-Grant	2018	Stanford Conservation Program	Riparian Tree Planting to Expand Canopy Cover in Stream Supporting CA Red- legged Frog	The project will enhance creek and bay ecosystems by planting and maintaining 25 native trees in the easement. The project will also evaluate the presence of California red-legged frog populations.	\$5,000	\$12,375	Closed February 23, 2021	<ul style="list-style-type: none">• 100% survivorship of planted trees.• Over 10 volunteer events hosted from May 2018 through May 2020.• During volunteer work events, trees were watered, weeded, and protective structures (tubex, rebar, wire mesh) were maintained.
D3 Mini-Grant	2018	Stanford Conservation Program	Restoring Native Understory Plant Community in support of biodiversity, improved water quality, and California tiger salamanders	The project will plant 100 understory riparian plants to support the California tiger salamander on Stanford land.	\$5,000	\$13,000	Closed February 23, 2021	<ul style="list-style-type: none">• Approximately 250 volunteers participated.• 100 understory shrubs watered and tended by volunteers.• Hosted approximately 10 volunteer events from May 2018-2020, which included an environmental education component.• Monitored water quality and quantity in ephemeral wetlands downslope of the project site on 10 occasions from May 2018-2020.• Monitored California tiger salamander eggs, larvae, juveniles, and adults; 345 unique California tiger salamander juveniles and adults were identified from May 2018-2020.• Created an educational opportunity for community members focused on native plant restoration.
D3 Mini-Grant	2018	Stanford Conservation Program	Native Hedgerow Planting as Fencing Alternative and Restoration Product in Permanent Conservation Easement	The project will plant and maintain 382 native shrubs in a hedgerow that will help restore the Deer Creek conservation easement which has been damaged by human impact over the years.	\$5,000	\$24,870	Closed February 9, 2021	<ul style="list-style-type: none">• Over 450 volunteers participated in planting and maintaining the native hedgerows.• Approximately 382 native shrubs in a hedgerow were established and nurtured.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2018	Veggielution	Eastside Explorers Watershed Curriculum	The project will take youth from East Side San Jose on field trips to educate them about the close relationship between the environment and their local food system. The activities they conduct are centered around collaborative group tasks focused on urban agriculture, nutrition, human impacts, and ecological interconnections. The project will increase community awareness and understanding of watershed stewardship by incorporating a watershed-specific component into their middle school field trip program curriculum.	\$5,000	\$7,650	Closed January 22, 2021	<ul style="list-style-type: none"> Developed a watershed education curriculum and outreached to schools in the community. Students were encouraged to return with their families to participate in Veggielution programs. After participating in the curriculum, students exhibited increased interest in farm activities and an appreciation of the benefits provided by a healthy watershed to the environment and surrounding community. Post-visit survey data showed that, before the field trips, over two-thirds of the visiting students were unaware of the importance of a watershed or how it affected our community. Upon completion of the field trip, 92% of students were able to effectively describe a watershed in their own words and 59% were able to describe a watershed more in-depth with a combination of terms such as drainage, landarea, multiple water sources, and environment.
D3 Mini-Grant	2018	Living Classroom	Hoover and Nixon School Native Ecology Garden- Based Lessons	The project will restore the school's native garden to be used as an outdoor classroom that will deliver watershed stewardship curriculum to over 400 students from grades K–5.	\$5,000	\$8,000	Closed June 11, 2021	<ul style="list-style-type: none"> Students met the lesson objectives with 83% accuracy. A total of 24 lessons were provided to approximately 400 students.
D3 Mini-Grant	2018	Grassroots Ecology	Nursery Phytosanitation Education and Equipment Upgrade	The project will upgrade phytisanitary tables to support the growth of native plants and allow the hosting of two educational nursery tours for professionals and garden groups to teach them about how to integrate the latest Best Management Practices for phytosanitation.	\$3,000	\$11,332	Closed July 21, 2020	<ul style="list-style-type: none"> 12 new tables put into service at the nursery. Hosted 2 educational tours at the nursery to 2 different groups.
D3 Mini-Grant	2018	Trout Unlimited	Little Arthur Creek Streamflow Stewardship Phase 2 Planning Project	The project will plan for phase 2 of an existing project "Little Arthur Creek Streamflow" to improve streamflow by implementing "storage and forbearance" technique. Storage tanks will be provided to landowners who would agree to divert their water during wet season and cease all diversion during dry season.	\$5,000	\$7,960	Closed June 30, 2020	<ul style="list-style-type: none"> Completed legal analysis of public water rights, parcel records searches, and outreach to individual landowners on Redwood Retreat Road. Identified existing ponds and reservoirs within the Little Arthur Creek watershed using aerial imagery, calculated effective storage capacities, and estimated the streamflow enhancement potentials from hypothetical flow releases from each of the available storage reservoirs. Discovered that the magnitude of streamflow enhancement possible from pond flow releases is more efficient than the proposed residential storage and forbearance approach. Initial work from this project being used to discuss more potential flow releases with Santa Clara County Parks and additional private landowners.
D3 Mini-Grant	2018	Living Classroom	Capri School Native Garden	The project will restore the school's native garden to be used as an outdoor classroom that will deliver watershed stewardship curriculum to over 400 students from grades K–3.	\$5,000	\$8,000	Closed May 10, 2021	<ul style="list-style-type: none"> Provided 19 ecology focused lessons on habitats, ecology, pollution, and California's biodiversity to approximately 300 students in grades K-3. Created approximately 1,600 square foot native habitat garden. Purchased and planted approximately 65 additional native plants (1-gallon size) representing 35 species. Created and installed 35 plant identification signs with a few sentences each to inform students. Grew 80 native plants from cuttings in the greenhouse and seed to supply native plants to other CUSD school native gardens.
D3	2018	Friends of Stevens Creek Trail	Stevens Creek Steelhead Passage Improvement Project	The project will provide construction of instream features at the Deep Cliff Golf Course on Stevens Creek in Cupertino to facilitate juvenile steelhead trout upstream passage (design, permit, construction).	\$120,000	\$176,850	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2018	San Francisco Bay Bird Observatory	Waterbird Monitoring in Santa Clara Salt Ponds	The project will expand on work connecting the community to the native birds in the bay through the Colonial Waterbird Program, a citizen science program that monitors nesting colonies of waterbirds within the South SF Bay to document overall population trends and responses to restoration.	\$5,000	\$12,280	Closed October 30, 2019	<ul style="list-style-type: none">Submitted 2 reports to Restoration Project managers that assembled targets for waterbirds and outlined recommendations for waterbird monitoring.In partnership with the U.S. Geological Survey and the U.S. Fish and Wildlife Service, surveyed all South Bay Salt Pond restoration sites and accessed tidal marsh areas to document breeding waterbirds. The U.S. Geological Survey's report will be provided to Restoration Project managers.Engaged thousands of community members with waterbird conservation.
D3 Mini-Grant	2018	Keep Coyote Creek Beautiful	Santa Clara Park BioBlitz Events	The project will engage community members through a BioBlitz event to act as citizen scientists where they explore the natural environment of plants, wildlife, and aquatic species. A part of the educational process, attendees will participate in activities that will connect them to better understanding how to protect the waterways by keeping the environment healthy.	\$5,000	\$13,500	Closed October 30, 2019	Hosted 3 BioBlitz events, where 194 participants of all ages and abilities came together to identify and learn about the natural environment, including plants, bugs, and birds.
D3 Mini-Grant	2018	Smart Yards Education Foundation	Earth Day Water Community Awareness	The project will partner with students and faculty from SJSU & local community colleges to teach watershed stewardship in schools in low-income neighborhoods. Students will receive hands on learning activities that will demonstrate water and soil conservation, support to identify conservation subsidies, and learn other techniques to improve the community through watershed activities.	\$5,000	\$7,000	Closed September 2018	<ul style="list-style-type: none">Presented a total of 2 workshops.58 individuals attended the event, including elected officials, Smart Yards Education Board of Directors, local community leaders, environmentalists, landscapers, students and clergy.Post event survey indicated that over 80% of the participants were very satisfied with the event.
D3 Mini-Grant	2018	San Francisco Bay Bird Observatory	California Gull Predator Surveys	The project will give local residents the opportunity to learn about and explore their local watersheds as well as disseminate this knowledge to their friends and families by having them participate in a surveying effort to count and document nesting California Gulls.	\$3,000	\$5,048	Closed September 2018	<ul style="list-style-type: none">Provided in depth training to 19 volunteers to work with staff to count and document nesting California Gulls.Worked with 19 volunteers to monitor and complete the surveys of 10 California Gull colonies in the South San Francisco Bay.Entered collected data from California Gull surveys into a long-term database to produce a report of the results of nesting surveys for US Fish & Wildlife Service, South Bay Salt Pond Restoration Project, and Valley Water.
D3 Mini-Grant	2018	Living Classroom	Creating Native Habitats in Schoolyards: Crittenden Middle School	The project will work with Crittenden Middle School in Mountain View to restore a native plant garden to help engage and educate students, teachers, parents, and the public about local native plants. The garden will be used as an outdoor learning classroom for teachers. The project will also provide lessons to middle school students on California's Biodiversity and Adaptation of California Native Plants that will likely reach nearly 400 students.	\$5,000	\$7,000	Completed May 2018	
D3 Mini-Grant	2018	Living Classroom	El Carmelo School Native Ecology Garden-Based Lessons	The project will restore the school's native garden to be used as an outdoor classroom that will deliver watershed stewardship curriculum to over 400 students from grades K-5.	\$5,000	\$8,000	Completed May 2019	<ul style="list-style-type: none">Students met the lesson objectives with 84% accuracy (goal was 70%).Provided a total of 22 lessons to approximately 400 students.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2018	Living Classroom	Castlemont Elementary School Native Garden	The project will restore the school's native garden to be used as an outdoor classroom that will deliver watershed stewardship curriculum to over 400 students from grades K-3.	\$5,000	\$8,000	In progress	
D3 Mini-Grant	2018	Citizens for Environmental and Economic Justice (CEEJ)	East San Jose: Overfelt Gardens Park Community Project	The project will engage students from SJSU to develop a pollinator native garden, document and map out non-native species using GPS technology, remove those non-native species, and pick up litter in Overfelt Gardens Park. The project will also develop new K-12 curricular to help increase awareness on local habitat in the area and support educational activities at the garden.	\$5,000	\$15,360	In progress	
D3	2019	City of Milpitas	Milpitas Lower Penitencia Creek Pedestrian Bridge Project	The project will provide for design and construction of a pedestrian bridge across the Penitencia East Channel between McCandless Drive and Montague Expressway. The new pedestrian bridge will connect residential developments, the Penitencia Creek multi-use trail, future McCandless Park, and the recently completed Mabel Mattos Elementary School.	\$60,000	\$1,865,000	Agreement execution in progress	
D3	2019	Midpeninsula Regional Open Space District	Beatty Trail Connection	The project will create new trail and public access at the Beatty property of the Sierra Azul Open Space Preserve (OSP) through new parking area and trail connection. The trail will provide new access to regional trails, including the Bay Area Ridge Trail (Ridge Trail) and Juan Bautista de Anza National Historic Trail, while also providing new creekside trail access.	\$149,906	\$514,351	Agreement execution in progress	
D3 Mini-Grant	2019	Irvington High School	Sustainable California Initiative Project	The project will provide funding to develop a watershed stewardship curriculum that will then be presented to approximately 10 high schools and 15 Boy Scout troops in Santa Clara County. The project will also create posters and artwork that will be displayed at local creeks, trails and parks with an emphasis on the benefits of preserving the watersheds, as well as cleanups at the Don Edwards Wildlife Refuge, Ed Levin County Park, and Berryessa Creek Park.	\$3,230.54	N/A	Cancelled	
D3 Mini-Grant	2019	Science from Scientists, Inc.	ECOAdventures Vacation Camp	The project will implement two five-day camps for 50 youths from the ages of 11 to 14 with a focus on STEM learning around our ecology, including our local watersheds.	\$5,000	N/A	Cancelled	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3	2019	Santa Clara County Office of Education (Partnership)	Environmental Education and Student Assessment Project	The project will support the expansion of SCCOE's Education Outreach Program and environmental education programming to reach more students, specifically in school districts that lack the resources and opportunities to implement environmental education in their classrooms.	\$50,000	\$175,000	In progress	
D3 Mini-Grant	2019	Bay Area Older Adults	Watersheds & Wildlife Education Walks	The project will provide outdoor educational programs for older adults age 50+ to experience Valley Water watersheds first-hand as well as teaching them about protecting local watersheds and dependent ecosystems. Project areas include Don Edwards Wildlife Refuge (San Jose), Ulistac Nature Area (Santa Clara), Guadalupe River Park (San Jose), Alum Rock Park (San Jose) and McClellan Ranch Preserve (Cupertino). The educational program is focused on hands-on learning which has been shown to be more effective than learning in a classroom.	\$5,000	\$14,448	Closed July 24, 2020	<ul style="list-style-type: none">• 5 programs were delivered to a total of 132 participants.• Post-survey results indicated that more than 90% of participants reported they learned something new about the watersheds and wildlife from the above areas. More than 72% of participants were "very satisfied" with the program.• All programs were promoted with a monthly full-page print ad in a senior magazine that was distributed to over 30,000 readers throughout Santa Clara County.• Valley Water-focused outreach materials were produced and distributed to program participants and the Valley Water logo was added to BAOA's webpages as a partnered agency.
D3 Mini-Grant	2019	Bay Area Older Adults	Watershed Appreciation Program	The project will provide four outdoor educational programs for blind older adults so they can experience Valley Water watersheds first-hand and to teach them about the Guadalupe watersheds and dependent ecosystems. The project will bring blind older adults to four waterways in four different watersheds - Los Alamos Creek and Guadalupe Slough (Guadalupe Watershed), Stevens Creek (Lower Peninsula Watershed) and Penitencia Creek (Upper Penitencia Creek Watershed).	\$5,000	\$7,590	Closed June 26, 2020	<ul style="list-style-type: none">• Participants increased their knowledge of the 4 watersheds located at the following locations: Los Alamos Creek, Guadalupe Slough, Stevens Creek and Penitencia Creek.• Pre- and post-walk surveys indicated an increase in participant knowledge of the creeks from an average of 0-22% to 78-100%, respectively.• Educational materials, such as plans and guides, were created that incorporated the senses of touch, smell, hearing and taste.

