



Santa Clara Valley Water District Capital Improvement Program Committee Meeting

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

REGULAR MEETING AGENDA

**Monday, May 20, 2024
11:00 AM**

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

BOARD COMMITTEE MEMBERS:

Committee Chair:
Director Nai Hsueh, District 5

Committee Vice Chair:
Director Tony Estremera, District 6

Committee Member:
Director Jim Beall, District 4

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.

COMMITTEE LIAISON:
Jessica Collins

Dave Leon (COB Liaison)
Asst. Deputy Clerk II
DaveLeon@valleywater.org
1-408-630-2006

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, May 20, 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 <http://emmas.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.

- 2.1. Election of 2024 Capital Improvement Program Committee Officers. [24-0513](#)

Recommendation: Nominate and elect the 2024 Capital Improvement Program Committee Chairperson and Vice Chairperson.

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

3. APPROVAL OF MINUTES:

- 3.1. Approval of April 22, 2024 Capital Improvement Program Committee Minutes. [24-0511](#)

Recommendation: Approve the minutes.

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

Attachments: [Attachment 1: 042224 CIP Committee Draft Minutes](#)

4. REGULAR AGENDA:

- 4.1. Receive and Discuss Information Regarding the Status of Capital Projects in the Design and Permitting Phase. [24-0408](#)

Recommendation: Receive and discuss information regarding the status of capital projects in the design and permitting phase.

Manager: Bhavani Yerrapotu, 408-630-2735
Emmanuel Aryee, 408-630-3074
Ryan McCarter, 408-630-2983

Attachments: [Attachment 1: Design and Permitting Report](#)

- 4.2. Receive Information on Change Orders to Anderson Dam Tunnel Project Construction Contract. [24-0409](#)

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

Manager: Ryan McCarter, 408-630-2983

Attachments: [Attachment A: Government Code § 84308: Flatiron West, Inc.](#)
[Attachment 1: Construction Contract Change Orders Status](#)
[Attachment 2: Construction Contract Financial Status](#)

- 4.3. Receive an update on the Distribution System Master Plan Implementation Project (Project No. 95044001) and the SCADA Master Plan Implementation Project (Project No. 95044002). [24-0410](#)

Recommendation: Receive an update on the Distribution System Master Plan Implementation Project (Project No. 95044001) and the SCADA Master Plan Implementation Project (Project No. 95044002).

Manager: Luz Penilla, 408-630-2228

Attachments: [Attachment 1: PowerPoint](#)

- 4.4. Review 2024 Capital Improvement Program Committee Work Plan.

[24-0411](#)

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 Monday, June 17, 2024.

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Santa Clara Valley Water District

File No.: 24-0513

Agenda Date: 5/20/2024

Item No.: 2.1.

COMMITTEE AGENDA MEMORANDUM **Capital Improvement Program Committee**

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

SUBJECT:

Election of 2024 Capital Improvement Program Committee Officers.

RECOMMENDATION:

Nominate and elect the 2024 Capital Improvement Program Committee Chairperson and Vice Chairperson.

SUMMARY:

The Capital Improvement Program (CIP) Committee (Committee) was established to provide a venue for more detailed discussions regarding capital project validation, including recommendations on prioritizing, deleting, and/or adding projects to the CIP, as well as monitoring implementation progress of key projects in the CIP.

The Committee is comprised of the Committee Chairperson and Vice Chairperson, who serve as the Committee's primary and secondary facilitators, and Committee representatives. The Committee Chairperson and Vice Chairperson are elected by the Committee annually.

The following is a summary of CIP Committee elected officers since the Committee's 2012 enactment by the Board of Directors.

Year	Chairperson	Vice Chairperson
2012	B. Schmidt	T. Estremera
2013	T. Estremera	D. Kennedy
2014	T. Estremera	D. Kennedy
2015	N. Hsueh	T. Estremera
2016	N. Hsueh	T. Estremera
2017	N. Hsueh	T. Estremera
2018	N. Hsueh	L. LeZotte

2019	N. Hsueh	L. LeZotte
2020	N. Hsueh	L. LeZotte
2021	N. Hsueh	L. LeZotte
2022	N. Hsueh	T. Estremera
2023	N. Hsueh	T. Estremera

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:

There are no environmental justice and equity impacts associated with this action. This action is unlikely to or will not result in adverse impacts.

ATTACHMENTS:

None.

UNCLASSIFIED MANAGER:

Candice Kwok-Smith, 408-630-3193



Santa Clara Valley Water District

File No.: 24-0511

Agenda Date: 5/20/2024
Item No.: 3.1.

COMMITTEE AGENDA MEMORANDUM **Capital Improvement Program Committee**

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

SUBJECT:

Approval of April 22, 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: 042224 CIP Committee Draft Minutes

UNCLASSIFIED MANAGER:

Candice Kwok-Smith, 408-630-3193

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CAPITAL IMPROVEMENT COMMITTEE MEETING

DRAFT MINUTES

REGULAR MEETING

**MONDAY, April 22, 2024
11:00 AM**

(Paragraph numbers coincide with agenda item numbers)

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 11:08 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, Aaron Baker, Erin Baker, Audrey Beaman, Sarah Berning, Wade Blackard, Sam Bogale, James Bohan, John Bourgeois, Rick L. Callender, Barton Ching, Jessica Collins, Enrique De Anda, Jiana Escobar, Alicia Fraumeni, Jaeho Hahn, Chris Hakes, Katrina Holden, Cody Houston, Candice Kwok-Smith, Peggy Lam, Dave Leon, Jennifer Martin, Ryan McCarter, Patrice McElroy, Nicole Merritt, Julianne O'Brien, Carlos Orellana, Leslie Orta, Luz Penilla, Alison Phagan, Mike Potter, Charlotte Reinthaler, Kristie Resendez, Don Rocha, Breanne Roderick, Amandeep Saini, Miguel Silva, Stephanie Simunic, Kirsten Struve, Charlene Sun, Darin Taylor, Cheryl Togami, Odilia Teixeira, Gregory Williams, Bhavani Yerrapotu, and Tina Yoke.

Public in attendance were: XXX-XXX-8214, Ros Beckensten, Sarah Clark, Chris Cleveland, Molly Culton, Rebecca Eisenberg, Helen H, Forest Olaf Peterson, Rick, and SJ.

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.

2.1. Election of 2024 Capital Improvement Program Committee Officers.

Recommendation: Nominate and elect the 2024 Capital Improvement Program Committee Chairperson and Vice Chairperson.

Chairperson Hsueh deferred the item to the May 2024 Committee meeting. The Committee took no action.

3.APPROVAL OF MINUTES:

3.1. Approval of March 18, 2024 Capital Improvement Program Committee Meeting Minutes.

Recommendation: Approve the minutes.

The Committee considered the attached minutes of the March 18, 2024 Committee meeting.

Public Comments: None.

It was moved by Director Beall and seconded by Chairperson Hsueh, and unanimously carried that the minutes be amended to correct the language in item 4.1 to read as follows:

“The Committee received the information, took no formal action, and requested that staff report to the Committee relating to community concern outreach updates of the RWTP Reliability Improvement Project. The Committee also requested that staff provide information to Director Beall relating to the scope of outreach to the CPRU relating to the expansion of electronic records.”

Regular Agenda:

4.1. 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 design and permitting phase.

Ryan McCarter, John Bourgeois, Kirsten Struve, Luz Penilla, Emmanuel Aryee, Bhavani Yerrapotu, and Amandeep Saini 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: Ryan McCarter reviewed rows marked RM, John Bourgeois reviewed rows marked JB, Kirsten Struve reviewed rows marked KS, Luz Penilla reviewed rows marked LP, Emmanuel Aryee reviewed rows marked EA, Bhavani Yerrapotu reviewed rows marked BY, John Bourgeois reviewed rows marked LB, and Amandeep Saini reviewed rows marked TN.

Ryan McCarter, John Bourgeois, Kirsten Struve, Luz Penilla, Emmanuel Aryee, Bhavani Yerrapotu, Amandeep Saini, and Tina Yoke were available to answer questions.

Public Comments: None

The Committee received the information and took no formal action.

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.

Ryan McCarter reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachments 1,2, and 3 and was available to answer questions.

Public Comments: None.

The Committee received the information and took no formal action.

4.3. Receive an update and provide feedback on the Water Treatment Plant Master Plan Implementation Project No. 93044001.

Recommendation: Receive an update and provide feedback on the Water Treatment Plant Master Plan Implementation Project No. 93044001.

Luz Penilla and Barton Ching 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.

