

October 20, 2023

MEETING NOTICE
SANTA CLARA VALLEY WATER DISTRICT
RECYCLED WATER COMMITTEE

Members of the Recycled Water Committee:

District 6 Director, Tony Estremera, Committee Chair
District 3 Director, Richard Santos, Committee Vice Chair
District 4 Director, Jim Beall, Member

Staff Support of the Recycled Water Committee:

Rick Callender, Chief Executive Officer
Melanie Richardson, Assistant Chief Executive Officer
Darin Taylor, Chief Financial Officer
Aaron Baker, Chief Operating Officer, Water Utility
Christopher Hakes, Chief Operating Officer, Watersheds
Tina Yoke, Chief Operating officer
Rachael Gibson, Chief of External Affairs
Carlos Orellana, District Counsel
Brian Hopper, Sr. Assistant District Counsel
Vincent Gin, Deputy Operating Officer
Emmanuel Aryee, Deputy Operating Officer
Bhavani Yerrapotu, Deputy Operating Officer
Marta Lugo, Deputy Administrative Officer
Tony Ndah, Deputy Administrative Officer
Sam Bogale, Deputy Operating Officer
Donald Rocha, Assistant Officer
Kirsten Struve, Assistant Officer
Lisa Bankosh, Assistant Officer
Charlene Sun, Treasury and Debt Manager
Hossein Ashktorab, Unit Manager, Recycled & Purified Water
Carmen Narayanan, Financial Planning & Revenue Manager
Metra Richert, Unit Manager, Water Supply Planning and Conservation Manager
Lei Hong, Utility Ops & Maintenance Manager
Medi Sinaki, Sr. Engineer-Recycled & Purified Water
Girle Jacobson, Sr. Engineer-Treatment Plant Design
Henry Barrientos, Associate Civil Engineer
David Tucker, Associate Engineer – Civil
Zachary Helsley, Associate Civil Engineer
Elise Latedjou-Durand, Senior Environmental Planner
Ricardo Barajas, Program Administrator
Samantha Greene, Senior Water Resource Specialist
Lakeisha Bryant, Public Info Rep II
Karen Adriano, Staff Analyst

A Santa Clara Valley Water District Special and Closed Session Recycled Water Committee meeting has been scheduled to occur at 11:00 a.m. on Friday, October 27, 2023 in the Headquarters Building Boardroom located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

Members of the public may join the meeting via Zoom Teleconference at:

<https://valleywater.zoom.us/j/99518153521>

The meeting agenda and corresponding materials are located on our website:

<https://www.valleywater.org/how-we-operate/committees>





Santa Clara Valley Water District Recycled Water Committee Meeting

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

Join Zoom Teleconference:
<https://valleywater.zoom.us/j/99518153521>

SPECIAL MEETING & CLOSED SESSION AGENDA

**Friday, October 27, 2023
11:00 AM**

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

RECYCLED WATER COMMITTEE

Tony Estremera - District 6, Chair
Richard Santos - District 3, Vice Chair
Jim Beall - District 4, Member

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.

KIRSTEN STRUVE
Committee Liaison

NICOLE MERRITT
Assistant Deputy Clerk II
Office/Clerk of the Board
(408) 630-3262
nmerritt@valleywater.org

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

**Santa Clara Valley Water District
Recycled Water Committee
SPECIAL MEETING &
CLOSED SESSION AGENDA**

Friday, October 27, 2023

11:00 AM

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

Join Zoom Meeting:
<https://valleywater.zoom.us/j/99518153521>

*****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 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/99518153521>
Meeting ID: 995 1815 3521
Join by Phone:
1 (669) 900-9128, 99518153521#

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 September 27, 2023 Recycled Water Committee Minutes. [23-1064](#)
- Recommendation: Approve the minutes.
- Manager: Candice Kwok-Smith, 408-630-3193
- Attachments: [Attachment 1: 092723 RWC Meeting Minutes](#)
- Est. Staff Time: 5 Minutes

4. REGULAR AGENDA:

- 4.1. Receive Purified Water Program Update Including Partnership with Cities of Palo Alto/Mountain View and San José/Santa Clara and Provide Feedback. [23-1045](#)
- Recommendation: Receive an update and provide feedback on the following topics:
- A. Collaboration effort with partners
 - Cities of Palo Alto and Mountain View
 - Cities of San José and Santa Clara
 - B. Public Private Partnership
 - C. Outreach
- Manager: Kirsten Struve, 408-630-3138
- Est. Staff Time: 10 Minutes
- 4.2. Receive South Santa Clara County Water Reuse Collaboration Update and Provide Feedback. [23-1047](#)
- Recommendation: Receive an update on Technical Work Group discussions and provide feedback.
- Manager: Kirsten Struve, 408-630-3138
- Attachments: [Attachment 1: PowerPoint](#)
- Est. Staff Time: 10 Minutes
- 4.3. Receive Update on the Environmental Feasibility Study for Seawater Desalination in Santa Clara County. [23-0932](#)
- Recommendation: Receive update and information on the environmental feasibility of constructing a seawater desalination plant in Santa Clara County and discuss next steps.
- Manager: Kirsten Struve, 408-630-3138
- Attachments: [Attachment 1: PowerPoint](#)
[Attachment 2: Desalination Study](#)
- Est. Staff Time: 10 Minutes

5. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS.

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

6. CLOSED SESSION:

6.1. CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL

[23-1137](#)

Conference with Real Property Negotiators Pursuant to Government Code
Section 54956.8 Setting Negotiation Parameters for Price and Terms of
Payment for Purchase, Sale, or Exchange of Property Interest in APNs
116-01-013 and 008-05-005

Agency Negotiators: Rick Callender, Melanie Richardson, Aaron Baker,
Kirsten Struve, Girlie Jacobsen

Negotiating Parties: City of Palo Alto

6.2. District Counsel Report on Closed Session.

7. ADJOURN:

7.1. Adjourn to Special Meeting at 10:00 a.m., on December 6, 2023.

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Santa Clara Valley Water District

File No.: 23-1064

Agenda Date: 10/27/2023
Item No.: 3.1.

COMMITTEE AGENDA MEMORANDUM Recycled Water Committee

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

SUBJECT:

Approval of September 27, 2023 Recycled Water 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 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 Valley Water's historical records archives and serve as historical records of the Committee's meetings.

ENVIRONMENTAL JUSTICE IMPACT:

There are no Environmental Justice impacts associated with this item.

ATTACHMENTS:

Attachment 1: 092723 RWC Meeting Minutes

UNCLASSIFIED MANAGER:

Candice Kwok-Smith, 408-630-3193

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RECYCLED WATER COMMITTEE MEETING

DRAFT MINUTES

**REGULAR MEETING
WEDNESDAY, SEPTEMBER 27, 2023
12:00 PM**

(Paragraph numbers coincide with agenda item numbers)

1. CALL TO ORDER:

A regular meeting of the Santa Clara Valley Water District (Valley Water) Recycled Water 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 12:00 p.m.

1.1. Roll Call.

Committee members in attendance were District 4 Director Jim Beall, District 3 Vice Chairperson Richard P. Santos, and District 6 Director Tony Estremera, Chairperson presiding, constituting a quorum of the Committee.

Staff members in attendance were: Brandon Adriano, Hossein Ashktorab, Aaron Baker, Henry Barrientos, Nastaran Basiri, Glenna Brambill, Lakeisha Bryant, James Downing, Jiana Escobar, Walter Gonzalez, Jason Gurdak, Zach Helsley, Brian Hopper, Girlie Jacobson, Candice Kwok-Smith, Marta Lugo, Becky Manchester, Nicole Merritt, Tony Ndah, Carlos Orellana, Leslie Orta, Don Rocha, Medi Sinaki, Clarissa Sangalang, Kirsten Struve, Darin Taylor, Sherilyn Tran, David Tucker, and Beckie Zisser.