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2019	Grassroots Ecology	Peninsula/South Bay Watershed Forum	The project will increase community awareness and understanding of watershed stewardship by convening Peninsula and South Bay community members, agencies, and organizations working on watershed-related issues to connect with one another, share information, and advance policies and best practices that promote watershed health.	\$5,000	\$9,370	Completed April 2021	<ul style="list-style-type: none">• 5 Watershed Forum meetings held with 210 participants.• 16 guest speakers engaged.• 253-member listserv maintained <p>Experts from different agencies and nonprofit groups shared information on topics including:</p> <p>Measure AA and the Bay Restoration Authority, South Bay Salt Ponds Restoration, Diversity in Local Environmental Leadership, Future Planning and Actions in Local Watersheds, and Anadromous Fish and FAHCE.</p>
D3 Mini-Grant	2019	Living Classroom	Equity in Environmental Literacy	The project will involve planning and supervising community building workdays to engage community members in planting native tree and under story plants, and interpretive signs; to create wildlife habitat; educate the participants and future visitors regarding the value of native plants in helping to restore our native ecology; and create more beautiful and inviting outdoor gathering places for the local community.	\$5,000	\$32,000	Completed December 2020	<p>Due to COVID-19, Living Classroom could not carry out the original scope of work with in-person workday lessons. The funding was instead used to create a new native and edible garden at Jose Vargas School. Key outcomes include:</p> <ul style="list-style-type: none">• Removed of topsoil and mulch.• Installed irrigation in a new native garden.• Removed existing shrubs and replanting them on the campus.• Planted 30 native plants.• Built two 8’ x 4’ x 24” redwood beds with vegetable blend soil added to each box.• Installed “stub ups” for future irrigation in the new beds and for suture beds 9a total of 10 beds are needed to accommodate the student enrollment at Vargas).
D3	2019	City of Morgan Hill	Madrone Channel Trail Improvements Project	The project will be the first phase of a two-phase project to pave an existing unpaved trail that is located on a maintenance road adjacent to the east side of Valley Water’s Madrone Channel. The 2.3-mile trail runs north along the eastside of Highway 101 from Tennent Avenue to Cochrane Road. The first phase is approximately 1.1 miles.	\$120,000	\$401,958	In progress	
D3	2020	Santa Clara Open Space Authority	Pond Restoration Project for California Red-legged Frog and Western Pond Turtle in Rancho Canada del Oro Open Space Preserve	The project will directly improve habitat for two special status species within Rancho Canada del Oro Open Space Preserve (Preserve) in Santa Clara County: California red-legged frogs (CRLF), western pond turtles (WPT). The project will be focused on conserving existing populations, increasing the number of individuals, and expanding the overall distribution of populations of these species in biologically appropriate locations to maintain viable populations and contribute to the regional recovery of these species. The project outcomes will be achieved through critical pond redesign, invasive plant removal, and native vegetation restoration. The project will build a network of ponds to provide vital habitat for CRLFs and WPTs and provide linkage to the ring of protected lands surrounding the Preserve.	\$476,796	\$704,548	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2020	Living Classroom	Campbell Union Elementary School District	The project will implement outdoor instruction and student experiential learning at six schools in the Campbell Union Elementary School District (CUSD) through a native ecology lesson portfolio . The lessons taught at these schools will focus on learning topics including ecology, sensory observation, pollination, water conservation, plant biodiversity and its relationship to wildlife diversity and abundance, healthy soil, and how all of this relates to a healthy watershed. Three of the six schools have native habitat gardens in place; one will be completed by summer’s end; and two schools (Sherman Oaks and Forest Hill) have plans to install gardens in the near future.	\$5,000	\$8,000	Agreement execution in progress	
D3 Mini-Grant	2020	Youth Outside	2019 Outdoor Educators Institute	The project will support 18-24 year-old Bay Area residents interested in pursuing a career in outdoor education through an immersive training program on evenings and weekends over a three-month period. OEI ensures that young adults who’ve historically faced social, economic, and cultural barriers to accessing the outdoors are reconnected to the natural world through training, skills-building, and experiences critical to their continued growth as leaders in the environmental field.	\$5,000	\$50,000	Agreement execution in progress	
D3 Mini-Grant	2020	Bay Area Older Adults	Watershed Appreciation Program	The project will provide four outdoor educational programs for visually impaired older adults (VIPs) to experience Valley Water watersheds first-hand, as well as teach them about the protecting our watersheds and dependent ecosystems, and related projects. The project will customize the program for this underserved population; provide transportation from the Vista Center for the Blind, healthy lunches, four blind-trained guides; creation of four-sense focused watershed interpretation; and create surveys to analyze what participants learned from each program.	\$5,000	\$12,627.14	Agreement execution in progress	
D3 Mini-Grant	2020	Guadalupe River Park Conservancy	Guadalupe Watershed Ecosystem Education Project	The project will provide programming and transportation scholarships to bring Title One schools to Guadalupe River Park and Gardens. At least forty percent of a school’s registered students must be eligible for Free or Reduced Price Meal (FRPM) in order to qualify for any GRPC scholarship.	\$4,725	\$6,433	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2020	Children’s Discovery Museum of San Jose	Project Transect Alamitos Creek	The project will enhance the Children’s Discovery Museum of San Jose’s existing BioSITE (Students Investigating Their Environment) environmental education program for the 4th grade students from Graystone and Williams Elementary Schools and their Leland High School student mentors with a pilot program to use “transects” to conduct biological monitoring of the biodiversity of the important and rich riparian environment at three collection sites along Alamitos Creek. The award-winning BioSITE curriculum, which uses local watersheds as outdoor classrooms, has traditionally focused on just the river or creek itself, and this pilot offering will expand the educational scope to include investigating change over time with the flora while also measuring impacts of human activity.	\$5,000	\$197,712	Agreement execution in progress	
D3 Mini-Grant	2020	Grassroots Ecology	Embarcadero Road Habitat Corridor	The project will be a partnership between Grassroots Ecology and landscape architect Juanita Salisbury, the City of Palo Alto and the San Jose Conservation Corps. Two pollinator gardens will be created along Embarcadero Road by converting the existing space into a watershed-friendly habitat, which will attract pollinators, such as bees and butterflies. The project will provide a hands-on workshop to the San Jose Conservation Corps as they remove the ivy and mulch from the existing area. The workshop provides training to at least 20 community members and teaches the concept of habitat gardening and installation of native vegetation. Signage will help interpret the garden flora and fauna and the garden’s watershed benefits and be visible to 25,000 passersby that travel the road daily. First Congregational Church members, neighbors and other community volunteers will provide and maintenance into the future.	\$5,000	14,500	In progress	
D3 Mini-Grant	2020	San Jose State University Research Foundation	KCCB BioBlitz and Connection to Nature	The project will implement a research component of the BioBlitz events to provide valuable data and analysis on how such events contribute to participant sense of connection to nature. Practical consequences of feeling connected to nature manifest themselves in ways such as pro-environmental attitudes and behaviors that impact citizen support for natural resource protection and management.	\$5,000	\$8,250	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2020	Marshmallow Minds	Environmental STE(A) M Education on Conservation of Birds	The project will create environment-focused STEAM education modules on bird conservation and their habitat, as well as field learning activities, in collaboration with the San Francisco Bay Bird Observatory (SFBBO) for students in grades K-8.	\$5,000	\$46,000	In progress	
D3 Mini-Grant	2020	Alliance for Water Efficiency	Sustainable California Initiative Project	The project will provide funding to develop a watershed stewardship curriculum that will then be presented to approximately 10 high schools and 15 Boy Scout troops in Santa Clara County. The project will also create posters and artwork that will be displayed at local creeks, trails and parks with an emphasis on the benefits of preserving the watersheds, as well as cleanups at the Don Edwards Wildlife Refuge, Ed Levin County Park, and Berryessa Creek Park.	\$3,230.54	\$4,310.50	Cancelled	
D3	2020	Grassroots Ecology	Re-Oaking Silicon Valley	The project will expand the climate resiliency of the region by growing, planting and establishing hundreds of oaks, willows, buckeyes and other native trees across public open spaces and parks in Palo Alto, Los Altos Hills and Cupertino, as well as providing native trees and plants through outreach programs in Sunnyvale and Santa Clara, where development has displaced the historic native tree canopy. The project will provide education and service-learning opportunities to hundreds of people in Santa Clara County and will expand the awareness of the importance of native oaks in improving the region's ecosystem and watershed health.	\$103,735	\$351,685	In progress	
D3 Mini-Grant	2020	Baker Home and School Club	Outdoor Classroom and Garden	The project will create an educational, productive and imaginative space at Baker Elementary School with an outdoor classroom, native plant garden, vegetable/herb/fruit garden. This newly created space in a large dirt area will result in an inviting and welcoming area for students. Students will feel a sense of ownership and accomplishment as they get their hands dirty, watch things grow, create experiments, and harvest from a beautiful outdoor garden.	\$5,000	\$20,680	In progress	
D3 Mini-Grant	2020	Bay Area Older Adults	Watershed and Wildlife Education Program	The project will increase access for 50 seniors ages 60+ to outdoor educational experiences. The grantee will continue with it's annual volunteer restoration event at Don Edwards San Francisco Bay National Wildlife Refuge, and add four new outdoor educational programs about Valley Water's watersheds in 2020. Project locations include Don Edwards Wildlife Refuge, Anderson Lake County Park, Vasona Lake County Park and Shoreline Lake Park.	\$5,000	\$15,876.06	In progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2020	Elizabeth F. Gamble Garden	Watershed Garden	The project will convert a quarter acre of turf grass into a prominent new garden on the corner of Embarcadero and Waverley Street in Palo Alto that will demonstrate the watershed approach to landscaping. The transformation will provide enhancements to the properties, neighborhoods and cities. It will demonstrate sustainable garden design principles including building healthy soil, keeping rain on the properties, using permeable paving, selecting climate-appropriate plants and lawn alternatives that also provide habitat to wildlife and managing supplemental irrigation.	\$5,000	\$99,150	In progress	
D3 Mini-Grant	2020	San Jose State University Research Foundation	Watershed Stewardship Awareness Educational Workshop Series	The project will conduct a series of educational workshops with the goal of creating awareness of watershed stewardship. conducted at San Jose State University and the participants will be students in the Department of Civil and Environmental Engineering, and other students of San Jose State who are interested in learning about watershed stewardship.	\$5,000	\$6,250	In progress	
D3	2021	Community Express	La Sendera Community Art Trail	The project will paint murals and place other art installations on community owned sound walls and private fences that line the two-mile trail. The project will host outdoor events in partnership with local businesses and schools to engage the community.	\$25,530	\$50,000	Agreement execution in progress	
D3 Mini-Grant	2021	Keep Coyote Creek Beautiful	Hellyer County Park Mural	The project will create a mural at Hellyer County Park in San Jose, CA. The mural design and implementation process includes: 1) Meeting with Santa Clara County Park management to create a full scope of work and budget; 2) Obtain community input to render a mural draft design and approve the design via in-person activities and surveys; 3) Preparing and painting the mural. The mural will bring awareness to the neighboring Coyote Creek and park visitors will learn about the flora and fauna that co-exist along the creek.	\$5,000	\$12,450	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2021	Keep Coyote Creek Beautiful	Empire Gardens Elementary School Mural	The project will create a mural at Empire Gardens Elementary School in San Jose, CA. The mural design and implementation process includes: 1) Meeting with the facility management to create a full scope of work and budget; 2) Refining community input to render a mural draft design and approve the design; 3) Preparing and painting the mural. The mural will bring awareness to the neighboring Coyote Creek, and the students and visitors will learn about the birds, bugs, fish, trees and other wildlife that live in and around the creek.	\$5,000	\$13,380	Agreement execution in progress	
D3 Mini-Grant	2021	Bay Area Ridge Trail Council	Ridge Trail Berryessa BioBlitz	The project will encourage residents to go out into their neighborhood parks and learn about the local environment around them. The event will be facilitated by Bay Area Ridge Trail staff, a local naturalist, and project partners. The training sessions will guide participants on how to examine and explore local flora/fauna using the iNaturalist App.	\$5,000	\$7,500	Agreement execution in progress	
D3 Mini-Grant	2021	Bay Area Older Adults	Watershed Appreciation Program	The project expands Bay Area Older Adults' Watershed Appreciation Program (project) to four additional Santa Clara County watersheds: Los Gatos Creek County Park, Joseph D. Grant and Grant Lake, Uvas Canyon County Park and Coyote Creek Ogier Ponds. The Project features both live and remote educational programs and promotion of recorded versions of the same programs to the visually impaired population of Santa Clara County.	\$5,000	\$16,680	Agreement execution in progress	
D3 Mini-Grant	2021	Bay Area Older Adults	Watershed Walk & Talk Program	The project will increase access of adults (age 60+) to Santa Clara County's watersheds while raising participant awareness and understanding of how healthy watersheds are critical to their well-being and that of the natural world around them. For 2021, the project will include four new in-person outdoor educational programs located within the Valley Water watersheds. The in-person programs will enable older adults, who do not usually have access to these watersheds, to experience them first-hand.	\$5,000	\$17,830	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3 Mini-Grant	2021	City of Santa Clara	Green Infrastructure and Water-wise Native Plant Demonstration Garden Design	The project will be an assessment to install an integrated project that will provide water quality improvement, water conservation benefit, enhance community understanding and promote inter-departmental engagement on green stormwater infrastructure (GSI) retrofit. Once implemented, it will pave the way for future GSI projects, engage the public and strengthen interdepartmental and interagency collaboration.	\$5,000	\$8,000	Agreement execution in progress	
D3 Mini-Grant	2021	City of Santa Clara	Adopt-a-Spot Tool Lending Program	The project will provide community groups, businesses, and individuals an opportunity to play an active role in keeping public spaces clean and beautiful by lending them the necessary resources and tools to conduct a successful cleanup, with the flexibility to set their own schedule. Participants will be able to adopt a space in the public right-of-way, such as gutter lines and sidewalks, creek trails (with Valley Water approval), neighborhood blocks, City-owned lots or alleys, storm drain inlets, and bus stops.	\$5,000	\$12,974	Agreement execution in progress	
D3 Mini-Grant	2021	City of Santa Clara	San Tomas Aquino Creek Trail Pet Waste Station and Public Litter Container Expansion Project	The project will include the installation, outreach and ongoing maintenance of two additional public litter containers, each accompanied by a new pet waste bag station and full-color, weather resistant pollution prevention sign; and three additional pet waste bag stations and signage installed near existing public litter containers along the trail (total project installation of two public litter containers, five pet waste bag stations and five pollution prevention signs). The signage will include a QR code with a link to the City's Stormwater Pollution Prevention webpage which includes useful information and links for residents to learn more about the hazards of stormwater pollution and their role in reducing this threat. The project will also include social media outreach messaging to promote the use of the new trail installations and connect users to resources to further educate the public.	\$5,000	\$8,760	Agreement execution in progress	
D3 Mini-Grant	2021	Gilroy After Hours Rotary Club	Gilroy Watershed Clean Up	The project will include two watershed clean up events. Each event will be held on a Saturday morning. Events will target two areas of the city that have significant clean up challenges due to urban infrastructure and aging neighborhoods. Each event is expected to attract approximately 50 volunteers and collect 3-4 six-yard dumpsters along with recycling products.	\$5,000	\$6,667	Agreement execution in progress	