4.4. Review 2023 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 May 20, 2024.

Chairperson Hsueh adjourned the meeting at 12:34 p.m.

Dave Leon
Assistant Deputy Clerk II

Date Approved:



Santa Clara Valley Water District

File No.: 24-0408

Agenda Date: 5/20/2024

Item No.: 4.1.

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 Design and Permitting Phase.

RECOMMENDATION:

Receive and discuss information regarding the status of capital projects in the design and permitting phase.

SUMMARY:

The 2024 Work Plan for the Board Capital Improvement Program Committee (Committee) includes monitoring of capital projects during all phases of development. Staff will present a list of active projects at each Committee meeting and provide detailed information on those where potential and/or significant issues have been identified. The projects presented for discussion will be organized by phases: planning/feasibility; design/permitting; and construction. Staff will present projects to the Committee for review one phase at a time. Projects currently in the design/permitting phase are being presented at this Committee meeting. Other attachments may be included to provide more detail on other items associated with these projects.

Attachment 1 is a list of projects in the design and permitting phase. A verbal report will be provided at the meeting with more detailed information about recent developments on the projects listed in Attachment 1.

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:

There are no environmental justice and equity impacts associated with presenting updates on Capital Improvement Program Projects in the design phase to the CIP Committee. This action is not associated with an equity opportunity.

ATTACHMENTS:

Attachment 1: Design and Permitting Report

UNCLASSIFIED MANAGER:

Bhavani Yerrapotu, 408-630-2735

Emmanuel Aryee, 408-630-3074

Ryan McCarter, 408-630-2983

Capital Project Monitoring Report - May 2024

Design and Permitting Phase

Row	Project No.	Project Name	Notes, Upcoming Board Actions or potential issues	Deputy's	Planned CM Services		
				Initials	Internal	External	Combination
Water Supply							
1	91234002	Coyote Pumping Plant ASD Replacement	The 60% design was completed in November 2023, and the 90% design was completed in January 2024. 100% design is scheduled to be completed in April 2024. Staff is currently reviewing the guaranteed maximum price (GMP at \$44M) for the Phase 2 agreement submitted by the Design-Builder, before negotiations for the final GMP for the construction start.	EA			X
2	95084002	10-Yr Pipeline Inspection & Rehabilitation (West Pipeline)	Staff completed the 90% design in July 2023. Final design for Phase 1 is scheduled to be completed in July 2024.	EA	X		
3	92304001	Almaden Valley Pipeline Replacement Project	The 30% design was completed in August 2023, and the 60% design is currently scheduled for June 2024.	EA	X		
4	26764001	SCW A3: IRP2 Additional Line Valves	Design of all four valves is complete. Construction activities on the first line valve are proceeding on the 10-Yr Pipeline Inspection & Rehabilitation Project (Snell Pipeline), which began in August 2023.	EA	X		
5	92144001	Pacheco/Santa Clara Conduit Right-of-Way Acquisition	Permits to construct driveways, gravel, and gates are expected to be secured by August 2024.	EA	X		
6	94084007	Treated Water Isolation Valves	The 90% design is scheduled to be completed in July 2024.	EA	X		
7	92264001	Vasona Pump Station Upgrade	Additional emissions modeling is being performed for the environmental document. An RFP for design consultant services is being evaluated by staff to determine if some of the design work can be done by in-house staff.	EA			X
8	93234044	Penitencia WTP Residuals Management	The 60% design was completed in April 2024. The 90% design is scheduled for staff review in August 2024.	EA	X		
9	93084004	Water Treatment Plant Electrical Improvement Project	On March 26, 2024, the Board approved a standard consultant agreement with Kennedy/Jenks Consultants, Inc., to provide design services for a not-to-exceed fee of \$1,227,923. The design consultant will complete 90% and final design. The project is currently on hold due to staffing resources.	EA	X		
10	91094001	Land Rights - South County Recycled Water Pipeline	Work is underway to determine the location of pipeline. The CADD documentation of the entire pipeline location is expected to be completed by summer 2024.	EA	N/A		
11	91854003	Almaden Calero Canal Rehabilitation	The Project Design Scope Elements Memo have been completed and work on the Project base map and the hydraulic capacity modeling of the canal is in progress. The environmental work and field investigation plans have been completed and work on the environmental strategy plan is in progress.	EA			
12	91854001	Almaden Dam Improvement Project	This Project is scheduled to be implemented after other dam seismic retrofit projects are completed and is essentially on hold. Environmental documentation and permitting work will be needed prior to implementation.	RM			X

13	91874004	Calero Dam Seismic Retrofit Project - Design & Construction	The agreement for consultant design services with Stantec was approved by the Board of Directors on February 27, 2024. In mid-March 2024, staff and the consultant team held the design services kick-off meeting. The consultant team is evaluating expedited project delivery through phased construction and other methods that would allow Valley Water to retain water in the reservoir during construction. Geotechnical field investigations are planned for September 2024. Additionally, work is underway to identify the required environmental studies and modeling necessary to support the environmental planning compliance efforts. A milestone schedule for environmental planning and regulatory compliance for the project is being developed to provide during outreach to applicable regulatory agencies to plan the review and approval process.	RM	X
14	91894002	Guadalupe Dam Seismic Retrofit - Design & Construct	Preliminary 90% design documentation was submitted by design consultant, GEI Consultants, in December 2020. Currently, staff is studying the feasibility of expediting project delivery through re-design of some project elements for early delivery and construction. Staff is also evaluating the feasibility of phased construction and other construction methods that would allow Valley Water to retain water in the reservoir during construction. Geotechnical field investigations are planned for June 2024. Work is also underway to identify required environmental studies and modeling necessary to support the environmental planning compliance efforts. A milestone schedule for the environmental planning and regulatory compliance for the project is being developed to provide during outreach to applicable regulatory agencies to plan the review and approval process. Work is also underway conducting environmental studies and preparing environmental documentation and planning for outreach to regulatory agencies for permitting.	RM	X
15	91954002	Pacheco Reservoir Expansion Project	Staff and the consultant team are continuing to work on addressing the Draft Environmental Impact Report (EIR) comments and developing the Final EIR/Environmental Impact Statement (EIS) document. They are also progressing on the 60% design and have started additional environmental field investigations, which will continue into late 2024. The geotechnical field investigations were paused in May 2023 in response to a court order. However, the team is working on additional California Environmental Quality Act (CEQA) documentation and plans to resume the geotechnical field investigations once the CEQA document is finalized. The CEQA document is anticipated to be released by the end of May 2024. The Project team presented an update to the California Water Commission on April 17, 2024, and will go back to the Commission in the fall for another update. The Project team presented a quarterly update on project benefits and operations to the Board of Directors on February 13, 2024. The next quarterly project update, which will discuss project costs, will be presented to the Water Supply and Demand Management Committee in May 2024 and to the Board of Directors in June 2024.	RM	X
16	91864005	Anderson Dam Seismic Retrofit Project (C1: Fund Transfer KPI)	Comments from the Federal Energy Regulatory Commission (FERC) and the Board of Consultants (BOC) have been provided for 90% design documents transmitted in March 2023, ahead of BOC Meeting No. 17. However, these documents remain in review by the Division of Safety of Dams (DSOD). The 90% spillway design to complete the 90% design documents was submitted in January 2024. The final reports on stochastic hydrology were transmitted in October 2023. BOC Meeting No. 17 was held on April 17-19, 2024. The Draft EIR was released for public review on September 1, 2023, and the public comment period closed on November 8, 2023. The final EIR is anticipated to be completed by September 2024. A draft petition to surrender the hydropower facility to FERC was submitted on September 28, 2023. The final petition to surrender was submitted on February 20, 2024. Planning remains ongoing for best value procurement of the construction contract. Award of the construction contract is scheduled for late 2025/early 2026 for start of construction in 2026. Construction is scheduled to be completed in 2032.	RM	X

