Santa Clara Valley Water District
Capital Improvement Program Committee Meeting

Headquarters Building Boardroom
5700 Almaden Expressway, San Jose, CA 95118

REGULAR MEETING
AGENDA

Monday, July 15, 2024
11:00 AM

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.

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  
Capital Improvement Program Committee  

REGULAR MEETING  
AGENDA

Monday, July 15, 2024  
11:00 AM  
HQ Boardroom  
5700 Almaden Expressway, San Jose, CA 95118

***IMPORTANT NOTICES AND PARTICIPATION INSTRUCTIONS***

Santa Clara Valley Water District (Valley Water) Board of Directors/Board Committee meetings are held as a “hybrid” meetings, conducted in-person as well as by telecommunication, and is compliant with the provisions of the Ralph M. Brown Act.

To maximize public safety while still maintaining transparency and public access, members of the public have an option to participate by teleconference/video conference or attend in-person. To observe and participate in the meeting by teleconference/video conference, please see the meeting link located at the top of the agenda. If attending in-person, you are required to comply with Ordinance 22-03 - AN ORDINANCE OF THE SANTA CLARA VALLEY WATER DISTRICT SPECIFYING RULES OF DECORUM FOR PARTICIPATION IN BOARD AND COMMITTEE MEETINGS located at https://s3.us-west-2.amazonaws.com/valleywater.org.if-us-west-2/f2-live/s3fs-public/Ord.pdf

In accordance with the requirements of Gov. Code Section 54954.3(a), members of the public wishing to address the Board/Committee during public comment or on any item listed on the agenda, may do so by filling out a Speaker Card and submitting it to the Clerk or using the “Raise Hand” tool located in the Zoom meeting application to identify yourself in order to speak, at the time the item is called. Speakers will be acknowledged by the Board/Committee Chair in the order requests are received and granted speaking access to address the Board.

• Members of the Public may test their connection to Zoom Meetings at: https://zoom.us/test
• Members of the Public are encouraged to review our overview on joining Valley Water Board Meetings at: https://www.youtube.com/watch?v=TojJpYCxXm0

Valley Water, in complying with the Americans with Disabilities Act (ADA), requests individuals who require special accommodations to access and/or participate in Valley Water Board of Directors/Board Committee meetings to please contact the Clerk of the Board’s office at (408) 630-2711, at least 3 business days before the scheduled meeting to ensure that Valley Water 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 Valley Water 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/94158013374
Meeting ID: 941 5801 3374
Join by Phone:
1 (669) 900-9128, 94158013374#

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 Board/Committee on any item not listed on the agenda may do so by filling out a Speaker Card and submitting it to the Clerk or using the “Raise Hand” tool located in the Zoom meeting application to identify yourself to speak. Speakers will be acknowledged by the Board/Committee Chair in the order requests are received and granted speaking access to address the Board/Committee. Speakers’ comments should be limited to three minutes or as set by the Chair. The law does not permit Board/Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Board/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 Board/Committee may take action on any item of business appearing on the posted agenda.

3. APPROVAL OF MINUTES:
3.1. Approval of June 17, 2024 Capital Improvement Program Committee Minutes.
Recommendation: Approve the minutes.
Manager: Candice Kwok-Smith, 408-630-3193
Attachments: Attachment 1: 061724 CIP Committee Draft Minutes

4. REGULAR AGENDA:

Recommendation: Receive and discuss information regarding the status of capital projects in the feasibility and planning phase.
Manager: Ryan McCarter, 408-630-2983
Kirsten Struve, 408-630-3138
Luz Penilla, 408-630-2228
Emmanuel Aryee, 408-630-3074
Bhavani Yerrapotu, 408-630-2735
Lisa Bankosh, 408-630-2618
Tony Ndah, 408-630-2208
Attachments: Attachment 1: Feasibility and Planning Report

4.2. Receive Information on Change Orders to Anderson Dam Tunnel Project Construction Contract.
Recommendation: Receive information on Change Orders to Anderson Dam Tunnel Project Construction Contract
Manager: Ryan McCarter, 408-630-2983
Attachment 1: Construction Contract Change Orders Status
Attachment 2: Construction Contract Financial Status

4.3. Receive Update on the Almaden Valley Pipeline Replacement Project, Project No. 92304001, (San Jose, Unincorporated Santa Clara County) (District 1, District 7).
Recommendation: Receive Update on the Almaden Valley Pipeline Replacement Project, Project No. 92304001, (San Jose, Unincorporated Santa Clara County) (District 1, District 7).
Manager: Emmanuel Aryee, 408-630-3074
Attachments: Attachment 1: PowerPoint
4.4. Review 2024 Capital Improvement Program Committee Work Plan.

Recommendation: Review the 2024 Capital Improvement Program Committee Work Plan and make adjustments as necessary.

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

Attachments: Attachment 1: 2024 CIP Committee Work Plan

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 August 19, 2024.
COMMITTEE AGENDA MEMORANDUM
Capital Improvement Program Committee

Government Code § 84308 Applies: Yes ☐ No ☒
(If “YES” Complete Attachment A)

SUBJECT:
Approval of June 17, 2024 Capital Improvement Program Committee Minutes.

RECOMMENDATION:
Approve the minutes.

SUMMARY:
In accordance with the Ralph M. Brown Act, a summary of Committee discussions, and details of all actions taken by the Capital Improvement Program Committee, during all open and public Committee meetings, is transcribed and submitted to the Committee for review and approval.

Upon Committee approval, minutes transcripts are finalized and entered into the Committee’s historical record archives and serve as the official historical record of the Committee’s meeting.

ATTACHMENTS:
Attachment 1: 061724 CIP Committee Draft Minutes

UNCLASSIFIED MANAGER:
Candice Kwok-Smith, 408-630-3193
1. CALL TO ORDER:

A regular meeting of the Santa Clara Valley Water District (Valley Water) Capital Improvement Committee (Committee) was called to order in the Valley Water Headquarters Building Boardroom at 5700 Almaden Expressway, San Jose, California, and by Zoom teleconference, at 11:04 a.m.

1.1 Roll Call.

Committee members in attendance were District 4 Director Jim Beall and District 5 Director Nai Hsueh, Chairperson presiding, constituting a quorum of the Committee. District 6 Director Tony Estremera, Vice Chairperson, was absent.

Staff members in attendance were: Gina Adriano, Emmanuel Aryee, Henry Barrientos, Sandra Benavidez, Wade Blackard, Sam Bogle, James Bohan, John Bourgeois, Sally Castro, Jessica Collins, Jiana Escobar, Bal Ganjoo, Meenakshi Ganjoo, Andrew Garcia, Jaeho Hahn, Chris Hakes, Girlie Jacobson, Michele King, Peggy Lam, Cecil Lawson, Jennifer Martin, Ryan McCarter, Nicole Merritt, Carmen Narayan, Tony Ndah, Karl Neuman, Carlos Orellana, Leslie Orta, Alison Phagan, Mike Potter, Amandeep Saini, Stephanie Simunic, Diahann Hudson Soleno, Kirsten Struve, Odilia Teixeira, Cheryl Togami, Tina Yoke, and Beckie Zisser.