Appendix C: Cumulative Partnerships and Grants Information for Projects A2, B3, B7 and D3

SCW Project Number	Grant Cycle FY	Grantee/ Community Partner	Project Name	Description of Project	Amount Awarded	Total Project Cost	Status	Measurable Outcomes
D3Mini-Grant	2021	President and Board of Trustees of Santa Clara College	The Water Project	The Water Project, a collaboratively created multi-media performance work, will raise awareness and promote engagement surrounding 21st century water issues, including those pertinent to regional watersheds and systems. Consulting water scientists confirm the need to complement hard data with artistic endeavors such as The Water Project to engage the public and motivate action. For this reason, The Water Project intends to be part of the conversation.	\$5,000	\$27,460	Agreement execution in progress	
D3 Mini-Grant	2021	SCIENCE IS ELEMENTARY INC	SiE Books Creek Cleanup	The project will address educational challenges that were highlighted during the COVID-19 pandemic: limited internet connectivity, lack of high-quality materials for remote hands-on science instruction, and a broadening of the achievement gap for students of color and those from low-income families. SiE Books are line-drawing illustrated short books that allow young kids (5-7 years of age) to do hands-on science experiments on their own and require little to no reading. The adult companion will contain information on watershed stewardship and cleanup, and will include recommendations for participating in creek clean-ups as a family.	\$5,000	\$100,000	Agreement execution in progress	
D3 Mini-Grant	2021	Latimer Home and School Club	Latimer Garden & Outdoor Classroom	The project will transform an unused section of Latimer School campus into a school garden and outdoor classroom for 550 students. The garden, which will attract a diversity of wildlife, will include themed garden beds for varying plants such as natives, pollinator- friendly, scented, and tactile. Outdoor classroom elements will also be installed, including picnic tables, a sink that uses greywater, a whiteboard, compost bins, a large garden shed and educational signage. Teachers at Latimer will use the garden and outdoor classroom to teach the students about local watershed stewardship, wildlife habitat, water conservation, garden education and other ecological concepts.	\$4,959	\$39,942	In progress	
Total					\$7,910,789	\$19,174,457		

Safe, Clean Water and Natural Flood Protection Program

Appendix D: Capital Projects Jurisdictional Complexities (Confidence Levels Regarding Outside Agencies) Fiscal Year 2019–2020

Partners and Outside Agencies	A3 Pipeline Reliability Project	C1 Anderson Dam Seismic Retrofit	D4 Fish Habitat and Passage Improvement		D6 Creek Restoration and Stabilization			E4 Upper Penitencia Creek Flood Protection	E5 San Francisquito Creek Flood Protection	E6 Upper Llagas Creek Flood Protection	E7 San Francisco Bay Shoreline Study		E8 Upper Guadalupe River Flood Protection		Permanente Creek Flood Protection	Sunnyvale East/West Channels Flood Protection	Coyote Creek Flood Protection
			Site 1: Almaden Lake	Site 2: Ogier Ponds	Site 1: Hale Creek	Site 2: Bolsa Road	Site 3: Los Gatos		Upstream of 101		EIAs 1-10	EIA 11	Reach 6	Reaches 7-12			
Funding																	
U.S. Army Corps of Engineers (Funding)								M	L		M	H		L			
State Grants								M	L								M
San Francisco Bay Restoration Authority (Measure AA)									L			H					
Other									L	L	M						M
Regulatory Permitting																	
U.S. Army Corps of Engineers (Permits)		M			H	H		H	M	H			M	M	H	M	M
California Department of Fish and Wildlife	M	M			H	H		H	M	H			M	M	H	M	M
California Department of Industrial Relations/CA Occupational Safety		M															
Department of Water Resources Division of Safety Dams		M															
Federal Energy Regulatory Commission		M															
National Marine Fisheries Service		M				H		H	M	H			M	M		M	M
San Francisco Bay Regional Water Quality Control Board	M	M			H			H	M			M	M	M	H	M	M
Central Coast Regional Water Quality Control Board						H				H							
San Francisco Bay Conservation and Development Commission												M				M	
United States Fish and Wildlife Service		M				H		H	M	H			M	M	H	M	M
Valley Habitat Plan	M	M				H		H									M
Cities																	
Cupertino	H														H		
East Palo Alto									H								
Gilroy																	
Los Altos					M	H									H		
Menlo Park									H								

Note: H– high, M– moderate, L– low
Refer to page 2 for more information on confidence level definitions.

Partners and Outside Agencies	A3 Pipeline Reliability Project	C1 Anderson Dam Seismic Retrofit	D4 Fish Habitat and Passage Improvement		D6 Creek Restoration and Stabilization			E4 Upper Penitencia Creek Flood Protection	E5 San Francisquito Creek Flood Protection	E6 Upper Llagas Creek Flood Protection	E7 San Francisco Bay Shoreline Study		E8 Upper Guadalupe River Flood Protection		Permanente Creek Flood Protection	Sunnyvale East/West Channels Flood Protection	Coyote Creek Flood Protection
			Site 1: Almaden Lake	Site 2: Ogier Ponds	Site 1: Hale Creek	Site 2: Bolsa Road	Site 3: Los Gatos		Upstream of 101		EIAs 1-10	EIA 11	Reach 6	Reaches 7-12			
Milpitas																	
Morgan Hill		M								H							
Mountain View					M						M				H		
Palo Alto									H		M						
San José	H		H					M				M	H	M			M
Saratoga	H																
Sunnyvale											M					H	
Counties																	
Santa Clara County	H	M		M				M	H	H	M	M			H	H	M
San Mateo County									H								
Other Agencies																	
California Department of Transportation (Caltrans)									H	M				M		H	
California State Coastal Conservancy											M						
Gate of Heaven Cemetery (Diocese of San José)															H		
Department of Water Resources	H								H	M							
Federal Emergency Management Agency									M	M						M	
Peninsula Corridor Joint Power Boards (Caltrain)														M			
Midpeninsula Regional Open Space District											M				H		
NASA Moffett Field											M						
PG&E	M	M			M			M	M	M				L	H	H	
San Francisquito Creek Joint Powers Authority									H		M						
San Mateo County Flood Control District									H								
Union Pacific Railroad	L									M		L		L	H		
State Office of Historical Preservation		M				H									H		
Santa Clara Valley Transportation Authority (VTA)	M							M									

Note: H– high, M– moderate, L– low

Note: Empty cells are not applicable to that project.

Refer to page 2 for more information on confidence level definitions.

Appendix E: Cumulative Trash Removal Data for Projects B1-B4, B6 and B7

E-1: Estimated volume of trash removed by project for Projects B1, B2, B4, B6 and B7¹

Project	Estimated amount of trash and debris removed in Tons and Cubic Yards (CY) ²			
	FY14-FY20		FY21	
	Est. Tons	Est. CY	Est. Tons	Est. CY
B1: Impaired Water Bodies Improvement (KPI #3: Trash accumulation point mapping and removal)³	33	329	6.7	67
B2: Interagency Urban Runoff Program (KPI#1: Trash booms)⁴	6	64	0.2	2.2
B2: Interagency Urban Runoff Program (Hot spot cleanup)	23	227	1.7	17
B4: Good Neighbor Program: Encampment Cleanup⁵	6,385	89,389	119	1,666
B6: Good Neighbor Program: Remove Graffiti and Litter⁵	692	9,672	157	2,199
B7: Volunteer Cleanup Efforts and Education (KPI #2: Cleanup day events)⁶	313	3,118	62	620
Estimated Totals	7,452	102,699	347	4,571

¹Grants and partnership trash removal information for Projects B3 and B7 are included in Table E-4.

²Some estimates may have slightly varied from past annual reports due to a refinement of the conversion from cubic yards to tons; and/or data that was processed after the previous report was developed.

³The trash accumulation point mapping started in FY16. Due to high flows during the winter of FY17, re-mapping was delayed and conducted in May and June 2017. Trash identified as part of this mapping effort will be cleaned in FY18.

⁴The San Francisco Bay Regional Water Quality Control Board has requested that all stormwater permittees report trash in volume rather than weight. Volume is a more meaningful measure of the trash present because it is not affected by the weight of wet vs. dry trash. For Projects B1 and B2, volume is visually estimated in the field and likely includes some vegetation and debris. Where data was only collected in weight, a conversion was used based on a solid waste calculator estimating 10 cubic yards per ton. Prior conversions were not consistent; as a result, the numbers in this table may not match previously reported numbers.

⁵Tons were converted to cubic yards using an estimate of 14 cubic yards per ton, which is based on a comparison with industry standard conversions and a watershed field operations field experiment and analysis. Project B4 and B6 quantities are based on landfill weights measured in tons.

⁶Project B7 grants and partnerships (KPI #1) and Adopt-A-Creek Program (KPI #2) are not included. Grants and partnerships information is included in Table E-4. Data is currently not available for the Adopt-A-Creek Program because the trash is removed by volunteers who do not consistently measure or report their results. Volunteers use number of bags and approximate weights to estimate pounds. Using pounds simplifies measurement for volunteers and is consistent with the efforts of other jurisdictions implementing Coastal Clean Up and National River Clean Up days. Pounds were converted to tons (2,000 pounds = 1 US ton). Tons were then converted to cubic yards using an estimate of 10 cubic yards per ton. For Project B7 cleanup day even totals, the Safe, Clean Water Program funds 55% of this project.

E-2: Estimated volume of trash removed by watershed for Projects B1, B2, B4, and B6¹

San Francisco Bay Watersheds	Estimated cubic yards (CY) of trash and debris removed ²	
	FY14-FY20	FY21
Lower Peninsula	2,901	79
West Valley	2,249	350
Guadalupe	19,352	1,295
Coyote	65,338	1,590
Uvas/Llagas (Pajaro)	9,487	550
Estimated Totals	99,327	3,864

¹Watershed information is not reported for Projects B3 and B7.

²Some estimates may have slightly varied from past annual reports due to a refinement of the conversion from tons to cubic yards and the timing of collecting the annual estimates.

E-3: Estimated cost of trash removal activities for Projects B4, B6, and B7¹

Project	Estimated costs for trash removal	
	FY14-FY20	FY21
B4: Good Neighbor Program: Encampment Cleanup	\$7,325,423	\$300,609
B6: Good Neighbor Program: Remove Graffiti and Litter ²	\$3,156,683	\$2,317,294
B7: Volunteer Cleanup Efforts and Education	\$805,924	\$68,000
Estimated Totals	\$11,288,030	\$2,685,903

¹ Cost information for trash removal activities are not available for Projects B1 and B2 because project budgets are tracked as a whole and not by specific KPI. Grants and partnership cost information for Projects B3 and B7 are included in Table E-4.

² The Project B6 estimated totals were revised based upon the FY18 audited financials and revised Maximo reporting calculations.

E-4: Trash removal information from partnerships and grants for Projects B3 and B7

Estimated amount of trash and debris removed in Pounds, Tons, and Cubic Yards (CY) ¹									
Project	Grant Cycle	Grantee/ community partner	Grant Project Name	Amount Awarded	Total Project Cost	Status	Estimated Amount of Trash Removed		
							Pounds	Tons	CY
Pollution Prevention Partnerships and Grants (B3)	FY14	San José Parks Foundation	Trash Free Coyote Creek Cleanup and Surveillance Project	\$26,783	\$80,760	Closed (9/30/15)	82,000 ¹	41	410
	FY14	California Product Stewardship Council	Secure Pharmaceutical Collection Bin Expansion	\$206,417	\$276,352	Closed (10/6/17)	8,929 ¹	4.5	45
	FY16	South Bay Clean Creeks Coalition	South Bay Creek Cleanup Program	\$60,000	\$80,000	Closed (7/21/17)	20,000 ³	10 ²	100
	FY16	San Francisco Bay Wildlife Society	San Francisco Bay National Wildlife Refuge (NWR) Clean-Up 2016	\$35,391	\$73,390	Closed (3/22/18)	6,280	3.1 ¹	31
	FY16	Santa Clara County Creeks Coalition	Trash Free North Coyote Creek Watershed Stewardship and Engagement Project	\$89,596	\$148,849	Closed (3/15/18)	60,000	30 ¹	300
	FY18	Downtown Streets Team	Penitencia Creek Team	\$122,280	\$190,828	In progress	145,000	72	725 ¹
	FY18	Downtown Streets Team	El Camino Clean Up	\$122,280	\$190,828	In progress	12,654 ¹	6	63
	FY18	Santa Clara Valley Transportation Authority (VTA)	Keep Santa Clara Valley Beautiful Project	\$78,285	\$104,380	In progress	N/A	N/A	N/A
	FY19	City of San José (partnership)	Tully Road Ballfields Creek Cleanup Project	\$200,000	\$331,900	In progress	N/A	N/A	N/A
	FY20	Guadalupe River Park Conservancy	Reducing the Impacts of Litter Along the Guadalupe River Trail	\$90,049	\$225,100	In progress	N/A	N/A	N/A
	FY20	West Valley Clean Water Program Authority	School Site Stormwater Pollution Prevention Plans	\$35,088	\$78,230	Agreement execution in progress	N/A	N/A	N/A
	FY21	City of San José (Partnership)	Cash for Trash	\$180,000	\$310,500	In progress	N/A	N/A	N/A
Support Volunteer Cleanup Efforts and Education (B7)	FY14	Acterra	Acterra Lower Peninsula Healthy Creeks Project	\$68,600	\$179,910	Closed (9/30/16)	18,180 ¹	9	90 ²
		Clean Water Fund	ReThink Disposable: Preventing Riparian Trash at the Source	\$82,133	\$174,036	Closed (7/6/17)	24,265 ¹	12.1	121
		City of Sunnyvale	Schools Goin' Green	\$32,250	\$47,448	Closed (6/30/16)	4,189 ¹	2	20 ²
		Save the Bay	Clean Bay Project	\$60,000	\$241,243	Closed (6/30/16)	2,200 ¹	1	10 ²
	FY18	Gilroy Compassion Center	South County Creeks Team Project	\$15,000	\$40,973	In progress	N/A	N/A	N/A
	FY18	South Bay Clean Creeks Coalition	Los Gatos Creek TEAM 222 Project	\$15,000	\$19,995	Closed (12/8/20)	18,200	9.1 ¹	91
	FY18	South Bay Clean Creeks Coalition	Friends of Coyote Creek Watershed North Coyote Creek Stewardship Project	\$35,000	\$46,665	In progress	40,800	20.4 ¹	204
	FY18	South Bay Clean Creek Coalition (Partnership)	Guadalupe River/ Coyote Creek Watershed Community Engagement Project	\$199,353	\$199,353	In progress	N/A	N/A	N/A
	FY19	Gilroy Compassion Center	South County Creeks Team Project	\$30,000	\$38,590	In Progress	N/A	N/A	N/A
	FY19	Grassroots Ecology	Young Watershed Stewards Project	\$44,301	\$167,781	In Progress	N/A	N/A	N/A
	FY21	Grassroots Ecology	Coyote/Stevens Creek Watershed Community Engagement Project	\$49,980	\$101,026	Agreement execution in progress	N/A	N/A	N/A
	FY21	Silicon Valley Bike Coalition	Wheels and Waterways Project	\$50,000	\$81,214	Agreement execution in progress	N/A	N/A	N/A
Estimated Total							442,697 pounds	220 tons	2,210 cubic yards

