



SCV WATER AGENCY REGULAR BOARD MEETING

Tuesday, June 7, 2022
Meeting Begins at 6:00 PM

Members of the public may attend by the following options:

In Person

Santa Clarita Valley Water Agency
Rio Vista Water Treatment Plant
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

See Agenda for additional location.

By Phone

Toll Free:
1-(833)-568-8864
Webinar ID: 161 406 3215

Virtually

Please join the meeting from your
computer, tablet or smartphone:

<https://scvwa.zoomgov.com/j/1614063215>

Have a Public Comment?

Public comments may be made virtually or in-person the night of the meeting, as well as
in writing via mail to the address listed above or email to the Board Secretary at
ajacobs@scvwa.org by 4:00 PM the day of the meeting.*

(Public comments take place during Item 3 of the Agenda and before each Item is considered. Please see the Agenda for details.)

This meeting will be recorded and the audio recording for all Board meetings will be posted to yourscvwater.com within 3
business days from the date of the Board meeting.

*All written comments received after 4:00 PM the day of the meeting will be made available at the meeting and posted on the SCV
Water Website the following day at yourscvwater.com. Public comments can also be heard the night of the meeting.

Disclaimer: Attendees should be aware that while the Agency is following all applicable requirements and guidelines regarding
COVID-19, the Agency cannot ensure the health of anyone attending a Board meeting. Attendees should therefore use their own
judgment with respect to protecting themselves from exposure to COVID-19.

Santa Clarita Valley Water Agency
Rio Vista Water Treatment Plant
27234 Bouquet Canyon Road
Santa Clarita, CA 91350
(661) 297-1600

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**SANTA CLARITA VALLEY WATER AGENCY
REGULAR BOARD MEETING AGENDA**

**SANTA CLARITA VALLEY WATER AGENCY
RIO VISTA WATER TREATMENT PLANT
BOARDROOM
27234 BOUQUET CANYON ROAD
SANTA CLARITA, CA 91350**

AND

**DIRECTOR COLLEY
TELECONFERENCE SITE LOCATED AT
100 HEBGEN MOUNTAIN ROAD
WEST YELLOWSTONE, MT 59758
1-(661)-378-4748**

TUESDAY, JUNE 7, 2022, AT 6:00 PM

IMPORTANT NOTICES

This meeting will be conducted in person at the address's above. As a convenience to the public, members of the public may also participate virtually by using the **Agency's Call-In Number 1-(833)-568-8864, Webinar ID: 161 406 3215 or Zoom Webinar by clicking on the link <https://scvwa.zoomgov.com/j/1614063215>**. Any member of the public may listen to the meeting or make comments to the Board using the call-in number or Zoom Webinar link above.

However, in the event there is a disruption of service which prevents the Agency from broadcasting the meeting to members of the public using either the call-in option or internet-based service, this meeting will not be postponed or rescheduled but will continue without remote participation. The remote participation option is being provided as a convenience to the public and is not required. Members of the public are welcome to attend the meeting in person.

Attendees should be aware that while the Agency is following all applicable requirements and guidelines regarding COVID-19, the Agency cannot ensure the health of anyone attending a Board meeting. Attendees should therefore use their own judgment with respect to protecting themselves from exposure to COVID-19.

Members of the public unable to attend this meeting may submit comments either in writing to ajacobs@scvwa.org or by mail to April Jacobs, Board Secretary, Santa Clarita Valley Water Agency, 27234 Bouquet Canyon Road, Santa Clarita, CA 91350. All written comments received before 4:00 PM the day of the meeting will be distributed to the Board members and posted on the Santa Clarita Valley Water Agency website prior to the start of the meeting. Anything received after 4:00 PM the day of the meeting will be made available at the meeting and posted on the SCV Water website the following day.

OPEN SESSION BEGINS AT 6:00 PM

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **PUBLIC COMMENTS** – Members of the public may comment as to items within the subject matter jurisdiction of the Agency that are not on the Agenda at this time. Members of the public wishing to comment on items covered in this Agenda may do so at the time each item is considered. (Comments may, at the discretion of the Board's presiding officer, be limited to three minutes for each speaker.)

4. **APPROVAL OF THE AGENDA**

5. **SPECIAL PROCEDURES**

5.1 Election of Second Vice President

6. **CONSENT CALENDAR**

PAGE

6.1 *	Approve Minutes of the May 17, 2022 Santa Clarita Valley Water Agency Regular Board of Directors Meeting	7
6.2 *	Approve Minutes of the May 24, 2022 Santa Clarita Valley Water Agency Special Board of Directors Meeting	13
6.3 *	Approve a Purchase Order to Cannon Corporation for Change Order No. 1 for Final Design Services for New Deane Zone Tank at Skyline Ranch – Design Prestressed Concrete Tank Instead of Welded Steel Tank	15
6.4 *	Approve a Resolution Adopting the Appropriation of All As-Yet Unappropriated Funds for FY 2021/22	29
6.5 *	Approve a Resolution Adopting the Appropriation Limit for FY 2022/23	33
6.6 *	Approve Receiving and Filing of FY 2021/22 Third Quarter Financial Report (January – March 2022)	39
6.7 *	Approve Receiving and Filing of March 2022 Monthly Financial Report – https://yourscvwater.com/wp-content/uploads/2022/05/Check-Register-March-2022.pdf	49

7. **ACTION ITEMS FOR APPROVAL**

PAGE

7.1 *	Adopt a Resolution Approving the SB 610 Water Supply Assessment for the Entrada South/Valencia Commerce Center Project	99
7.2 *	Approve Employee Manual Policy 41 - Fleet Management Policy	323

8. **GENERAL MANAGER'S REPORT ON ACTIVITIES, PROJECTS AND PROGRAMS**

9. COMMITTEE MEETING RECAP REPORTS FOR INFORMATIONAL PURPOSES ONLY PAGE

9.1 *	May 11, 2022 Water Resources and Watershed Committee Meeting Report	331
9.2 *	May 12, 2022 Rescheduled Engineering and Operations Committee Meeting Report	337
9.3 *	May 16, 2022 Finance and Administration Committee Meeting Report	343

10. WRITTEN REPORTS FOR INFORMATIONAL PURPOSES ONLY PAGE

10.1 *	Engineering Services Section Report	349
10.2 *	Finance, Administration and Information Technology Section Report	359
10.3 *	Treatment, Distribution, Operations and Maintenance Section Report	365
10.4 *	Water Resources and Outreach Section Report	375
10.5 *	Committee Planning Calendars	387

11. PRESIDENT'S REPORT

12. AB 1234 WRITTEN AND VERBAL REPORTS PAGE

12.1 *	May 25, 2022 Southern California Water Dialogue Meeting – Director Plambeck	411
12.2	Other AB 1234 Reports	

13. DIRECTOR REPORTS

14. DIRECTOR REQUESTS FOR APPROVAL FOR EVENT ATTENDANCE

15. ADJOURNMENT

* Indicates Attachment

◆ Indicates Handout

Note: The Board reserves the right to discuss or take action or both on all of the above Agenda items.

NOTICES

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning April Jacobs, Secretary to the Board of Directors, at (661) 297-1600, or in writing to Santa Clarita Valley Water Agency at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that Agency staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the Agency to provide the requested accommodation.

Pursuant to Government Code Section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection at the Santa Clarita Valley Water Agency, located at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350, during regular business hours. When practical, these public records will also be made available on the Agency's Internet Website, accessible at <http://www.yourscvwater.com>.

Posted on June 1, 2022.

M65

Minutes of the Regular Meeting of the Board of Directors of the Santa Clarita Valley Water Agency – May 17, 2022

A regular meeting of the Board of Directors of the Santa Clarita Valley Water Agency was held at Santa Clarita Valley Water Agency 27234 Bouquet Canyon Road, Santa Clarita, CA 91350 at 6:00 PM on Tuesday, May 17, 2022. A copy of the Agenda is inserted in the Minute Book of the Agency preceding these minutes.

DIRECTORS PRESENT: Kathy Armitage, B. J. Atkins (Arrived at 6:01 PM), Beth Braunstein, Ed Colley, William Cooper, Jeff Ford, Maria Gutzeit, R. J. Kelly (Arrived at 6:10 PM), Gary Martin, Piotr Orzechowski and Lynne Plambeck.

DIRECTORS ABSENT: Jerry Gladbach.

Also present: Assistant General Manager Steve Cole, Board Secretary April Jacobs, Chief Engineer Courtney Mael, Chief Financial and Administrative Officer Eric Campbell, Chief Operating Officer Keith Abercrombie, Controller Amy Aguer, Director of Finance and Administration Rochelle Patterson, Director of Operations and Maintenance Mike Alvord, Director of Technology Services Cris Perez, General Counsel Joe Byrne, General Manager Matthew Stone, Interim Director of Water Resources Dirk Marks, Senior Information Technology Technician Emmanuel Adinkra, Senior Management Analyst Kim Grass, Water Resources Planner Sarah Fleury, as well as additional SCV Water Agency staff and members of the public.

President Martin called the meeting to order at 6:00 PM. A quorum was present.

President Martin announced that Item 5.2 would be moved to the June 7, 2022 regular Board meeting to allow for full Board participation and Item 12.2 Closed Session related to Whittaker Corporation would be pulled. There were no other changes to the May 17, 2022 regular Board meeting Agenda and it was accepted with those changes. (Item 4).

The Ceremonial Oath of Office was given to Director Gutzeit and she took her seat (Item 5.1).

Item 5.2 Election of Second Vice President was pulled and will be put on the June 7, 2022 Board Agenda.

Upon motion of Director Plambeck, seconded by Director Colley and carried, the Board approved the Consent Calendar with the following change:

April 26, 2022 meeting minutes under General Managers Report Item 8, 7th paragraph down, 3rd sentence to say "This includes one well that was part of the former Newhall County Water District."

by the following roll call votes (Item 6):

Director Armitage	Yes	Director Atkins	Yes
Director Braunstein	Yes	Director Colley	Yes
Director Cooper	Yes	Director Ford	Abstain

Vice President Gladbach	Absent	Director Gutzeit	Abstain
Director Kelly	Abstain	President Martin	Yes
Director Orzechowski	Yes	Director Plambeck	Yes

Upon motion of Director Gutzeit, seconded by Director Atkins and carried, the Board authorized, pursuant to exemption under CEQA Guidelines Section 15061(b)(3), the General Manager to enter into a Short-Term Water Exchange Agreement with Irvine Ranch Water District as described in Exhibit A of the staff report by the following roll call votes (Item 7.1):

Director Armitage	Yes	Director Atkins	Yes
Director Braunstein	Yes	Director Colley	Yes
Director Cooper	Yes	Director Ford	Yes
Vice President Gladbach	Absent	Director Gutzeit	Yes
Director Kelly	Yes	President Martin	Yes
Director Orzechowski	Yes	Director Plambeck	Yes

Upon motion of Director Kelly, seconded by Director Atkins and carried, the Board approved Resolution No. SCV-276 revising the FY 2022/23 Budget by the following roll call votes (Item 7.2):

Director Armitage	Yes	Director Atkins	Yes
Director Braunstein	Yes	Director Colley	No
Director Cooper	Yes	Director Ford	Yes
Vice President Gladbach	Absent	Director Gutzeit	Yes
Director Kelly	Yes	President Martin	Yes
Director Orzechowski	Yes	Director Plambeck	Yes

RESOLUTION NO. 276

**RESOLUTION OF THE
SANTA CLARITA VALLEY WATER AGENCY BOARD OF DIRECTORS
REVISING THE BUDGET FOR FISCAL YEAR 2022/23**

<https://yourscvwater.com/wp-content/uploads/2022/05/SCV-Water-Approved-Resolution-051722-Resolution-SCV-276.pdf>

Chief Operating Officer Keith Abercrombie gave a presentation on the Local Hazard Mitigation Plan (Item 8).