Public in attendance were: Phillippe Daniel (Liquisti LLC), Jan Davel (CDM Smith), Katja Irvin (Sierra Club), Patrick Ferraro and Steven White (San Jose State University), and Mansour Nasser (City of Sunnyvale).

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

Chairperson Estremera declared time open for public comment on any item not on the agenda.

Steven White requested to speak and addressed the Committee as noted below under Item 4.2.

3. APPROVAL OF MINUTES:

3.1. Approval of August 18, 2023 Recycled Water Committee Meeting Minutes.

Recommendation: Approve the minutes.

The Committee considered the attached minutes of the August 18, 2023 Committee meeting.

Public Comments:
None.

It was moved by Vice Chair Santos and seconded by Director Beall, and unanimously carried that the minutes be approved.

4. REGULAR AGENDA:

4.1. Receive Purified Water Program Update Including Partnerships with Cities of San Jose and Palo Alto and Provide Feedback.

Recommendation: Receive an update and provide feedback on the following topics:

- A. Collaboration effort with partners
 - Cities of Palo Alto and Mountain View
 - Cities of San Jose and Santa Clara
- B. Public Private Partnership
- C. Outreach

Kirsten Struve reviewed the information on this item, per the attached Committee Agenda Memo, and Jason Gurdak reviewed the information contained in Attachment 1.

Kirsten Struve, Jason Gurdak, and Aaron Baker were available to answer questions.

Public Comments:

Steven White made an inquiry about the status of the fluorescein dye used in the tracer study in Budd Pond and if it was toxic.

Jason Gurdak confirmed that the fluorescein dye traveled and infiltrated the bottom of the pond to become diluted in the aquifer decreasing the dye's green color in the water; and noted the dye is non-toxic and approved by the San Francisco Bay Regional Board.

The Committee received the information, took no formal action, and noted the following:

- Director Beall requested for the results of the groundwater study be shared with Santa Clara County and the City of Campbell, a follow up on samplings regarding any contamination findings from the ponds noted on page 6 of Attachment 1, and confirmation of how often the Sunnyoaks Ponds are being utilized.
- The Committee noted that well control zones will be addressed by the Water Conservation and Demand Management Committee.
- The Committee expressed support to staff for receiving over \$380,000 in funding from the Bureau of Reclamation's Water Smart Grant Program for the Purified Water Program's feasibility study with the Cities of San Jose and Santa Clara.

4.2. Receive Direct Potable Reuse (DPR) Update and Provide Feedback.

Recommendation: Receive update and provide feedback on DPR regulatory developments.

Medi Sinaki reviewed the information on this item, per the attached Committee Agenda Memo, and per the information contained in Attachment 1.

Medi Sinaki and Kirsten Struve were available to answer questions.

Public Comments:

Steven White reviewed and distributed speaking points, identified as Handout 4.2-A. Copies of the Handout were distributed to the Committee and made available to the public.

The Committee received the information, took no formal action, and noted the following:

- The Committee noted support for staff to work with Steven White to assist with preparing for an upcoming Joint Board meeting with City of San Jose and follow up with plants in Orange County and Huntington Beach regarding the water oxidation processes.
- Director Beall encouraged continued innovation and funding for research and development for water purification.

4.3. Receive and Discuss the 2023 Recycled Water Committee Work Plan, Upcoming Discussion Items, and Upcoming Meeting Date.

Recommendation: Receive information on the 2023 Recycled Water Committee Work Plan and provide feedback on upcoming discussions items and next meeting date.

The Committee considered this Item without a staff presentation.

Public Comments:

None.

The Committee received the information, took no formal action, and noted no changes to the RWC 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.

None.

6. Adjourn:

6.1. Adjourn to Special Meeting at 10:00 a.m. on October 25, 2023.

Chairperson Estremera adjourned the meeting at 12:48 p.m., to the special meeting at 10:00 a.m. on October 25, 2023, but was subsequently rescheduled for 11:00 a.m on October 27, 2023.

Nicole Merritt
Assistant Deputy Clerk II

Date Approved:



Santa Clara Valley Water District

File No.: 23-1045

Agenda Date: 10/27/2023

Item No.: 4.1.

COMMITTEE AGENDA MEMORANDUM Recycled Water Committee

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

SUBJECT:

Receive Purified Water Program Update Including Partnership with Cities of Palo Alto/Mountain View and San José/Santa Clara and Provide Feedback.

RECOMMENDATION:

Receive an update and provide feedback on the following topics:

- A. Collaboration effort with partners
 - Cities of Palo Alto and Mountain View
 - Cities of San José and Santa Clara
- B. Public Private Partnership
- C. Outreach

SUMMARY:

- a. **Collaboration Efforts with Partners**

Palo Alto and Mountain View

Valley Water continues to make progress on the agreements for the proposed future purification facility with the City of Palo Alto, including a lease agreement for the former Los Altos Treatment Plant site as well as the site for the Source Water Pump Station, an easement for pipeline tie ins, and an Operations and Maintenance Agreement.

Staff continues to meet every two weeks with Palo Alto's Planning Department. On November 2, renderings of the Source Water Pump Station at the Palo Alto Regional Water Quality Control Plant will be part of Palo Alto's presentation on the small salt removal facility, that Palo Alto is leading, to their Architectural Review Board.

Collaboration with cities and entities along the pipeline route is continuing, including development of conditional clearance, acknowledgement letters, and encroachment agreements.

San José and Santa Clara

Discussions with the Cities of San José and Santa Clara regarding a future project in San José are ongoing. Staff from all three agencies are developing a Direct Potable Reuse (DPR) project concept and timeline. This includes discussion on financial and institutional arrangements, wastewater availability and water utilization, Reverse Osmosis concentrate management, and other needed technical studies. Staff are exploring ways to expedite the schedule per direction from the Joint Recycled Water Policy Committee and plans to jointly present at the upcoming joint Valley Water Board and San José City Council meeting in November.

Valley Water received notice that a joint grant application for a San José Purified Water Project feasibility study will be funded with over \$380,000 by the Bureau of Reclamation WaterSMART program. An approved feasibility study is needed to receive construction funding in the future.

On September 20, 2023, the Bay Area Clean Water Agencies (BACWA) hosted a workshop for wastewater and water agencies to discuss lessons learned and best practices for collaborating on reuse projects. Valley Water staff were instrumental in helping to organize this event.

b. Public Private Partnership Update

Valley Water continues to provide updates on technical information available as well as updates on the schedule as needed to the shortlisted teams.

c. Outreach

In the month of September, Valley Water engaged over 110 members of the public through nine in-person tours and community presentations. This month, staff collaborated with the Safe, Clean Water Grants & Partnerships Program to host a joint public tour and informational workshop on the various grant opportunities available at Valley Water. Staff also hosted several private tours for key stakeholders, including South Bay Water Recycling, Sacred Heart Community Service and Joint Ventures Silicon Valley. Additionally, staff hosted Valley Water's Youth Commission for their annual retreat at the Silicon Valley Advanced Water Purification Center. The youth have expressed interest in getting more involved in helping to educate other youth in the county about the importance and benefits of bringing purified water to our region. They will be going back to their full Youth Commission to decide on creating a new working group to focus on youth outreach for purified water and their first task will be to reach out to the other youth commissions in the county to invite them on for a tour.

Staff also recently hosted a private tour for City of San José Mayor Matt Mahan. Mayor Mahan expressed his support for purified water and was joined by Director Richard Santos and Chief Operating Officer, Aaron Baker in a taste test of demonstration water.

ENVIRONMENTAL JUSTICE IMPACT:

File No.: 23-1045

Agenda Date: 10/27/2023
Item No.: 4.1.

There are no Environmental Justice impacts associated with this item.

ATTACHMENTS:

None.

UNCLASSIFIED MANAGER:

Kirsten Struve, 408-630-3138

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Santa Clara Valley Water District

File No.: 23-1047

Agenda Date: 10/27/2023

Item No.: 4.2.