Flood Protection

17	26174043	Coyote Creek, Montague Expressway to Tully Road (E1)	Due to the Anderson Dam Seismic Retrofit Project FERC Order, this project was split into two projects: Coyote Creek Flood Management Measures Project (CCFMMP) and Coyote Creek Flood Protection Project (CCFPP). Staff presented the project updates in public meetings on April 17 and 18, 2024. Staff also presented the improvements within William Street and Selma Olinder Parks to the Naglee Park Campus Community Association Board and Olinder/Brookwood community on March 13 and March 20, 2024, respectively. Staff is currently working on 90% design and CEQA-related documentation for the CCFPP. Staff anticipates completing the 90% design in May 2024 and final design in September 2024. The Draft EIR will be released for public comments in summer 2024 and the final EIR will be recommended for Board certification at the end of 2024. CCFPP construction is anticipated to start in early to mid-2025.	BY		X
18	00044026	San Francisco Bay Shoreline, EIA 11 - Alviso Slough to Coyote Creek	The design of Union Pacific Railroad closure and pedestrian bridge structures is on hold pending a path forward on impacts to railroad operations, bridge height, and a resolution on resource agency comments. The US Army Corps of Engineers (USACE) is working on a Value Engineering study of Reaches 4-5 to determine if there are ways to reduce costs. The Value Engineering study is anticipated to be completed by May 2024. The design of those reaches is on hold pending the outcome of the study. As part of this effort, Valley Water is also working with the City of San Jose to identify proposals for cost savings.	BY	N/A	USACE construction
19	26324001	SCW E4: Upper Penitencia Ck, Coyote Ck-Dorel Drive	Staff recently received direction to focus on the design of Phase I (Coyote Creek confluence to King Road) and pursue rights of way needed for the project. Staff is working on a request for proposal for design and environmental consultant services.	BY	TBD	
20	26074002	SCW E2: Sunnyvale East and West Channels	Valley Water resubmitted the permit applications to various resource agencies (USACE, RWQCB, California Department of Fish and Wildlife) in August 2023. The project team submitted the permit application to the Bay Conservation Development Commission in October 2023. The subject project was deemed eligible for WIFIA loan funding on February 14, 2023. Staff received direction from the Board of Directors in January 2023 to construct the Sunnyvale West Channel as Phase 1 and the Sunnyvale East Channel as Phase 2 due to available funding. Staff is looking to reappropriate funding to combine the construction of both phases to facilitate construction and reduce the overall project cost. Staff continues to prepare responses to resource agency permit applications comments. Permits are anticipated to be acquired in winter 2024. Project design is 99% complete and will be finalized upon final comments from the resource agency permits and inclusion of the permit conditions into the contract documents.	BY	X	
21	26174051 26174052 26174054 26174055	E6: Upper Llagas Creek, Phase 2B (Portion of Reach 8, and Reaches 6, 7B, and 14)	On August 17, 2021, the National Resource Conservation Service (NRCS) notified Valley Water of committed funding to construct Phase 2B. The funding amount available is over \$80M. The Phase 2B design is 99% complete with advertisement for bids anticipated on May 14, 2024, and award of contract anticipated on July 9, 2024. On September 27, 2023, NRCS confirmed in writing that they have accepted the Valley Water construction documents with no further comments.	BY		X (2B-TBD)

			<p>The project consists of four distinct subprojects in various stages of design. The Final EIR for the project was certified in September 2019 and San Francisquito Creek Joint Powers Authority (SFCJPA) submitted draft permit applications in July 2022. Valley Water and JPA completed a review of the current hydraulic model to identify any changes needed as the bank overtopping locations during the 2022 New Year's Eve flood were different than predicted by the model. Valley Water and JPA presented the initial findings to the JPA Board in June 2023 and are validating the tech memo with a third-party consultant. Validation of hydraulic model recalibration by a third-party consultant is expected to be completed in early 2024.</p>		
22	26284002	San Francisquito Creek – Construction, SF Bay to Middlefield Road (E5)	<p><u>1) Newell Road Bridge</u> The City of Palo Alto leads the design and construction of this project. Valley Water's role as a member agency of SFCJPA is to provide technical review and funding for the project. The City of Palo Alto secured Caltrans Highway Bridge Program funding for design and right-of-way acquisitions and is seeking to secure the funds for construction. Construction on this project is anticipated to start in the summer of 2024.</p> <p><u>2) Channel Widening Design</u> The design for this subproject is at 90%. SFCJPA is looking to have this project funded through the USACE Continuing Authorities Program (CAP) 205 Process. The USACE approved Tentatively Selected Plan (TSP), and the feasibility study report was completed in July 2022. The final study report is currently on hold until the hydraulic model review being performed in response to the 2022 New Year's Eve flooding is completed. USACE and SFCJPA completed the National Environmental Policy Act (NEPA) scoping workshop in October 2021. The design of the project elements is on hold pending results of the third-party hydraulic model review and validation.</p> <p><u>3) Top-of-Bank Improvements</u> Design for top-of-bank improvements is at 60% and currently on hold due to the hydraulic model review being performed in response to the 2022 New Year's Eve flooding. SFCJPA procured a consultant to complete a supplemental EIR for this scope of work, as the extent of improvement exceeds the scope of the previously certified Final EIR.</p> <p><u>4) Pope-Chaucer Bridge</u> The design for this subproject is at 85%. Construction is anticipated to start following the completion of the Channel Widening, Top-of-Bank Improvements, and Newell Road Bridge construction. SFCJPA is looking into the possible increased flood risk to downstream communities if the current design of Pope Chaucer Bridge is replaced with a new one. The design of this project is on hold pending the results of third-party hydraulic model review and validation.</p>	BY	X
23	10394001	Palo Alto Flood Basin Tide Gate Structure Replacement	<p><u>Phase 1</u> is a seismic retrofit and rehabilitation of the existing tide gate structure to strengthen the structure and extend its service life until a longer-term project can be implemented. Staff held a stakeholder tour for the Palo Alto Parks and Recreation Commission on April 2, 2024. The tour included a project update for the Phase 1 work and staff answered questions from the tour participants. The 90% design was completed April 26, 2024. Construction is anticipated to start in September 2025 and be completed by January 2026.</p> <p><u>Phase 2</u> is the long-term replacement of the Palo Alto Tide Gate structure. Staff is working on a strategy for completing this work in the future.</p>	BY	

24	26154003	SCW E8: Upper Guadalupe River - SPRR to Blossom Hill Road (Reaches 7-12)	In January 2021, the USACE began a General Re-evaluation Study for the entire project, including re-evaluating the project's alternatives and benefit-cost-ratio, with the goal of making the project more competitive for federal funding. On September 9, 2022, USACE presented the "Tentatively Selected Plan" and staff reviewed and supported it. USACE provided a draft Environmental Assessment (EA)/Feasibility Report for Valley Water review on October 3, 2022. On March 9, 2023, USACE held their Agency Decision Milestone meeting where Valley Water further supported the Combination Plan to be the selected plan for the General Re-evaluation Report. USACE started the optimization and refinement of the Selected Plan that will take up to six months to complete. The General Re-evaluation Report is scheduled for completion by November 2024.	BY	N/A	USACE construction
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Under this Program’s plan for 2024, six projects are in various stages of design:

25	62084001	Small Capital Improvements, Watershed Asset Rehabilitation Program (WARP)	<ul style="list-style-type: none"> U-Frame wall repairs on Permanente and Hale Creeks - staff is currently working on 60% design. Erosion repair on Coyote Creek at Julian Street adjacent to San Jose High School – staff is currently working on the 60% design. Slope and bank repair on Guadalupe River at Malone Road and Blossom Hill Road – staff identified an improved design and will redo the 90% design documents; the improved design at the Blossom Hill Road site can be performed under the Stream Maintenance Program (SMP) permit now and will not require a new CEQA document and permit. Due to tree removal requirements, the Malone Road site will still require a CEQA document and permit for construction. Planning and preliminary investigation is underway for Llagas Creek levee rehabilitation between Bloomfield and Pajaro River confluence. Operations staff conducted vegetation removal in November 2023, and this work has increased flow capacity in the creek; staff is re-evaluating the hydraulic capacity and further work needs. 	BY	X	
			A CEQA Mitigated Negative Declaration document is being prepared for Erosion Repair on Coyote Creek at Julian Street adjacent to the San Jose High School Project.			

Water Resources Stewardship						
26	26044001	D4: Almaden Lake Improvements	The design phase will be closed out by July 2024, and the project is being removed from the Capital Improvement Program and placed on the unfunded list.	BY	X	
Buildings & IT						

No projects to report

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Santa Clara Valley Water District

File No.: 24-0409

Agenda Date: 5/20/2024

Item No.: 4.2.

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 #34) to present to the CIP Committee. The estimated value of CCO #34 is \$115,579.00. Included for reference are two attachments providing information on construction contract change orders (Attachment 1) and construction contract financials (Attachment 2).

Contract Change Order #34

- 1. Trash Rack Panel Design Change** - Valley Water issued Contract Document Clarification (CDC) 047 with revised Drawing S-041, which included design modifications to the trash rack panels, including adding extra bolted connections to increase the panel stiffness. These modifications were necessary to mitigate structural fatigue and wear caused by higher water inflow speeds and vibration resulting from relocation of the trash rack. This portion of the change is estimated to be valued at \$57,744.00.