General Manager's Report on Activities, Projects and Programs (Item 9).

The General Manager reported the following:

He mentioned that earlier this month, Assistant General Manager Steve Cole, Chief Engineer Courtney Meal and himself along with representatives from the City hosted a site tour with

Senator Feinstein's Field Representative Marco Enriquez. Tour sites included the Cemex Area, Arundo and the Valleys' PFAS Treatment Facilities. Staff provided a briefing on PFAS and the larger challenges related to that issue.

He informed the Board that he attended the ACWA 2022 Spring Conference and gave a brief report on his attendance.

He then updated the Board on the May 10, 2022 SCV Water Virtual Drought Forum which covered the following topics:

- 411 on statewide and regional extreme drought conditions and forecast
- How SCV Water plans for water supply in wet and dry years
- What we can do together to save water
- Live Q & A session

Lastly, he thanked and acknowledged the team for all their hard work in getting the recent Meter Grant that was mentioned earlier this evening by Director of Operations and Maintenance Mike Alvord. He ended by noting that we may be applying for another grant through WaterSMART next year.

The full General Manager's report can be heard at https://yourscvwater.com/wp-content/uploads/2022/05/Board_Recording_051722-Part-1.mp3.

President's Report (Item 10).

The President updated the Board on upcoming meetings, events and Board reminders.

AB 1234 Written and Verbal Reports (Item 11).

Written reports were submitted by Directors Armitage, Ford and Plambeck which were included in the Board packet. Additional written reports were submitted by President Martin and Director Armitage which were posted on the SCV Water website and are part of the record.

Director Armitage reported that she attended a virtual one-on-one meeting with General Manager Stone on May 10, 2022 and attended the virtual Special Districts Association of North Los Angeles County Executive Board meeting (a written report was also submitted) on April 27, 2022.

Director Braunstein stated that she did not have a written report to submit at this time but did attend the ACWA 2022 Spring Conference held in Sacramento on May 3-5, 2022.

Director Kelly reported that he attended the ACWA 2022 Spring Conference held in Sacramento on May 3-5, 2022.

Director Atkins reported that he attended the ACWA 2022 Spring Conference held in Sacramento on May 3-5, 2022.

Director Cooper reported that he attended the ACWA 2022 Spring Conference held in Sacramento on May 3-5, 2022.

Director Orzechowski reported that he attended the SCV Water Virtual Drought Forum on May 10, 2022 and attended the virtual Innovative Technologies for Decentralized and Small Systems hosted by the Water Research Foundation on May 10, 2022.

Director Orzechowski also reported, as a Directors report, that he had volunteered at the LA County Department of Parks and Recreation in collaboration with Friends of Castaic Lake; Fishing and Fun for Kids Day held at Castaic Lake on May 7, 2022.

There were no other AB 1234 Reports.

The Board went into Closed Session at 8:34 PM to discuss Items 12.1 and 12.2 (Item 12).

The Zoom meeting was put on hold while the Board went into Closed Session. President Martin advised the public and staff for those who wanted to stay, to stay on the current teleconference line and once Closed Session has ended, the Board would reconvene for Closed Session announcements and the conclusion of the meeting.

President Martin reconvened the Open Session at 8:50 PM.

Joe Byrne, Esq., reported that regarding Item 12.1 Conference with Legal Counsel – Anticipated Litigation – Significant Exposure to Litigation Pursuant to Paragraph (2) of Subdivision (d) of Section 54956.9, Claim of Thomas Overstreet, against Santa Clarita Valley Water Agency, Claim for Property Damage, Date of Claim March 4, 2022, the Board unanimously voted to reject the claim and submit it to the Agency’s Joint Powers Insurance Authority, upon motion of Director Colley, seconded by Director Kelly and carried, by the following roll call votes:

Director Armitage	Yes	Director Atkins	Yes
Director Braunstein	Yes	Director Colley	Yes
Director Cooper	Yes	Director Ford	Yes
Vice President Gladbach	Absent	Director Gutzeit	Yes
Director Kelly	Yes	President Martin	Yes
Director Orzechowski	Yes	Director Plambeck	Yes

There were no other actions taken in Closed Session that were reportable under the Ralph M. Brown Act (Item 13).

Director Requests for Future Agenda Items (Item 14).

Director Braunstein requested that she receive more information on recycled water and/or our recycled water program. She would also like to know how we can expand it and what the plans are for the future.

In addition, she wants to learn more about our connection with the city and how we can improve it in terms of development and other issues, as we don't authorize development but must be able to provide water. She wants to know a little bit more about that relationship, interaction between the two, and how we might be able to improve it.

Director Kelly would like an update on Central Park and the activities that are taking place.

Director Atkins wants an update, when ready, on Bouquet Creek pertaining to the Steering Committee selection, grant funding and definition of the project.

There were no other requests for future Agenda items.

The meeting was adjourned at 8:54 PM (Item 15).

April Jacobs, Board Secretary

ATTEST:

President of the Board

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DRAFT

ITEM NO.
6.2

Minutes of the Special Meeting of the Board of Directors of the Santa Clarita Valley Water Agency – May 24, 2022

A special meeting of the Board of Directors of the Santa Clarita Valley Water Agency was held at Santa Clarita Valley Water Agency 27234 Bouquet Canyon Road, Santa Clarita, CA 91350 at 6:00 PM on Tuesday, May 24, 2022. A copy of the Agenda is inserted in the Minute Book of the Agency preceding these minutes.

DIRECTORS PRESENT: Kathy Armitage, B. J. Atkins (Arrived at 6:03 PM), Beth Braunstein, Ed Colley, William Cooper, Jeff Ford, Jerry Gladbach, Maria Gutzeit, R. J. Kelly, Gary Martin, Piotr Orzechowski and Lynne Plambeck.

DIRECTORS ABSENT: None.

Also present: Assistant General Manager Steve Cole, Board Secretary April Jacobs, Director of Technology Services Cris Perez, General Counsel Tom Bunn (Via Zoom), Information Technology Technician I Jonathan Thomas, Sustainability Manager Matt Dickens, Water Conservation Specialist I Julia Grothe, Kearns & West Consultants Jack Hughes and Joan Isaacson, Ricon Corporation Consultants Erica Linard, additional consultants from Kearns and West Consultants and Ricon Corporation (Via Zoom), as well as several SCV Water Agency staff and members of the public.

President Martin called the meeting to order at 6:00 PM. A quorum was present.

There were no changes to the May 24, 2022 special Board meeting Agenda and it was accepted as shown (Item 4).

After a brief introduction by Assistant General Manager Steve Cole, Kearns & West Consultant and facilitator Joan Isaacson was introduced. Presentations were given by the Sustainability Manager Matt Dickens who began the workshop as well as Water Conservation Specialist I Julia Grothe and Ricon Corporation Consultant Erica Linard. The workshop was centered around the development of the Agency’s Sustainability Plan, asking for feedback from the Board of Directors and members of the public (Item 5).

The meeting was adjourned at 9:00 PM in memory of the children and teachers who lost their lives in the shooting at Robb Elementary School in Uvalde Texas (Item 6).

April Jacobs, Board Secretary

ATTEST:

President of the Board

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BOARD MEMORANDUM

DATE: May 13, 2022
TO: Board of Directors
FROM: Courtney Mael, P.E. *CM*
Chief Engineer
SUBJECT Approve a Purchase Order to Cannon Corporation for Change Order No. 1 for Final Design Services for New Deane Zone Tank at Skyline Ranch – Design Prestressed Concrete Tank Instead of Welded Steel Tank

SUMMARY

Staff recommends approval of a purchase order to Cannon Corporation (Cannon) for Change Order No. 1 for final design services for a new prestressed concrete tank instead of a welded steel tank for the SCV Water Deane Zone to be located at Skyline Ranch. This project provides a portion of the necessary emergency storage improvements identified in the 2013 Water Master Plan for the Santa Clarita Water Division (SWCD).

DISCUSSION

The 2013 Water Master Plan (WMP) for the Santa Clarita Water Division recommends construction of new storage and pumping facilities to address existing deficiencies in the Deane Pressure Zone that provides water to the east side of our service area. The 2013 WMP identifies an existing storage deficiency of 4.22 MG in the Deane Zone. In addition, the Skyline Ranch development (Tract 60922) will add 0.87 MG of storage demand for a combined storage deficiency of 5.09 MG in the Deane Zone (based on the Planning Phase Hydraulic Analysis dated April 13, 2021). SCV Water has initiated a phased Capital Improvement Plan to build three new tanks (at two sites) over the next two (2) to five (5) years to address the storage deficiencies and new demands in the Deane Zone. These projects are being done in conjunction with new developments to take advantage of developer contributions for their fair share of the projects.

The existing deficiencies and additional demands from the Skyline Ranch development are being addressed jointly by SCV Water and the Skyline Ranch developer by constructing a new 2.08 MG tank, a pump station and disinfection facility. The SCV Water Board of Directors approved a purchase order on February 2, 2021 for \$184,360 for SCV Water's fair share costs for final design services to Cannon Corporation for the new tank, pump station and disinfection facility. (Note: Cannon's original design fee was \$384,057 for final design of the tank, pump station and disinfection facility. The developer's fair share is \$199,697).

The original scope was for design of a welded steel tank, which was used for two new tanks recently funded and built by the developer in the Skyline Ranch pressure zone. However, given recent and significant price increases and long deliveries associated with welded steel tanks, staff evaluated the use of prestressed concrete tanks compared to steel to determine which one

offered the best long-term value for SCV Water. The prestressed concrete tank offers several important advantages compared to steel tanks:

- Concrete is NSF approved and does not require special coatings,
- Concrete (and rebar) is available from local suppliers, which results in cost and schedule savings,
- Concrete offers better structural integrity to meet latest seismic codes without the need for excessive freeboard or special rafters,
- Concrete avoids the risks associated with sand blasting and coating for initial construction (and recoating) of a welded steel tank in a residential neighborhood,
- Concrete offers a reduced risk of construction change orders that are associated with steel pricing in today's volatile market, and
- Concrete results in lower life cycle costs since recoating is not required.

Cannon prepared preliminary designs and planning level cost estimates for a welded steel tank option and a pre-stressed concrete option for a 2.08 MG at the proposed Skyline Ranch Deane Tank site. In this case, the initial cost to construct the concrete tank is slightly lower than the welded steel tank option, based on recent steel prices. The engineer's estimate was \$4.6 million dollars for the pre-stressed concrete tank, and \$4.8 million dollars for the welded steel tank. These estimates include all work necessary to construct the tanks at the site, including mobilization, grading, drainage, tank, foundations, piping, valves, instrumentation, electrical, testing and disinfection, paving, fencing, etc.

Life cycle costs (see attached) were estimated for the 2.08 MG welded steel tank versus concrete tank at this site. The total cost of ownership over an assumed 100-year asset life is \$2.5 million dollars for the pre-stressed concrete tank versus \$4.9 million dollars for the welded steel tank. This is based on the need to recoat a welded steel tank (interior and exterior) every 20 years at a cost of approximately \$503,000 each time. The life cycle costs are based on an initial construction cost of the tank and foundation only, estimated at \$2.3 million for a concrete tank and \$2.5 million for a welded steel tank (i.e., excludes tank appurtenances and site improvements).