Public in attendance were: Molly Culton, Julianne O'Brien, and Rick.
2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA:
Chairperson Hsueh declared time open for public comment on any item not on the agenda. There was no one who wished to speak.

3. APPROVAL OF MINUTES:
3.1. Approval of May 20, 2024 Capital Improvement Program Committee Meeting Minutes.
Recommendation: Approve the minutes.

The Committee considered the attached minutes of the May 20, 2024 Committee meeting.

Public Comments: None.

It was moved by Director Beall and seconded by Chairperson Hsueh, and unanimously carried that the minutes be approved.

Regular Agenda:
4.1. Receive and Discuss Information Regarding the Status of Capital Projects in the Construction Phase.
Recommendation: Receive and discuss information regarding the status of capital projects in the construction phase.

Emmanuel Aryee, Ryan McCarter, Karl Neuman, and Cecil Lawson reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachment 1 were reviewed by staff per the row and Deputy’s initials as follows: Emmanuel Aryee reviewed rows marked EA, Ryan McCarter reviewed rows marked RM, Karl Neuman reviewed rows marked BY, and Cecil Lawson reviewed rows marked CL.

Emmanuel Aryee, Ryan McCarter, Karl Neuman, and Cecil Lawson were available to answer questions.

Public Comments: None

The Committee received the information and took no formal action.

4.2. Receive and Discuss Information Regarding the Status of Capital Projects in the Environmental Permit Compliance (Post Construction) Monitoring Phase.
Recommendation: Receive and discuss information regarding the status of capital projects in the construction phase.
John Bourgeois reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachment 1 and was available to answer questions.

Public Comments: None

The Committee received the information, took no formal action, and requested that staff report to the Committee relating to damages that occur on Valley Water property through third parties, and staff processes to document the damage and recover costs.

4.3. Receive Information on Change Orders to Anderson Dam Tunnel Project Construction Contract.

Recommendation: Receive information on Change Orders to Anderson Dam Tunnel Project Construction Contract.

Ryan McCarter reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachments 1 and 2 and was available to answer questions.

Public Comments: None.

The Committee received the information and took no formal action.

4.4. Receive Information on Upcoming Consultant Agreement Amendments for Capital Projects

Recommendation: Receive information on upcoming consultant agreement amendments for capital projects.

Kirsten Struve, Karl Neuman, and Emmanuel Aryee reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachment 1, and were available to answer questions.

Public Comments: None.

The Committee received the information and took no formal action.


Recommendation: Receive, review, and discuss information on the Dam
Safety Program Strategy.

Ryan McCarter and Andrew Garcia reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachments 1 and 2, and were available to answer questions.

Public Comments: None.

The Committee received the information and took no formal action.

4.6. Review 2024 Capital Improvement Program Committee Work Plan.
Recommendation: Review the 2024 Capital Improvement Program Committee Work Plan and make adjustments as necessary.
The Committee considered this item without a staff presentation.
Public Comments: None.

The Committee received the information and took no formal action.

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.

The Committee took no action.

6. Adjourn:

6.1. Adjourn to Regular Meeting at 11:00 a.m. on July 15, 2024.

Chairperson Hsueh adjourned the meeting at 12:52 p.m.

Dave Leon
Assistant Deputy Clerk II

Date Approved:
COMMITTEE AGENDA MEMORANDUM
Capital Improvement Program Committee

Government Code § 84308 Applies: Yes ☐ No ☒
(If “YES” Complete Attachment A - Gov. Code § 84308)

SUBJECT: Receive and Discuss Information Regarding the Status of Capital Projects in the Feasibility and Planning Phase.

RECOMMENDATION:
Receive and discuss information regarding the status of capital projects in the feasibility and planning phase.

SUMMARY:
The Capital Improvement Committee’s (CIP) 2024 Workplan includes monitoring of capital projects during all phases of delivery. Staff will prepare a list of active projects to submit to the Committee each month and will provide detailed information on those where potential and/or significant issues have been identified. The projects presented for discussion will be organized by phases: feasibility/planning, design/permitting, and construction. Staff will present projects to the CIP Committee for review one phase at a time. Projects currently in the feasibility/planning phase are being presented this month.

Attachment 1 is a list of projects in the feasibility/planning phase. A verbal report will be provided at the meeting with more detailed information about recent developments, as requested by the Committee.

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:
There are no environmental justice and equity impacts associated with this item. This action is unlikely to or will not result in adverse impacts and is not associated with an equity opportunity.

ATTACHMENTS:
Attachment 1: Feasibility and Planning Report
UNCLASSIFIED MANAGER:
Ryan McCarter, 408-630-2983
Kirsten Struve, 408-630-3138
Luz Penilla, 408-630-2228
Emmanuel Aryee, 408-630-3074
Bhavani Yerrapotu, 408-630-2735
Lisa Bankosh, 408-630-2618
Tony Ndah, 408-630-2208
# Capital Project Monitoring Report - July 2024