COMMITTEE AGENDA MEMORANDUM Recycled Water Committee

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

SUBJECT:

Receive South Santa Clara County Water Reuse Collaboration Update and Provide Feedback.

RECOMMENDATION:

Receive an update on Technical Work Group discussions and provide feedback.

SUMMARY:

This update will summarize the Technical Working Group's (TWG) recent discussions related to South County Water Reuse Collaborations:

- South County Water Reuse Interagency Agreements,
- South County Recycled Water Master Planning,
- Ceremonies commemorating the completion of major pipeline, and
- U.S. Bureau of Reclamation Funding Announcement

Since 1999, the Santa Clara Valley Water District (Valley Water), the South County Water Resources Authority (SCRWA), the City of Gilroy (Gilroy), and the City of Morgan Hill (Morgan Hill) have demonstrated a long history of collaboration to carry on the utilization and expansion of non-potable water recycling in South County. In August 2017, Valley Water established the Joint Water Resources Committee (JWRC) with elected officials representing the Cities of Gilroy and Morgan Hill to pursue collaborative relationships and agreements to support future water reuse expansion. In August 2021, the JWRC recommended the establishment of a TWG to evaluate the opportunities and constraints of:

- One Comprehensive Water Reuse Agreement,
- Consistent water reuse terms and conditions countywide,
- Provisions to advance water reuse and purified water production, distribution, and wholesaling, and
- Cost sharing accords to integrate water conservation, water reuse, and water supply.

The TWG has met almost monthly since September 2021, and these meetings have included technical representatives from Gilroy, Morgan Hill, and Valley Water. The Recycled Water Committee has previously received TWG informational updates in December, March, and September 2022; and April and August 2023; that have reported our interagency collaborations to advance South County water recycling activities and programs. Staff has also presented the feedback that has been received from the JWRC on the TWG's collaborative activities and work products.

The TWG has focused considerable attention on reviewing and revising the water reuse agreements in South County that were adopted in 1999 and 2006. This Committee update will present the status of our continuing efforts to revise these interagency agreements supporting non-potable water reuse in South County; and will highlight key terms and conditions within these agreements promoting water reuse, and the roles and responsibilities for Valley Water, Gilroy, and SCRWA. Unfortunately, in September 2023, the TWG was informed that organizational changes at the City of Gilroy will limit their current participation in reviewing and updating these water reuse agreements for South County until further notice.

Staff will also discuss the TWGs progress to update the 2015 South County Recycled Water Master Plan, which will include revisions to the current reuse infrastructure (new pipeline), recycled water customer updates and their reuse potential, evaluations of potential new users along the distribution system, incorporation of planned future system upgrades, and updated discussion of constraints to ongoing operation and future expansion options. The discussion will highlight water reuse opportunities for the South County system, options for further discussion to provide water reuse in Morgan Hill, and capital improvement projects for further discussion to expand reuse in South County. The discussion will include the status of a United States Bureau of Reclamation (USBR) grant to complete a South County Recycled Water System Feasibility Study. It is unclear how organizational developments in Gilroy will impact the completion of this master planning update.

Lastly, staff will present a summary of recent recycled water system development and highlight capital construction that supports expansion of water reuse in South County and enhances system flexibility and redundancy. This discussion will review capital improvements, capital projects timeline, and USBR grant close-out. Staff will highlight project dedication ceremonies commemorating the completion of major pipeline construction in South County.

ENVIRONMENTAL JUSTICE IMPACT:

There are no Environmental Justice impacts associated with this item.

ATTACHMENTS:

Attachment 1: PowerPoint

UNCLASSIFIED MANAGER:

Kirsten Struve, 408-630-3138



South County Water Reuse Collaboration

Recycling Water Committee Meeting
October 27, 2023

Joint Water Resources Committee

Technical Work Group

2

- ✓ Provisions to advance water reuse and purified water production, distribution and wholesaling;
- ✓ Consistent water reuse terms and conditions countywide;
- ✓ Cost sharing accord to integrate water conservation, reuse and supply;
- ✓ One comprehensive Water Reuse Agreement

Water Reuse Agreements

- ❑ **Legal Agreement Revisions**
 - **2006 Producer – Wholesaler Highlights**
 - **1999 Wholesaler – Retailer Update**

South County Master Planning

4

- ❑ **Recycled Water Master Plan Update**
 - **Goals and Objectives**
 - **Approach, Opportunities & Expectations**
 - **Next Steps & Timing**

South County RW Updates

5

- ❑ **South County Pipeline Project**
 - **Project Celebration**
- ❑ **USBR Planning Grant Notification**

RW Pipeline Completion

6



valleywater.org



Santa Clara Valley Water District

File No.: 23-0932

Agenda Date: 10/27/2023

Item No.: 4.3.

COMMITTEE AGENDA MEMORANDUM Recycled Water Committee

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

SUBJECT:

Receive Update on the Environmental Feasibility Study for Seawater Desalination in Santa Clara County.

RECOMMENDATION:

Receive update and information on the environmental feasibility of constructing a seawater desalination plant in Santa Clara County and discuss next steps.

SUMMARY:

Valley Water recently completed an Environmental Feasibility Study (Feasibility Study) for the possible development of a 10 million gallons per day (MGD) seawater desalination project (Desalination Project) in Santa Clara County (County) with intake of seawater from the South San Francisco Bay (South Bay). The attached Executive Summary of the Feasibility Study provides an overview of the areas evaluated and rankings of the alternatives (Attachment 2).

While Valley Water is focusing on potable reuse of treated wastewater, this first phase, or Feasibility Study assists in continued evaluation of desalination as an auxiliary alternative water supply in the County. The Feasibility Study mainly focuses on the areas related to the environmental impact and compliance, land use, regulatory aspects, and stakeholder issues. Future steps such as Engineering Conceptual Development would evaluate costs associated with design, construction, Operations & Maintenance, and energy usage in more details.

Background

Since 2003, Valley Water has been exploring potential desalination projects to help meet future water supply needs. Valley Water previously participated in the Bay Area Regional Desalination Project (BARDP), a collaborative desalination project among several Bay Area water agencies. However, the BARDP did not evaluate potential seawater intakes in the South Bay. BARDP evaluated several sites around the San Francisco Bay for a desalination project, and ultimately the Mallard Slough in eastern

Contra Costa County was chosen as the most feasible site for a desalination project. The current BARDP project proposal is to build between a 10-25 MGD desalination treatment facility using Contra Costa Water District's water rights.

Completed Study and Next Steps

The Feasibility Study considered eight options for intakes and three options for brine management and identified Treatment Facility Planning Areas (TFPAs) within the generalized areas of San José, Mountain View, and Palo Alto where a treatment facility could be located in the future. These locations were intended as conceptual to analyze environmental impacts of desalination and did not optimize the final point of use for the water produced.

Overall, a total of 13 conceptual desalination project alternatives were identified, each consisting of a unique combination of intake, brine management, and TFPA. Typical reverse osmosis (RO) and water treatment processes for similar desalination facilities were assumed for the conceptual desalination project.

The environmental, land use, and regulatory issues of intake and brine management options and TFPAs were evaluated to identify constraints, feasibility-level issues, and to develop recommendations and next steps. The alternatives were analyzed to develop preferred alternatives based on environmental constraints. The environmental permitting, California Environmental Quality Act (CEQA), and National Environmental Policy Act (NEPA) requirements of a desalination project and key issues were also evaluated along with stakeholder and public acceptance of such a project, to provide guidance for future phases of desalination project planning.