Cannon has submitted Change Order No. 1 for \$80,549 to prepare final design plans and specifications for a prestressed concrete tank. Based on SCV Water's fair share of the costs for the tank (58.2%), SCV Water will pay \$46,880 to Cannon for design Change Order No. 1. (The developer will pay their fair share of the costs in the amount of \$33,669). SCV Water's Purchasing Policy requires Board approval for change orders over 10% (cumulative) of the original professional services contract amount. Accordingly, staff seeks SCV Board approval of \$46,880 to Cannon for Design Change Order No. 1.

CEQA CONSIDERATIONS

The County of Los Angeles is the Lead Agency under the California Environmental Quality Act (CEQA) for the Skyline Ranch Development project. The County prepared an Environmental Impact Report (EIR) for the Skyline Ranch project pursuant to CEQA provisions. The EIR included all of the water infrastructure required for the Skyline Ranch project. The Final EIR was approved by the Los Angeles County Board of Supervisors on December 7, 2010. The Notice of Determination was filed with Los Angeles County Clerk on December 9, 2010.

On May 12, 2022, the Engineering and Operations Committee considered staff's recommendation to approve a purchase order to Cannon Corporation for Change Order No. 1 for final design services for new Deane Zone Tank at Skyline Ranch – design prestressed concrete tank instead of welded steel tank.

FINANCIAL CONSIDERATIONS

Cannon's original design fee for final design services was \$384,057 for design of a welded steel tank, pump station and disinfection facility. Based on fair share percentages, SCV Water is responsible for \$184,360, which was approved by the Board on February 2, 2021. The developer's fair share is \$199,697.

Cannon's design Change Order No.1 is for \$80,549. Based on fair share percentages, SCV Water is responsible for \$46,880 and the developer is responsible for \$33,669. SCV Water's total cost share of design, including Change Order No. 1 is \$231,240. SCV Water's portion is within the approved FY 2020/21/22 CIP budget of \$250,000 for design of the Deane tank at Skyline Ranch. Budget for SCV Water's portion of the construction is included in the upcoming FY 2022/23 CIP Budget.

Funding for SCV's portion of this retail CIP project is based on the increased capacity that is needed for existing customers (paid by rates) and future customers (paid by capacity fees). The percentage of capacity fees (for future users) was determined during the approved budget process, as follows: 50% of the costs (SCV's portion) will be funded by SCWD pay-go budget, and the remaining 50% (SCV's portion) will be funded by capacity fees (future users).

RECOMMENDATION

The Engineering and Operations Committee recommends that the Board of Directors authorize the General Manager to issue a purchase order to Cannon Corporation for an amount not to exceed \$46,880 for SCV Water's portion of Change Order No. 1 for final design of the prestressed concrete Deane tank.

TBP

Attachment

M65

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2.08 MG Life Cycle Cost Analysis Welded Steel Tank vs. Prestressed Concrete Tank

Tank Dimensions For Usable Water Volume

Tank Diameter = 104.0 FT.
Side Water Depth = 34.00 FT.
Usable Tank Capacity (Floor Slope 0%) = 2.08 MG

NOTE: Usable is defined as the full side water depth (Finish floor to overflow)

Welded Steel Tank Dimensions

Assumed Freeboard = 8 FT.
Total Steel Tank Volume = 2.64 MG
Assumed Steel Tank Cost = \$ 2,530,000.00 DOLLARS

NOTE: Freeboard is equal to assumed sloshing height per AWWA D100

Assumed budget includes concrete ringwall and initial coatings

Prestressed Concrete Tank Dimensions

Assumed Freeboard = 6 FT.
Total Prestressed Concrete Tank Volume = 2.51 MG
Assumed Prestressed Concrete Tank Cost = \$ 2,310,000.00 DOLLARS

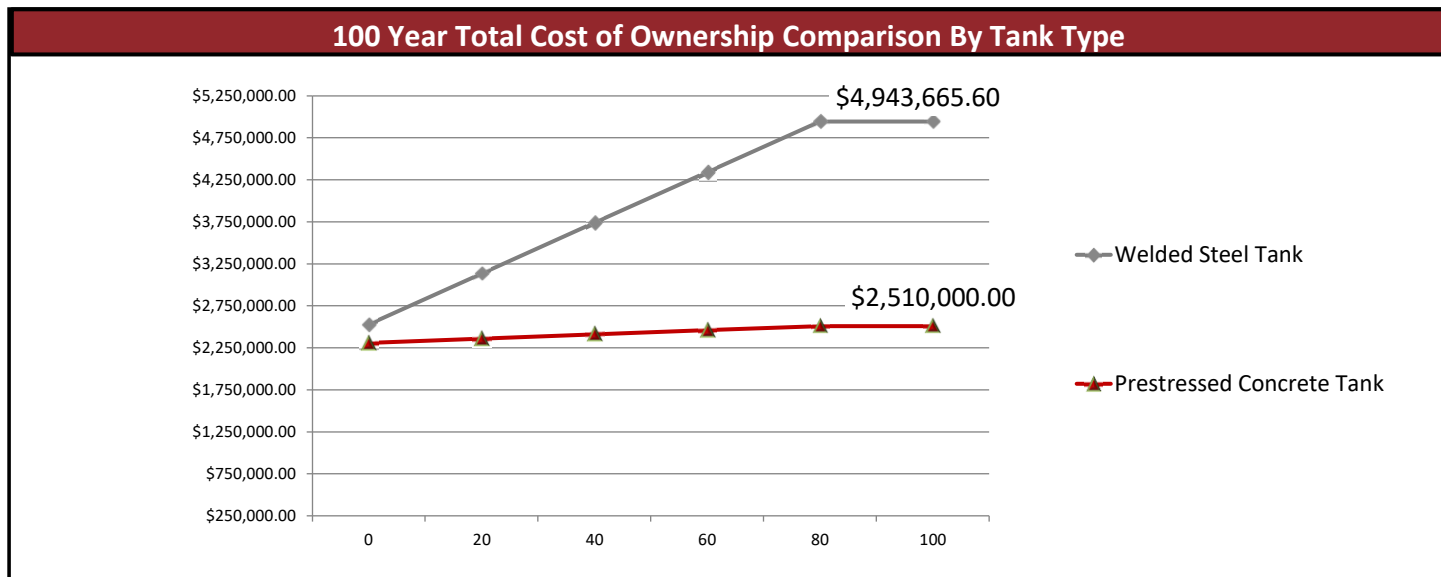
NOTE: Freeboard is less than assumed sloshing height per AWWA D110

Assumes Cast in Place Concrete Dome Roof

Welded Steel Tank Maintenance Costs				
Return Period	Maintenance Scheduled	Sq Ft	Unit Price	Total Price
20	Blast exterior and re-application of coating	22,747	\$7.00	\$159,229.00
20	Blast interior and re-application of coating	31,238	\$11.00	\$343,618.00
20	Engineering Design Cost (Estimate 10%)			\$50,284.70
20	Construction Management / Inspection Cost (Estimate 10%)			\$50,284.70
TOTAL MAINTENANCE COST PER 20 YEAR RETURN PERIOD				\$603,416.40

Prestressed Concrete Tank Maintenance Costs				
Return Period	Maintenance Scheduled	LS	Unit Price	Total Price
20	Powerwashing, Routine Maintenance, and Inspection	LS	\$50,000.00	\$50,000.00
TOTAL MAINTENANCE COST PER 20 YEAR RETURN PERIOD				\$50,000.00

100 Year Total Cost of Ownership Comparison					
Year	Capital and Maintenance Cost Schedule			Cumulative Total Cost of Ownership	
	Prestressed Concrete	Welded Steel		Prestressed Concrete	Welded Steel
0	\$2,310,000.00	\$2,530,000.00		\$2,310,000.00	\$2,530,000.00
20	\$50,000.00	\$603,416.40		\$2,360,000.00	\$3,133,416.40
40	\$50,000.00	\$603,416.40		\$2,410,000.00	\$3,736,832.80
60	\$50,000.00	\$603,416.40		\$2,460,000.00	\$4,340,249.20
80	\$50,000.00	\$603,416.40		\$2,510,000.00	\$4,943,665.60
100				\$2,510,000.00	\$4,943,665.60



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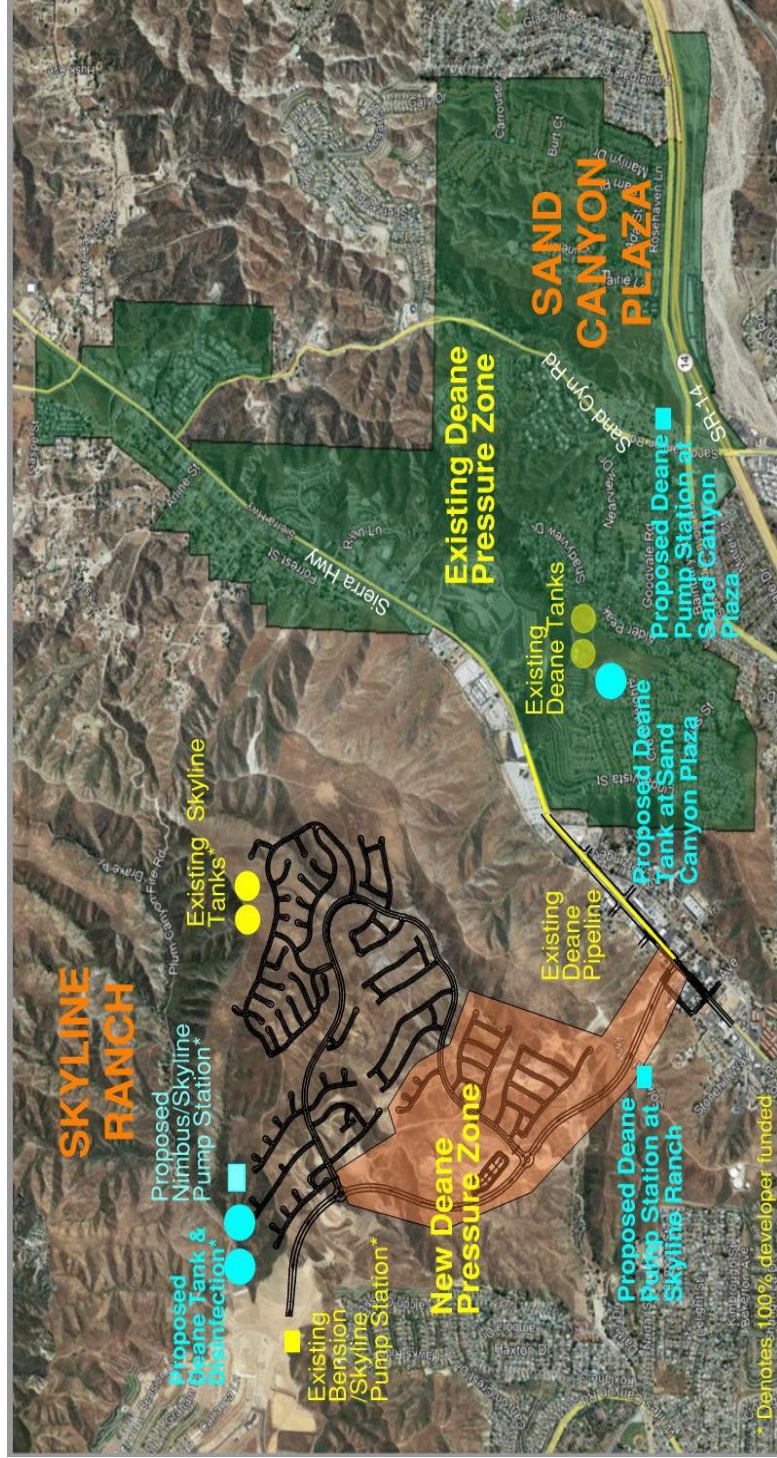


June 7, 2022

Skylines Ranch Project Design Change Order No. 1 for Prestressed Concrete Tank

Board Meeting

Overview of Deane Pressure Zone



Deane Zone Tank, Pump Station and Disinfection Facility

Final Design- Original Scope of Work

SCV Water approved purchase order on February 2, 2021 for Cannon to perform final engineering design services for the following improvements:

1. One - 2.08 million-gallon Deane zone welded steel tank, piping, site work and appurtenances.
2. Deane zone pump station with three 75 HP pumps (two duty and one stand-by), piping, site work and appurtenances.
3. Disinfection building with chloramine feed system.
4. Site/design will include provisions to add second 2.08 MG tank (future CIP project).