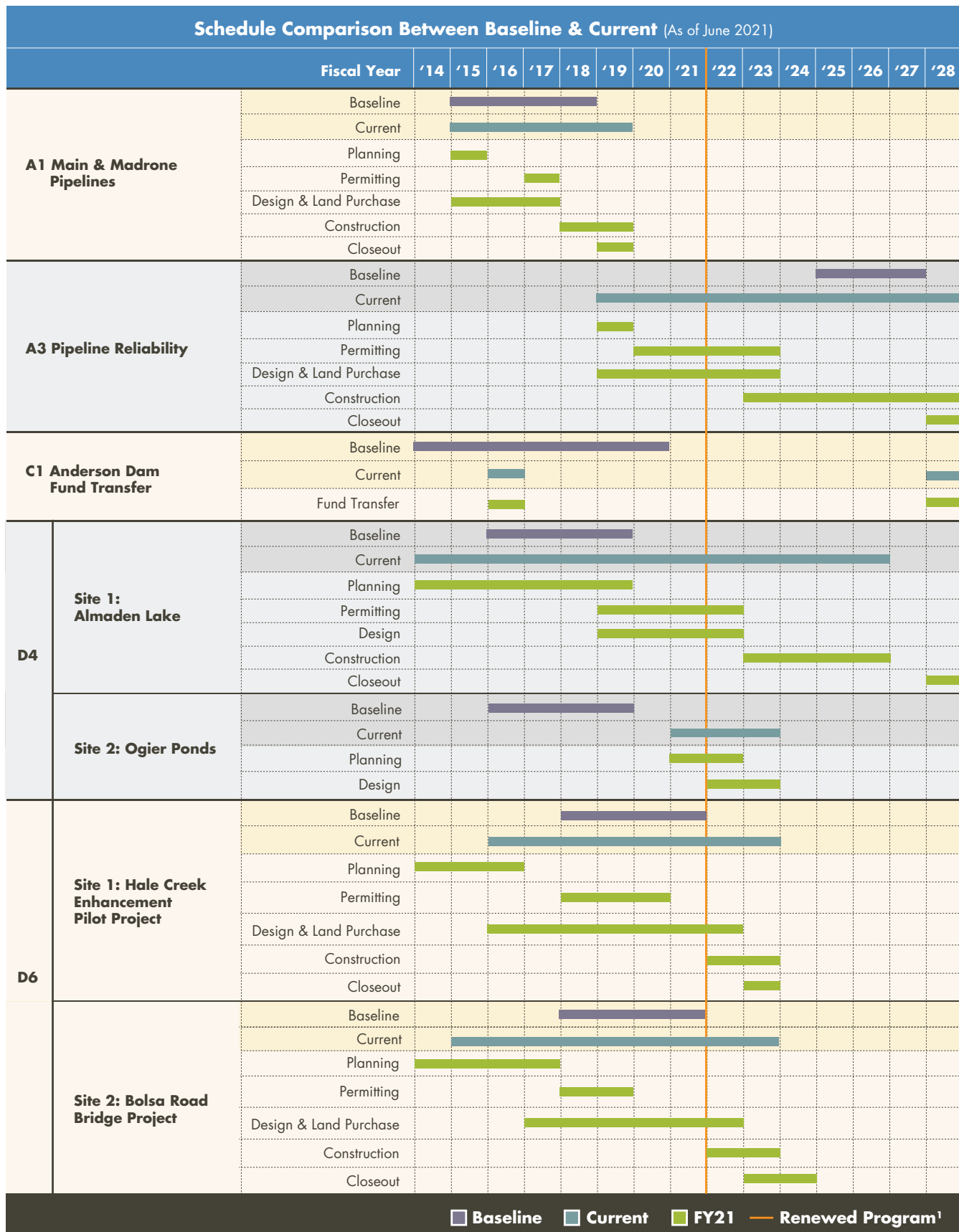
¹ These numbers are the original reported by each grantee. The other numbers were converted by staff.

² This number was corrected from a previous miscalculation.

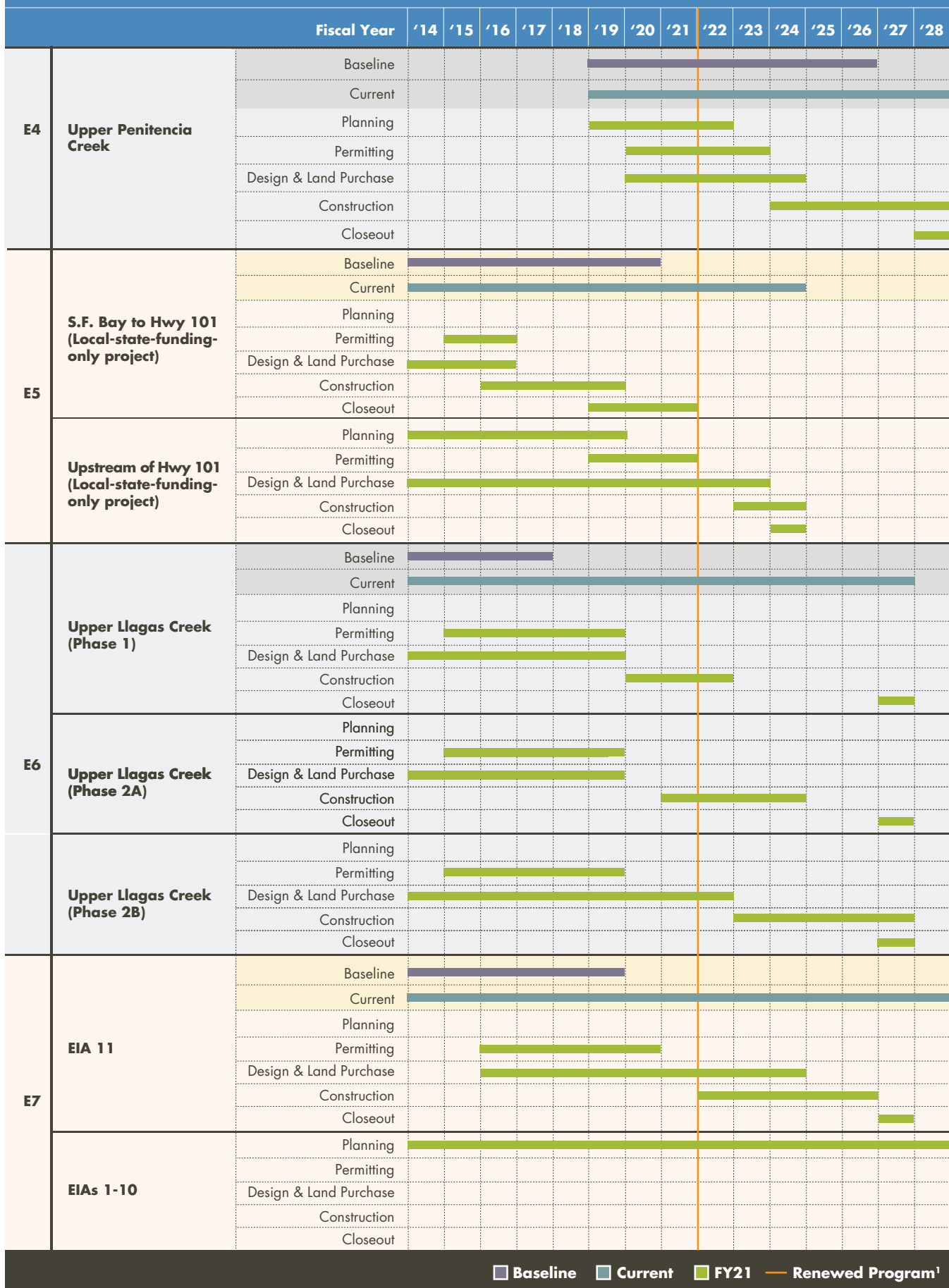
NOTE: Due to COVID-19 shelter-in-place orders and poor air quality due to wildfires, many grant-funded clean-up projects were put on hold in FY21.

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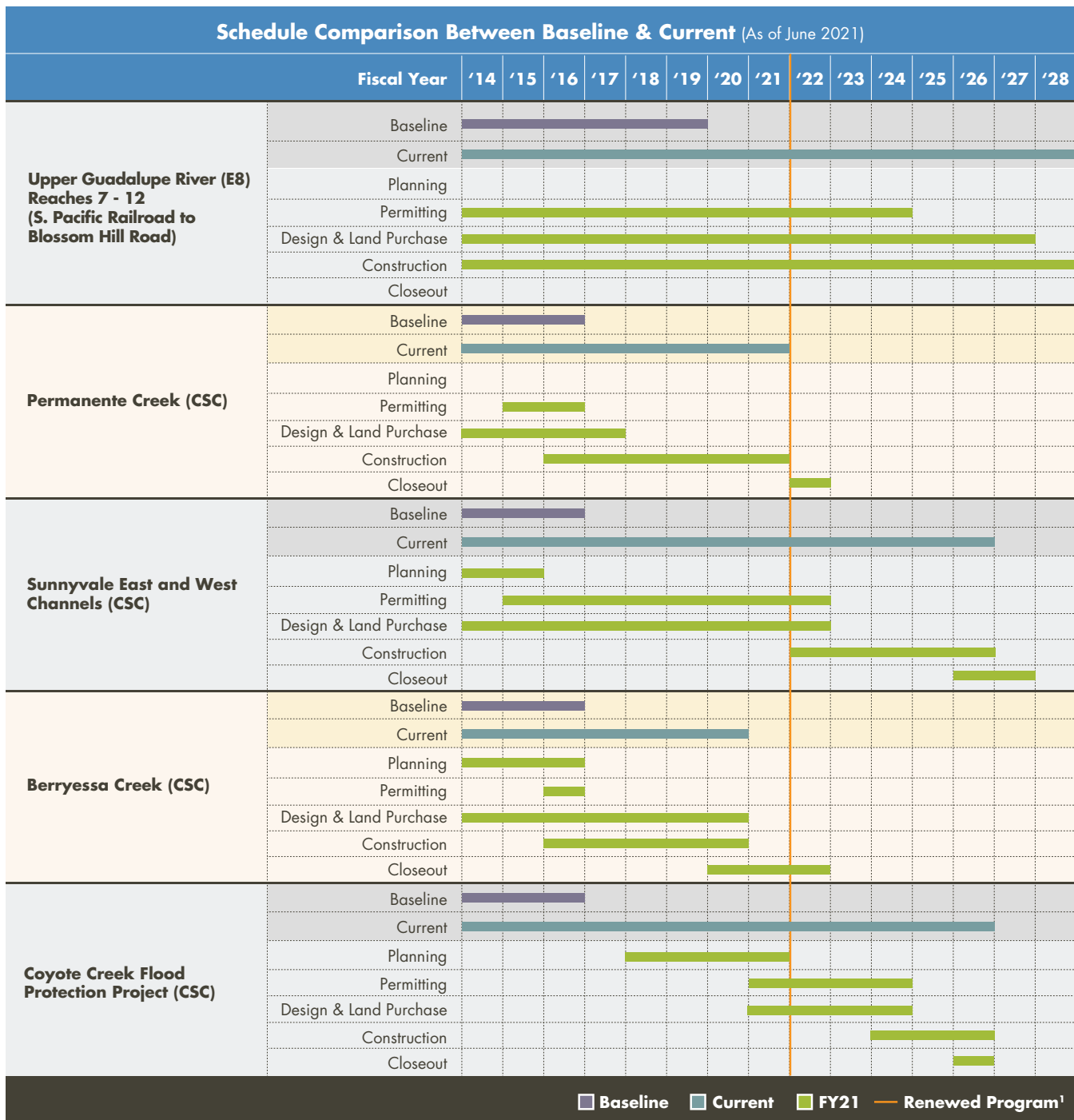
Appendix F: Schedule Comparison for Projects



Schedule Comparison Between Baseline & Current (As of June 2021)



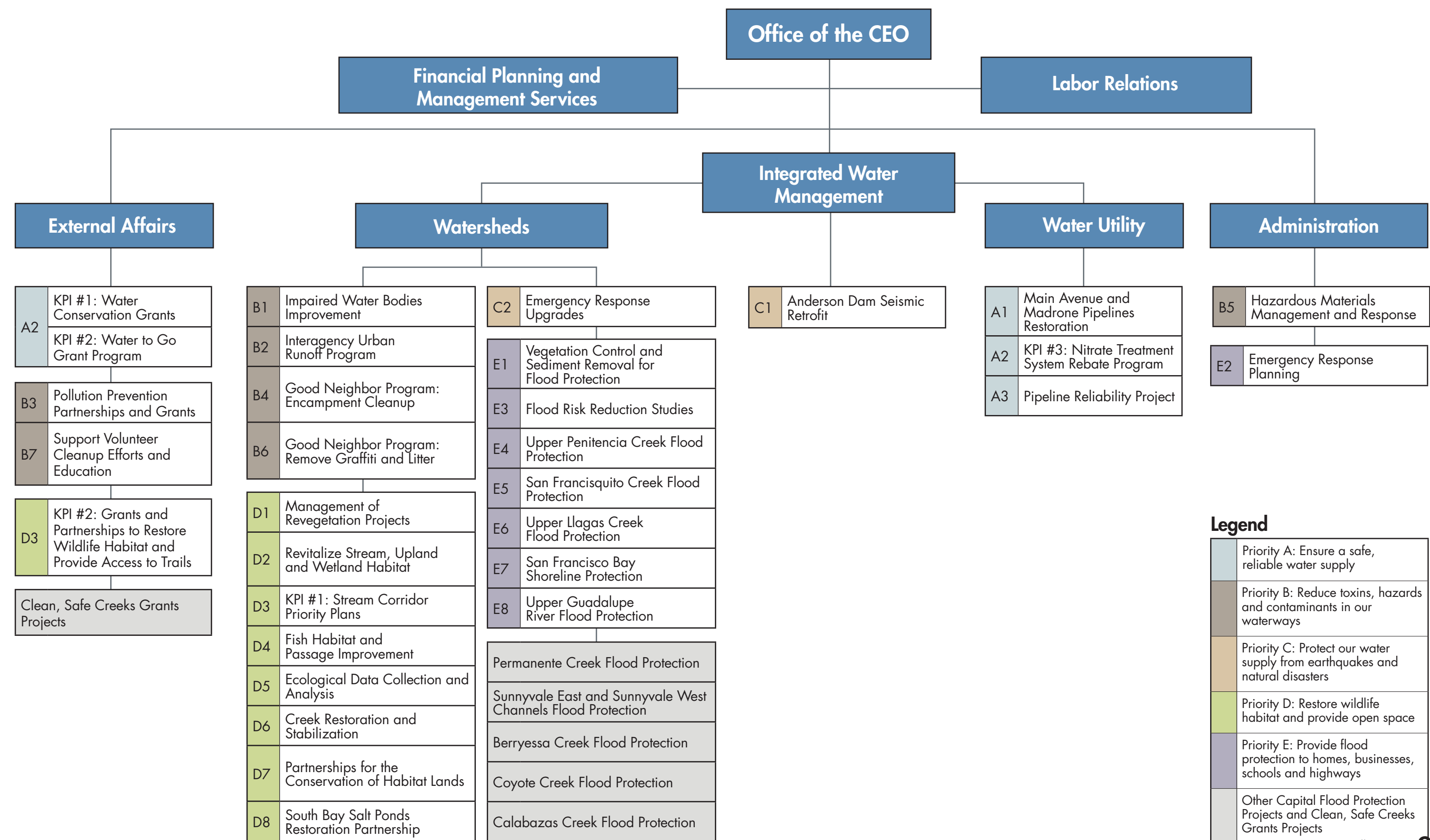
■ Baseline ■ Current ■ FY21 — Renewed Program¹



¹ The orange line denotes the start of the renewed Safe, Clean Water Program that replaced the 2012 Program. The project schedule after this point is determined by activities in the renewed Program.