The Feasibility Study indicates that a desalination facility in the County is possible provided certain environmental issues are addressed. Specifically, some of the critical issues include those related to intake options and brine management for marine organisms, refuge compatible use, planned land uses and brine discharge requirements. To a lesser degree issues related to sensitive habitats, special status and listed species and climate change hazards also need to be addressed. Because the South Bay is a sensitive ecosystem, these issues, which are worse with desalination than with treated wastewater purification, will need to be handled with extra sensitivity. Planning considerations include compliance with CEQA, NEPA, local, state, and federal permitting, environmental justice and public acceptance.

The scoring and ranking for the above-described options resulted in two potentially preferred sites, one in the San José area and one in the Mountain View-Palo Alto area. It's also critical that as part of a future engineering feasibility study, subsurface intake options are considered before open water intakes. This is required by the Ocean Plan.

As the next step, an engineering feasibility study will inform Valley Water Board of Directors of options and the technical feasibility of pursuing a desalination facility in the future. This effort will focus on the preferred sites and the individual options which scored the highest such as ocean water intake, brine management, treatment facility planning areas, environmental and planning evaluations, etc.

Staff is currently working on the procurement process to issue a request for qualifications to conduct the engineering feasibility study and expects to issue a notice to proceed in spring of 2024. Staff will report to the Committee with updates at key milestones of this future work.

ENVIRONMENTAL JUSTICE IMPACT:

There is no Environmental Justice Impact from this item.

ATTACHMENTS:

Attachment 1: PowerPoint

Attachment 2: Desalination Study

UNCLASSIFIED MANAGER:

Kirsten Struve, 408-630-3138

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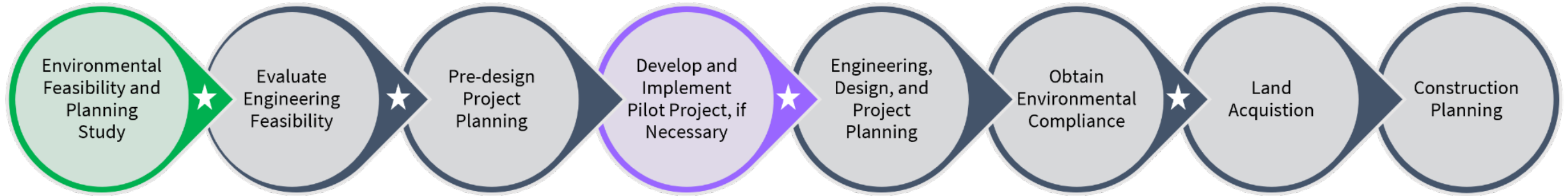
Update on Santa Clara County Seawater Desalination Environmental Feasibility Study

Recycled Water Committee – October 27, 2023

Environmental Feasibility Study: Desalination in Santa Clara County

- Investigating the environmental feasibility of a 10 MGD Desal Facility
- Sea water intake located in the South San Francisco Bay (South Bay)
- Discharge of brine to the South Bay
- Potential site located in the Santa Clara County

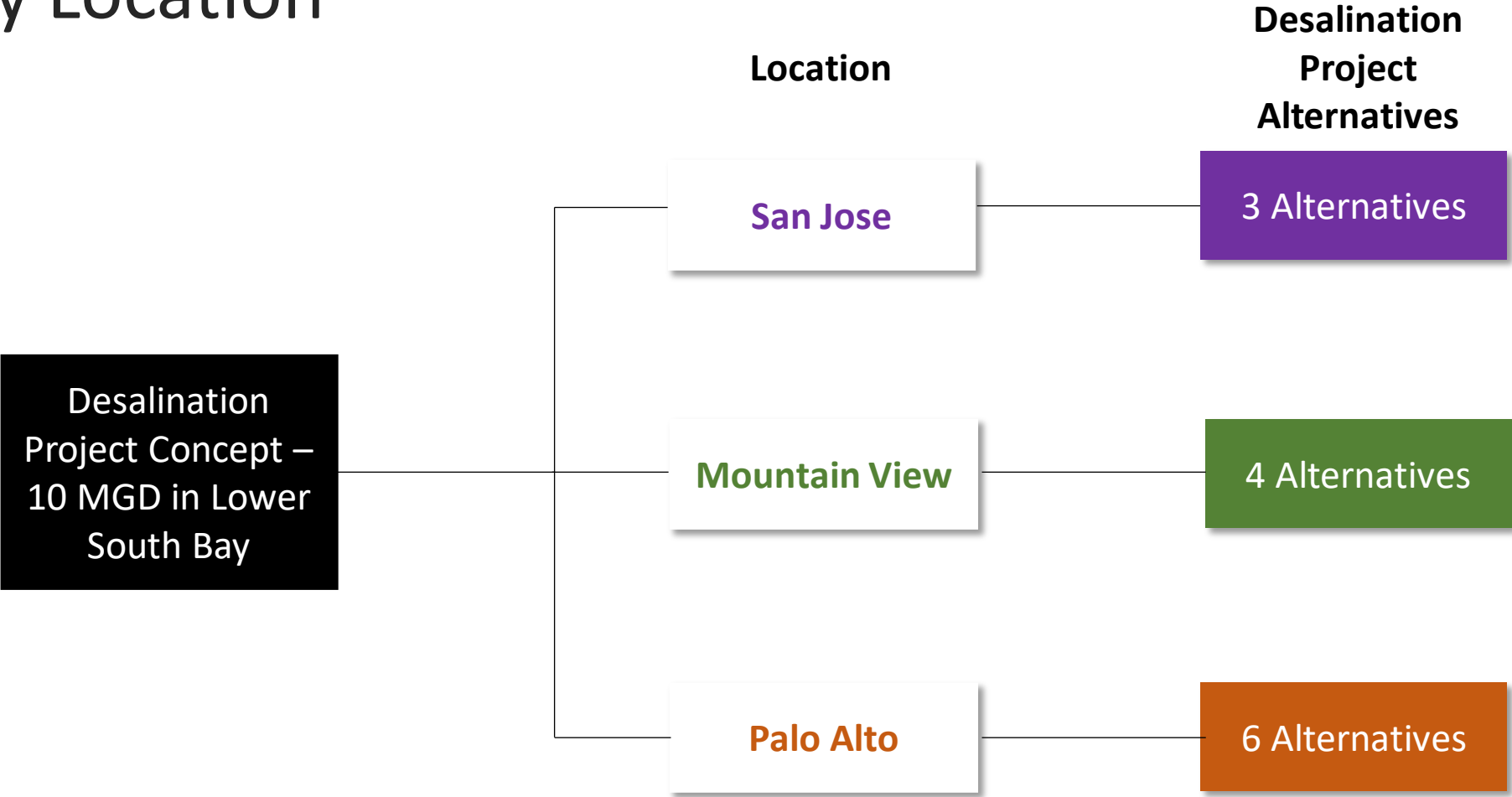
Development Process Overview



Phase 1 Goals

- Identify environmental, land use, stakeholder, and regulatory constraints
- Evaluate environmental feasibility
- Score and rank alternatives and identify preferred alternatives
- Develop recommendations and next steps for environmental planning during future phases of project development

Project Options and Desalination Project Alternatives by Study Location



Environmental Evaluations Overview

Water Quality

- Source Water & Intakes
- Receiving Water & Brine Management

Environmental Conditions

- Special-status Species & Marine Organisms
- Sensitive Habitats
- Water Supply Availability
- Cultural Resources
- Contamination

Land Use & Planning

- Compatibility with:
 - Regional Planning
 - Existing & Planned Land Use Projects
 - Municipal Land Use Planning

Energy

- Energy Use
- Potential Energy Sources

Climate Change

- Greenhouse Gas Emissions
- Flood Related Climate Hazards
- Non-Flood Related Climate Hazards

Environmental Feasibility Findings*

- Feasibility-level Criteria for Intake, Conveyance and Brine Management Options
 - Palo Alto and San Jose are the best two options
 - Deep Bay Outfall and Palo Alto/Mountain View Horizontal Levee score highest (brine management)
- Other Significant Environmental Criteria for Intake, Conveyance and Brine Management Options
 - Palo Alto Areas and Mountain View score highest (intake and conveyance)
 - Deep Bay Outfall and Palo Alto/Mountain View Horizontal Levee score highest