Deane Zone Tank, Pump Station and Disinfection Facility Final Design Change Order No. 1 Prestressed Concrete Tank

Scope of Change Order No. 1

- Design prestressed concrete tank, including piping, site work and appurtenances. - Includes 60%, 90% and final design submittals

Benefits to SCV Water

- Lower life cycle costs since coating is not required
- Avoids risk associated with blasting and coating steel tank in neighborhood
- Lower initial costs in today's volatile steel market for 2 MG tank
- Structural integrity to meet seismic codes without the need for excessive freeboard or special rafters
- Allows for use of local concrete suppliers and faster construction time



Deane Zone Tank, Disinfection Facility and Pump Station Project Design Budget

Facility	Final Design Fee (Cannon)	SCV Water %	SCV Water Amount	Developer %	Developer Amount
Deane Tank	\$117,679	58.2%	\$68,489	41.8%	\$49,190
Disinfection	\$ 74,220	0%	\$0	100%	\$74,220
Deane Pump Station	\$192,158	60.3%	\$115,871	39.7%	\$76,287
Total - Original Design	\$384,057		\$184,360		\$199,697
Change Order 1 (Conc Tank)	\$ 80,549	58.2%	\$46,880	41.8%	\$33,669
TOTAL	\$464,606		\$231,240		\$233,366

(1) Estimated Construction Budget for Concrete Tank: \$3.5 Million

(2) FY 2021/22 CIP Budget for Design is \$250,000



Deane Zone Tank, Pump Station and Disinfection Facility Anticipated Project Schedule

- Complete final design ~ July/August 2022
- Bidding by Developer under Master Agreement - August/September 2022
- Board approval for Construction Award (Fair Share Costs) ~ October 2022
- Construction by developer under Master Agreement ~ September 2023



Deane Zone Tank, Pump Station and Disinfection Facility Recommendation

The Engineering & Operations Committee recommends that the Board of Directors:

- Authorize the General Manager to issue a purchase order with Cannon for an amount not to exceed \$46,880 for SCV Water's portion of the final design Change Order No. 1 for design of prestressed concrete tank at Skyline Ranch.

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BOARD MEMORANDUM

DATE: May 31, 2022
TO: Board of Directors
FROM: Rochelle Patterson *RP*
Director of Finance and Administration
SUBJECT: Approve a Resolution Adopting the Appropriation of All As-Yet Unappropriated Funds for FY 2021/22

SUMMARY AND DISCUSSION

Pursuant to Article XIII-B of the California Constitution, the Agency must appropriate all as-yet unappropriated funds each year prior to June 30. This is a legal formality to ensure that no funds of the Agency are unappropriated and thereby subject to forfeiture.

On May 16, 2022, the Finance and Administration Committee considered staff's recommendation to approve a resolution adopting the appropriation of all as-yet unappropriated funds for FY 2021/22.

FINANCIAL CONSIDERATIONS

None.

RECOMMENDATION

The Finance and Administration Committee recommends that the Board of Directors adopt the attached resolution appropriating all as-yet unappropriated funds for FY 2021/22.

RP/ed

Attachment

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RESOLUTION NO. ____

**RESOLUTION OF THE
SANTA CLARITA VALLEY WATER AGENCY BOARD OF DIRECTORS
ADOPTING THE APPROPRIATION OF ALL AS-YET UNAPPROPRIATED FUNDS
FOR FISCAL YEAR 2021/22**

WHEREAS, it is in the best interest of all Agency citizens that the Agency amend its Fiscal Year 2021/22 Budget by appropriating pursuant to Article XIII-B of the California Constitution all as-yet unappropriated funds.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Santa Clarita Valley Water Agency hereby amends its Fiscal Year 2021/22 Budget by appropriating all as-yet unappropriated funds received through June 30, 2022 to the General Fund/Operating Fund of the Agency.

DRAFT

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BOARD MEMORANDUM

DATE: May 31, 2022
TO: Board of Directors
FROM: Rochelle Patterson *RP*
Director of Finance and Administration
SUBJECT: Approve a Resolution Adopting the Appropriation Limit for FY 2022/23

SUMMARY AND DISCUSSION

Article XIII B of the California Constitution, commonly referred to as the Gann Appropriations Limit, adopted by California voters in 1980, placed limits on the amount of tax proceeds that state and local agencies can appropriate and spend each year. The Agency is required to calculate the limit for each upcoming fiscal year, which the governing body must adopt by resolution. The amount of the limit is based on the amount of tax proceeds authorized to be spent in Fiscal Year 1978/1979, modified for changes in per capita income and population. The appropriations limit applies to taxes which are not specifically approved by voters. Therefore, the appropriations limit includes the Agency's One-Percent tax revenues but does not include its State Water Project tax revenues.

The limit for each year is equal to the limit for the prior year, adjusted for changes (adjustment factor) in the cost-of-living and population, and various other adjustments. This information is published by the California Department of Finance annually in May.

The appropriation limit for FY 2022/23 is \$51,330,990. Based upon estimated Fiscal Year 2022/23 general tax receipts of \$30,244,543, the Agency is under the limit by \$21,086,447 and is able to appropriate 100% of its general taxes. Attached is a copy of the resolution and summary calculation sheet for the Santa Clarita Valley Water Agency's appropriation limit for FY 2022/23.

On May 16, 2022, the Finance and Administration Committee considered staff's recommendation to approve a resolution adopting the appropriation limit for FY 2022/23.

FINANCIAL CONSIDERATIONS

None.

RECOMMENDATION

The Finance and Administration Committee recommends that the Board of Directors approve a resolution adopting the appropriation limit for FY 2022/23.

RP/ed

Attachments

M65

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RESOLUTION NO. ____

**RESOLUTION OF THE
BOARD OF DIRECTORS OF THE SANTA CLARITA VALLEY WATER AGENCY
ADOPTING THE APPROPRIATION LIMIT
FOR FY 2022/23**

WHEREAS, the Agency's General Manager has caused to be prepared a calculation of the Agency's annual appropriation limit for the Agency FY 2022/23; and

WHEREAS, documentation used in the determination of said appropriation limit has been publicly available at the Agency's offices for the period required by law; and

WHEREAS, Proposition 111 has determined that the appropriation limit may be set by using either the change in California per capita income or the change in assessed value of non-residential development; and

WHEREAS, it has been determined that the change in California per capita income is the appropriation selection of the Agency; and

WHEREAS, the calculation is hereby found to have been completed in full accordance with Article XIII-B of the California State Constitution and the implementing legislation for Article XIII-B.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Santa Clarita Valley Water Agency does hereby, based upon said calculation, adopt the sum of \$51,330,900 as its FY 2022/23 appropriation limit.

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**Santa Clarita Valley Water Agency
 GANN Appropriations Limit
 Fiscal Year 2022/23 Calculation**

	<u>Ratio</u>	<u>Amount</u>
Fiscal Year 2021/22 GANN Limit		\$ 47,923,934
2022 to 2023 Change in California Per Capita Income ¹	1.075500	
2022 to 2023 Change in Population ¹	0.995902	
Calculation Factor (1.075500 x .995902)	1.071093	
Fiscal Year 2022/23 GANN Limit (\$47,923,934 x 1.0710939)		\$ 51,330,990
Estimated Proceeds from General Property Taxes ²		<u>30,244,543</u>
Amount under Limit		<u><u>\$ 21,086,447</u></u>

¹ Source: California Department of Finance Price Factor and Population Information May 2022

² Source: SCV Water FY 2022/23 Revised Budget

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BOARD MEMORANDUM

DATE: May 31, 2022

TO: Board of Directors

FROM: Rochelle Patterson *RP*
 Director of Finance and Administration

SUBJECT: Approve Receiving and Filing of FY 2021/22 Third Quarter Financial Report (January – March 2022)

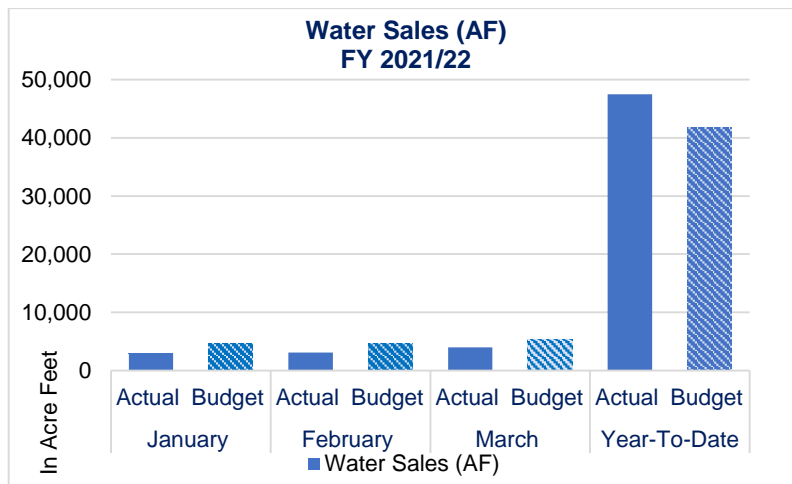
Below is the FY 2021/22 Third Quarter Financial Summary (January – March 2022). This report reviews the financing activities for the quarter and compares the FY 2021/22 Budget to actual revenues and expenditures for the operating and capital budgets.

Quarterly Finance Highlights

- Approved a Professional Services Agreement with Emtec Consulting for managed services, which will allow for the continuation of services for enhancements within Oracle Cloud Fusion.
- Discussed a policy for Ratepayer Assistance with the Committee and Board. Further policy discussions are expected in the fourth quarter.
- Staff presented the FY 2021/22 projections and the revised FY 2022/23 Budget to the F&A Committee and Board.
- Staff continues working with its consultant on the enQuesta conversion and upgrade project (customer billing system). Completion is expected in May 2022.

Water Production and Sales

Total water produced for retail consumption from January – March 2022 was 12,399 acre-feet (AF). Comprised of 4,928 AF of groundwater and 7,472 AF of surface water. Total water sales were 9,973 AF (based on billing date), which is a decrease of 32% from the budgeted projection of 14,702 AF for the quarter. Year-to-date total water consumption was 47,476 AF as compared to the budget projection of 41,755 AF.