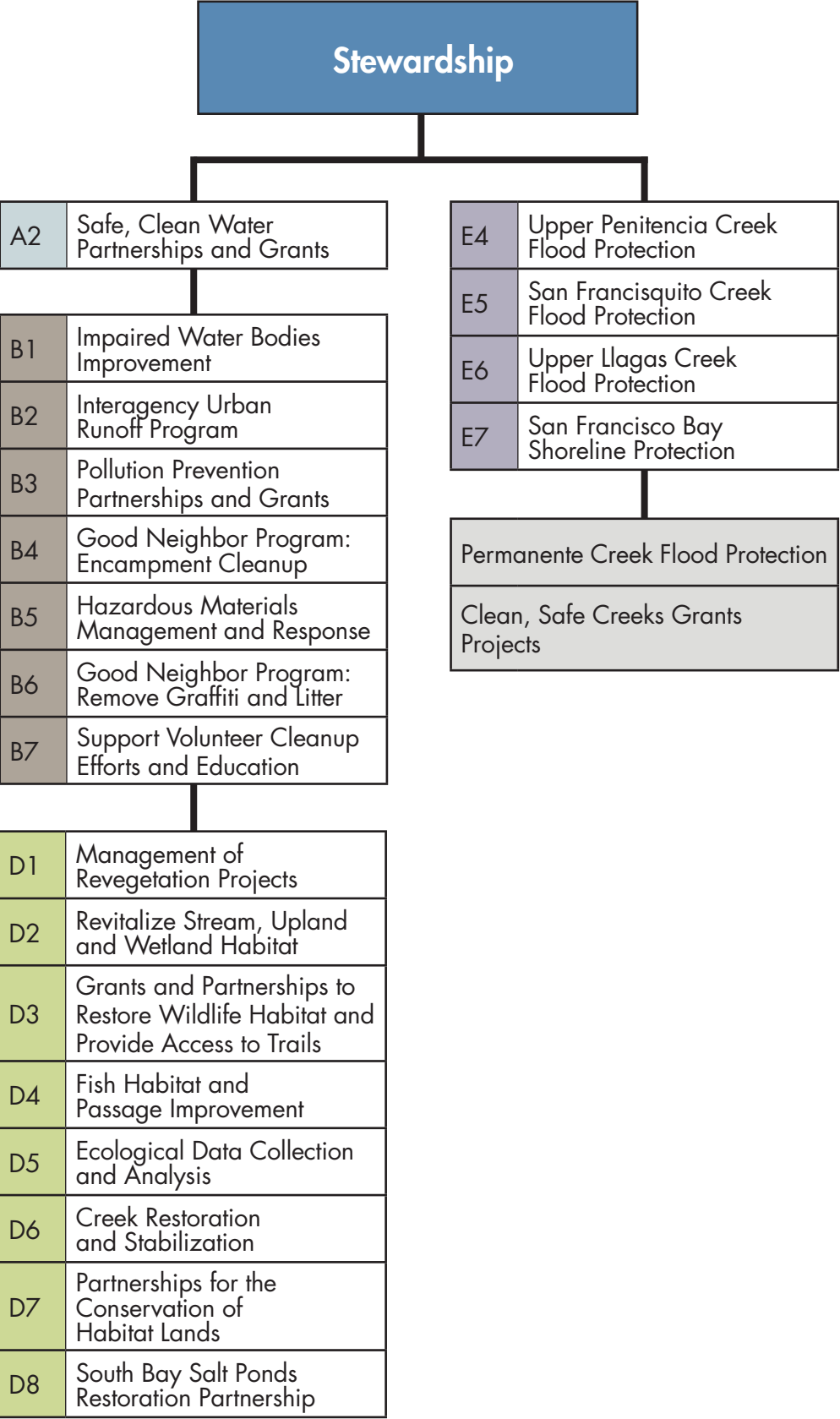
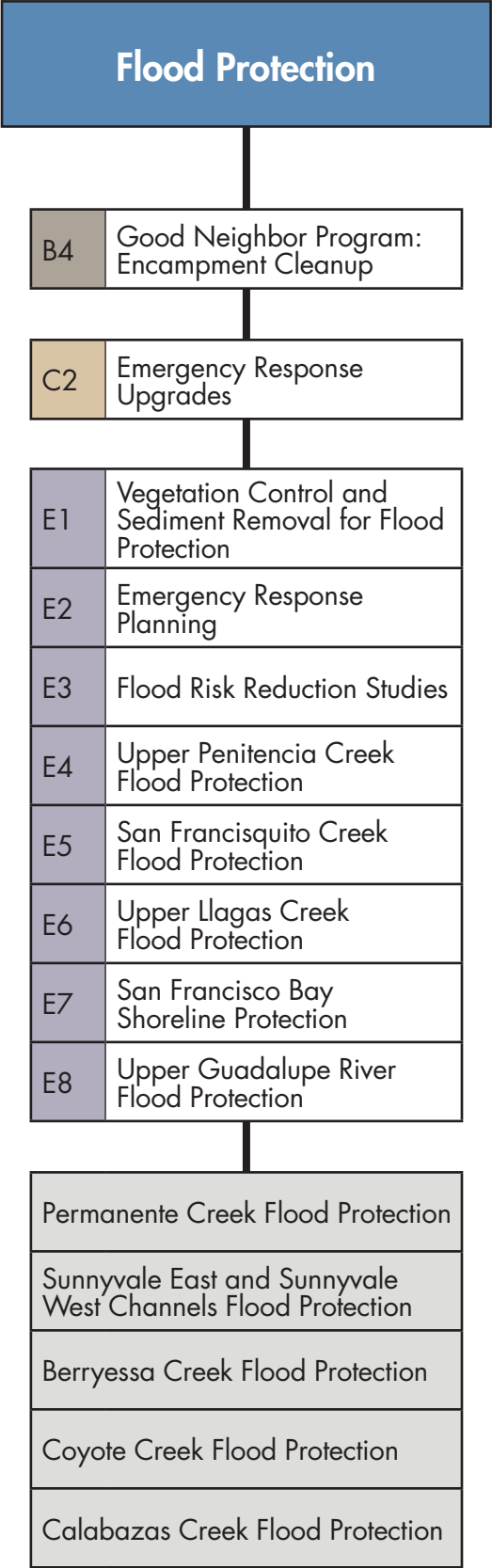
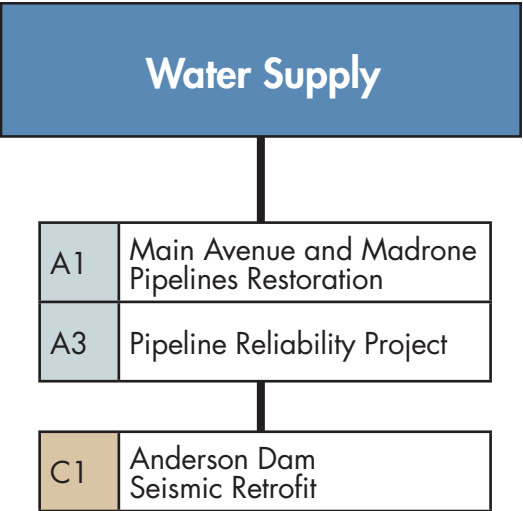
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Appendix G: Projects by Organization Structure



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Appendix H: Projects by Valley Water Mission Area



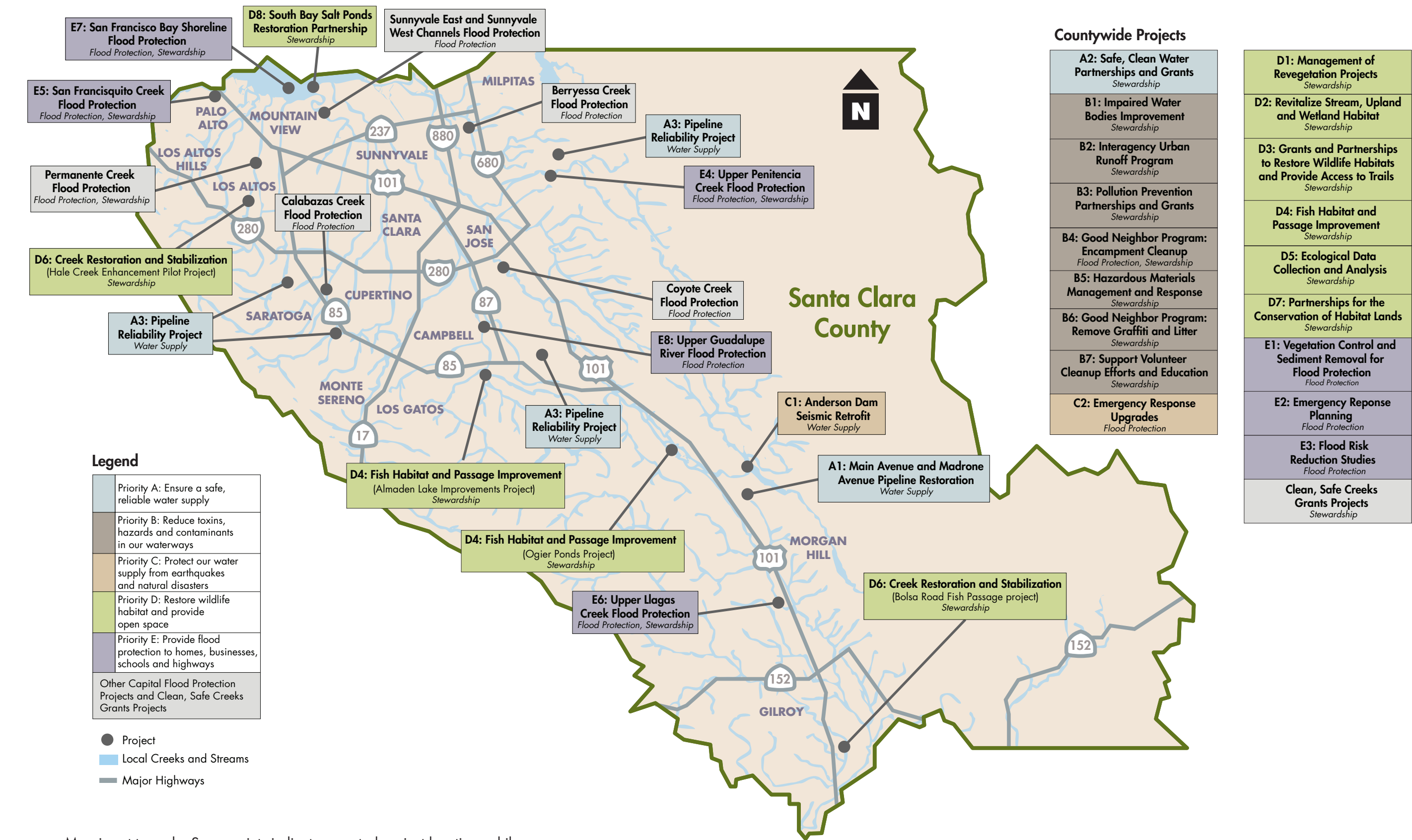
Legend

	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
	Other Capital Flood Protection Projects and Clean, Safe Creeks Grants Projects

Please note that some projects have multiple benefits; therefore they are listed under more than one mission area.

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Appendix I: Countywide Map of Projects



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Appendix J: Glossary

1% flood

A flood that has a 1% chance of occurring in any given year; also referred to as a 100-year flood.

50-year flood

A flood that has a 2% chance of occurring in any given year.

100-year flood

A flood that has a chance of occurring an average of once every 100 years; also referred to as a 1% flood.

Acre-feet (AF)

An acre-foot of water would cover 1 acre of land to a depth of 1 foot. 1 acre-foot equals approximately 325,000 gallons, the average amount of water used by 2 families of 5 in 1 year.

Advanced Quantitative Precipitation Information (AQPI)

A regional project awarded to the NOAA which consists of improved mapping and weather data for estimating precipitation, as well as a series of updated forecasting systems for more accurate weather prediction.

Anaerobic

Defines an absence of oxygen or an organism which does not require oxygen to live.

Atmospheric river (AR)

Long, narrow regions in the atmosphere which transport most of the water vapor outside the tropic regions. When atmospheric rivers face landfall, they deposit most of their vapors in the form of rain or snow.

Aquifer

An underground geologic formation of rock, soil, or sediment that is saturated with water; an aquifer stores groundwater.

Booms

Increase in populations which signal almost or near-exponential growth.

Bypass channel

A channel built to carry excess water from a stream, or to divert water from the main channel.

Budget adjustment

A procedure to revise a budget appropriation, usually completed by either of two methods: (1) the Board of Directors approve the adjustment through the transfer of appropriations between funds, or through additional revenues or appropriations or (2) the CEO authorizes the adjustment of appropriations within a fund and within Operating Budget or within Capital Budget.