*based on weighted scores

Next Steps

Phase 2- Desalination Project Engineering Feasibility Study

- Evaluate preferred desalination facility sites, including consideration of where water would best be used in the water supply system
- Evaluate desalination treatment facility
- Evaluate intake and outfall options
- Evaluate brine management options
- Brief Committee in 2024

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Artesian Slough



SANTA CLARA COUNTY
SEAWATER DESALINATION PROJECT

Environmental Feasibility and Planning Study

JULY 2023

PREPARED BY



Executive Summary

ES.1 Introduction

The Santa Clara Valley Water District (Valley Water) is evaluating the environmental feasibility of a seawater desalination project (desalination project) in Santa Clara County with intake of seawater from the South San Francisco Bay (South Bay). A desalination project would augment potable water supply and serve the primary purpose of providing a new reliable water supply for current and future populations in the Santa Clara County. This study was prepared as a first step in project planning to evaluate environmental, land use, regulatory, and stakeholder issues, as well as to aid in the selection of project alternatives and identification of critical issues that could render an alternative or even the overall desalination project infeasible. This study was conducted in four phases with the results of each phase informing subsequent phases (see text box).

Study Phases

Phase 1 - Screened potential desalination project locations to identify project options and alternatives.

Phase 2 - Evaluated existing information on environmental conditions and applicable plans and regulations to identify issues and constraints.

Phase 3 - Identified regulatory requirements and key issues to provide a guide for obtaining regulatory approvals and public acceptance.

Phase 4 - Developed scoring of project options and alternatives, evaluated feasibility-level issues, and developed recommendations and next steps.

As a starting point, the desalination project evaluated for this study is based on a production capacity of 10 million gallons per day (MGD) – up to 11,208 acre-feet per year. In this study, typical reverse osmosis (RO) and water treatment processes for seawater desalination facilities were assumed. As a result, a recovery rate of approximately 50 percent was identified, which requires a seawater intake (intake) capacity of 20 MGD for this desalination project. After screening several options, seven intake and three brine management options were selected for evaluation (see **Figure ES-1** below and **Figure ES-5** at the end of this section). Additionally, three Treatment Facility Planning Areas (TFPAs) were identified, which consist of general areas where a treatment facility could be located. Two TFPAs in San Jose and one covering areas in both Mountain View and Palo Alto were evaluated and some TFPAs are composed of several discrete areas, as shown in the Figures ES-1 and ES-5. Figure ES-1 also includes the reference identification used for each project option in this study.

A total of 13 different desalination project alternatives were then assembled – each consisting of a unique combination of an intake option and a brine management option, as shown in **Figure ES-2**. These project alternatives included three in San Jose, four in Mountain View, and six in Palo Alto. The remainder of this section discusses the key findings of this study.

Figure ES-1. Project Options Evaluated

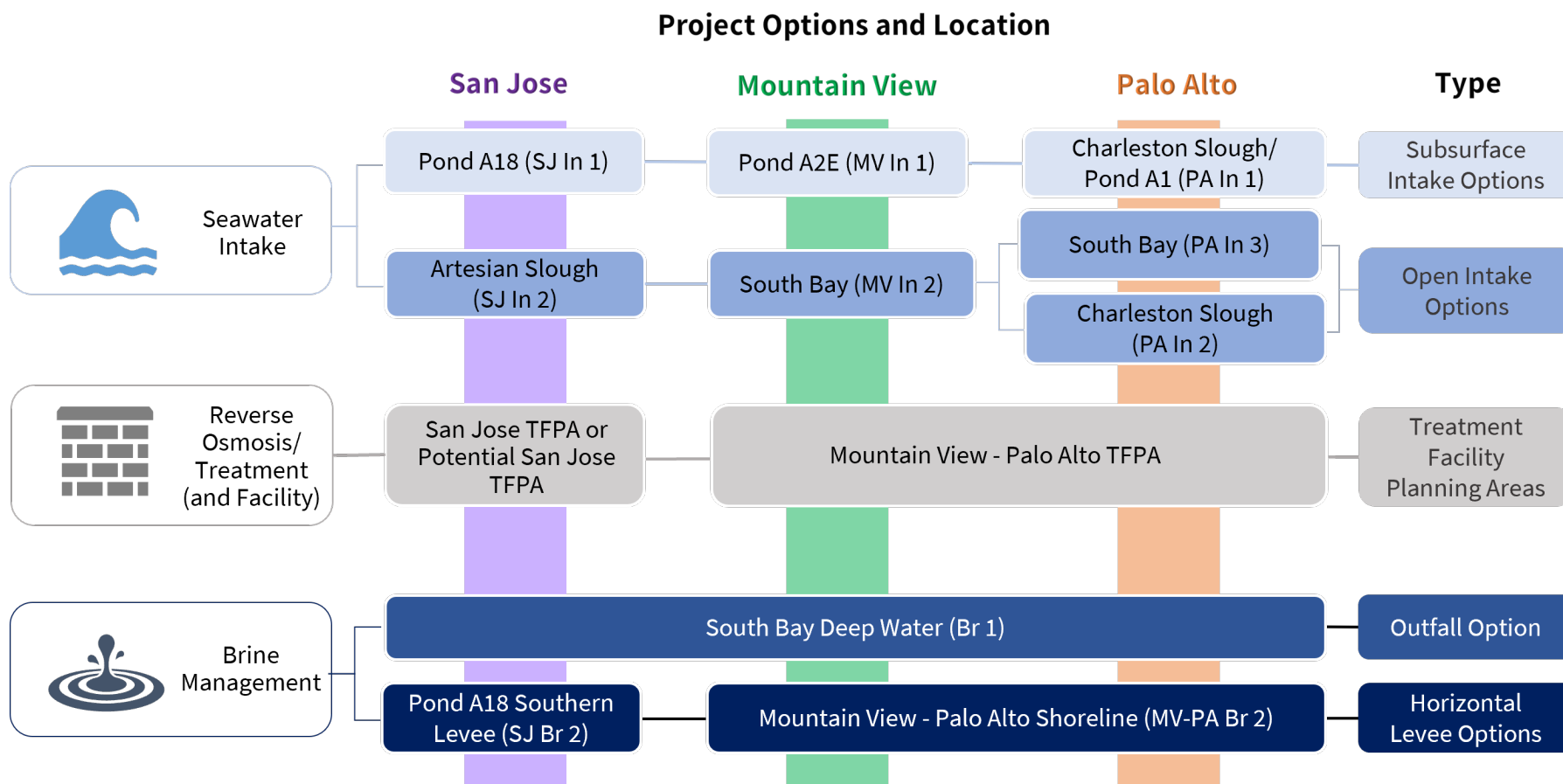
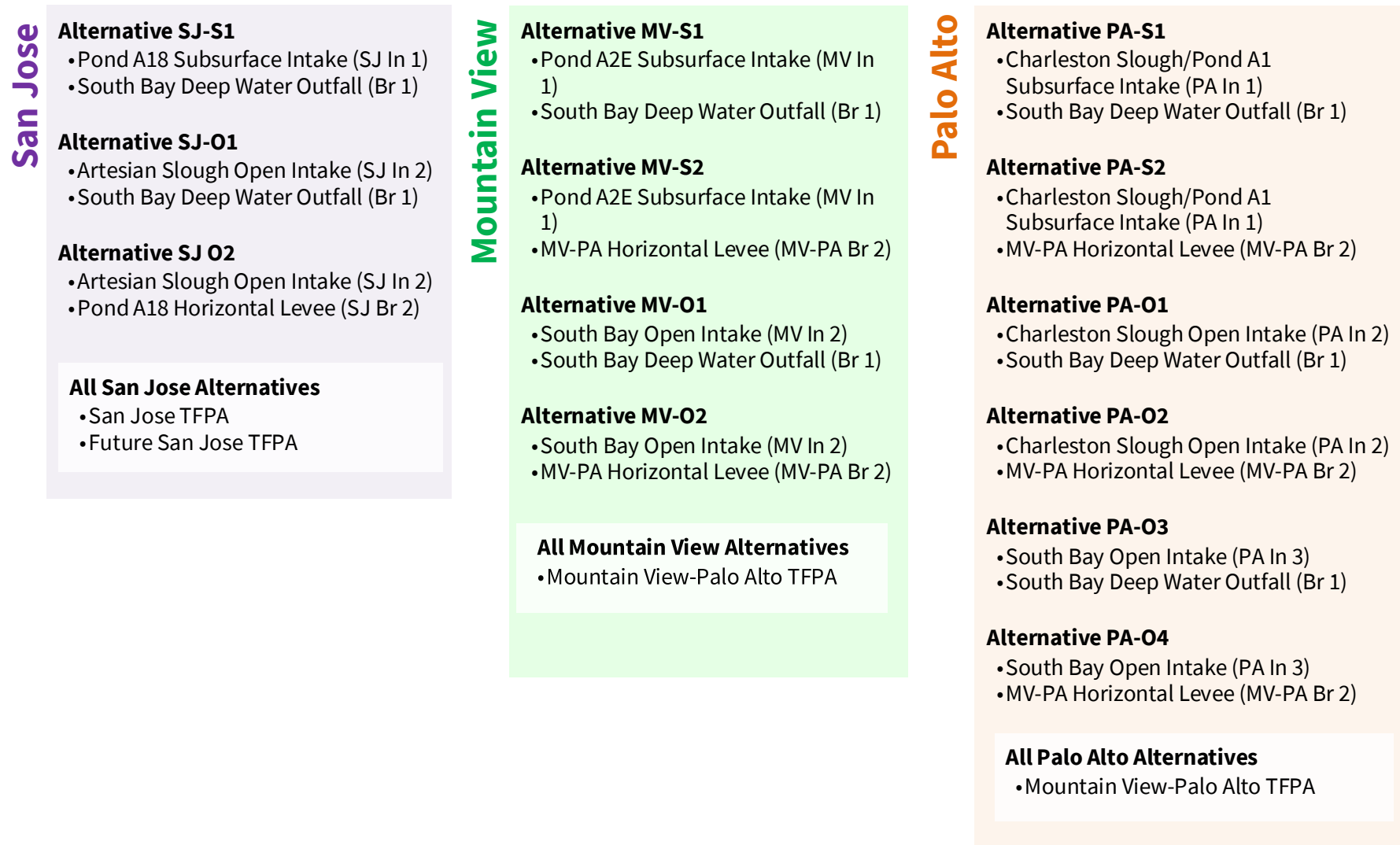