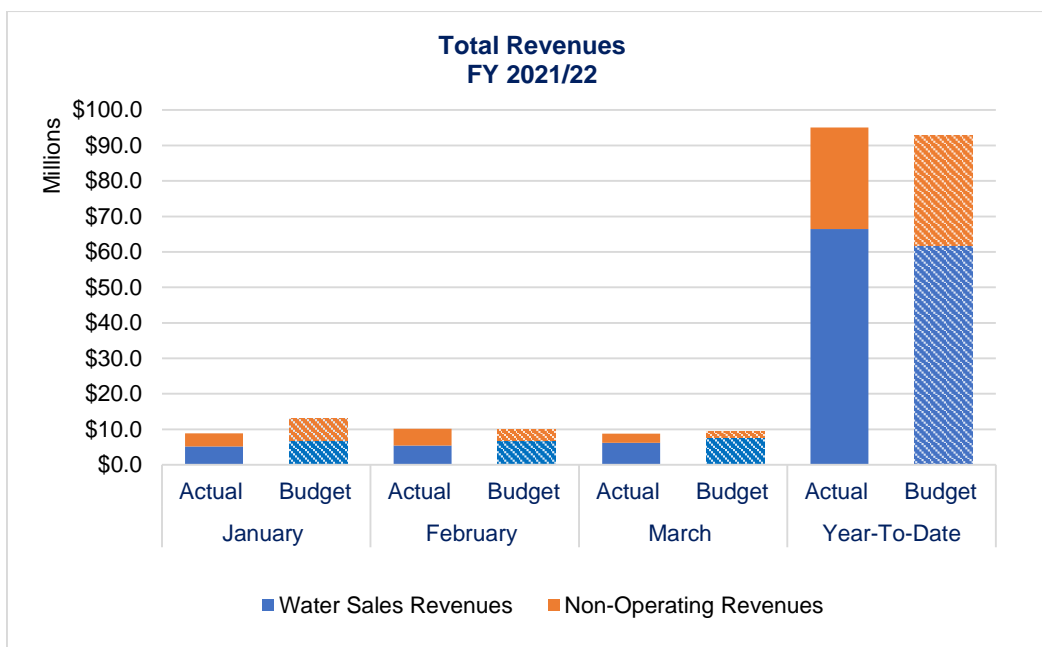


Revenues

Total water sales for the quarter were \$16.1 million, which was a reduction of 29% compared to the quarterly budget of \$21.7 million. Overall, the year-to-date revenue of \$66.4 million, is an increase of 8% from the \$61.7 million budget projection. Certain revenues and expenses are budgeted based on seasonal, trend or expectation. Water sales revenues and chemicals were budgeted based on seasonal demand and production history, whereas purchased power are budgeted based on a 10-year trend. Typically, a higher percentage of revenues are received in the summer months, then in the winter months. Revenues, such as Property Taxes are budgeted in specific months based on expectation of when taxes are due. A majority of taxes are received in December and April.

Revenues

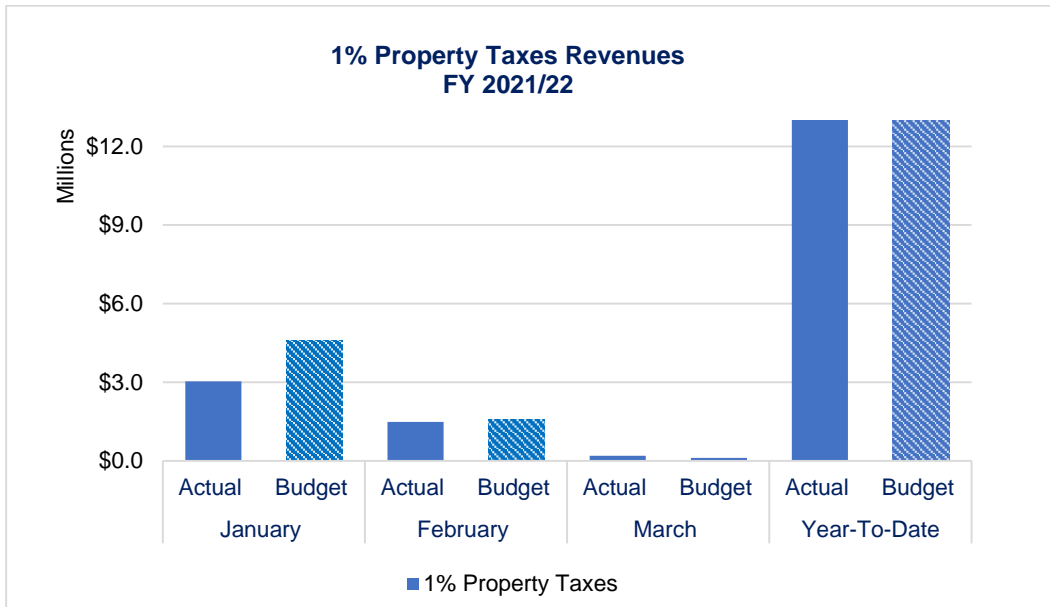
Overall, FY 2021/22 total revenues (operating and non-operating) of \$95,076,887 were 2% (\$2,243,273) over the budget of \$92,883,614.



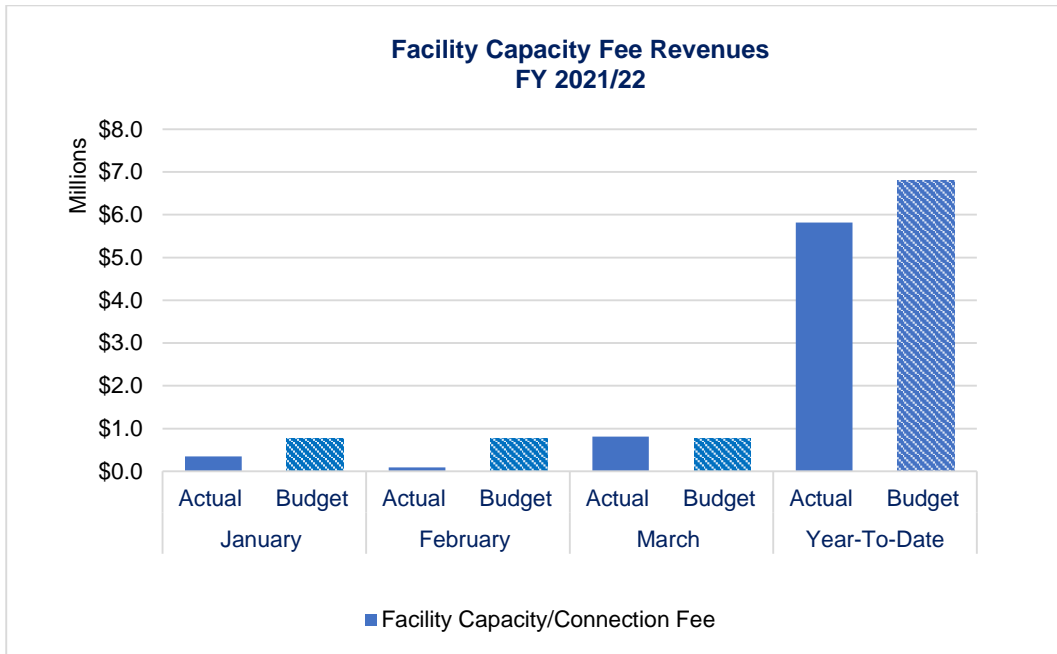
Significant year-to-date changes from the budget are as follows:

- Water sales are over budget by 8% which consists of the following:
 - Residential water sales over budget by 17% (\$5,645,402)
 - Commercial water sales over budget by 31% (\$1,007,999)
 - Landscaping/Irrigation water sales was under budget by 7% (-\$944,196)
 - All Other water sales were under budget by 23% (-\$323,717)
 - Total number of billing connections added through March were 590, out of the 1,019 projected for the year.

- Property tax (1%) received in the 3rd quarter was \$4,706,087 for a year-to-date total of \$16,377,341 of \$17,291,640 budget.



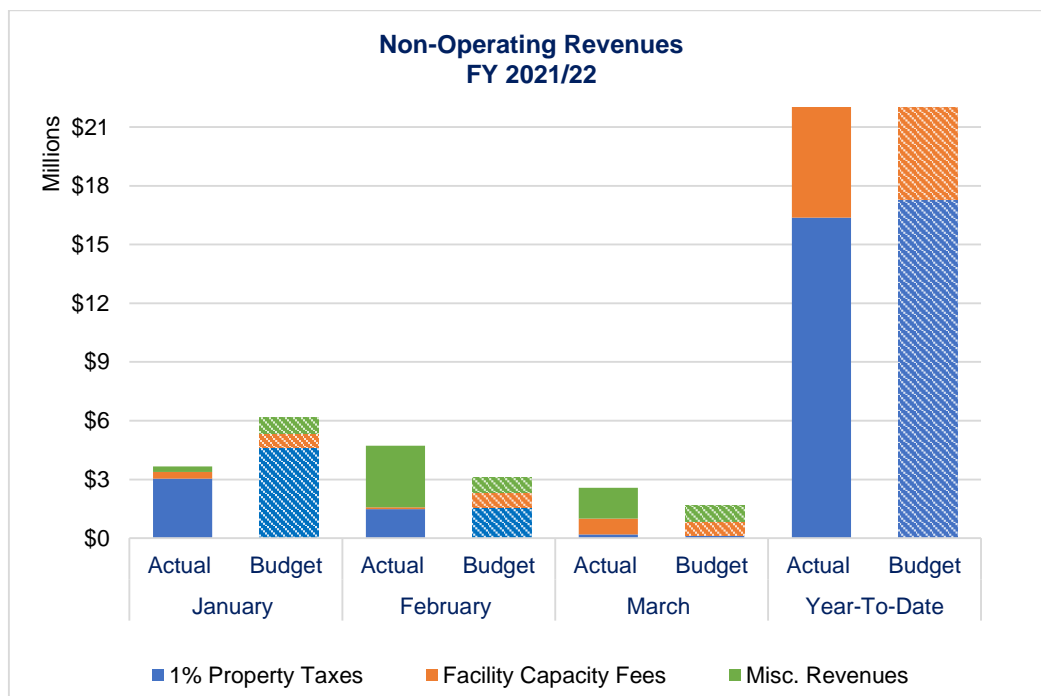
- Facility/Retail Capacity Fees received in the 3rd quarter were \$1.26 million for a year-to-date total of \$5,817,305. Regional Facility Capacity Fees collected were \$5,796,775 and \$20,530 in Retail Capacity Fees out of a budget of \$6,803,325.



Fees Received

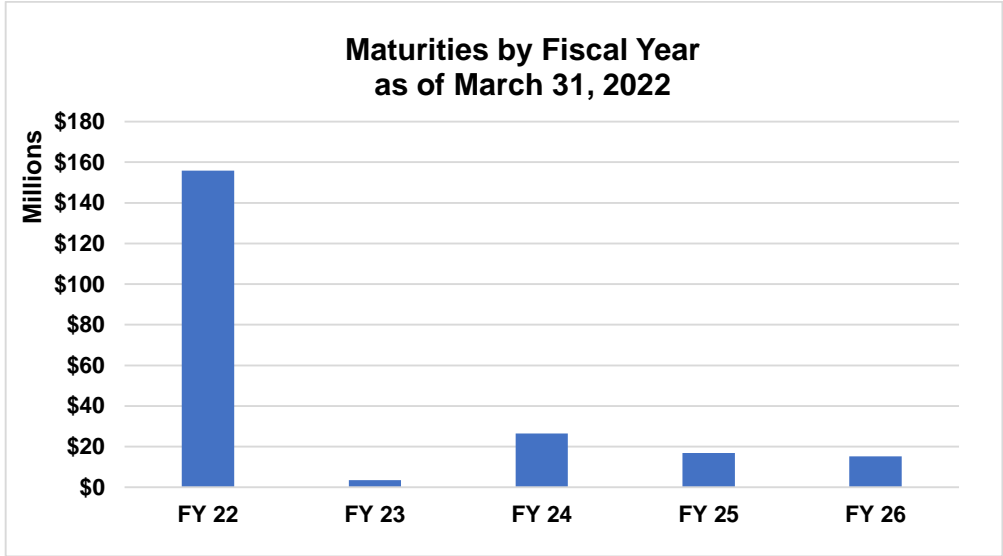
Developers	3rd Quarter		Year to Date	
	Total	# Connections	Total	# Connections
Lennar Homes	\$ -	0	\$ 2,553,600	300
KB Homes	\$ 549,743	63	\$ 1,290,287	150
Tri Pointe Homes	\$ 641,168	71	\$ 1,296,765	140
Newhall Land and Farming	\$ -	0	\$ 151,512	7
Toll Brothers, Inc	\$ -	0	\$ 169,527	33
Richmond American Homes	\$ 40,856	8	\$ 139,592	25
Other	\$ 26,443	3	\$ 195,492	10
Total	\$ 1,258,210	145	\$ 5,796,775	665

Other Miscellaneous revenues (grants, reimbursements, cell leases/rental income and investment revenues) received in the quarter were \$5,011,336 with a year-to-date total of \$6,466,121, approximately 92% of the budget of \$7,051,079.