## Feasibility and Planning Phase

<table>
<thead>
<tr>
<th>Row</th>
<th>Project No.</th>
<th>Project Name</th>
<th>Notes, Upcoming Board Actions, or potential issues</th>
<th>Deputy's Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>91084019</td>
<td>Dam Seismic Stability Evaluations</td>
<td>The seismic stability evaluation for Coyote Dam is on track for completion in July 2024. The Chesbro and Uvas Dams evaluations are expected to be completed in December 2024. The Division of Safety of Dams (DSOD) has reviewed the spillway evaluations for Lenihan and Stevens Creek Dams. The project team will use the evaluations to continue the planning phase work, including alternatives analysis.</td>
<td>RM</td>
</tr>
<tr>
<td>2</td>
<td>92C40357</td>
<td>FAHCE Implementation</td>
<td>The Fish and Aquatic Habitat Collaborative Effort (FAHCE) Final Program Environmental Impact Report (EIR) for Stevens Creek and Guadalupe Watersheds was completed on June 30, 2023, and Board certification of the Final Program EIR took place on August 8, 2023. Non-flow measures are being implemented with the FAHCE+ rule curves and FAHCE monitoring program in effect. Live Oak Restoration Reach, Ogier Ponds, along with the Moffett fish barrier removal project, are currently in the planning and feasibility study phase. The implementation status for all Phase 1 measures will be included in the first annual report finalized in the summer of 2025. This annual report is required as a part of the FAHCE Adaptive Management Program, as outlined in the Board certified EIR. The Initialing Parties and the Adaptive Management Team will meet more frequently as the program enters full implementation. Staff will continue to update the Stream Planning and Operations Committee (formerly the FAHCE Ad Hoc Committee) throughout the year.</td>
<td>JB</td>
</tr>
<tr>
<td>3</td>
<td>91294001</td>
<td>San Jose Purified Water Project (SJW) - Phase 1</td>
<td>Staff is working on amending current Palo Alto Purified Water Project consultant contracts for project management and environmental planning services to focus on the SJW Demonstration Facility. Contract amendments are expected to be completed in August. In addition, city and Valley Water staff have begun working on regulatory approaches and agreements needed for the demonstration facility.</td>
<td>KS</td>
</tr>
<tr>
<td>4</td>
<td>93044001</td>
<td>Water Treatment Plant (WTP) Master Plan Implementation Project</td>
<td>Staff continues to develop high priority conceptual projects toward a 10% Basis of Design. Staff held two public meetings in June and received no public feedback on the master plan’s progress or initially proposed project alternatives. Staff is nearly complete with finalizing the Recommended Alternatives Report.</td>
<td>LP</td>
</tr>
<tr>
<td>5</td>
<td>95044002</td>
<td>SCADA Master Plan Implementation Project</td>
<td>Staff is working with the project consultant to finalize the Early Implementation Projects’ planning phase documentation that will be used in the first phase of improvements done under the master plan follow-up project, the SCADA Master Plan Implementation Project (SMPIP) Upgrades - Phase 1 (for upgrades to aging SCADA communications and implementing additional backup control center capabilities). This new capital project was approved as a part of the FY25 CIP. Additionally, staff is working with the consultant to develop updated SCADA design and implementation standards.</td>
<td>LP</td>
</tr>
<tr>
<td>6</td>
<td>95044001</td>
<td>Distribution System Master Plan Implementation Project</td>
<td>Staff continues to perform desktop condition assessments and performance evaluations of pipeline assets as well as review and update the Consequence of Failure (COF) scoring methodology for the pipeline assets. Staff will report the condition assessment findings to this committee in August. Staff is continuing desktop and field condition assessments of the pump station facilities.</td>
<td>LP</td>
</tr>
<tr>
<td>7</td>
<td>95084002</td>
<td>10-Year Pipeline Inspection and Rehabilitation Project</td>
<td>Staff is continuing to coordinate with internal stakeholders to update the current program. The environmental consultant is preparing the second Draft EIR for Valley Water review.</td>
<td>EA</td>
</tr>
</tbody>
</table>

7/2/2024

Attachment 1
Page 1 of 3
<table>
<thead>
<tr>
<th>Proj No</th>
<th>Proj Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>93294059</td>
<td>Rinconada WTP Ammonia Storage and Metering Facility Upgrade Project</td>
<td>The project proposal and planning phase work plan was completed in March 2024. Staff has begun working on the Planning Phase, starting with the Problem Definition Report.</td>
</tr>
<tr>
<td>30154019</td>
<td>Lower Guadalupe River Capacity Restoration Project</td>
<td>Staff completed the Planning Study Report, Planning to Design Transition Report, and closed out the planning phase in June 2024. The project will move into the design phase for future updates. In addition, staff completed technical analysis of Forecast Informed Reservoir Operations (FIRO) as a potential future enhancement to the staff-recommended alternative. The analysis found that FIRO is not a viable option for flood protection in the Guadalupe River Watershed, and therefore will not be further investigated as an option for this project.</td>
</tr>
<tr>
<td>00044026s</td>
<td>San Francisco Bay Shoreline (E7) – Phase II and Phase III</td>
<td>For the Phase II study, which includes Economic Impact Areas (EIAs) 1-4 (from San Francisquito Creek in Palo Alto to Permanente Creek in Mountain View), US Army Corps of Engineers (USACE) completed a feasibility analysis that determined that the future economic damage from coastal flooding is not great enough to justify investing federal money in a project such as this until approximately 2060. Valley Water and other stakeholders, including the State Coastal Conservancy, Caltrans, and the Cities of Palo Alto and Mountain View, worked closely with USACE over several months to examine USACE’s analysis, suggest smaller alternatives, and discuss ways the study might be held open and re-scoped. Despite these efforts, the parties concluded that closing this study is the best way forward. Although there is no federal interest in investing in a USACE-led coastal flood protection project at this time, the study authorization will remain open, which leaves the door open for a future study and the possibility of future federal interest as sea levels and consequent potential flood damage increases. In the near term, Valley Water and the regional stakeholders mentioned above will continue to work independently and collaboratively to identify both near- and long-term solutions for potential high-risk coastal flooding and sea level rise. USACE kicked off the Phase III Feasibility Study for EIAs 5-10 (from Permanente Creek in Mountain View to Guadalupe River in San Jose) in August 2023. Valley Water and the State Coastal Conservancy are the local sponsors of the project. USACE held a planning charrette to identify initial project alternatives with Study stakeholders in early December and a public scoping meeting in mid-February. USACE’s first milestone was delayed from February to June 2024. USACE will provide an updated budget and schedule to complete the Study following the first milestone, and continues technical work to develop hydraulic models, review background information, and refine initial alternatives.</td>
</tr>
<tr>
<td>26044003</td>
<td>SCW Ogier Ponds Separation from Coyote Creek (D4.2)</td>
<td>The Feasible Alternatives Report is currently being finalized internally and will then be provided to stakeholders for feedback. The project team has tentatively identified Alternative 6 as the Least Environmentally Damaging Practicable Alternative, or Recommended Alternative, and retained a consultant to refine steelhead habitat and flow criteria. The Recommended Alternative will be further developed over the next several months to provide preliminary design information for steelhead trout habitat features, a high-flow diversion system, and an outlet drainage structure. The project team is on track to complete the Planning Study Report this year, pending review by County Parks and other stakeholder input. Geotechnical studies to support completion of the Planning Study continue to be on hold pending landowner approval.</td>
</tr>
<tr>
<td>26044005</td>
<td>SCW Implementation: Fish Passage Improvements (D4.3)</td>
<td>Expenditures planned for FY28 were moved to FY24 as the project is now in preliminary planning for a fish passage improvement project on Stevens Creek per the November 8, 2022 Board meeting. Staff and stakeholders identified the Moffett Drop Structure for priority removal and expect to complete the planning study by the end of 2024. Staff is currently conducting a feasibility evaluation for the Planning Study Report that includes hydraulic modeling to determine flood risk and improving the cost estimate.</td>
</tr>
<tr>
<td></td>
<td>13 20444001</td>
<td>Calabazas/San Tomas Aquino Creek-Marsh Connection Project (Planning and Design)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>No award decision has been made on the National Oceanic and Atmospheric Administration (NOAA) Coastal Resiliency Grant application that included $15M in construction funding for the Project. There was an agency coordination meeting in April and a public meeting in May to present preliminary rankings of feasible alternatives. A BRRIT meeting was held in early March to present a conceptual proposal for a pilot study of a nature-based solution using a proposed horizontal levee along the southern boundary of Pond A4 for the treatment of reverse osmosis concentrate, wastewater, and stormwater. The proposal was well received, and staff met with Regional Water Quality Control Board (RWQCB) staff to discuss relevant National Pollutant Discharge Elimination System (NPDES) requirements. A meeting with City of Sunnyvale staff will be scheduled in August to report on the high-level concept and the NPDES requirements discussed with RWQCB staff and to enhance coordination.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14 20444002</td>
<td>Pond A4 Resilient Habitat Restoration Project (Phase 1 - Planning and Design)</td>
</tr>
<tr>
<td></td>
<td>In April 2023, Phase 1 of the Project was approved to be included in the CIP FY 2024-28 Five-Year Plan while Phase 2 is currently unfunded. The Project aims to continue the beneficial reuse of Stream Maintenance Program sediment, an objective of the SCW D3 Project, and support the Calabazas/San Tomas Aquino Creek-Marsh Connection Project by accelerating the ecotone construction. The State Coastal Conservancy Board approved $5 million in grant funding for the Project in February 2024. Staff utilized an accelerated process under the California Department of Fish and Wildlife &quot;Cutting the Green Tape&quot; initiative and received their concurrence for the application of a statutory exemption from California Environmental Quality Act (CEQA). The geotechnical investigation for the Project is complete, and a draft report has been submitted. Currently, an alternative analysis is being conducted with the goal of completing 70% of the design by June 2024. The permit application will be submitted around the same time, focusing on addressing the written comments generated from the May 2023 Pre-Application Bay Restoration Regulatory Integration Team (BRRIT) Meeting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 60204022</td>
<td>Security Upgrades and Enhancements</td>
</tr>
<tr>
<td></td>
<td>This project will significantly enhance overall security at Valley Water facilities by designing and installing a modern technical security system capable of meeting today’s security and investigative requirements in order to counter security threats. Staff is working on developing plans and specifications to upgrade the fencing at and around Valley Water facilities. Staff is also working with a consultant to develop system requirements and a scope of work for the replacement of our security system.</td>
<td></td>
</tr>
</tbody>
</table>
COMMITTEE AGENDA MEMORANDUM
Capital Improvement Program Committee