Figure ES-2. Desalination Project Alternatives and Associated Project Options



ES.2 Environmental and Planning Considerations Evaluated

Environmental Considerations

Table ES-1 provides a summary of issues that are critical to feasibility of the desalination project, such that if these issues are not resolved, then they will pose challenges to development of the desalination project. **Table ES-2** provides a summary of other important considerations identified in this study. The general types of project options (i.e., intake, treatment/facility, and brine management) that are applicable to each issue are also identified in these tables.

Table ES-1. Feasibility Level Environmental Considerations




























Feasibility Level Issue Summary	Applicable Project Options		
Marine Organisms – Impacts to marine organisms must be minimized. Regulations for intake of seawater require evaluating the feasibility of subsurface intakes first, and open intakes can only be considered if subsurface intakes are infeasible.			
Refuge Compatible Use – Infrastructure within the Don Edwards San Francisco Bay National Wildlife Refuge must be determined to be a compatible use (based largely on environmental impacts) or Valley Water would be denied right-of-way. Significant changes to the scope of project options may be needed to obtain/avoid right-of-way.			
Direct Potable Reuse – Should the desalination project draw in wastewater effluent, it could be considered as a direct potable reuse project, potentially resulting in significant additional treatment requirements.			
Municipal Drinking Water Designation – Source water from the South Bay needs to be designated as municipal for drinking purposes through a regulatory hearing process to amend the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan).			
Water Supply Availability – 20 MGD of source water supply may not be available for intake options in sloughs and salt marsh habitats.			
Planned Land Uses and Projects – Conflicts with flood protection and habitat restoration projects planned along the South Bay shoreline could preclude development or significantly change the scope of some project options.			
Brine Discharge Requirements – To comply with brine discharge requirements in the Basin Plan, Valley Water needs to consider achieving proper dilution of brine discharged to open water and/or blending brine with wastewater effluents to reduce salinity levels.			

Table ES-2. Other Important Environmental Considerations

Issue Summary	Applicable Project Options		
Source Water Quality – Intake options that do not draw seawater in directly from the South Bay, including subsurface intakes and intakes in sloughs, may have lower salinity levels. Additionally, constituents that may impact treatment effectiveness or the potable water distribution system were evaluated.			
Sensitive Habitats – Sensitive habitats including salt marshes, wetlands, and other waters of the U.S./State could be impacted by construction activities, operation of intakes in sloughs and salt ponds, and/or discharge of brine with elevated levels of salinity.			
Special-Status and Listed Species – A total of 22 special-status species including 10 species listed per the Endangered Species Act and/or California Endangered Species Act could be impacted by the project options to various degrees.			
Energy Use – Energy use from conveyance and treatment (including RO) was estimated to be similar among all project options/alternatives, and it is largely dependent on salinity levels during treatment.			1
Greenhouse Gas (GHG) Emissions – GHG emissions from purchase of electricity for conveyance and treatment (including RO) were estimated to be similar among all project options/alternatives and are largely dependent on energy use during treatment. However, if energy is purchased from pooling or renewable energy sources, then GHG emissions would not typically be generated.			1
Climate Change Hazards – Based on a high-level assessment of flooding and non-flooding climate change hazards, the desalination project would be vulnerable to various flood hazards and compound flood events, increases in groundwater salinity, increases in water temperature, and power outages.			

Notes: ¹ This study preliminarily determined that brine management does not require pumping for conveyance to disposal location, and therefore would not require energy or generate GHG emissions from operations. Refer to Chapter 7, “Energy Use,” for more information.

Planning Considerations

The following considerations are necessary to support regulatory approvals and public acceptance.



CEQA and NEPA Compliance

Valley Water would be the California Environmental Quality Act (CEQA) lead agency for preparation of an Environmental Impact Report (EIR).

Several regulatory permitting authorities would use the EIR, acting as CEQA responsible agencies, to issue permits/approvals for the desalination project.

The EIR would evaluate the comprehensive actions of the desalination project including design, construction activities, operations and maintenance activities, and relocation or construction of energy sources and electrical lines.

National Environmental Policy Act (NEPA) documentation would be required for federal permits and federal funding.



Environmental Justice

The desalination project could potentially be a moderate to high contributor to impacts related to traffic, air quality (including diesel particulate matter), hazardous chemicals, and impaired water bodies affecting nearby environmental justice (EJ) communities.

An environmental justice analysis is required for NEPA compliance and by the San Francisco Bay Conservation and Development Commission for projects proposed within environmental justice communities.



Permitting

Approximately 14 permits/approvals from federal agencies, 8 permits/approvals from state agencies, and several from local agencies may be required to obtain approvals for issues related to water, biological and cultural resources, and land use issues.

Permitting the desalination project is anticipated to be a long and complicated process.

A detailed permitting work plan, including permit triggers, requirements, key issues, timelines, and agency contacts is provided in **Appendix D**.



Public Acceptance

A review of other seawater desalination studies and projects in California revealed issues that may be similarly perceived by the public for this project as follows: brine discharge and disposal, general environmental impacts, intake structures, pipeline construction, construction and long-term noise, treated water quality, energy use and GHG emissions, and growth-inducing impacts.