Investment Maturities by Fiscal Year

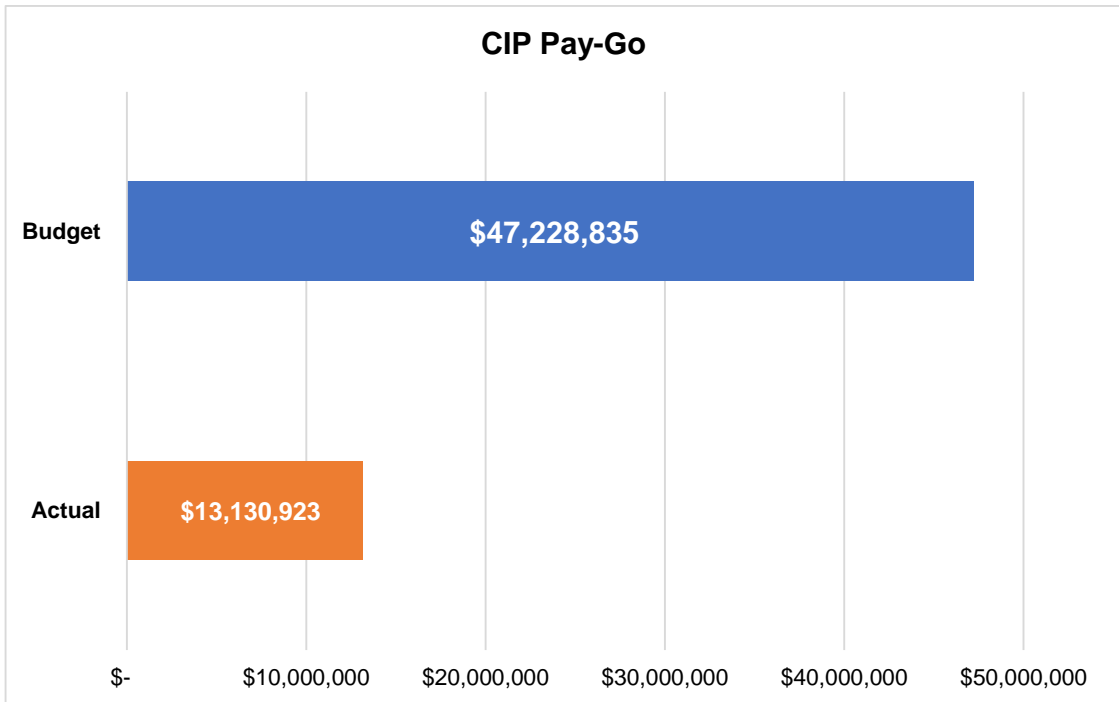
As of March 31, 2022, the Agency has \$218,102,049 in short and long-term investments. A significant amount (\$155.9 million) of the Agency's investments is held in liquid accounts, such as the Local Agency Investment Fund (LAIF), LA County Pooled Investment Funds (LACPIF), US Bank, and Wells Fargo Government Money Market Fund. Long-term investments (\$62.9 million) are held in Federal Home Loan Bank (FHLB) bonds, Federal National Mortgage Association (FNMA or Fannie Mae) and Certificates of Deposit (CD). Over the past couple of years, the Agency has invested in long-term investments in an effort to maximize its returns. We will be looking to invest in additional short-term investments since they are now more favorable. The Agency's average annual yield is 1.74%.

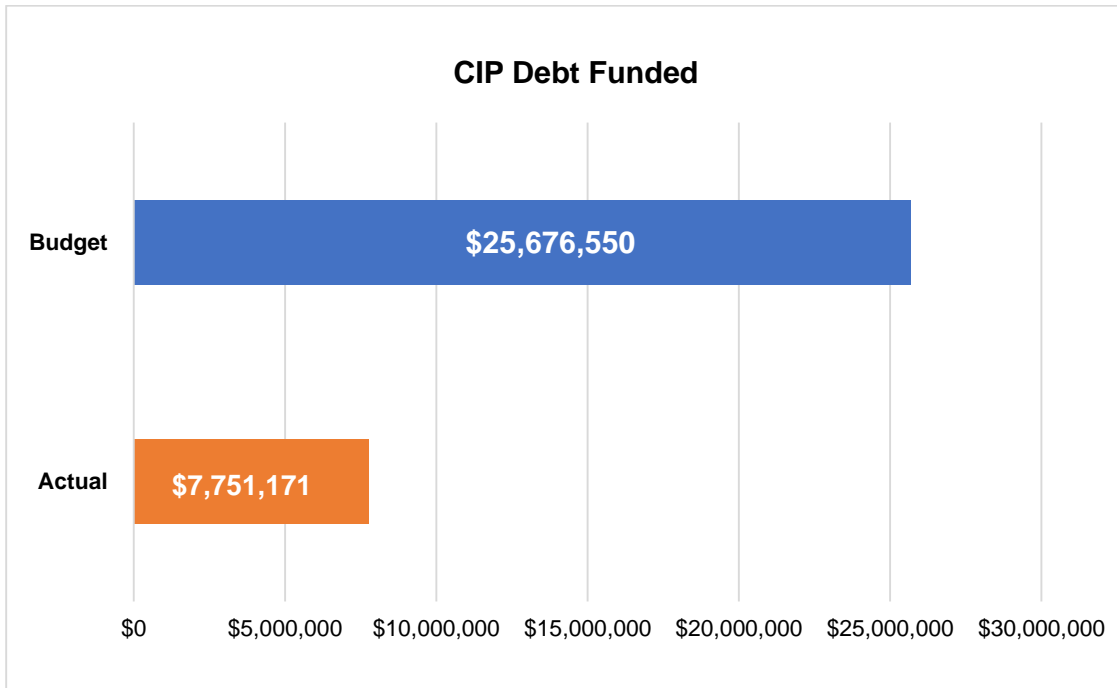


Capital Improvement Program (Pay-go and Debt-Funded Projects)

In general, expenditures for CIP projects depend on bid timing and contract awards, coordination with other agencies, coordination with other projects, staffing levels and other such factors.

- The FY 2021/22 Pay-go Budget for Capital Improvement Program (CIP) expenditures was \$47,228,835. Of that amount 28% or \$13,130,923 funds have been expended.
- The FY 2021/22 Debt Funded Budget for CIP expenditures was \$25,676,550. Of that amount 30.2% or \$7,751,171 funds have been expended.

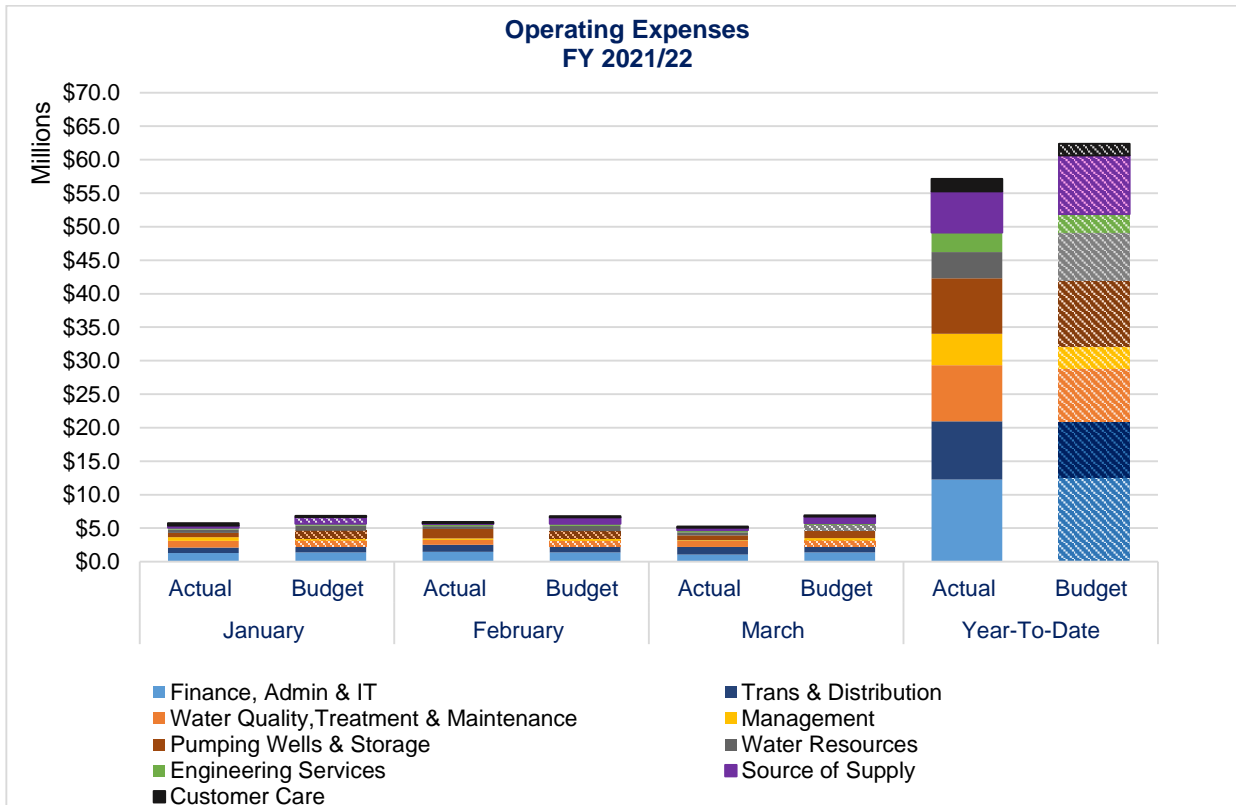




CIP project details are included at the end of this report.

Operating Expenditures

FY 2021/22 Operating Expenditures of \$57,142,117 were underbudget by 8% (\$5,236,619) of the \$62,378,736 budget.



Significant Activities

- Management – Over budget due to Perchlorate Litigation costs
- Source of Supply – Additional water purchases through banking programs not yet recognized. Core water supplies are paid in December and June, budgeted evenly.
- Water Resources – Conservation programs less than expected due to lower program participation.
- Pumping, Wells and Storage – Timing of PFAS resin changeouts and SCE invoices

Debt Service

In the 3rd quarter of FY 2021/22, interest payments were made on the Agency’s debt in the amount of \$3,204,651. The principal debt outstanding as of March 31, 2022, is \$280,289,218.