Carryforward

A portion or total of the unspent balance of an appropriation that is made available for expenditure in the succeeding fiscal year.

Glossary



Capital projects

Projects that are budgeted within the Capital Budget and fall within the definition of Capital Expenditures, meaning they (1) create or extend the lives of assets, (2) their work products have a useful life of greater than two years, and they involve an expenditure of Valley Water resources in excess of \$50,000.

Change Control Process: Over the life of the Safe, Clean Water Program, Valley Water may need to update or adjust the Program due to various reasons, such as regulatory, economic and technological changes outside the scope of Valley Water's activities. As described in the original Program Report, the Board must approve any Program changes in an open and public meeting. Furthermore, to ensure transparency and accountability to the community, the Board approved a Change Control Process.

Cleanup

The removal of trash and debris resulting from encampments; by Valley Water or by Valley Water in coordination with other agencies.

COVID-19

Disease caused by novel coronavirus, which has become a pandemic in the United States in 2020.

Diameter at breast height (DBH)

Standard for measuring the diameter of a tree, most often measured at 4.5 feet (1.7m) above the ground. This specified height is where data points such as growth, volume, and yield tables are collected.

Ecosystem

An ecological community of plants, animals, and microorganisms in their environment, functioning together as a unit.

Ecological service index (ESI)

Index used to measure ecosystem services within multifunctional landscapes, typically defined as a synergistic approach to bridge the gap between ecological services and the needs of a particular landscape.

Ecotone

Transition area between two differing ecological spaces. Retains some of the characteristics of each respective ecological space, yet contains species not typically found in either environment.

Encampment (homeless)

1 or more structures occupied by an individual or family that is located illegally on Valley Water or other public property. An area where there are no structures, but where personal property is stored is also considered an encampment.

Environmental enhancement

Action taken by Valley Water that benefits the environment, is not mitigation and is undertaken voluntarily. Enhancement actions may include environmental preservation or creation. In instances where enhancements are located in the same vicinity as a mitigation project, actions must exceed required compliance activities to be considered environmental enhancements.

Glossary



Environmental stewardship

To entrust the careful and responsible management of the environment and natural resources to one's care for the benefit of the greater community.

Epilimnion

The upper, wind-mixed layer of a lake which has been thermally stratified.

Erosion

The process by which soil is removed from a place by forces such as water or construction activity, and eventually deposited at a new place as sediment.

FEMA 1% Flood Risk Zone

Per FEMA modeling, this is the area representing parcels that have a 1% chance of experiencing 1 foot or greater flooding in any given year.

Fiscal year (FY)

A period that a company or government uses for accounting purposes and preparing financial statements. The fiscal year may or may not be the same as a calendar year. Valley Water uses a fiscal year that begins on July 1 and ends on June 30, which coincides with the State of California's fiscal year. The fiscal year is denoted by the year in which it ends, so spending incurred on November 14, 2015, would belong to fiscal year 2016. The federal government's fiscal year begins on October 1 and ends on September 30.

Fisheries

An area with an associated fish or aquatic population.

Fish and Aquatic Habitat Collaborative Effort (FAHCE)

Seeks to improve aquatic spawning and rearing habitat and fish passage for migration to and from the watersheds of Coyote and Stevens creeks as well as Guadalupe River. Improvements include modifications to reservoir operations to provide instream flows, restoration measures to improve habitat conditions and fish passage, as well as monitoring and adaptive management techniques.

Fish passage

A generic term for several methods incorporated into flood protection projects which allow native fish species to travel upstream to spawn.

Flood

A temporary inundation of inland or tidal waters onto normally dry land areas.

Flood conveyance capacity

The maximum amount of water that can flow through a channel, stream, or culvert before there is flooding of surrounding properties.

Floodplain

The low, flat, periodically flooded lands adjacent to creeks and rivers.

Glossary



Floodplain management

A city or county program of corrective, preventive and regulatory measures to reduce flood damage and encourage the natural and beneficial functions of floodplains. Careful local management of development in the floodplains results in construction practices that can reduce flood damages.

Floodwall

Walls used as levees to contain floodwaters within a stream. Floodwalls are used when right-of-way is limited.

Geomorphology/geomorphic

The study of the natural relationship between a stream and its bank and bed; pertaining to those processes that affect the form or shape of the surface of the earth, including creeks and streams.

Geotechnical

A field of study which explicitly deals with soil and rock behavior from an engineering perspective. Geotechnical engineers must assess risks such as landslides, slope stability, falling rocks, and avalanches.

Groundwater

Water that is found beneath the surface in small pores and cracks in the rock and substrate.

Groundwater Recharge

The addition of new water to an aquifer or to the zone of saturation. See groundwater.

Habitat

The specific, physical location or area in which a particular type of plant or animal lives. To be complete, an organism's habitat must provide all of the basic requirements of life for that organism.

Hydraulics

The properties and behaviors of fluids, such as water.

Hydrology

The behavior (properties, distribution and circulation) of water in the atmosphere, on land and in the soil.

Hypolimnion

Dense, bottom layer of water in a thermally stratified lake. In the summer, lakes separate into layers: epilimnion (top of the lake) and the hypolimnion (bottom), with a thermocline layer in the middle. Typically, the hypolimnion is the coldest layer of a lake in summer and is isolated from surface wind-mixing. During stratification, oxygen can be depleted in the hypolimnion.

Hypolimnion Oxygenation Systems

Commonly used to increase dissolved oxygen concentrations in the hypolimnion of lakes and reservoirs. Benefits include maintenance of an oxygenated source to cool water, decrease in nutrient loading, inhibiting the release of harmful sediments, as well as maintaining a summer habitat for cold-water organisms.

Glossary



Impaired water bodies

Waters that are too polluted or otherwise degraded to meet the water quality standards set by the State of California. Under the federal Clean Water Act, California is required to develop lists of impaired water bodies, including creeks, streams, and lakes.

Invasive plants

A non-native plant species that has spread into native or minimally managed plant communities (habitats).

Large woody debris (LWD)

The logs, sticks, branches, and other wood that falls into streams and rivers. This debris can influence the flow and shape of the stream channel. LWD plays an important biological role in streams by increasing channel complexity, enhancing fish habitat, and creating diversity in the food web.

Levee

An embankment constructed to provide flood protection from seasonal high water.

Limiting factors analysis (LFA)

An analysis of environmental factor that limits the growth, abundance or distribution of a population of organisms in an ecosystem.

Methylation

The complex process by which inorganic mercury in surface water is converted to toxic methylmercury, the only form of mercury that accumulates appreciably in fish.

Methylmercury

An organic, highly toxic form of mercury that easily bioaccumulates in organisms, increasing in concentration as it travels up the food chain. Because of mercury contamination the public is advised against consuming fish caught in some Santa Clara County reservoirs and ponds.

Mitigation

Action taken to fulfill CEQA/NEPA, permit requirements and court-mandates to avoid, minimize, rectify or reduce adverse environmental impacts, or compensate for the impact(s) by replacing or providing substitute resources or environments.

Mitigated negative declaration (MND)

A negative declaration that incorporates revisions (mitigation measures) in the proposed project to ensure that no significant impacts on the environment can or will occur.

Modified floodplain

A flood protection technique where land adjacent to a creek is lowered, allowing floodwaters to spread out over a wider area while containing the flow, and reducing the risk of damaging floods. A modified floodplain is often planted with native riparian species.

Glossary



Natural flood protection

A multiple-objective approach to providing environmental quality, community benefit and protection from creek flooding in a cost-effective manner through integrated planning and management that considers the physical, hydrologic and ecologic functions and processes of streams within the community setting.

Operations project

Projects are budgeted within the Operating Budget and fall within the definition of Operating Expenditures. Although Operating Projects may, in some cases, create or extend the life of an asset and may have a useful life greater than two years, their costs may be under \$50,000. Valley Water management may still decide to designate some Operating Projects as Capital Projects for purposes of giving the work visibility, control and resources beyond a normal operating budget.

Oxygenation treatment systems

Treatment systems that help increase the relative oxygen levels in a body of water.

Pay-as-you-go

A funding mechanism which collects revenue until sufficient funds are available to begin construction of a project, in contrast to debt financing, in which a large sum is borrowed so that construction can begin sooner.

Permitting requirements

A mechanism used to enforce state and federal laws that protect environmentally sensitive areas. Before moving forward on projects, Valley Water is required to obtain permits from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, NOAA Fisheries, Regional Water Quality Control Board, and the California Department of Fish and Wildlife. Each permit gives the permitting agency an opportunity to attach specific measures to the project to reduce impact on the environment.

Plant palette

A master list of appropriate plants that can be drawn from to create a specific assemblage of plants well-matched to a particular area or project's physical, hydrological and ecological conditions.

Preservation

Action taken to protect an ecosystem or habitat area by removing a threat to that ecosystem or habitat, including regulatory actions and the purchase of land and easements.

Project adjustment: Under the Safe, Clean Water Program Change Control Process, changes to the Program are categorized as either an adjustment or a modification. Adjustments are changes to a project's description, benefits, geographic area of benefit, funding or schedule that don't impact project key performance indicators (KPIs). The Board can approve project adjustments during a public board meeting.

Project modification: Under the Safe, Clean Water Program Change Control Process, changes to the Program are categorized as either an adjustment or a modification. Changes to project KPIs or a decision not to implement a project are considered modifications. Project modification requires a public hearing that must be publicly noticed as per California Government Code § 6066.

Reach (creek)

A portion of a creek or watercourse usually defined by both an upstream and a downstream unit.

Glossary



Respond

For hazardous materials response (project B5) "Responded to" means that responder arrives at site within 2 hours. For litter and graffiti removal (project B6) "Responded to" means that a request for Valley Water action is acknowledged either verbally, in writing, or by email within 5 working days.

Restoration/restore

Action taken by Valley Water, to the extent practicable, toward the re-establishment as closely as possible of an ecosystem's pre-disturbance structure, function, and value, where it has been degraded, damaged, or otherwise destroyed.

Revegetate

To re-establish vegetation in areas which have been disturbed by project construction.

Revitalize

Improve habitat value, particularly in an effort to connect contiguous creek reaches of higher value, by removing invasive, non-native vegetation and diseased and/or non-thriving specimens, applying mulch to suppress weed competition, revegetating sites with native plants, and installing predation prevention measures such as browse protection or cautionary fencing to reduce impacts from animals and vandals.

Riparian

Pertaining to the banks and adjacent terrestrial habitat of streams, creeks or other freshwater bodies and watercourses.

Riparian corridor

The riverside or riverine environment next to a stream channel.

Riparian ecosystem

A natural association of soil, plants and animals existing within the floodplain of a stream and dependent for their survival on high water tables and river flow.

Sediment/sedimentation

Mineral or organic material that is deposited by moving water and settles at the bottom of a waterway. Sediment in a lake, reservoir or stream can either be suspended in the water column or deposited on the bottom. Sediment usually consists of eroded material from the watershed, precipitated minerals and the remains of aquatic organisms.

Special status species

Any species that is listed or proposed for listing as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service under the provisions of the Endangered Species Act; any species designated by the U.S. Fish and Wildlife Service as a "listed," "candidate," "sensitive," or "species of concern," and any species which is listed by the State of California in a category implying potential danger of extinction.

Glossary



Special tax

Any tax imposed for specific purposes or any tax imposed by a special purpose district or agency, such as the Santa Clara Valley Water District. A special district contemplating a special tax levy must hold a noticed public hearing and adopt an ordinance or resolution prior to placing the tax on the ballot. The ordinance or resolution must specify the purpose of the tax, the rate at which it will be imposed, the method of collection, and the date of the election to approve the tax levy. Approval by a 2/3 vote of the city, county or district electorate is necessary for adoption.

State Water Resources Control Board

The State Water Resources Control Board (State Water Board) was created by the Legislature in 1967. The mission of the State Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. There are 9 regional water quality control boards that exercise rulemaking and regulatory activities by basin. Santa Clara County is part of 2 regions: Region 2 - San Francisco Regional Water Quality Control Board (north of Morgan Hill) and Region 3 - Central Coast Regional Water Quality Control Board (south of Morgan Hill).

Subvention

Subventions are reimbursements for rights-of-way and relocation costs of channel improvements and levee projects provided to flood control agencies by the Department of Water Resources Flood Subventions Program.

Stream Corridor Priority Plan (SCPP)

A document which identifies priorities for stream restoration and can be a source of information to guide restoration actions by all parties.

Stream maintenance program (SMP)

Ensure flood protection projects continue to function as designed to protect homes and businesses along Valley Water streams. SMP work includes removal of sediment, management of vegetation, clearing of trash and debris, stabilization of eroded riverbanks over portions of 278 miles of creeks in Santa Clara County.

Stratification

Layering that occurs in most sedimentary rocks and in igneous rocks which have been formed at the Earth's surface from lava flows and fragmental deposits. Layers range from several millimeters to several meters in thickness and vary in shape greatly.

Threatened species

A species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Total Maximum Daily Loads (TMDLs)

The maximum pollutant load a waterbody can receive (loading capacity) without violating water quality standards.

Glossary



Trash capture devices

Innovative devices used to capture wastes and trash in bodies of water and on land. Comprised of nets and sharp implements which can snare waste items.

Urban runoff

The water that runs over the impervious areas in cities, collecting pollutants as it flows. Runoff is recognized as a major source of water impairment.

Valley Water 1% Flood Risk Zone

Per Valley Water modeling, this is the area representing parcels that have a 1% chance of experiencing flooding, including less than 1 foot, in any given year.

Watershed

Land area from which water drains into a major body of water.

Watershed stewardship

Protecting and enhancing the county's creeks, streams and water bodies to preserve a vibrant, healthy ecosystem and provide recreational opportunities when appropriate.

Wetland

Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions, as well as the diverse wildlife species that depend on this habitat.