- 2. North Channel Extension - Dewatering and Dike Design Submittals Procurement** - The North Channel Extension scope of work requires additional dewatering efforts, including the installation of a temporary dike, which requires the Contractor to provide engineered design submittals. As the cost to perform the North Channel Extension construction work is still under negotiation, and to mitigate potential Project delays, this change order is being issued to compensate the Contractor for proceeding with contracting for the necessary design submittals.

This new scope includes designing a temporary dike, designing the dewatering system, and updating the dewatering plan. This portion of the change order has an estimated value of \$57,835.00. A change order for constructing the North Channel Extension work will be issued separately.

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

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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

<u>Organization Name</u>	<u>Name</u>	<u>Role</u>	<u>Location</u>
Flatiron West, Inc.	Shawn Golden	Vice President	2100 Goodyear Rd. Benicia, CA 94510

List of Participants and Their Agents/Representatives Known to Staff

<u>Organization Name</u>	<u>Name</u>	<u>Role</u>	<u>Location</u>

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**Anderson Dam Tunnel Project
Construction Contract Change (CO) Order Status**

CCO #	CIP Committee Date	Approval Date	Description	Amount	Contingency Amount	Approval Level	Status
		4/27/2021	Original Contract	\$161,140,321.00	\$40,000,000.00	Board	
1	1/18/2022	12/16/2021	Additional Tree Removal, Protection and Relocation	\$460,250.41	\$39,539,749.59	DOO	Approved
2	2/14/2022	4/26/2022	Outlet Works Vertical Shaft Re-sizing	\$3,783,119.15	\$35,756,630.44	CEO	Approved
3	5/16/2022	5/17/2022	Water Quality Monitoring Equipment, Miscellaneous demolition, TCEAP VHF/UHF Radios	\$131,603.28	\$35,625,027.16	AOO	Approved
4	6/13/2022	6/30/2022	Tunnel and Miscellaneous Items from CDC-001/001.1, Remove Taber Drilling from Scope	\$386,801.98	\$35,238,225.18	DOO	Approved
5	6/13/2022	6/30/2022	Upsizing Soil Nail Rows D&E from #18 to #20	\$228,562.00	\$35,009,663.18	DOO	Approved
6	7/18/2022	8/6/2022	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	\$63,063.32	\$34,946,599.86	UM	Approved
7	9/26/2022	10/31/2022	DOS Foundation Excavation - Revised Soil Nail Wall, and Additional Environmental Compliance for Water Quality Monitoring and Soil Testing	\$1,526,724.84	\$33,419,875.02	ACEO	Approved
8	10/18/2022	10/26/2022	Disposal of Regulated and Organic Material	\$80,000.00	\$33,339,875.02	UM	Approved
9	11/14/2022	11/18/2022	3-D Modeling of HLOW Shaft	\$101,101.00	\$33,238,774.02	AOO	Approved
10	12/12/2022	12/19/2022	Monitoring of Additional Piezometer, Supplementary Support for the Transition Zone, DOS Portal Conditions, Partnering	\$1,971,946.48	\$31,266,827.54	ACEO	Approved
11	2/13/2023	12/19/2022	Time Related Overhead Time Impact Analysis 002	\$2,515,330.18	\$28,751,497.36	CEO	Approved
12	2/13/2023	1/19/2023	Increased Quantity of Diversion Tunnel Excavation Class 5	\$1,800,000.00	\$26,951,497.36	ACEO	Approved
13	2/13/2023	2/24/2023	Diversion Outlet Structure (DOS) Energy Dissipation Chamber Grated Access Opening	\$26,000.00	\$26,925,497.36	UM	Approved
14	3/20/2023	4/03/2023	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.	\$156,000.00	\$26,769,497.36	AOO	Approved
15	3/20/2023	4/18/2023	Diversion Outlet Structure CLSM Saturday Premium Time, Diversion Portal Soil Nail Wall Condition	\$436,753.65	\$26,332,743.71	DOO	Approved
16	4/10/2023	5/12/2023	Surge Protection Device for Main Switchgear, CDC 015 Water Quality Instrumentation, Tree Trimming for Pacific Gas & Electric Pole Relocation	\$84,200.00	\$26,248,543.71	AOO	Approved
17	4/10/2023	5/12/2023	Increased Bid Item No. 11A Allowance - Other Wildlife and Fish Species, Specification Section 19.09	\$145,080.00	\$26,103,463.71	AOO	Approved
18	5/15/2023	5/30/2023	Traffic Support for Press Event	\$2,023.00	\$26,101,440.71	AOO	Approved
19	6/30/2023	5/25/2023	Increase Bid Item No. 5x Tunnel Excavation in Transition Zone - Class 5	\$994,500.00	\$25,106,940.71	ACEO	Approved
20	6/30/2023	8/10/2023	18" Hydro Return Line Decommissioning, Low Level Outlet Tunnel Steel Sets Enlargement, DPP8 Boring Survey Assistance, Air Vent Pipe Procurement, CDC 007.3 North Channel FWI Scope 2023, CDC 007.3 North Channel DTDS Scope 2023.	\$1,175,413.01	\$23,931,527.70	ACEO	Approved
21	6/30/2023	7/26/2023	Time Related Overhead Time Impact Analysis 003	\$884,042.66	\$23,047,485.04	ACEO	Approved
22	8/21/2023	7/31/2023	Additional Shotcrete in the Transition Zone, Increase in Bid Item No. 5g – Transition Zone Rock Bolts	\$424,016.00	\$22,623,469.04	DOO	Approved
23	8/21/2023	9/27/2023	Anderson Force Main Galvanic Cathodic Protection, Air Vent Pipe Installation	\$573,874.58	\$22,049,594.46	ACEO	Approved
24	10/16/2023	11/21/2023	Micro-Tunnel Boring Machine (MTBM) Lake Tap Tie Down, Reservoir Log Boom Relocation	\$108,205.00	\$21,941,389.46	AOO	Approved

**Anderson Dam Tunnel Project
Construction Contract Change (CO) Order Status**

CCO #	CIP Committee Date	Approval Date	Description	Amount	Contingency Amount	Approval Level	Status
25	10/16/2023	11/27/2023	North Channel Tree Removal, Allowance Increase for Additional Environmental Compliance for Water Quality Monitoring and Soil Testing, Access Hatch for HLOW Shaft.	\$848,456.00	\$21,092,933.46	ACEO	Approved
26	11/13/2023	12/23/2023	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-Ditch Extension at 460, Winterization of North Channel Dike 2023	\$833,772.00	\$20,259,161.46	ACEO	Approved
27	12/11/2023	1/04/2024	Cost Increase for DOS Foundation Excavation – Revised Soil Nail Wall ,Quantity Increase for Bid Item No. 5r – Pre-excavation Drilling Within Rock Tunnel.	\$1,341,261.43	\$18,917,900.03	ACEO	Approved
28	12/11/2023	1/19/2024	Quantity Increase for Bid Item 4c Lake-Tap Excavation (Dredging) Microtunnel Boring Machine Landing Pad	\$570,375.00	\$18,347,525.03	ACEO	Approved
29	1/22/2024	12/26/2023	Bid Item Increase 5o - Probing within Rock Tunnel	\$370,800.00	\$17,976,725.03	DOO	Approved
30	1/22/2024	2/14/2024	Revised Motor Control Center (MCCA) Schedule, Additional Telemetry Pull Box, Material Escalation due to Delay in Issuing Notice to Proceed (NTP) 2A/2B, Credit for Hoot Owl Way Landslide Supplemental Work.	-\$1,822,581.61	\$19,799,306.64	ACEO	Approved
31	2/26/2024	3/20/2024	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	\$1,457,191.11	\$18,342,115.53	ACEO	Approved
32	3/18/2024	4/09/2024	Additional Cost for Diversion Outlet Structure (DOS) Rock Anchors Installation, Geological and Phytrophthora Test Pits	\$163,736.00	\$18,178,379.53	AOO	Approved
33	4/22/2024	TBD	Additional Cost for Diversion Outlet Structure (DOS) Rock Anchors Installation, Geological and Phytrophthora Test Pits	\$1,095,816.00	\$17,082,563.53	ACEO	Pending
DCO #	CIP Committee Date	Approval Date	Description	Amount	Contingency Amount	Approval Level	Status
1	09/26/22	10/05/22	Milestone 7, 9, and 10 Completion Revisions	\$0.00	\$18,178,379.53	UM	Approved