Government Code § 84308 Applies: Yes ☒ No ☐
(If “YES” Complete Attachment A - Gov. Code § 84308)

SUBJECT:
Receive Information on Change Orders to Anderson Dam Tunnel Project Construction Contract.

RECOMMENDATION:
Receive information on Change Orders to Anderson Dam Tunnel Project Construction Contract

SUMMARY:
During the May 17, 2021, Capital Improvement Program (CIP) Committee meeting, staff provided an update on the Anderson Dam Tunnel Project (ADTP) No. 91864006. The Committee requested staff provide monthly change order status updates after construction of the ADTP commences on July 7, 2021.

Project Background

Santa Clara Valley Water District (Valley Water) is undertaking the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) as a result of the February 20, 2020, directive from the Federal Energy Regulatory Commission (FERC) to implement interim risk reduction measures at Anderson Dam. One of those measures is the ADTP.

On April 27, 2021, Valley Water’s Board of Directors awarded the construction contract for the ADTP to the top-ranked, best-value proposer, Flatiron West, Inc. (Flatiron), in the sum of $161,140,321 and approved a contingency amount of $40,000,000 (25% of the contract price). The Board directed staff to discuss delegating authority for contingency expenditures with the CIP Committee.

By unanimous roll call vote at its May 17, 2021, meeting, the Committee approved recommending to the full Board that it consider delegating authority to staff to approve change orders for the ADTP at the amounts stated below and that the CIP Committee receive regular monthly reports with information regarding approved change orders, pending change orders, and the cumulative amounts. Valley Water’s Board of Directors accepted the CIP Committee recommendations at its regular
meeting on May 25, 2021.

**Delegated Approval Authority**

Unit Manager: Up to $100,000  
Assistant Operating Officer: Up to $250,000  
Deputy Operating Officer: Up to $500,000  
Assistant Chief Executive Officer: Up to $2.5 million  
Chief Executive Officer: Up to $5 million  
Board of Directors: $5 million and above

**Construction Contract Change Orders Status**

There is one new Contract Change Order (CCO #37) to present to the CIP Committee. The estimated value of CCO #37 is a credit of $14,951,168.00. Included for reference are two attachments providing information on construction contract change orders (Attachment 1) and construction contract financials (Attachment 2).

**Contract Change Order #37**

1. **Middle Intake Modification** - Valley Water issued Contract Document Clarification (CDC) 004, which includes revisions to the Middle Intake Modifications to address comments from regulatory agencies. The revised work per CDC 004 includes construction of an access road, construction of concrete blocks, mobilization of customized heavy equipment for drilling of rock anchors, and installation of rock anchors at the Middle Intake Structure. This work is to be done on a Time-and-Material basis, with an established budget allowance of $718,000.

2. **Bid Item Quantity Adjustment (5e, 5o, 5r, 5s, 5t, 5u, 5v)** - This change adjusts the contract unit bid quantities, either decreasing or increasing them by comparing the actual final quantity of completed work in the field against the associated approximate quantities listed in the Contract Documents for tunneling. The work related to the bid items listed below has been completed, resulting in final figures for these bid items. The final bid item quantity adjustment resulted in a net credit valued at $3,390,309.00.

   5e - 24 Ft Dia Tunnel Ex Class 4, decrease by 113.16 LF @ $12,300.00/LF  
       ..........................................................................................................................................................................................................................................................................................................................................................................................($1,391,868.00)

   5o - Rock Tunnel Probing, increase by 71 LF @ $300/LF  
       ..........................................................................................................................................................................................................................................................................................................................................................................................$21,300.00

   5r - Rock Tunnel Pre-Ex Drilling (Direct), decease by 274 LF @ $300/LF  
       ..........................................................................................................................................................................................................................................................................................................................................................................................($82,200.00)

   5s - Rock Tunnel Pre-Ex Drilling and Grouting (Indirect), decrease by 99 Shifts @ $10,000.00/Shift  
       ..........................................................................................................................................................................................................................................................................................................................................................................................($990,000.00)

   5t - Rock Tunnel Pre-Ex Grouting (Microfine cement), decrease by 3150 Sacks @ $120/  
       Sack ..........................................................................................................................................................................................................................................................................................................................................................................................($378,000.00)
5u - Rock Tunnel Pre-Ex Grouting (Chemical grout), decrease by 5300 Gal @ $25/Gal..........................................................................................($378,000.00)
5v - Transition Zone Tunnel Ex Class 3, decrease by 505 CY @ $865/CY.........................................................................................($436,825.00)

3. **Seismic Pipe Material Deduction** - Valley Water issued CDC 041, which replaced the special seismic steel pipe (SSSP) with an alternative design concept utilizing steel pipes and a large blowoff valve to satisfy the emergency drawdown requirements in the event of pipe damage during seismic or landslide events. This change will credit back the SSSP material which includes one 156-inch (inside diameter) SSSP segment and two 132-inch (inside diameter) SSSP segments.