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Valley Water

Clean Water • Healthy Environment • Flood Protection

Santa Clara Valley Water District
5750 Almaden Expressway, San José, CA 95118-3686
Phone: (408) 265-2600 Fax: (408) 266-0271
www.valleywater.org



**Safe, Clean Water
and Natural Flood Protection**

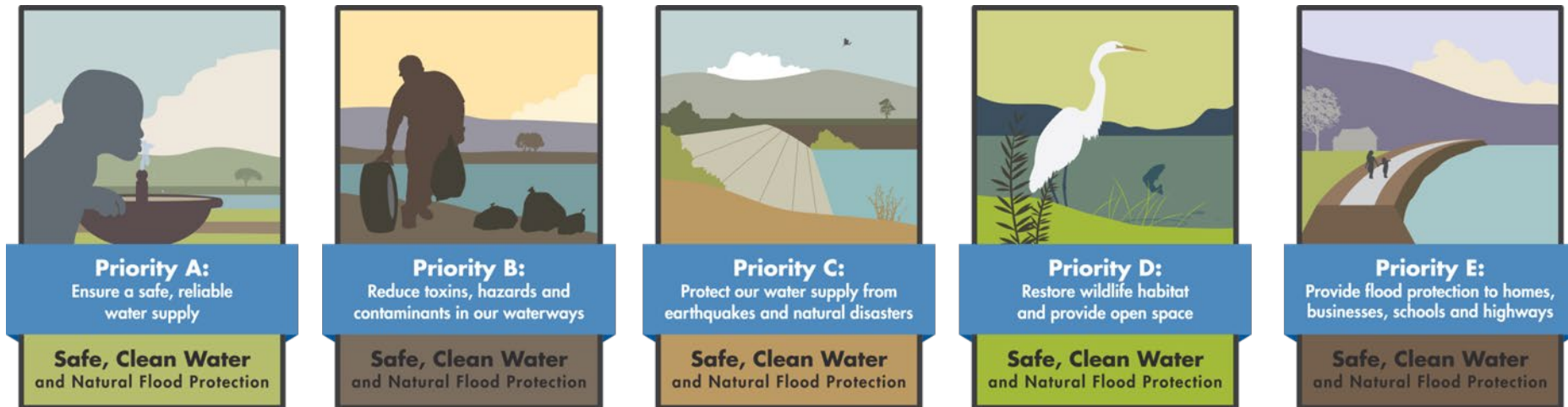


Fiscal Year 2020-21 Safe, Clean Water and Natural Flood Protection Program Annual Report – Year 8

Presented by: Meenakshi Ganjoo, Program Administrator

Program Summary

2



Program Performance

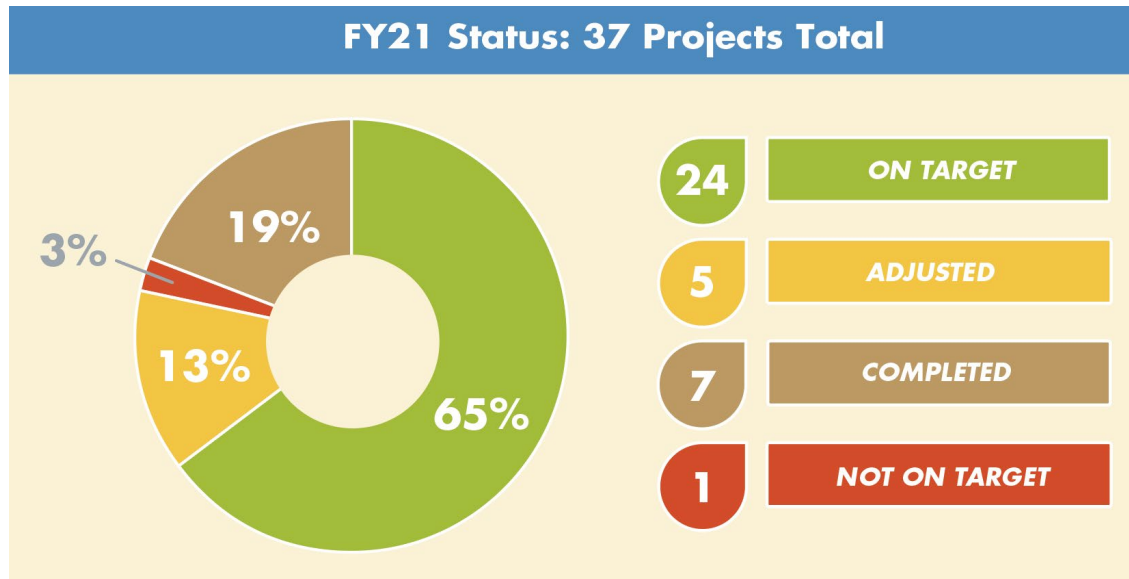


Table 1: Program Status as of June 30, 2021

Project	Project Description	Status
Priority A: Ensure a Safe, Reliable Water Supply		
A1	Main and Madrone Avenue Pipelines Restoration	COMPLETED
A2	Safe, Clean Water Partnerships and Grants	ON TARGET
A3	Pipeline Reliability Project	ADJUSTED
Priority B: Reduce Toxins, Hazards, and Contaminants in our Waterways		
B1	Impaired Water Bodies Improvement	ON TARGET
B2	Interagency Urban Runoff Program	ON TARGET
B3	Pollution Prevention Partnerships and Grants	ON TARGET
B4	Good Neighbor Program: Encampment Cleanup	NOT ON TARGET
B5	Hazardous Materials Management and Response	ON TARGET
B6	Good Neighbor Program: Remove Graffiti and Litter	ON TARGET
B7	Support Volunteer Cleanup Efforts and Education	ON TARGET
Priority C: Protect our Water Supply from Earthquakes and Natural Disasters		
C1	Anderson Dam Seismic Retrofit	ON TARGET
C2	Emergency Response Upgrades	ON TARGET
Priority D: Restore Wildlife Habitat and Provide Open Space		
D1	Management of Revegetation Projects	ON TARGET
D2	Revitalize Stream, Upland and Wetland Habitat	COMPLETED
D3	Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails	ON TARGET
D4	Fish Habitat and Passage Improvement	ADJUSTED
D5	Ecological Data Collection and Analysis	ON TARGET
D6	Creek Restoration and Stabilization	ADJUSTED
D7	Partnerships for the Conservation of Habitat Lands	COMPLETED
D8	South Bay Salt Ponds Restoration Partnership	ON TARGET
Priority E: Provide Flood Protection to Homes, Businesses, Schools, and Highways		
E1.1	Vegetation Control for Capacity	ON TARGET
E1.2	Sediment Removal for Capacity	ON TARGET
E1.3	Maintenance of Newly Improved Creeks	ON TARGET
E1.4	Vegetation Management for Access	ON TARGET
E2	Emergency Response Planning	ON TARGET
E3	Flood Risk Reduction Studies	ON TARGET
E4	Upper Penitencia Creek Flood Protection	ON TARGET
E5	San Francisquito Creek Flood Protection	ON TARGET
E6	Upper Llagas Creek Flood Protection	ON TARGET
E7	San Francisco Bay Shoreline Protection	ON TARGET
E8	Upper Guadalupe River Flood Protection	ADJUSTED
Other Flood Protection Projects and Clean, Safe Creeks Grants Projects		
	Permanente Creek Flood Protection	COMPLETED
	Sunnyvale East and Sunnyvale West Channels Flood Protection	ADJUSTED
	Berryessa Creek Flood Protection	COMPLETED
	Coyote Creek Flood Protection	ON TARGET
	Calabazas Creek Flood Protection	COMPLETED
	Clean Safe Creeks Grants Projects	ON TARGET

Program Highlights

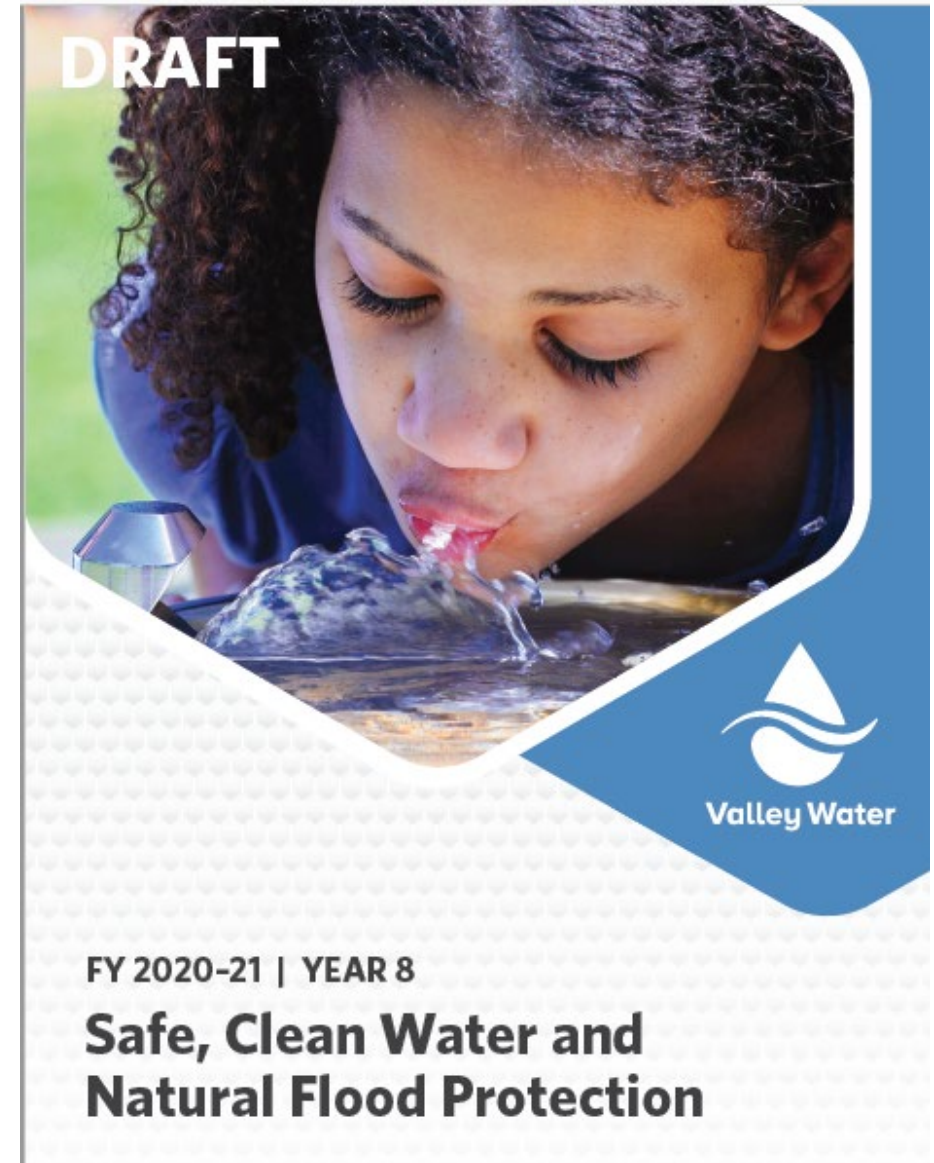
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- Anderson Dam Tunnel Project construction begins
- Permanente Creek flood protection project completed
- Construction begins on Phase 2A of the Upper Llagas Creek project
- Designs for 3 line-valves completed under the Pipeline Reliability project
- Almaden Lake Improvement Project selected to be constructed under Project D4
- 55,878 cubic yards of sediment removed; 1,153 acres of in-stream vegetation management completed
- 347 tons of trash removed
- \$489,042 awarded in grants
- Revitalize Stream, Upland and Wetland Habitat project KPIs exceeded with about 87 acres of invasive and non-native vegetations stands removed from FY14-21

Report Improvements

- Financial Summary Section added
- “Budget Adjustments” and “Carryforward” are shown separately in annual financial tables
- Charts to show the funding breakdown for projects with more than one Valley Water funding source
- Definition of financial terms included in the Glossary section
- All completed projects compiled in a separate section
- Shorter weblinks



Next Steps

1. Finalize Report

- Incorporate Board input
- Audited financials
 - Update tables, charts and appendices, as required

2. Provide to IMC for review



QUESTIONS





Valley Water

Clean Water • Healthy Environment • Flood Protection



Santa Clara Valley Water District

File No.: 21-1058

Agenda Date: 9/28/2021
Item No.: *9.1.

BOARD AGENDA MEMORANDUM

SUBJECT:

CEO and Chiefs' Report.

ATTACHMENTS:

*Handout 9.1-A: Office of Government Relations Update

*Handout 9.1-B: Office of Civic Engagement Update

SUMMARY FOR SEPTEMBER 2021

Office of Government Relations Activities



STATE ADVOCACY EFFORTS



California State Capitol

2021 State Legislative Session Ends

The 2021 Legislative Session ended on September 10 with nearly 700 bills passed and sent to the Governor in the last week. Gov. Newsom has until October 10 to act on these bills or else they will become law without his signature.

The Legislature also made numerous last-minute changes to the previously enacted State Budget approved in June, sending 16 budget-related bills to the Governor's desk. SB 170 (Skinner) changed numerous budget line items, increasing expenditures for drought-related water supply and climate resiliency programs. SB 155 (Committee on Budget), the natural resources trailer bill, includes a California Environmental Quality Act (CEQA) exemption for environmental restoration-only projects, bans water service shutoffs through 12/31/21, and includes \$350 million for the State Coastal Conservancy with an undetermined amount going to the San Francisco Bay Restoration Authority for habitat protection.

The State Budget is the largest in history ringing in at over \$250 billion. Staff is reviewing the enacted budget for grant funding opportunities for Valley Water projects and will be following grant solicitations closely. In addition, staff also will be reviewing enacted legislation for compliance impacts to Valley Water operations.

LOCAL ADVOCACY AND ENGAGEMENT EFFORTS



Families stopped by the booth at the Cupertino Rotary's Silicon Valley Fall Festival to learn more about the drought, water conservation, and have an opportunity to win fun prizes.

Valley Water Returns to Community Festivals

The Office of Government Relations (OGR) has begun to coordinate Valley Water's participation at various community events. This month, Valley Water hosted three booths at the Santos Car Show, Cupertino Rotary's Silicon Valley Fall Festival, and Mountain View Chamber of Commerce's Art and Wine Festival. Valley Water staff educated families about the drought and engaged with community members on water conservation tips, rebates, and ongoing Valley Water projects. Although in-person events have been greatly reduced due to the COVID-19 pandemic, OGR staff is still working to participate in the limited opportunities to do so.

Directors Provide Drought Updates to Community

On August 30, Director Linda LeZotte provided a drought update presentation for Councilmember Pam Foley's Town Hall. Following her presentation, community members in attendance asked questions about current water supply conditions and water conservation actions residents can take to save water. In September, Vice Chair Gary Kremen provided drought updates at the Mountain View Chamber of Commerce's Business Issues & Public Policy (BIPP) and the Mountain View City Council Meeting. Director Kremen discussed the current water shortage emergency condition as well as Valley Water's call for water conservation actions. During the presentations, he discussed what businesses in Mountain View could do to save water and money as well as the various water conservation programs available through Valley Water's website.



Director LeZotte presenting on the drought during Councilmember Pam Foley's Town Hall.



Vice Chair Kremen provides a drought update at Mountain View Chamber of Commerce's Business Issues & Public Policy

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Redistricting Advisory Committee to Begin Outreach Meetings

The Board-appointed Redistricting Advisory Committee (RAC) recently concluded all of its training sessions and has received preliminary information on the Census Bureau data release on existing districts and new populations. Beginning September 22, the RAC will hold weekly outreach meetings specific to each district as part of the ongoing redistricting process to garner community input on potentially modifying the boundaries of the seven electoral districts, as well as providing community members the opportunity to create their own map.