Stakeholder messaging is pivotal to success of Valley Water's desalination project and should be conducted in an iterative and cyclical process as follows:

1. Collaboration with Valley Water Board of Directors.
2. Outreach to key elected officials so that they are apprised of the project.
3. Engagement with partner agencies and key stakeholders on strategic key issues.
4. Outreach to the public for education and input.

ES.3 Scoring, Recommendations, and Next Steps

Scoring

Each intake and brine management option was scored based on a set of criteria that were determined from the environmental evaluations summarized above. Each criteria score was multiplied by a corresponding criteria weight. Higher weighting was assigned to feasibility-level issues (discussed above) compared to other significant issues. Desalination project alternative scores were then compiled by adding the scores of the applicable intake and brine management options. The remainder of this section summarizes scoring, recommendations, and next steps.

Selection of Project Options and Alternatives

The scoring and ranking for the seven intake options and three brine management options, based on the evaluation presented in this study, is summarized in **Figure ES-3**. Note that subsurface intakes are preferred before open intakes regardless of option scoring due to regulations that require evaluation of subsurface intakes first. Scoring and ranking were not conducted for the TFPAs. However, the study conclusions for these areas are summarized below.

- **San Jose TFPA and Potential San Jose TFPA** – The TFPAs in San Jose could provide a larger area for development of a treatment facility than the other TFPA but pose potential challenges with compatibility of existing and future planned land uses. These issues should continue to be evaluated.
- **Mountain View-Palo Alto TFPA** – This is a much smaller area due to lack of available sites north of U.S. Highway 101 and the San Francisco Bay Conservation and Development Commission’s requirement to be located more than 100 feet from the shoreline.

The scoring and ranking of the 13 different desalination project alternatives, based on the evaluation presented in this study, is summarized in **Figure ES-4**. Similar to the ranking for intake and brine management options above, alternatives with subsurface intakes are preferred before open intakes regardless of option scoring due to regulations that require evaluation of subsurface intakes first. The options that compose each alternative were shown in Figure ES-2. The ranking of desalination project alternatives does not consider constraints of the TFPAs.

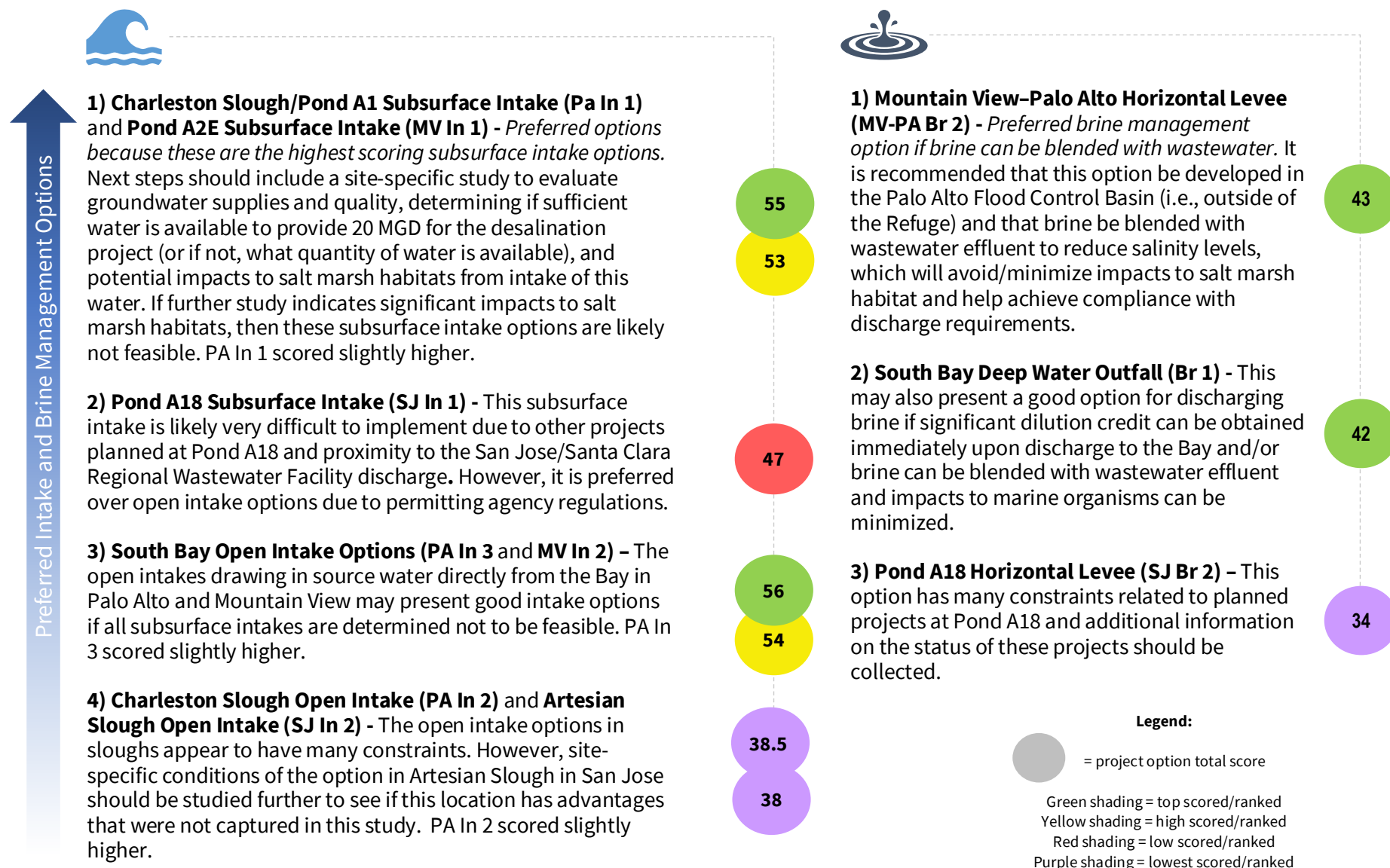
Additional Data Collection and Verification

This study was conducted at a desktop level using publicly available information and was based on general concepts of the project options. As a result, some data gaps and limitations were identified, and several assumptions were made to conduct the evaluations in this study. Additional information and data should be collected to confirm and update the environmental evaluations conducted. Additional information that should be collected includes source water quality data, environmental conditions based on field surveys, treatment requirements, use of energy recovery devices, pipeline lengths and elevation changes, and other key assumptions for evaluation energy use. Additionally, coordination should be conducted with regulatory agencies and other stakeholders to verify and update the understanding of feasibility level and other significant issues identified in this study.