The cost for work to implement the alternative design concept resulting in replacement of the SSSP, will be negotiated and documented in a future change order. It is anticipated that the replacement work cost will be a fraction of the SSSP material credit to be approved pursuant to this change order. The material credit portion of this change is estimated to be valued at $11,560,859.00.

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:
There are no environmental justice and equity impacts associated with this item. This action is unlikely to or will not result in adverse impacts and is not associated with an equity opportunity.

ATTACHMENTS:
Attachment A: Government Code §84308
Attachment 1: Construction Contract Change Orders Status
Attachment 2: Construction Contract Financial Status

UNCLASSIFIED MANAGER:
Ryan McCarter, 408-630-2983
Attachment A – Gov. Code § 84308

Receive Information on Change Orders to Anderson Dam Tunnel Project Construction Contract.

List of Parties and Their Agents/Representatives Known to Staff

<table>
<thead>
<tr>
<th>Organization Name</th>
<th>Name</th>
<th>Role</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatiron West, Inc.</td>
<td>Shawn Golden</td>
<td>Vice President</td>
<td>2100 Goodyear Rd., Benicia, CA 94510</td>
</tr>
</tbody>
</table>

List of Participants and Their Agents/Representatives Known to Staff

<table>
<thead>
<tr>
<th>Organization Name</th>
<th>Name</th>
<th>Role</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCO #</td>
<td>CIP Committee Date</td>
<td>Approval Date</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------</td>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>1/18/2022</td>
<td>12/16/2021</td>
<td>Additional Tree Removal, Protection and Relocation</td>
</tr>
<tr>
<td>2</td>
<td>2/14/2022</td>
<td>4/16/2022</td>
<td>Outlet Works Vertical Shaft Re-sizing</td>
</tr>
<tr>
<td>3</td>
<td>5/16/2022</td>
<td>5/17/2022</td>
<td>Water Quality Monitoring Equipment, Miscellaneous demolition, TCEAP VHF/UHF Radios</td>
</tr>
<tr>
<td>4</td>
<td>6/13/2022</td>
<td>6/30/2022</td>
<td>Tunnel and Miscellaneous items from CDC-001/001.1, Remove Taber Drilling from Scope</td>
</tr>
<tr>
<td>5</td>
<td>6/13/2022</td>
<td>6/30/2022</td>
<td>Upsizing Soil Nail Rows D&amp;E from #18 to #20</td>
</tr>
<tr>
<td>6</td>
<td>7/18/2022</td>
<td>8/6/2022</td>
<td>Increased Quantity of Diversion Portal Excavation, Assistance with Geological Investigations, Internet access to Trailer # 2, and Change of Infill material for High Level Outlet Works (HLOW) Shaft</td>
</tr>
<tr>
<td>7</td>
<td>9/26/2022</td>
<td>10/31/2022</td>
<td>DOS Foundation Excavation - Revised Soil Nail Wall, and Additional Environmental Compliance for Water Quality Monitoring and Soil Testing</td>
</tr>
<tr>
<td>8</td>
<td>10/18/2022</td>
<td>10/26/2022</td>
<td>Disposal of Regulated and Organic Material</td>
</tr>
<tr>
<td>9</td>
<td>11/14/2022</td>
<td>11/18/2022</td>
<td>3-D Modeling of HLOW Shaft</td>
</tr>
<tr>
<td>10</td>
<td>12/12/2022</td>
<td>12/19/2022</td>
<td>Monitoring of Additional Piezometer, Supplementary Support for the Transition Zone, DOS Portal Conditions, Partnering</td>
</tr>
<tr>
<td>11</td>
<td>2/13/2023</td>
<td>2/19/2023</td>
<td>Time Related Overhead Time Impact Analysis 002</td>
</tr>
<tr>
<td>12</td>
<td>2/13/2023</td>
<td>1/19/2023</td>
<td>Increased Quantity of Diversion Tunnel Excavation Class 5</td>
</tr>
<tr>
<td>13</td>
<td>2/13/2023</td>
<td>2/24/2023</td>
<td>Diversion Outlet Structure (DOS) Energy Dissipation Chamber Grated Access Opening</td>
</tr>
<tr>
<td>14</td>
<td>3/20/2023</td>
<td>4/03/2023</td>
<td>Increased Quantity for 18.5 Foot Diameter Tunnel Excavation Class 5, Increased Quantity for Bid Item No. 2h, 2i, 2j, 2k. Decreased Quantity for Bid Item No. 5a and 5b.</td>
</tr>
<tr>
<td>15</td>
<td>3/20/2023</td>
<td>4/18/2023</td>
<td>Diversion Outlet Structure CLSM Saturday Premium Time, Diversion Portal Soil Nail Wall Condition</td>
</tr>
<tr>
<td>16</td>
<td>4/10/2023</td>
<td>5/12/2023</td>
<td>Surge Protection Device for Main Switchgear, CDC-015 Water Quality Instrumentation, Tree Trimming for Pacific Gas &amp; Electric Pole Relocation</td>
</tr>
<tr>
<td>17</td>
<td>4/10/2023</td>
<td>5/12/2023</td>
<td>Increased Bid Item No. 11A Allowance - Other Wildlife and Fish Species, Specification Section 19.09</td>
</tr>
<tr>
<td>18</td>
<td>5/15/2023</td>
<td>5/30/2023</td>
<td>Traffic Support for Press Event</td>
</tr>
<tr>
<td>19</td>
<td>6/30/2023</td>
<td>5/25/2023</td>
<td>Increase Bid Item No. 5x Tunnel Excavation in Transition Zone - Class 5</td>
</tr>
<tr>
<td>20</td>
<td>6/30/2023</td>
<td>8/10/2023</td>
<td>18&quot; Hydro Return Line Decommissioning, Low Level Outlet Tunnel Steel Sets Enlargement, DPPB Boring Survey Assistance, Air Vent Pipe Procurement, CDC-007.3 North Channel FWI Scope 2023, CDC-007.3 North Channel DTDS Scope 2023</td>
</tr>
<tr>
<td>22</td>
<td>8/21/2023</td>
<td>7/31/2023</td>
<td>Additional Shotcrete in the Transition Zone, Increase in Bid Item No. 5g – Transition Zone Rock Bolts</td>
</tr>
<tr>
<td>24</td>
<td>10/16/2023</td>
<td>11/31/2023</td>
<td>Micro-Tunnel Boring Machine (MTBM) Lake Tap Tie Down, Reservoir Log Boom Relocation</td>
</tr>
</tbody>
</table>
## Anderson Dam Tunnel Project
### Construction Contract Change (CO) Order Status