New CCOs for CIP Committee

Pending CCO #	CIP Committee Date	Approval Date	Description	Amount	Contingency Amount	Approval Level	Status
34	5/20/2024	TBD	Trash Rack Panel Redesign, North Channel Extension - Submittal Procurement	\$115,579.00	\$16,966,984.53	AOO	Pending

Total COs Approved	34	Total	\$22,917,436.47	\$17,082,563.53
Total COs Pending	1	Total	\$115,579.00	\$16,966,984.53

Total Number of COs (Approved & Pending)	Total Amount of COs (Approved & Pending)
35	\$23,033,015.47

Anderson Dam Tunnel Project - Construction Contract Financials

Bid Item No.	Description	Amount	Balance Remaining	Billing Through March 2024	
				Percent (%)	Amount
1	MOBILIZATION AND DEMOBILIZATION	\$ 16,150,000.00	\$ 2,047,750.00	87%	\$ 14,102,250.00
2	SITE PREPARATION	\$ 5,713,000.00	\$ 602,853.42	89%	\$ 5,110,146.58
3	DIVERSION PORTAL	\$ 6,173,496.00	\$ 261,886.40	96%	\$ 5,911,609.60
4	LAKE-TAP PORTAL	\$ 4,215,000.00	\$ 958,380.00	77%	\$ 3,256,620.00
5	TUNNEL EXCAVATION AND LINING	\$ 47,438,325.00	\$ 24,130,914.99	49%	\$ 23,307,410.01
6	SHAFT EXCAVATION AND LINING	\$ 10,100,000.00	\$ 4,336,360.00	57%	\$ 5,763,640.00
7	MICROTUNNEL	\$ 9,982,000.00	\$ 9,052,000.00	9%	\$ 930,000.00
8	DIVERSION OUTLET STRUCTURE	\$ 48,678,550.00	\$ 31,351,237.20	36%	\$ 17,327,312.80
9	COYOTE CREEK MODIFICATIONS	\$ 6,421,550.00	\$ 3,693,027.00	42%	\$ 2,728,523.00
10	SUPPLEMENTAL WORK ITEMS	\$ 5,668,400.00	\$ 2,260,000.00	60%	\$ 3,408,400.00
11	ALLOWANCES	\$ 600,000.00	\$ 244,177.31	59%	\$ 355,822.69
		Total Original Contract Amount	Total Balance Remaining	Percent (%) Billed	Total Billed To Original Contract Amount
		\$ 161,140,321.00	\$ 78,938,586.32	51%	\$ 82,201,734.68

CCOs	Description	Amount	Balance Remaining	Billing Through March 2024	
				Percent (%)	Amount
CCO 1-31	CONTRACT CHANGE ORDERS (CCO)	\$ 21,657,884.47	\$ 5,564,566.22	74%	\$ 16,093,318.25
		Total Contract Amount Including CCOs	Total Balance Remaining Including CCOs	Total Percent (%) Billed Including CCOs	Total Billed Including CCOs
		\$ 182,798,205.47	\$ 84,503,152.54	54%	\$ 98,295,052.93

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Santa Clara Valley Water District

File No.: 24-0410

Agenda Date: 5/20/2024

Item No.: 4.3.

COMMITTEE AGENDA MEMORANDUM Capital Improvement Program Committee

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

SUBJECT:

Receive an update on the Distribution System Master Plan Implementation Project (Project No. 95044001) and the SCADA Master Plan Implementation Project (Project No. 95044002).

RECOMMENDATION:

Receive an update on the Distribution System Master Plan Implementation Project (Project No. 95044001) and the SCADA Master Plan Implementation Project (Project No. 95044002).

SUMMARY:

At the April 22, 2024, Capital Improvement Program (CIP) Committee Special Meeting, staff presented a planning phase update on the three water utility master plans: the Water Treatment Plant Master Plan Implementation Project (WTP MPIP); SCADA Master Plan Implementation Project (SMPIP); and the Distribution Master Plan Implementation Project (DS MPIP). Staff presented more detailed information in a presentation regarding the WTP MPIP, and this agenda item includes presentations on the other two Master Plan Projects.

Staff will continue to provide updates on the progress of all three projects to the CIP Committee and request input on key project proposals and recommendations.

Background

Distribution System Master Plan Implementation Project

The Project scope entails a consultant preparing a 30-year implementation plan recommending capital projects to repair, replace, or upgrade distribution system infrastructure. This includes raw and treated water pipelines, pump stations, canals, wells, and recycled water facilities. The consultant will also prepare a programmatic Environmental Impact Report (PEIR) for the high-priority projects. A consultant agreement was awarded by the Board in May 2022, and the scope of work is expected to be completed in 2027.

SCADA Master Plan Implementation Project

The Project includes a consultant preparing a 15-year implementation plan with recommended capital projects and a PEIR for high-priority projects. The 15-year plan will include identifying projects to repair, replace, and/or upgrade the SCADA system infrastructure used throughout Santa Clara Valley Water District's water conveyance and treatment systems. This includes work at reservoirs, pumping plants, pipelines, and water treatment and purification plants. A consultant agreement was awarded by the Board in June 2022, and the scope of work is expected to be completed in 2026.

Presentation Outline

Attachment 1 provides information and updates on the DS MPIP and the SMPIP, as follows:

1. Water Utility Infrastructure Planning Overview
2. Distribution System Project Overview
 - A. Approach
 - B. Pipeline Risk Assessment
 - C. Next Steps
3. SCADA Project Overview
 - A. Approach
 - B. System Risk Assessment
 - C. SCADA Master Plan Projects (Phases 1 & 2)
 - D. Next Steps

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:

There are no environmental justice and equity impacts associated with the Distribution System Master Plan Implementation Project (Project No. 95044001) or the SCADA Master Plan Implementation Project (Project No. 95044002). This action is unlikely to or will not result in human health or environmental effects and is not associated with an equity opportunity.

ATTACHMENTS:

Attachment 1: PowerPoint

UNCLASSIFIED MANAGER:

Luz Penilla, 408-630-2228



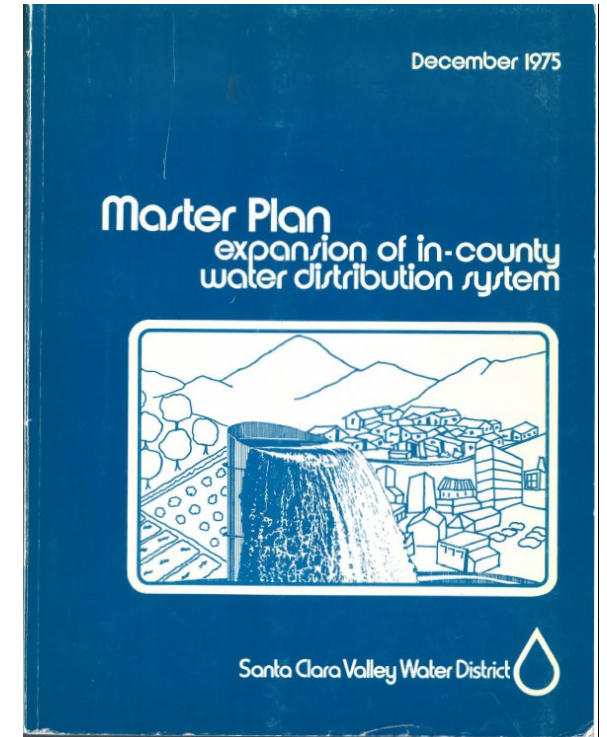
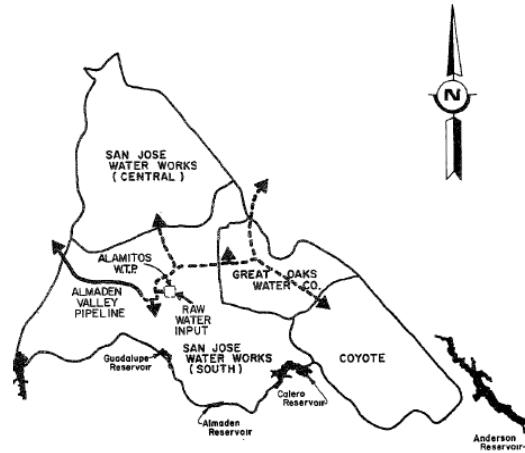
Receive an update on the Master Plan Implementation Projects Distribution System and SCADA (Supervisory Control and Data Acquisition)

Presented by: James Bohan (Engineering Manager), Barton Ching (Senior Engineer), and Cody Houston (Senior Engineer)
Business Support & Asset Management Unit
Capital Improvement Program Committee - May 20, 2024