Future Phases of Project Development

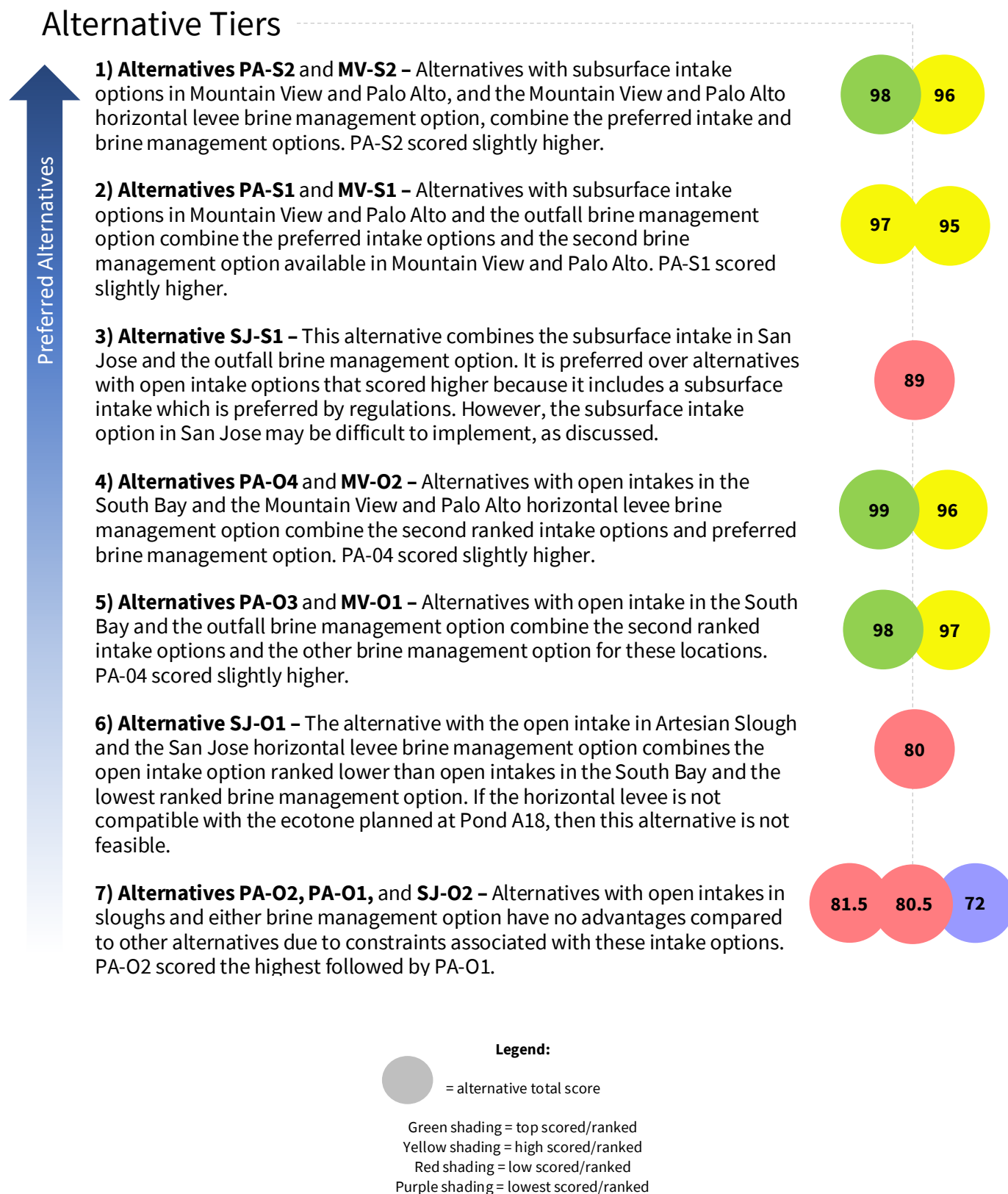
As project options are selected and designed, information in this study should be used to avoid and minimize environmental impacts and regulatory requirements to the extent possible. The next step is to conduct an engineering feasibility evaluation, which should be organized around the preferred project options and desalination project alternatives identified in this study. Subsurface intakes should be evaluated first and environmental information in this study should be supplemented with additional information necessary to complete the feasibility analysis required by the Ocean Plan (per the Water Code section 13142.5[b]). Several additional considerations for the next phase of project development are provide in Chapter 14, “Recommendations and Next Steps.”

Figure ES-3. Intake and Brine Management Option Scoring and Recommendations



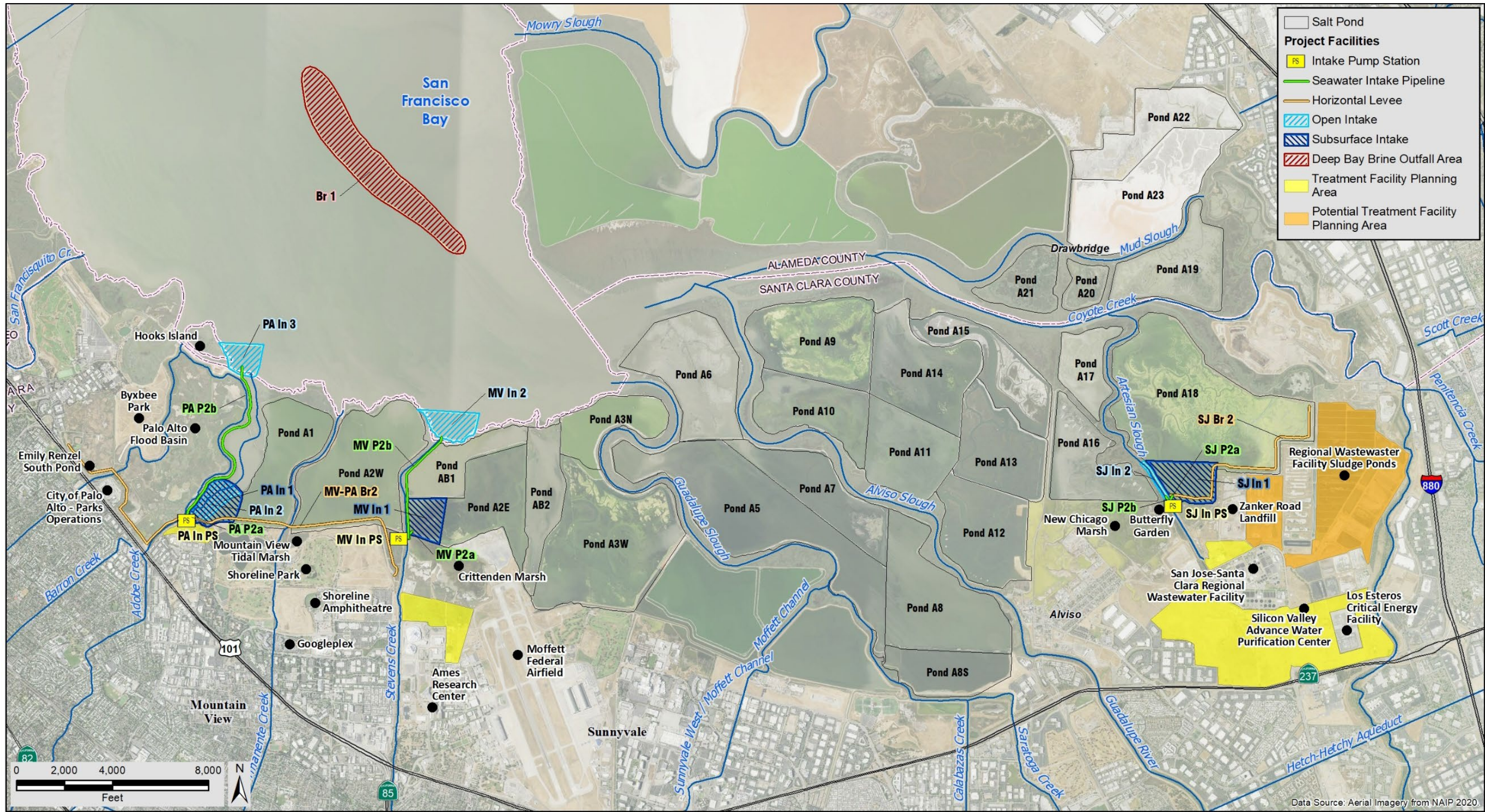
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Figure ES-4. Desalination Project Alternative Scoring and Recommendations



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Figure ES-5. Overview of Project Option Locations



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Santa Clara Valley Water District

File No.: 23-1137

Agenda Date: 10/27/2023

Item No.: 6.1.

NON-EXHIBIT/CLOSED SESSION ITEM

SUBJECT:

CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL

Conference with Real Property Negotiators Pursuant to Government Code Section 54956.8 Setting Negotiation Parameters for Price and Terms of Payment for Purchase, Sale, or Exchange of Property Interest in APNs 116-01-013 and 008-05-005

Agency Negotiators: Rick Callender, Melanie Richardson, Aaron Baker, Kirsten Struve, Girlie Jacobsen

Negotiating Parties: City of Palo Alto

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