<table>
<thead>
<tr>
<th>CCO #</th>
<th>CIP Committee Date</th>
<th>Approval Date</th>
<th>Description</th>
<th>Amount</th>
<th>Contingency Amount</th>
<th>Approval Level</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>11/13/2023</td>
<td>12/23/2023</td>
<td>Quantity Increase for Bid Item No. 5d – 24 Foot Diameter Tunnel Excavation Class 3, Quantity Increase for Bid Item No. 5g – Transition Zone Rock Bolts, Allowance Increase for Bid Item No. 11a – Other Wildlife and Fish Species Increase, V-Drift Extension at 460, Winterization of North Channel Dike 2023</td>
<td>$833,772.00</td>
<td>$20,259,161.46</td>
<td>ACEO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>27</td>
<td>12/11/2023</td>
<td>1/04/2024</td>
<td>Cost Increase for DOS Foundation Excavation – Revised Soil Nail Wall, Quantity Increase for Bid Item No. 5r – Pre-extraction Drilling Within Rock Tunnel.</td>
<td>$1,341,261.43</td>
<td>$18,917,900.03</td>
<td>ACEO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>28</td>
<td>12/11/2023</td>
<td>1/09/2024</td>
<td>Quantity Increase for Bid Item 4c Lake Tap Excavation (Dredging) Microtunnel Boring Machine Landing Pad</td>
<td>$570,375.00</td>
<td>$18,347,525.03</td>
<td>ACEO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>29</td>
<td>1/22/2024</td>
<td>12/26/2023</td>
<td>Bid Item Increase So - Probing within Rock Tunnel</td>
<td>$370,800.00</td>
<td>$17,976,725.03</td>
<td>ACEO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>30</td>
<td>1/22/2024</td>
<td>2/14/2024</td>
<td>Revised Motor Control Center (MCCEA) Schedule, Additional Telemetry Pull-Box, Material due to Delay in Issuing Notice to Proceed (NTP) 2A/2B, Credit for Host-Owl Way Landslide Supplemental Work.</td>
<td>-$1,822,581.61</td>
<td>$19,799,306.64</td>
<td>ACEO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>31</td>
<td>2/26/2024</td>
<td>3/20/2024</td>
<td>Cost increase for North Channel Dewatering Wells, 2024 Reservoir Log Boom Relocation Allowance, Alternative Initial Lining - Sawtooth Design Method, Concrete Abrasion Testing, Allowance for Trash Rack Foundation Design Changes</td>
<td>$1,457,191.11</td>
<td>$18,342,115.53</td>
<td>ACEO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>32</td>
<td>3/18/2024</td>
<td>4/09/2024</td>
<td>Additional Cost for Diversion Outlet Structure (DOS) Rock Anchors Installation, Geological and Phytophthora Test Pits</td>
<td>$163,736.00</td>
<td>$18,178,379.53</td>
<td>AOO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>33</td>
<td>4/22/2024</td>
<td>6/20/2024</td>
<td>Diversion Outlet Structure Roof Top Baffle, Articulated Joint Mockup</td>
<td>$1,082,734.00</td>
<td>$17,095,645.53</td>
<td>ACEO Approved</td>
<td>Approved</td>
</tr>
<tr>
<td>34</td>
<td>5/20/2024</td>
<td>TBD</td>
<td>Trash Rack Panel Redesign, North Channel Extension - Submittal Procurement</td>
<td>$115,579.00</td>
<td>$16,380,066.53</td>
<td>AOO Pending</td>
<td>Pending</td>
</tr>
<tr>
<td>35</td>
<td>4/22/2024</td>
<td>TBD</td>
<td>Coyote Creek Modifications - North Channel</td>
<td>$101,487,120.20</td>
<td>$6,831,156.35</td>
<td>CEO Pending</td>
<td>Pending</td>
</tr>
<tr>
<td>36</td>
<td>6/17/2024</td>
<td>TBD</td>
<td>Concrete Pad for Generator, Concrete Pad for Main Switchboard (MSA), Differing Site Condition for Dredging Operation</td>
<td>$2,647,633.00</td>
<td>$4,183,723.33</td>
<td>CEO Pending</td>
<td>Pending</td>
</tr>
</tbody>
</table>

### New CCOs for CIP Committee

<table>
<thead>
<tr>
<th>DCO #</th>
<th>CIP Committee Date</th>
<th>Approval Date</th>
<th>Description</th>
<th>Amount</th>
<th>Contingency Amount</th>
<th>Approval Level</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>09/26/22</td>
<td>10/05/22</td>
<td>Milestone 7, 9, and 10 Completion Revisions</td>
<td>$0.00</td>
<td>$4,183,723.33</td>
<td>UM Approved</td>
<td>Approved</td>
</tr>
</tbody>
</table>

### Pending CCOs

<table>
<thead>
<tr>
<th>Pending CCO #</th>
<th>CIP Committee Date</th>
<th>Approval Date</th>
<th>Description</th>
<th>Amount</th>
<th>Contingency Amount</th>
<th>Approval Level</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>7/15/2024</td>
<td>TBD</td>
<td>Middle Intake Modification, Bid Item Quantity Adjustment (Se, So, Sr, Sl, St, Su, Sv), Seismic Pipe Material Deduction</td>
<td>-$14,951,168.00</td>
<td>$19,134,891.33</td>
<td>ACEO Pending</td>
<td>Pending</td>
</tr>
</tbody>
</table>

### Total COs

- **Total COs Approved**: $35,816,276.67
- **Total COs Pending**: $14,951,168.00

<table>
<thead>
<tr>
<th>Total Number of COs (Approved &amp; Pending)</th>
<th>Total Amount of COs (Approved &amp; Pending)</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>$20,865,108.67</td>
</tr>
</tbody>
</table>
### Anderson Dam Tunnel Project - Construction Contract Financials