- 1. Water Utility Infrastructure Planning Overview**
- 2. Distribution System Project Overview**
 - A. Approach**
 - B. Pipeline Risk Assessment**
 - C. Next Steps**
- 3. SCADA Project Overview**
 - A. Approach**
 - B. System Risk Assessment**
 - C. SCADA Master Plan Projects (Phase 1 & Future)**
 - D. Next Steps**

WU Infrastructure Planning – Background & Purpose

1. Last comprehensive infrastructure master plan was in 1975
2. Purpose of master plans
 - Aging and obsolete Water Utility (WU) infrastructure
 - Changes in future demands
 - Upcoming regulatory requirements
 - Need to improve efficiency
 - Need for redundancy to enable maintenance and prevent service outages
 - New supplies coming online



WU Infrastructure Planning – Drivers for New Capital Projects



Minimizing asset life-cycle costs while sustainably delivering the levels of service that meet customer expectations at an acceptable level of risk as expressed through the Board. (I-EL-6.4.a)

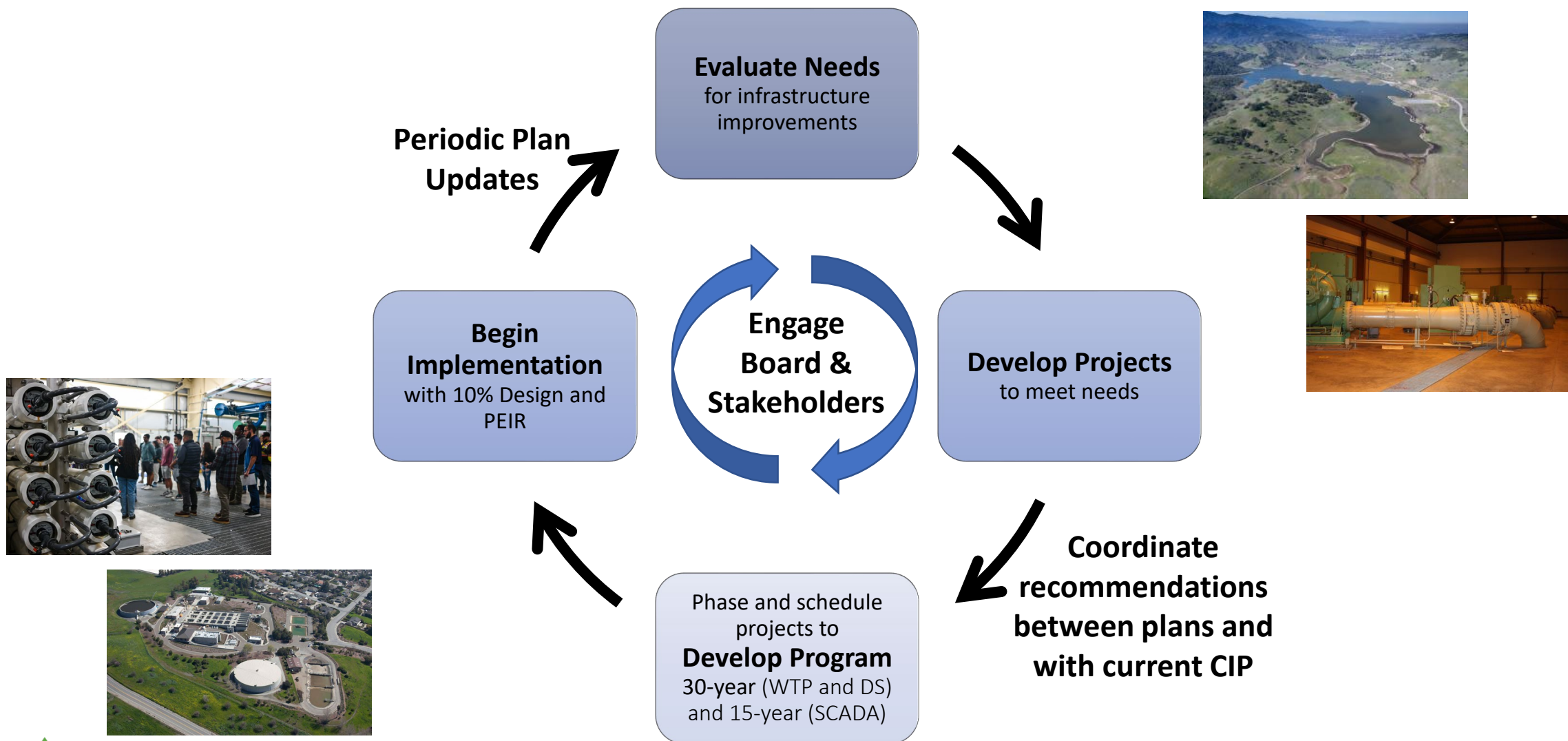
WATER SUPPLY MASTER PLAN

Long-term water supply reliability projects and investments

WATER UTILITY MASTER PLAN IMPLEMENTATION PROJECTS

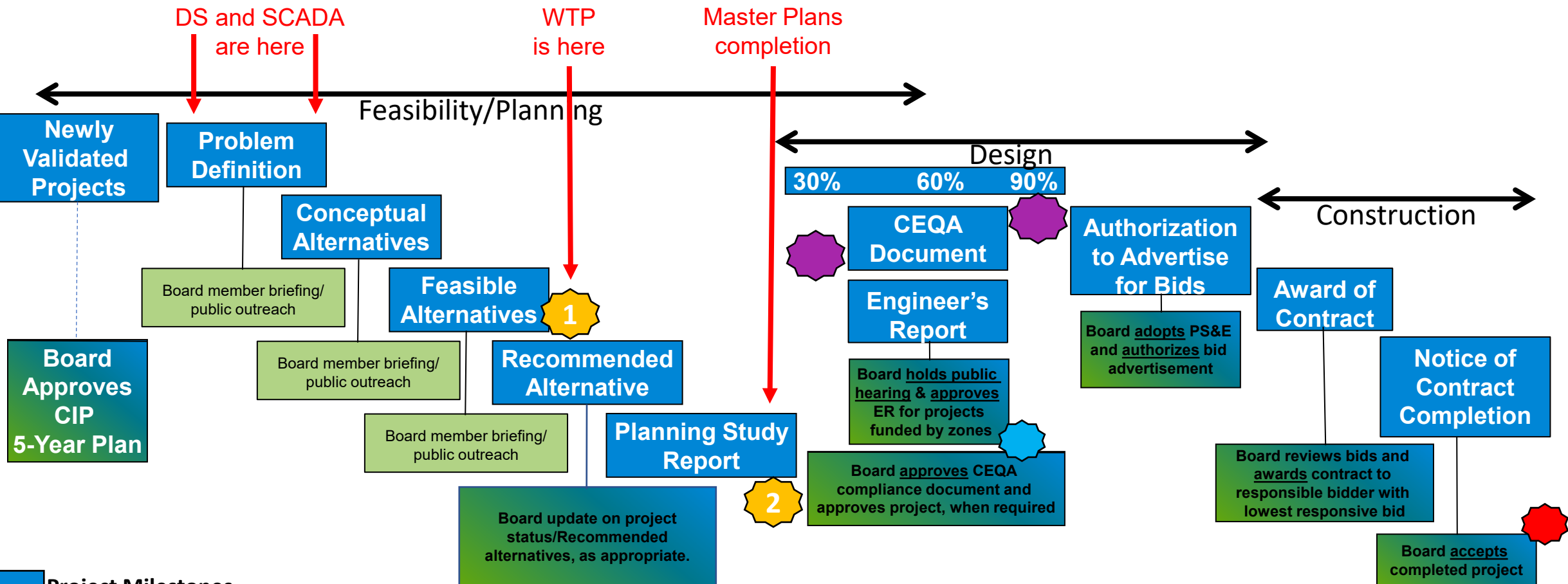
15-to-30-year program of recommended capital improvements

WU Infrastructure Planning – Process



CIP Processes Overview

BOARD ACTION & ENGAGEMENT: CAPITAL PROJECT DELIVERY PROCESS*



- Project Milestones
- Board Member Engagement
- Board Engagement/Action

Additional Board Engagement Points for Complex Projects

Additional Board Engagement Points for Operations & Maintenance Impacts

- 40 Board Action: Approval/Adoption of Environmental = Approval of Project
- Staff: Reassess Risk for Remaining Contingency



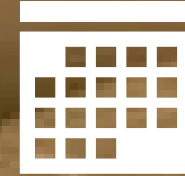
Distribution System Master Plan Implementation Project (DS MPIP)