Capital Improvement Projects: Pay-Go Project List

Capital Pay-Go Projects		FY 2021/22 Budget	FY 2021/22 Actual	%	Committed Cost
1	Appurtenance Improvements - Agency-wide	\$ 410,000	\$ 70,967	17%	\$ 18,862
2	Booster Station/Turnout Improvements - Agency-wide	1,060,000	219,690	21%	61,634
3	Bridgeport Pocket Park	250,000	2,279	1%	-
4	BVRRB Storage and Recovery Program	2,797,506	1,397,992	50%	-
5	Capital Program/Facility Capacity Fees	50,000	26,968	54%	-
6	CIS Software Integration & Upgrade	1,350,000	405,443	30%	780,832
7	Deane Pump Station @ Sand Canyon Plaza*	1,232,200	627	0%	-
8	Deane Pump Station @ Skyline Ranch*	900,000	-	0%	-
9	Deane SC-6 Pump Station	175,000	-	0%	-
10	Deane SC-6 Soledad Pipeline	200,000	-	0%	-
11	Deane Tank Site (Existing) Improvements	50,000	-	0%	-
12	Deane Tanks - One 1.5 MG Tank @ Sand Canyon Plaza	1,175,000	-	0%	-
13	Deane Tanks (Two 2.5 MG Tanks) @ Skyline Ranch*	1,420,000	12,456	1%	-
14	Deane Zone Disinfection @ Skyline Ranch*	250,000	73,683	29%	2,526
15	Debt Financing and Administration	15,000	-	0%	-
16	Devil's Den Property Solar Project	100,000	16,843	17%	-
17	Disinfection Projects - Agency-wide	1,010,000	196,309	19%	65,289
18	Dickason Pipeline Replacement	20,000	3,848	19%	2,640
19	Equipment and Vehicle Replacements	1,375,000	79,121	6%	338,674
20	ERP Software (Finance & Accounting)	1,037,229	1,721,461	166%	83,251
21	ESFP Access Road Automatic Gate	75,000	-	0%	110,128
22	ESFP Repair & Replacement	385,000	33,761	9%	54,108
23	ESFP Standby Generator	1,025,000	904,745	88%	68,697
24	ESFP Two 5 MG Tanks Improvements	1,595,000	61,022	4%	20,768
25	ESIPS Repair & Replacement	100,000	63,798	64%	-
26	Friendly Valley Booster Station (Crossroads)	75,000	-	0%	-
27	Friendly Valley Pipeline @ Via Princessa (Crossroads)	100,000	-	0%	-
28	Friendly Valley Tank (3.25 MG) @ Crossroads	100,000	-	0%	-
29	Golden Valley Pipeline @ Via Princessa (Crossroads)	100,000	-	0%	-
30	Golden Valley Tank (1.6 MG) @ Crossroads	100,000	4,231	4%	-
31	GSP Implementation (monitoring,data base, reporting)	50,000	-	0%	-
32	Honby Pipeline Bottleneck	100,000	97,635	98%	47,966
33	Invasive Species Management	250,000	42,873	17%	15
34	Lab Equipment	50,000	3,054	6%	-
35	Market Street Pump Station (Wiley Canyon)	50,000	-	0%	-
36	Market Street/Shadeland/Maple Street Pipeline (Wiley Cyn)	75,000	-	0%	-
37	Meter Replacements - Agency-wide	2,075,000	500,026	24%	70,484
38	Miscellaneous Large Tools and Equipment	35,000	-	0%	-
39	Office Furniture - General	30,000	11,767	39%	-
40	Office Improvements - Various	270,000	60,769	23%	39,092
41	Office Reconfiguration - Summit Circle	15,000	7,716	51%	961
42	Pipeline Inspection Facility Modifications	300,000	127,999	43%	40,689
43	Pipeline Relocations/Modifications	213,900	93,084	44%	13,191
44	Pipeline Repair & Replacement	25,000	23,963	96%	-
45	Pipelines & Pipeline Replacements - Agency-wide	4,800,000	978,959	20%	122,184
46	Placerita Tanks (Two 1.6 MG Tanks)	75,000	-	0%	-

Capital Improvement Projects: Pay-Go Project List – continued

Capital Pay-Go Projects		FY 2021/22 Budget	FY 2021/22 Actual	%	Committed Cost
47	Recycled Water Program Phase II, 2B - Vista Cyn Customer Conv	240,000	-	0%	
48	Recycled Water Program Phase II, 2B - Vista Cyn Distribution	400,000	378,174	95%	
49	Recycled Water Program Phase II, 2C - South End Distribution	327,450		0%	
50	Recycled Water Program Phase II, 2D - West Ranch Customer Conv	607,500		0%	
51	Recycled Water System Repair & Replacement	550,000	300	0%	110,128
52	Resiliency Water Master Plan	1,210,000	302,647	25%	506,300
53	RVIPS Repair & Replacement	115,000	45,096	39%	96,553
54	RWWTP Repair & Replacement	579,450	75,649	13%	162,891
55	RWWTP Underground Storage Tank Replmt	526,000	-	0%	
56	Sand Canyon System Repair & Replacement	65,000	30,159	46%	17,303
57	Saugus 1 and 2 Wells Repair & Replacement	75,000	128,718	172%	31,146
58	Saugus 3 & 4 Replacement Wells	4,882,000		0%	
59	SC-12 Warmuth Pipeline	50,000		0%	
60	SCADA - Agency-wide	375,000	111,851	30%	50,132
61	SCWWA Integration	100,000		0%	
62	Security Equipment Upgrades	15,000		0%	
63	Stair/Ladder Safety Improvements	790,000	29,511	4%	75
64	System Hydraulic Model	100,000	88,424	88%	22,721
65	Tank 4 (1.5 MG Tank @Wiley Canyon)	75,000	40,580	54%	
66	Tanks & Tank Facility Improvements - Agency-wide	970,000	230,901	24%	336,406
67	Technology Improvements and Replacements	2,832,500	212,463	8%	127,159
68	Treatment Plant & Laboratory Improvements	770,000	2,602	0%	137,218
69	Update Water Conservation and Education Garden	1,210,000	75,369	6%	24,515
70	V-9 Improvements	158,000	970	1%	
71	Valencia Marketplace Pipeline Replacement	200,000	25,425	13%	47,297
72	Vista Cyn Bridge Piping at Soledad/Lost Canyon	300,000	-	0%	
73	Video Surveillance Equipment	10,000	-	0%	
74	Well 205 (Perchlorate)	510,000	-	0%	
75	Well Q2 (Perchlorate)	300,000	2,862	1%	
76	Wells & Well Facility Improvements	1,170,000	774,716	66%	35,605
77	WR-Summit Circle - Repair & Replacement	24,000		0%	-
78	Yuba Accord Water	455,000	712,848	157%	-
79	Additional Wells (T7, U4, U6) (includes S1&S2 Wells VOC Treatment	-	27,648	0%	403,273
80	E Wells (E-14, E-15, E-16, E-17)	-	12,631	0%	460
81	Dockweiler-Sierra Hwy Pipeline*	175,000	-	0%	
82	Newhall Tanks 1 and 1A - Tank Upgrades	50,000	-	0%	
83	Pitchess Pipeline Modifications Project	12,100	1,463	12%	
84	S Wells (S6, S7 and S8)	-	27,805	0%	46,408
85	Santa Clara and Honby Wells	-	274,464	0%	209,097
86	Sierra Hwy Bridge Expansion Water Pipelines Protection	54,000	4,139	8%	-
87	Valley Center Well	-	2,270,417	0%	51,285
Total CIP - Pay Go Projects		\$ 47,228,835	\$ 13,130,923	28%	\$ 4,357,961

Capital Improvement Projects: Debt Funded Project List

Debt Funded Capital Projects		FY 2021/22 Budget	FY 2021/22 Actual	%	Committed Cost
1	Castaic Conduit	\$ 180,000	\$ 9,861	5%	\$ -
2	ESFP Sludge Collection System	5,666,000	125,528	2%	14,698
3	Honby Parallel	135,000	10,799	8%	-
4	New Water Banking Program	100,000	-	0%	-
5	LARC Pipeline*	825,000	60,700	7%	-
6	Magic Mountain Pipeline No. 4	420,000	220,409	52%	63,910
7	Magic Mountain Pipeline No. 5	552,000	233,919	42%	-
8	Magic Mountain Pipeline No. 6	8,900,000	4,655,123	52%	44,346
9	Magic Mountain Reservoir	977,000	72,625	7%	24,403
10	Mitchell 5A Replacement	300,000	-	0%	-
11	Recycled Water Fill Station	78,000	63,052	81%	4,763
12	Recycled Water Program Phase II, 2A - Central Park	1,000	-	0%	-
13	Recycled Water Program Phase II, 2B - Vista Canyon Backbone	5,250,000	2,157,245	41%	289,232
14	Recycled Water Program Phase II, 2C - South End Backbone	857,550	90,939	11%	439,720
15	Recycled Water Program Phase II, 2D	-	40,796	0%	-
16	Sites Reservoir	750,000	-	0%	-
17	As-Needed Regulatory Support for Non-Potable Recycled Water Permitting	65,000	-	0%	24,500
18	Saugus Dry Year Reliability Wells 5 & 6	220,000	7,550	3%	-
19	Well 201 VOC Groundwater Treatment Improvements	400,000	2,625	0%	296,900
Total Debt Funded Capital Projects		\$ 25,676,550	\$7,751,171	30.2%	\$ 1,202,473

On May 16, 2022, the Finance and Administration Committee considered staff's recommendation to receive and file the FY 2021/22 third quarter financial report.

FINANCIAL CONSIDERATIONS

None.

RECOMMENDATION

The Finance and Administration Committee recommends that the Board of Directors receive and file the FY 2021/22 Third Quarter Financial Report.