<table>
<thead>
<tr>
<th>Bid Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Balance Remaining</th>
<th>Billing Through May 2024*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Percent (%)</td>
<td>Amount</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>MOBILIZATION AND DEMOBILIZATION</td>
<td>$16,150,000.00</td>
<td>$1,782,750.00</td>
<td>89%</td>
</tr>
<tr>
<td>2</td>
<td>SITE PREPARATION</td>
<td>$5,713,000.00</td>
<td>$412,657.78</td>
<td>93%</td>
</tr>
<tr>
<td>3</td>
<td>DIVERSION PORTAL</td>
<td>$6,173,496.00</td>
<td>$261,886.40</td>
<td>96%</td>
</tr>
<tr>
<td>4</td>
<td>LAKE-TAP PORTAL</td>
<td>$4,215,000.00</td>
<td>$958,380.00</td>
<td>77%</td>
</tr>
<tr>
<td>5</td>
<td>TUNNEL EXCAVATION AND LINING</td>
<td>$47,438,325.00</td>
<td>$24,130,914.99</td>
<td>49%</td>
</tr>
<tr>
<td>6</td>
<td>SHAFT EXCAVATION AND LINING</td>
<td>$10,100,000.00</td>
<td>$4,336,360.00</td>
<td>57%</td>
</tr>
<tr>
<td>7</td>
<td>MICROTUNNEL</td>
<td>$9,982,000.00</td>
<td>$8,280,500.00</td>
<td>17%</td>
</tr>
<tr>
<td>8</td>
<td>DIVERSION OUTLET STRUCTURE</td>
<td>$48,678,550.00</td>
<td>$30,769,130.16</td>
<td>37%</td>
</tr>
<tr>
<td>9</td>
<td>COYOTE CREEK MODIFICATIONS</td>
<td>$6,421,550.00</td>
<td>$3,497,277.00</td>
<td>46%</td>
</tr>
<tr>
<td>10</td>
<td>SUPPLEMENTAL WORK ITEMS</td>
<td>$5,668,400.00</td>
<td>$2,260,000.00</td>
<td>60%</td>
</tr>
<tr>
<td>11</td>
<td>ALLOWANCES</td>
<td>$600,000.00</td>
<td>$208,152.42</td>
<td>65%</td>
</tr>
</tbody>
</table>

#### Total Contract Amount

<table>
<thead>
<tr>
<th>Total Original Contract Amount</th>
<th>Total Balance Remaining</th>
<th>Percent (%) Billed</th>
<th>Total Billed To Original Contract Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$161,140,321.00</td>
<td>$76,898,008.75</td>
<td>52%</td>
<td>$84,242,312.25</td>
</tr>
</tbody>
</table>

#### CCOs

<table>
<thead>
<tr>
<th>CCOs</th>
<th>Description</th>
<th>Amount</th>
<th>Balance Remaining</th>
<th>Billing Through May 2024*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Percent (%)</td>
<td>Amount</td>
<td></td>
</tr>
<tr>
<td>CCO 1-32</td>
<td>CONTRACT CHANGE ORDERS (CCO)</td>
<td>$21,821,620.53</td>
<td>$4,742,581.22</td>
<td>78%</td>
</tr>
</tbody>
</table>

#### Total Contract Amount Including CCOs

<table>
<thead>
<tr>
<th>Total Contract Amount Including CCOs</th>
<th>Total Balance Remaining Including CCOs</th>
<th>Total Percent (%) Billed Including CCOs</th>
<th>Total Billed Including CCOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$182,961,941.53</td>
<td>$81,640,589.97</td>
<td>55%</td>
<td>$101,321,351.56</td>
</tr>
</tbody>
</table>

*May invoice is still under review and the values may vary once it is finalized*
SUBJECT: Receive Update on the Almaden Valley Pipeline Replacement Project, Project No. 92304001, (San Jose, Unincorporated Santa Clara County) (District 1, District 7).

RECOMMENDATION: Receive Update on the Almaden Valley Pipeline Replacement Project, Project No. 92304001, (San Jose, Unincorporated Santa Clara County) (District 1, District 7).

SUMMARY: During the November 13, 2023, Capital Improvement Program (CIP) Committee meeting, staff provided an update on the Almaden Valley Pipeline (AVP) Replacement Project No. 92304001 (Project) as part of the Status of Capital Projects in the Design and Permitting Phase Report. The Committee requested staff provide a more detailed update on the Project at a future CIP Committee meeting.

Project Background

The Almaden Valley Pipeline consists of approximately 11.6 miles of 72-inch-to-78-inch diameter prestressed concrete cylinder pipe (PCCP) and welded steel pipe. The pipeline was constructed in three segments: Unit I (4.4 miles) was constructed in the 1960s, and Unit II Phase I (3.7 miles) and Unit II Phase II (3.5 miles) were constructed in the 1980s. The AVP conveys raw water to Central Pipeline.

In 2008 and 2017, Valley Water conducted inspections of AVP and found increasing distress in AVP PCCP. Follow-up actions taken by Valley Water included measures to validate the inspection results, forensic investigation and material testing of wire samples taken from AVP Unit II PCCP, emergency repairs to non-sequential PCCP sections, and installation of an acoustic fiber optic (AFO) monitoring system to monitor all AVP PCCP as part of the AVP Inspection & Rehabilitation Project.

In 2018, following the emergency repairs and considering the vital nature of AVP, Water Utility Capital
staff initiated a project proposal for the AVP Replacement Project to address the long-term reliability of the AVP.

In 2019 and 2021, another two emergencies were declared to repair several PCCP sections of AVP that had become severely distressed since the original emergency in 2017. Staff continued to monitor and assess the condition of AVP based on the AFO prestressing wire break data. The data from the AFO system indicated that the PCCP in the Unit II Phase II portion of AVP continued to degrade and that additional PCCP pieces were approaching the condition of severely distressed. Concurrently, in 2019 and 2021, the pre-CIP and pre-planning Business Case Reports for the AVP Replacement Project were approved. On May 26, 2020, the Board approved including the Project in the CIP at a total Project cost of $89.7M.

Additionally, the 2016 Infrastructure Reliability Project (IRP) evaluated Valley Water’s raw water system performance in several selected outage scenarios, including earthquake, storm, and power outage. The recommended projects in the 2016 IRP included a project to replace a critical and vulnerable section (approximately 25,000 linear feet) of the AVP.

**Project Objective**

The objective of the Almaden Valley Pipeline Replacement Project is to maintain delivery of raw water through safe operations of AVP. A secondary objective is to improve reliability and level of service in a major hazard event or system outage to deliver raw water through the AVP to serve Valley Water’s water treatment plants and customers.

The scope of the Project includes design and rehabilitation of approximately 7.5 miles of PCCP in two phases. Phase 1 of the Project will rehabilitate approximately 3.5 miles of AVP (Unit II Phase II of the original construction) and replace the existing Shannon Line Valve Vault. Phase 2 of the Project will rehabilitate approximately 4.1 miles of AVP (Unit I of the original construction).

The rehabilitation of AVP will be achieved by installing steel liner pipe within the existing PCCP at several access portals along AVP. The process steps of relining the pipe at each portal are 1) excavating the portals; 2) removing the top half of the existing PCCP; 3) installing steel liner pipe within the PCCP; 4) welding the liner and grouting the annular space between the liner and PCCP; 5) providing a cement mortar lining on the inside of the steel liner; and 6) encasing portals in concrete and restoring the site.

**Project Status Update**

The Project Planning Phase work was completed in October 2022 under the Pipeline Maintenance Program (2007) and the 10-Year Almaden Valley Pipeline Inspection & Rehabilitation Project. Additionally, the Project is covered under the Pipeline Maintenance Program Environmental Impact Report (2007).