Project Number 95044001

Consultant:
AECOM



Budget: \$9.3M
AECOM: ~\$6M
VW Labor: \$3.3M



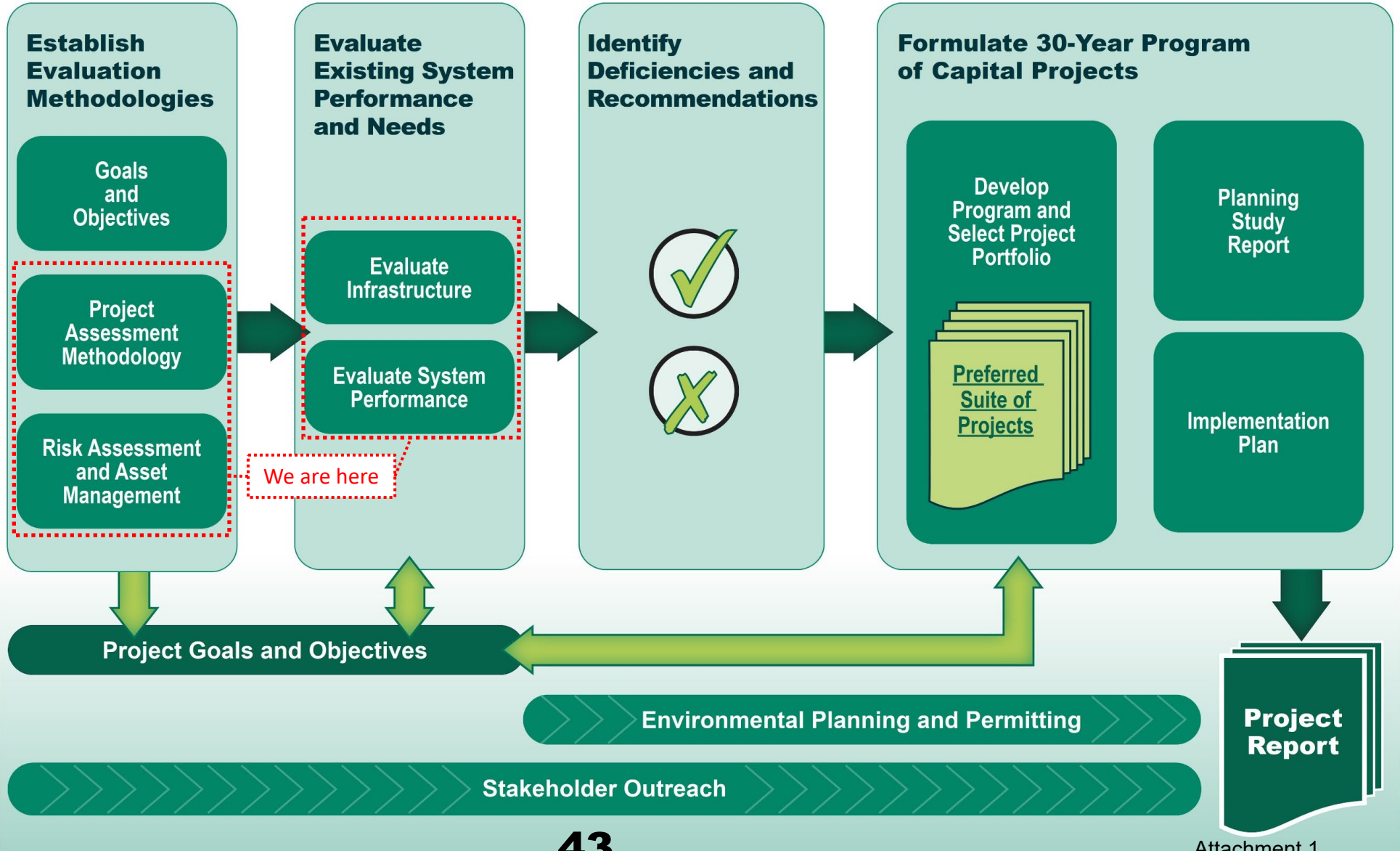
Schedule:
May 2022 – May 2027

Key Deliverables:

1. 30-year Distribution System Program of recommended capital improvements for pipelines, pumping plants, canals, wells and recycled water facilities
2. 10% Design for projects in first 10 years of planning horizon
3. Programmatic Environmental Impact Report (PEIR)

Approach

DS MPIP: Work Approach



DS MPIP: Project Schedule

We are
here



Valley Water Distribution System Master Plan Implementation Project Timeline

2022	2023	2024	2025	2026	2027
Project Development					
	System Evaluation				
			Alternative Development		
				Final Planning	
				Environmental Planning and Permitting	

DS MPIP: Goals and Objectives

Category	Definition
Distribution System Capacity	Meeting water delivery objectives
Distribution System Reliability	Reliably meet water delivery objectives under a range of outage and operating scenarios
Environmental Sustainability	Be good to the environment, and mindful of climate change and use of resources
Equity/Good Neighbor	Incorporate equity and good neighbor concepts into program

Pipeline Risk Assessment

DS MPIP: Risk Methodology (In Progress)

1. Review and update risk methodology:

- A. Probability of Failure (PoF)
- B. Consequence of Failure (CoF)
- C. Risk = (PoF x CoF) used as a factor in prioritizing pipeline improvement projects

2. Probability of Failure (PoF):

- A. Condition assessments are in progress
- B. Pipeline inspection data varies for different pipe materials



DS MPIP: Pipeline CoF Refinements

Consequence of Failure – Reflects impacts of pipeline outages

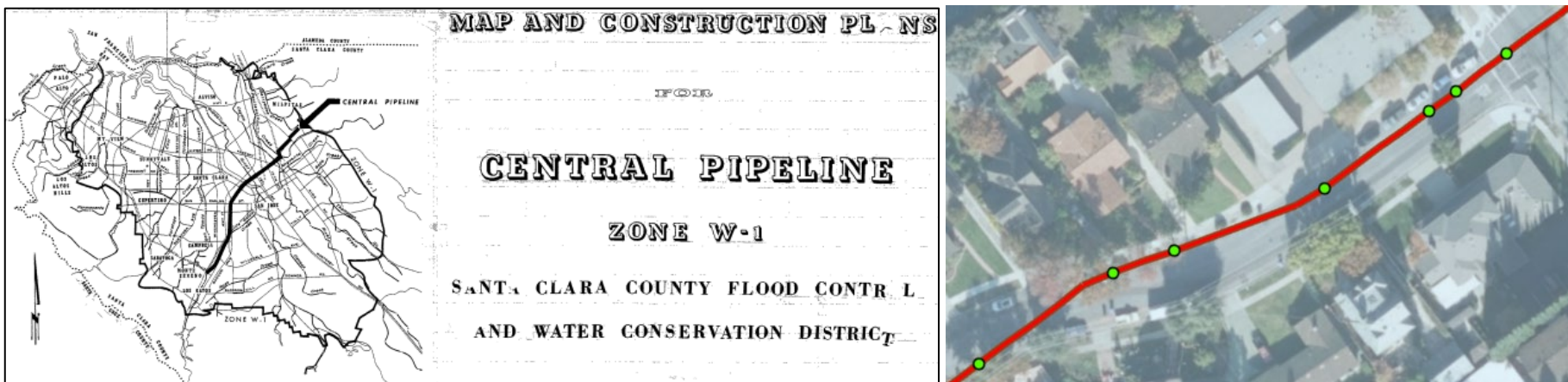
CoF Category	Evaluating
Social	<ul style="list-style-type: none">• Land use/zoning• Public transit• Transportation/traffic• Equity
Environmental	<ul style="list-style-type: none">• Habitat impact
Economic	<ul style="list-style-type: none">• Replacement cost
Operational	<ul style="list-style-type: none">• Water delivery

DS MPIP: Pipeline Assessments

Piloting Pipe Condition Assessment

Central Pipeline has all the large-diameter pipe types in our system

1. Welded Steel: 1.2 mi (10%)
2. Bar-Wrapped: 4.8 mi (38%)
3. Prestressed Concrete: 6.7 mi (52%)



Next Steps

DS MPIP: Next Steps

1. Continue with Valley Water (VW) stakeholder engagement
2. Ensure pipeline planning efforts complement other current VW efforts (e.g., Pipeline Maintenance Program, and project-specific EIRs)
3. Technical results are expected in August

SCADA Master Plan Implementation Project No. 95044002 (SMPIP)

Project Number 95044002

Consultants:

Black and Veatch
Harris Water Engineering

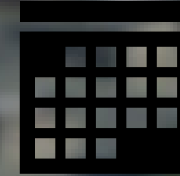


Budget: \$6.5M

B&V: \$3.0M

HWE: \$0.8M

VW Labor and S&S: \$2.7M



Schedule:

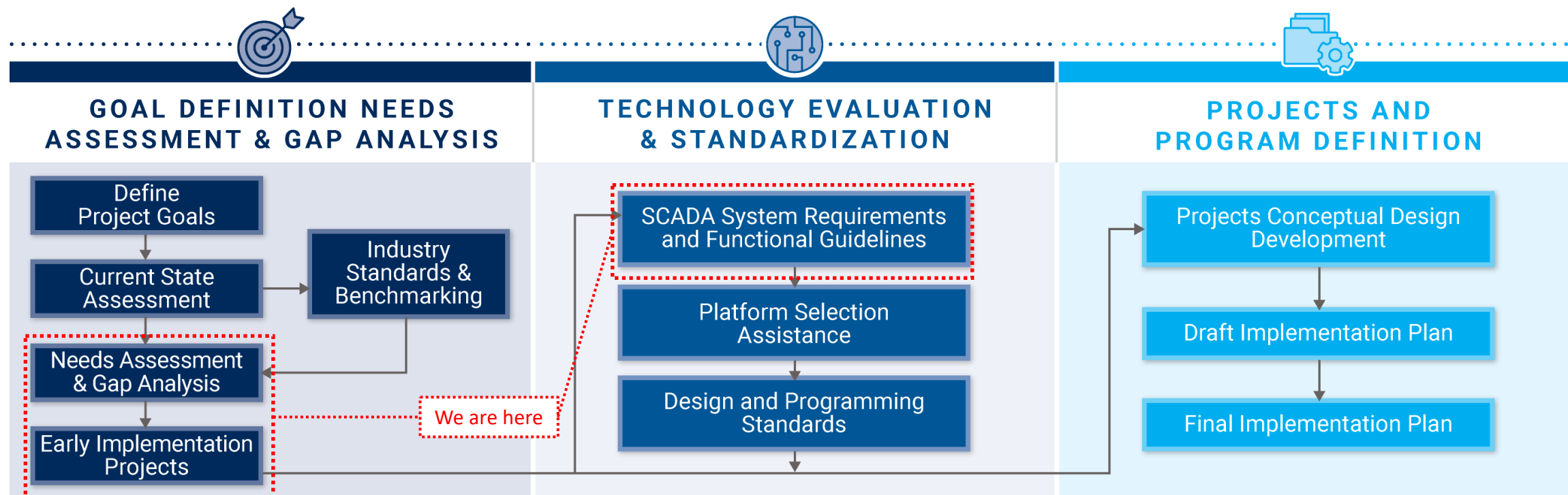
Jun 2022 – Jan 2026

Key Deliverables:

1. 15-year program of recommended capital projects for SCADA systems including:
 - A. Raw Water Conveyance
 - B. Treatment Plants
 - C. Treated Water Distribution
2. 10% design for the Early Implementation Projects
3. Programmatic Environmental Impact Report (PEIR)

Approach

SMPIP: Work Approach



SCADA Master Plan Project Schedule

We are
here



2022	2023	2024	2025	2026
	Goal Definition, Needs Assessment and Gap Analysis			
		Early Implementation Projects		
		Technology Evaluation		
			Project Definition	
			Environmental Planning and Permitting	

SMPIP: Goals and Objectives

CATEGORY	DEFINITION
Reliability and Redundancy	Minimal downtime to meet water conveyance and treatment requirements
Standardization	Improved operations and reduced system maintenance cost and time
Cybersecurity	Increased security and reduction in vulnerability
Data	Available and accurate data for operations, reporting, and planning

System Risk Assessment

SMPIP: Risk Methodology

1. Review & update risk methodology:

- A. Probability of Failure (PoF)
- B. Consequence of Failure (CoF)
- C. Risk = (PoF x CoF) used as a factor in prioritizing SCADA improvements

2. SCADA analysis:

- A. Risk scoring for components and systems
- B. Evaluating modes of failure



SMPIP: Risk Methodology (cont.)

Risk Methodology (cont'd)

Failure Modes, Effects, and Criticality Analysis (FMECA) – Examines potential failure modes within a system to determine effects on equipment and performance

Probability of Failure (PoF)	Potential Failure Modes	In what ways can the asset fail?
	Preventative Controls	What controls exist for preventing or detecting failures?
Consequence of Failure (CoF)	Current Mitigations	Are there asset redundancies? Operational alternatives?
	Potential Failure Effects	What is the impact on the system of asset failure?

SCADA Master Plan Projects (Phase 1 & Future)

SMPIP: Future SCADA Upgrades

1. SMPIP Upgrades – Phase 1 (Project Number 95044004)

Project in CIP Draft FY25-29 Five-Year Plan

- A. Upgrade aging communications infrastructure
- B. Implementing additional backup control center capabilities

2. Future SMPIP Projects

- A. Control systems at water treatment plants
- B. Software integrations with other operations and business systems
- C. Physical and cyber security enhancements



Next Steps

SMPIP: Next Steps – Technology Evaluation

1. System Requirements and Guidance

- A. Update system requirements per industry best practices and staff feedback
- B. Guidance for future investments to standardize processes

2. Platform Selection

- A. Work closely with Operations
- B. Determine best software and hardware solutions for future implementation



SMPIP: Next Steps – Projects

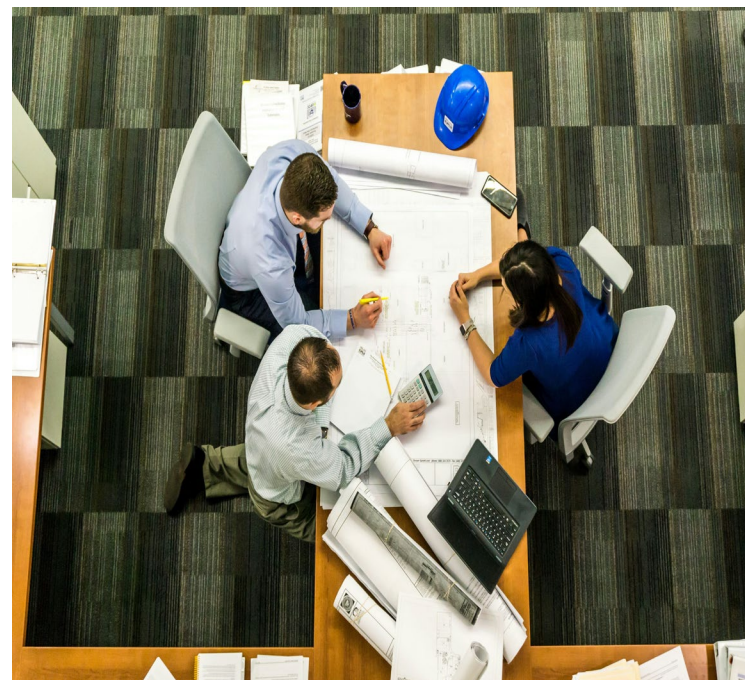
1. SMPIP Upgrades – Phase 1 (Project No. 95044004)

Project in CIP Draft FY25-29 Five-Year Plan

- A. Finalize early implementation conceptual alternatives
- B. Follow up with feasible and staff-recommended alternatives
- C. Create a 10% design of recommended alternatives

2. Future SMPIP Projects

- A. Identify future system needs, develop alternatives, and define appropriate projects
- B. Create 10% designs for priority improvement needs



END OF PRESENTATION

Questions & Answers



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Santa Clara Valley Water District

File No.: 24-0411

Agenda Date: 5/20/2024

Item No.: 4.4.

COMMITTEE AGENDA MEMORANDUM **Capital Improvement Program Committee**

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

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 Capital Improvement Program (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

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Capital Project Monitoring												
Feasibility/Planning	X			X			X			X		
Design/Permitting		X			X			X			X	
Construction	X		X			X			X			X
Projects in Mitigation/Plant Establishment						X						
CIP Implementation												
Construction Contractor Compliance		X										
Headquarters Operations Building Planning		X										
Construction Activities Carbon Footprint								X				
Master Plan/Implementation Projects				X	X			X				
Dam Safety Program Strategy						X						
Almaden Valley Pipeline Replacement							X					
RWTP Reliability Improvement Project Neighborhood Outreach												
CIP Development												
Final CIP Performance Audit									X			
Water Supply Capital Workshop									X			
CIP Planning Process												
• Annual CIP Process and Integrated Financial Planning Schedule and Review of Initially Validated and Unfunded Projects										X		
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							

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