Upcoming Events:

- October 2, 2021, Explore Martial Cottle Park (Booth)
- October 2-3, 2021, Sunnyvale Chamber of Commerce's Art & Wine Festival (Booth)
- October 16, 2021, Cupertino Chamber of Commerce Diwali Festival (Booth)

Federal Legislation Active in September 2021 with Board-Approved Positions:

Bill (Author)	Subject	Position	Status
S. 91 (Sinema) H.R. 535 (Garamendi)	Special Districts Provide Essential Services Act of 2021	Support and Amend	Introduced
H.R. 610 (Speier)	San Francisco Bay Restoration Act	Support	Passed House on June 15, 2021
H.R. 1015 (Napolitano)	Water Recycling Improvement and Investment Act	Support	Introduced
H.R. 737 (Valadao)	Responsible, No-Cost Extension of Western Water Infrastructure Improvements for the Nation (RENEW WIIN) Act	Support	Introduced
H.R. 848 (Thompson)	Growing Renewable Energy and Efficiency Now (GREEN) Act of 2021	Support and Amend	Introduced
H.R. 866 (Calvert)	Federal Integrated Species Health (FISH) Act	Support	Introduced
H.R. 644 (Calvert)	Reducing Environmental Barriers to Unified Infrastructure and Land Development Act	Support	Introduced
S. 101 (Markey)	Environmental Justice Mapping and Data Collection Act of 2021	Support	Introduced
H.R. 1319 (Yarmurth)	American Jobs Plan Act	Support and Amend	Became Public Law 117-2
S. XXXX (Feinstein)	Draft "Support To Rehydrate the Environment, Agriculture, and Municipalities (STREAM) Act"	Support and Amend	Introduced
S. 1179 (Feinstein) H.R. 2552 (Costa)	Canal Conveyance Capacity Restoration Act	Support	Introduced
S. 914 (Duckworth)	Drinking Water and Wastewater Infrastructure Act of 2021	Support and Amend	Passed Senate on April 29, 2021
H.R. 1915 (DeFazio)	Water Quality Protection and Job Creation Act of 2021	Support	Reported favorably from the House Committee on Transportation and Infrastructure on June 22, 2021
H.R. 1848 (Pallone)	Leading Infrastructure for Tomorrow's America (LIFT America) Act	Support	Introduced

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H.R. 3404 (Huffman)	Furthering Underutilized Technologies and Unleashing Responsible Expenditures for Western Water Infrastructure and Drought Resiliency Act (FUTURE Western Water Infrastructure and Drought Resiliency Act)	Support and Amend	Introduced
H.R. 3293 (Blunt Rochester)	Low-Income Water Customer Assistance Programs Act of 2021	Support and Amend	Introduced
H.R. 1512 (Pallone)	Climate Leadership and Environmental Action for our Nation's Future Act (CLEAN Future Act)	Support	Introduced
H.R. 2337 (Neal)	Public Servants Protection and Fairness Act of 2021	Support	Introduced
S. 2185 (Barrasso)	Western Water Infrastructure Act of 2021	Support and Amend	Introduced
S. 872 (Duckworth)	Environmental Justice for All Act	Support	Introduced
S. 2334 (Cortez Masto)	Large Scale Water Recycling Project and Drought Resiliency Investment Act	Support and Amend	Pieces incorporated into the bipartisan infrastructure bill (H.R. 3684), which the Senate passed on August 9, 2021
S. 2377 (Manchin)	Energy Infrastructure Act	Support and Amend	Incorporated into the bipartisan infrastructure bill (H.R. 3684), which the Senate passed on August 9, 2021
S. 2454 (Padilla)	Water Reuse and Resiliency Act of 2021	Support	Pieces incorporated into the bipartisan infrastructure bill (H.R. 3684), which the Senate passed on August 9, 2021
H.R. 4375 (Kuster) S. 2356 (Feinstein)	Twenty-First Century Dams Act	Support and Amend	Introduced
H.R. 2197 (Cicilline) S. 939 (Whitehouse)	Innovative Materials for America's Growth and Infrastructure Newly Expanded (IMAGINE) Act	Support and Amend	Introduced
H.R. 3701(Delgado)	Protecting Infrastructure and Promoting the Economy (PIPE) Act	Support and Amend	Introduced

State Legislation Active in July 2021 with Board-Approved Positions:

Bill (Author)	Subject	Position	Status
AB 252 (R. Rivas)	Multibenefit Land Repurposing Incentive Program: Compatible Uses: Contracts	Support	Pending – Senate Governance and Finance Committee – 2 Year Bill
AB 271 (R. Rivas)	Timely, Safe, & Expert Construction for the Anderson Dam Project	Sponsor	Signed by the Governor
AB 315 (Stone)	Voluntary Stream Restoration Property Owner Liability: Indemnification	Support	Pending – Governor’s Desk
AB 361 (R. Rivas)	Open Meetings: Local Agencies: Teleconferences	Support	Signed by the Governor
AB 652 (Friedman)	Juvenile Products: Perfluoroalkyl and Polyfluoroalkyl Substances	Support	Pending – Governor’ Desk
AB 819 (Levine)	California Environmental Quality Act: Notices and Documents: Electronic Filing and Posting	Support	Signed by the Governor
AB 897 (Mullin)	Regional Climate Adaptation Action Plans	Support	Pending – Senate Appropriations Committee – 2 Year Bill
AB 959 (Mullin)	Park Districts: Nuisances Abatement	Support	Pending – Governor’s Desk
AB 1110 (R. Rivas)	Zero-Emission Vehicles: Climate Catalyst Revolving Loan Fund Program	Support	Pending – Senate Appropriations Committee – 2 Year Bill
SB 274 (Wieckowski)	Local Government Meetings: Agenda and Documents	Support	Pending – Governor’s Desk
SB 323 (Caballero)	Local Government: Water or Sewer Service Validation Actions	Support	Pending – Governor’s Desk
SB 372 (Leyva)	Zero-Emission Vehicles: Medium- and Heavy-Duty Fleet Purchasing Assistance Program	Support	Pending – Governor’s Desk
SB 496 (Laird)	Pajaro River Flood Control	Support	Pending – Governor’s Desk
SB 559 (Hurtado)	Water Conveyance Systems: Canal Conveyance Capacity Restoration Fund	Support	Pending – Governor’s Desk
SB 626 (Dodd)	Department of Water Resources: Procurement Methods	Support	Pending – Governor’s Desk
SB 786 (Becker)	Smart Financing for Water Infrastructure	Sponsor	Pending – Assembly Local Government Committee – 2 Year Bill

SUMMARY FOR AUGUST 2021

Office of Civic Engagement Monthly Update



Youth Commission

On August 25, the Youth Commission held its first meeting of the new school year. Nine new commissioners were sworn in: Ranveer Saini (D1), Kate Hanson (D2), Niharika Koduru (D2), Lucia Parakh (D4), Pramath Doddaballapur (D5), Daniel Shih (D5), Luis Hernandez (D6), David Khoury (D6), and Oded Bronicki (D7). The Commission elected Anika Kulkarni (D3) as the Chair and Ye'ela Bronicki (D7) as the Vice-Chair for the new school year. All the new and returning commissioners were given the opportunity to introduce themselves. There were 19 youth commissioners in attendance, along with Directors Hsueh, Varela and Keegan.



Youth Commission Meeting on August 25, 2021.

Creek Stewardship

In August, staff wrapped up our revamp of the Adopt-A-Creek signs. In the fall, Valley Water staff will remove 26 outdated signs and place 55 new signs with the new Safe, Clean Water logo for all current Adopt-A-Creek partners.



Example of the new Adopt-a-Creek Signs

Safe, Clean Water Grants and Partnerships

Grants on the radio: On August 26, staff were invited to the Old Time Farm and Garden Show on KKUP radio to showcase Valley Water's Safe, Clean Water Grants & Partnerships Program, current grant funding opportunities, and grant projects that support community water conservation efforts.

Grant Closeout: Grassroots Ecology's Westwind Barn Stormwater Infiltration Project. In FY 2018, Valley Water awarded Grassroots Ecology a \$70,605.60 B3 grant for their Westwind Barn Stormwater Infiltration Project. The grant funded environmental stewardship activities to increase stormwater infiltration at the Westwind Community Barn in the upper Adobe Creek Watershed in Los Altos Hills. The project engaged 628 volunteers to install a series of berms and contour plantings to slow and treat surface runoff to safeguard Moody Creek from polluted runoff. Activities included native plant installation and maintenance, invasive plant removal, regenerating riparian habitats, and taught volunteers how to grow, plant, and care for native plants.



Grassroots Ecology's Westwind Barn Stormwater Infiltration Project: Volunteers played an instrumental role in clearing invasive plants and growing, planting and caring for native plants.

Grant Closeout: Living Classroom's Crittenden Middle School Native Plant Garden Project. In FY 2017, Valley Water awarded Living Classroom a \$5,000 D3 Mini-Grant for their Crittenden Middle School Native Plant Garden Project. The grant funded the installation of a 2,300 sq. ft. native plant garden with 75 native plants and serves as an outdoor classroom to provide environmentally focused lessons to students.



Living Classroom's Crittenden Middle School Native Plant Garden Project: Volunteers help install a 2,300 sqft native plant garden for students.

ADOPT-A-CREEK CLEANUP NUMBERS

DATE	PARTNER	CREEK	# VOLUNTEERS	# MILES CLEANED	LBS TRASH
August 7	De Anza Optimist Club - Steig Klein	McClellan Road Percolation System	6	.5	40
August 14	Saved by Nature	Guadalupe Creek	10	.5	15
August 14	Miller Neighborhood Association Hella (Bluhm-Stieber)	Calabazas Creek	2	.5	30
August 14	BAF13111	Barron Creek	2	.5	23
August 15	Henry & Delfina Shoane	Penitencia Creek	2	.5	150
August 18	Pit Stop Outreach	West Branch Llagas Creek	5	.5	1500
August 21	DIY Neighbors	Guadalupe Creek	2	.5	75
August 21	BAF1311	Barron Creek	4	.5	17
August 28	Jeff Prickett	West Little Llagas Creek	10	.5	1000
August 29	Boy Scout Troop 286	Guadalupe Creek	12	0.5	500

Education Outreach

In August, the Education Outreach team reached 99 students through eight virtual summer camp presentations and one Wonders of Water Wednesday presentation. The team also supported eight educators through virtual engagements.

- Education Outreach staff presented Watershed Maps and Plastic Voyages to the 4-H Summer Science Camp. Students from throughout California shared stories and ideas about the drought, ways to protect our watersheds and save water every day.
- Education Outreach staff presented Water Cycle Boogie to the Palo Alto Library "Wacky Wednesdays" summer camp series. Attendees drew a water cycle diagram, sang a water cycle song and brainstormed ways to save water every day during the drought.
- Education Outreach launched the 2021-2022 Wonders of Water after-school enrichment series.

EDUCATION OUTREACH JULY PRESENTATION NUMBERS			
MONTH	STUDENTS AND EDUCATORS	PUBLIC ATTENDEES	YEAR TO DATE
JULY	592	0	592
AUGUST	107	23	130
TOTAL	699	23	722

FY22 Goal: Reach at least 10,000 students and 1,000 members of the public.



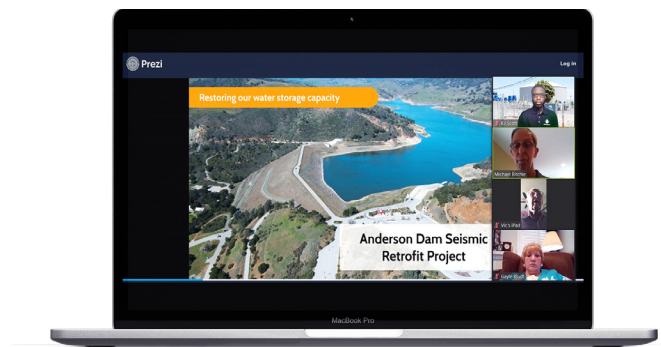
Wonders of Water Wednesday attendees learn about saving water.

Water Supply Outreach

WATER SUPPLY OUTREACH NUMBERS		
DATE	WATER INFRASTRUCTURE AND PURIFICATION CENTER TOURS	FY 22 TOTAL ATTENDEES
July 2022		210
August 12	SVAWPC Private - Campbell Lions Club	15
August 18	SVAWPC Public tour with SJPL	3
AUGUST TOTAL		18
TOTAL		228

FY 22 Goal: Conduct public/private tours of the SVAWPC in any of our tour formats (live, virtual or self-guided) for at least 1,000 attendees.

The Water Supply Outreach team hosted two tours of the Silicon Valley Advanced Water Purification Center in August, reaching a total of 18 individuals. On August 5, the team coordinated with the Water Supply Division to present the Purified Water Project to various Palo Alto environmental groups at the Peninsula Conservation Center Council meeting.



Private SVAWPC tour to the Campbell Lions Club

Volunteer Program



Water Ambassador's quarterly working meeting on August 18

On August 18, staff hosted the Water Ambassadors for their first quarterly meeting of fiscal year 2021. Attendees learned about the newly adopted Climate Change Action Plan and current drought emergency. After the presentation, they brainstormed ways to support water conservation and amplify drought messaging within their communities. In attendance were ambassadors from all three Water 101 cohorts (2019, 2020, and 2021). In addition, staff developed and implemented an annual Water Ambassadors survey to gather participant feedback to inform future program planning.

Community Rating System

Staff hosted a joint meeting of the CRS Users Group and Program for Public Information (PPI) Meeting on August 18. The meeting focused on discussing the development of new outreach initiatives as indicated in the 2021 Multi-Jurisdictional PPI 5-Year Plan. The meeting also had two presentations - one on Valley Water's upcoming "Get Flood Ready" campaign and the second on a Valley Water initiative to study the communities most vulnerable to flooding in Santa Clara County.

Looking Ahead

Wonders of Water Wednesdays After-school Enrichment Series 4:00 p.m.

- September 1st - Watershed Maps
- September 8th - Discover California Water
- September 15th - Plastic Voyages
- September 22nd - H2O on the Go
- September 29th - How to be a Conscious Conservationist

Water Supply Outreach tour program:

- September 1st - SVAWPC Private Tour for West Valley College
- September 9th - SVAWPC Public Tour
- September 15th - SVAWPC Public Tour in collaboration with the SJ Public Library
- September 18th - SVAWPC Private Tour for the Oakmont of SJ Retirement Community
- September 22nd - SVAWPC Public Tour in collaboration with the SC Public Library