The Project Phase 1 Design Phase began in November 2022 and the 60% Design is scheduled to be completed by June 30, 2024.
Project Schedule

Phase 1
1. 60% Design complete, June 2024
2. Design complete, June 2026
3. Bid advertisement, July 2026
4. Award of construction contract, September 2026
5. Construction begins, October 2026
6. Construction ends, August 2029
7. Close-Out, December 2029

Phase 2
1. Design begins, July 2026
2. Design complete, June 2028
3. Bid advertisement, July 2031
4. Award of construction contract, September 2031
5. Construction begins, October 2031
6. Construction ends, May 2034
7. Close-Out, June 2035

Note: Each phase will use at least two shutdown windows during construction.

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:
Environmental Justice impacts associated with the AVP Replacement Project are currently unknown and will be evaluated and reported to the Board when the Project is recommended to approve the final contract documents and advertise for bidders.

ATTACHMENTS:
Attachment 1: PowerPoint

UNCLASSIFIED MANAGER:
Emmanuel Aryee, 408-630-3074
Almaden Valley Pipeline Replacement Project Overview

Presented by: Juan Renteria, Unit Manager, Pipelines Project Delivery Unit
Capital Improvement Program Committee - July 15, 2024
Recent History of Almaden Valley Pipeline

- **Emergency Shutdown for Repair**
  - December 2017
- **Emergency Shutdown for Repair**
  - December 2019
- **Emergency Shutdown for Repair**
  - November 2021
- **AVP Replacement Project**
  - Design Phase Begins
  - November 2022

- **September 2019**
  - Project Business Case Report Approved

- **October 2022**
  - AVP Replacement Project Planning Phase Completed

- **January 2023**
  - AVP Inspection & Rehabilitation Project Begins
Almaden Valley Pipeline Location

- Raw Water Pipeline
- Approximately 11.6 miles long
- 72-inch and 78-inch diameter prestressed concrete cylinder pipe (PCCP) (7.5 miles)
- Welded steel pipe (WSP) and bar wrapped pipe (BWP) (4.2 miles)
Almaden Valley Pipeline Supply

**WATER TREATMENT**
- Rinconada Water Treatment Plant (WTP)
- Santa Teressa WTP
- Penitencia WTP

**RAW WATER SUPPLY**
- US Bureau of Reclamation
- San Luis Reservoir
- San Felipe System
- District-owned reservoirs

Almaden Valley Pipeline
Prestressed Concrete Cylinder Pipe (PCCP)

PCCP Cross Section

Santa Clara Conduit Rupture – August 2015
Steel Pipeline Relining Rehabilitation

1. Significant cost savings when compared to removing and replacing the existing pipeline or other repair methods.

2. Less construction time and impacts to the public when compared to a full removal and replacement.

3. Does not require any new permanent pipeline easements.

4. Steel relining has had recent successes at Metropolitan Water District and San Diego County Water Authority.
Liner Installation Process
AVP Replacement Project

• Phase 1
  • Between Santa Teresa Force Main and Calero Valve Yard
  • Relining of 3.4 miles of PCCP
  • Replacement of Shannon Line Valve
  • Replace seven existing vault structures
  • New additional line valve

• Phase 2
  • Between Guadalupe Creek and Vasona Pump Station
  • Relining of 4.1 miles of PCCP
  • Replace 10 existing vault structures

• Estimated project cost: $119.3M
Almaden Valley Pipeline Replacement Schedule

Board Advertises & Awards Phase 1
July – September 2026

Phase 1 Design
February 2024 – June 2026

Phase 1 Construction
October 2026 – August 2029

Phase 2 Design
July 2026 – June 2028

October 2031 – May 2034
Phase 2 Construction

July – September 2031
Board Advertises & Awards Phase 2

TODAY
Valley Water

Clean Water • Healthy Environment • Flood Protection
SUBJECT: Review 2024 Capital Improvement Program Committee Work Plan.

RECOMMENDATION: Review the 2024 Capital Improvement Program Committee Work Plan and make adjustments as necessary.

SUMMARY: Work Plans are created and implemented by all Board Committees to increase Committee efficiency, provide increased public notice of intended Committee discussions, and enable improved follow-up by staff. Work Plans are dynamic documents managed by Committee Chairs and are subject to change. Committee Work Plans also serve to assist in preparing an Annual Committee Accomplishments Reports.

Discussion of topics as stated in the Plan have been described based on information from the following sources:

- Items referred to the Committee by the Board;
- Items requested by the Committee to be brought back by staff;
- Items scheduled for presentation to the full Board of Directors and
- Items identified by staff.

Regular monthly meetings are scheduled to occur at 11:00 a.m., on the third Monday of each month, or at the call of the Committee Chair.

Establishing a work plan and meeting schedule is necessary to provide staff with a basis for meeting planning, logistics coordination, and agenda item preparation. Attachment 1 is the 2024 CIP committee work plan for review and comments by the CIP committee.
ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:
There are no environmental justice and equity impacts associated with this item. This action is unlikely to or will not result in human health or environmental effects.

ATTACHMENTS:
Attachment 1: 2024 CIP Committee Work Plan

UNCLASSIFIED MANAGER:
Candice Kwok-Smith, 408-630-3193
### CIP Committee 2024 Work Plan

#### Capital Project Monitoring
- **Feasibility/Planning**: | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
  - X
- **Design/Permitting**: | | | | | | X | | | | | | X
- **Construction**: | | | | | X | | | X | X | | X
- **Environmental Permit Compliance (Post Construction)**: | | | | | | | | | | X | |

#### CIP Implementation
- **Construction Contractor Compliance**: | X |
- **Headquarters Operations Building Planning**: | |
- **Construction Activities Carbon Footprint**: | | X |
- **Master Plan/Implementation Projects**: | X | X | X | |
- **Dam Safety Program Strategy**: | X |
- **Almaden Valley Pipeline Replacement**: | |
- **RWTP Reliability Improvement Project Neighborhood Outreach**: | |
- **Anderson Recreation Impacts/Coordination with County Parks**: | X |
- **Almaden Dam Fiscal Analysis**: | |

#### CIP Development
- **Final CIP Performance Audit**: | |
- **Water Supply Capital Workshop**: | X |
- **CIP Development Process**:
  - Annual CIP Development Process and Integrated Financial Planning: | |
  - Schedule and Review of Initially Validated and Unfunded Projects: | |
- **Preliminary CIP Review**: | X |
  - Review Significant Project Plan Updates: | X |

#### Standing Items
- **Anderson Dam Tunnel Project Contingency and Change Order Monitoring**: | X | X | X | X | X | X | X | X | X | X | X | X |
- **Upcoming Consultant Agreement Amendments**: | X | X | X | X | X | X | X | X | X | X | X | X |
- **Workplan**: | X | X | X | X | X | X | X | X | X | X | X | X |
- **Minutes**: | X | X | X | X | X | X | X | X | X | X | X | X |
- **Annual Election of Committee Officer**: | X |