M65

ITEM NO.
6.7



Monthly Financial Report

MARCH 2022

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Statement of Revenues and Expenses

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SCV Water
Statement of Revenues and Expenses
For the 9th Period Ending 3.31.22

	(A) Actual	(B) Current Period		(C) Variance	(D) Percent	(E) Year-to-Date			(H) Percent	
		Budget	(F) Budget			(G) Variance				
(1)	\$ 6,079,996	\$ 7,684,218	\$ (1,604,222)	(21%)	\$ 65,942,166	\$ 60,619,942	\$ 5,322,224	9%		
(2)	3,544	5,699	(2,155)	(38%)	57,746	51,294	6,452	13%		
(3)	13,796	34,037	(20,241)	(59%)	299,671	306,334	(6,663)	(2%)		
(4)	90,899	90,000	899	1%	116,536	710,000	(593,464)	(84%)		
(5)	\$ 6,188,235	\$ 7,813,954	\$ (1,625,720)	(21%)	\$ 66,416,120	\$ 61,687,570	\$ 4,728,550	8%		
Operating Revenues										
(6)	\$ 98,365	\$ 353,695	\$ (255,330)	(72%)	\$ 4,662,820	\$ 3,211,095	\$ 1,451,725	45%		
(7)	1,060,417	1,363,657	(303,240)	(22%)	12,261,994	12,489,845	(227,851)	(2%)		
(8)	200,677	186,257	14,421	8%	1,847,945	1,732,570	115,375	7%		
(9)	1,142,584	913,471	229,113	25%	8,705,995	8,417,793	288,202	3%		
(10)	719,909	1,171,898	(451,989)	(39%)	8,283,113	9,924,142	(1,641,029)	(17%)		
(11)	487,573	782,490	(294,917)	(38%)	3,915,026	7,165,751	(3,250,725)	(45%)		
(12)	357,462	975,718	(618,256)	(63%)	6,180,272	8,758,464	(2,578,192)	(29%)		
(13)	882,929	876,854	6,075	1%	8,367,032	7,973,522	393,510	5%		
(14)	297,551	291,681	5,870	2%	2,917,919	2,705,553	212,367	8%		
(15)	\$ 5,247,468	\$ 6,915,720	\$ (1,668,252)	(24%)	\$ 57,142,117	\$ 62,378,736	\$ (5,236,619)	(8%)		
(16)	\$ 940,767	\$ 898,234	\$ 42,533	5%	\$ 9,274,003	\$ (691,166)	\$ 9,965,169	(1442%)		
Non-Operating Revenues and (Expenses)										
(17)	\$ 2,573,146	\$ 1,651,117	\$ 922,028	56%	\$ 28,660,766	\$ 31,146,044	\$ (2,485,278)	(8%)		
(18)	(4,660,305)	(3,935,736)	(724,568)	18%	(13,130,923)	(35,421,626)	22,290,704	(63%)		
(19)	-	-	-	0%	(32,912,555)	(32,960,792)	48,237	(0%)		
(20)	\$ (2,087,159)	\$ (2,284,619)	\$ 197,460	(9%)	\$ (17,382,711)	\$ (37,236,374)	\$ 19,853,663	(53%)		
(21)	\$ (1,146,392)	\$ (1,386,385)	\$ 239,993	(17%)	\$ (8,108,708)	\$ (37,927,540)	\$ 29,818,832	(79%)		

Monthly Changes of more than 10% and \$20,000

(a) Budget projection based on a seasonal trend. For March, there was a budget of 9% and received 7%. Historical trend of water sales will be used in FY 2023.

(b) Timing of Perchlorate Litigation expenses

(c) Cost of fuel and City/County Overlay Projects (raising valves after asphalt replacement)

(d) Timing of Purchase Power invoices from SCE. Overall, YTD SCE billings are over budget by 11% across several departments due to the solar generation outage earlier in the year.

(e) BMP Implementation is under budget due to lower conservation program participation

(f) Core Water Supplies - budgeted evenly, paid in December and June

(g) Non-Operating Revenues are higher due to Annexation Reimbursement received in March. YTD Grants and Reimbursements are less than expected due to timing of associated project completions.

¹ Non-Operating Revenues include: Grants & Reimbursements, 1% Property Tax, Cell Sites, FCF, Lab Revenues, Interest Income

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Debt & Cash Position

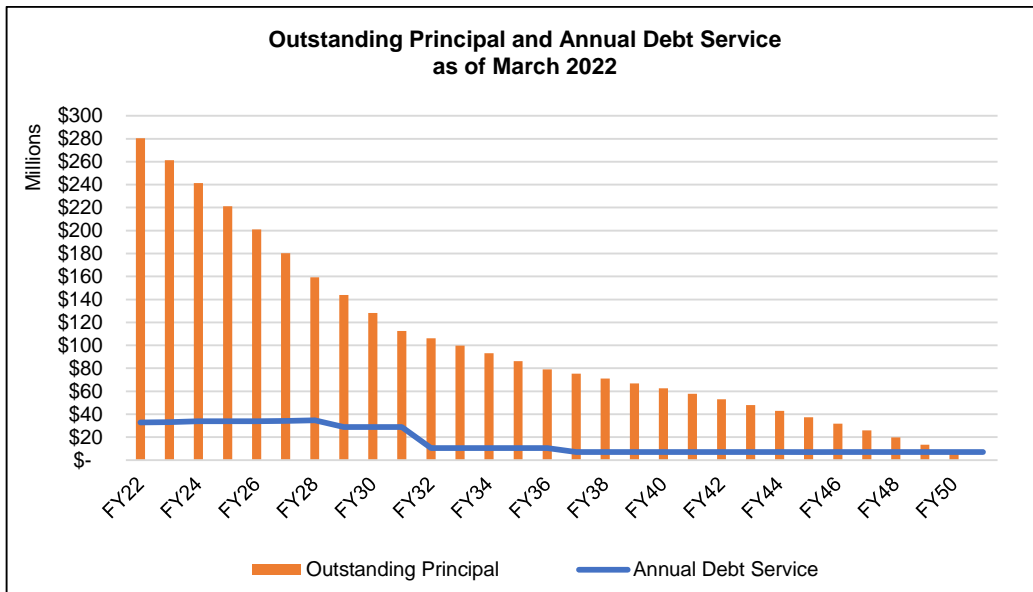
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This report reviews the Agency’s outstanding principal and debt service on an annual basis, cash balances of unrestricted, restricted, and reserve funds as of March 31, 2022, and the total current and non-current assets as of June 30, 2021.

DEBT SERVICE

The outstanding principal debt as of March 31, 2022, is \$280,289,218* with an annual debt service of \$32,917,555. The debt payments are due in August and February of each fiscal year.

The outstanding principal and annual debt service payments shown in the graph below consists of the current outstanding debt and associated payments. It does not include potential future debt which may be approved and issued to partially fund construction projects.

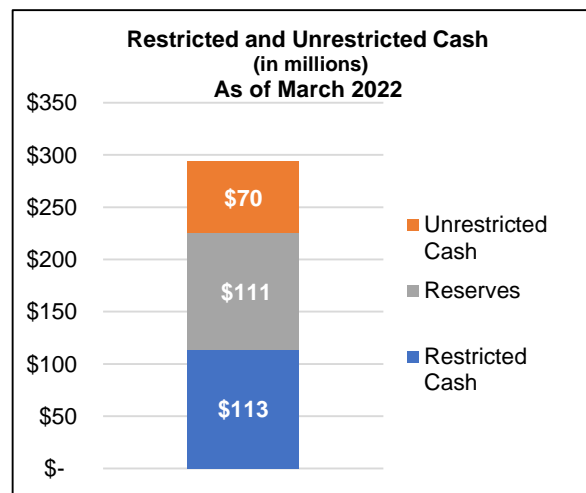


*The outstanding principal of VWD Acquisition Interfund Loan of \$63,411,661 is excluded from the outstanding principal balance.

CASH POSITION

As of March 31, 2022, the Agency has:

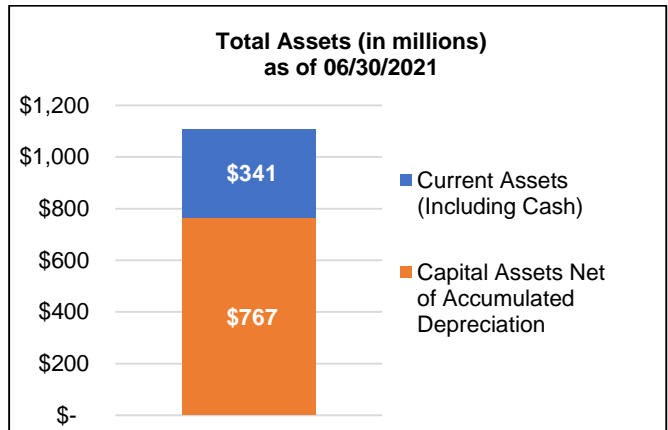
- Fully funded reserve balance of \$111,125,886 as per the agency policy, and
- Restricted cash of \$113,364,424 which includes the Facility/Retail Capacity Fee Funds, State Water Project Fund, and remaining Bond Proceeds, and
- Unrestricted cash of \$69,542,780 to meet the Agency’s payment obligations such as operating expenses (including debt service), payroll expenses, insurance, CIP Pay-Go, etc.



TOTAL ASSETS

As of June 30, 2021 (audited), the total assets consist of:

- Current Assets including cash with a balance of \$341,153,720, and
- Capital Assets Net of Accumulated Depreciation with a balance of \$766,983,482.



Ten Largest Disbursements Check Register

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SCV Water
Ten Largest Disbursements
March 1, 2022 to March 31, 2022

No.	Date	Paymt #	Supplier_Name	Invoice_Description	Method	Payment_Amount
1	03-09-2022	51849	NFP Property & Casualty Services, Inc.	Insurance Renewal 1/22/22-1/22/23	CHECK	399,023.88
	NFP Property & Casualty Services, Inc.					
2	03-09-2022	51890	Department of Water Resources	DWR Monthly Variable - JAN2022 Contract 160213	CHECK	335,098.00
	Department of Water Resources					
3	03-09-2022	51850	GSE Construction Company Inc.	Valley Center Well PFAS Groundwater Treatment Improvements Progress Payment through 1/31/22	CHECK	228,475.00
	GSE Construction Company Inc.					
4	03-02-2022	51808	Rosedale-Rio Bravo Water Storage District	2nd Priority Power and O&M Charges NOV 2021	CHECK	74,104.43
				Power and O&M Charges OCT (adjustment) and NOV 2021	CHECK	118,926.86
	Rosedale-Rio Bravo Water Storage District					
5	03-31-2022	11773	So. California Edison Co.	Acct-4924 Statement 3/17/22	AUTO_DEBIT	184,036.66
	So. California Edison Co.					
6	03-30-2022	11608	Newhall Land and Farming Co.	MMP5 Expenditures November 2021	SCV_ACH	3,146.57
				Magic Mountain Pipeline Phase 6B, Progress Payment through 11/30/21	SCV_ACH	97,850.00
				MMP4 Expenditures November 2021	SCV_ACH	3,290.53
				Magic Mountain Pipeline Phase 5, Progress Payment through 11/30/21	SCV_ACH	74,731.09
				Newhall Land and Farming Co.		
7	03-23-2022	11553	Emtec Consulting Services, LLC	Milestone 27B - Monthly Reporting, Forecasting, Staff Planning	SCV_ACH	38,043.00
				Clear Care November 2021	SCV_ACH	16,800.00
				MP #38 Post Go Live Support	SCV_ACH	76,085.10
				Ticket 412 Data Dump	SCV_ACH	10,774.80
				Ticket 411 BIP report for on hand quantity	SCV_ACH	7,214.40
				Emtec Consulting Services, LLC		
8	03-02-2022	11387	Emtec Consulting Services, LLC	Milestone #8 - D7,D6,D12,D10	SCV_ACH	63,405.00
				Retention Release 3/1/22	SCV_ACH	21,499.00
				Retention Release	SCV_ACH	54,000.00
				Week 21 Data Conversion Progress	SCV_ACH	7,699.00
				Data Production Conversion	SCV_ACH	5,132.00
				Conversion Credit CO11	SCV_ACH	-6,816.00
Emtec Consulting Services, LLC						144,919.00
	03-23-2022	11557	Rick Franklin Construction, Inc.	Asphalt Repair @ Westford Place	SCV_ACH	10,526.00
				Asphalt Repairs @ Marsala, Flower park, Golden Valley Drive	SCV_ACH	8,250.00
				Asphalt Repair @ Stillmore Street	SCV_ACH	11,493.00
				Asphalt Repairs @ Dickenson & Smyth	SCV_ACH	4,911.00
				Asphalt Repairs @ Pamplico Drive	SCV_ACH	11,513.00
				Asphalt Repairs @ Canones, Lagosta, Deodar Place	SCV_ACH	10,048.00

SCV Water
 Ten Largest Disbursements
 March 1, 2022 to March 31, 2022

No.	Date	Paymt #	Supplier_Name	Invoice_Description	Method	Payment_Amount
9				Asphalt Repair @ Placerita Canyon & Desert Ave	SCV_ACH	2,200.00
				25808 Mendoza Asphalt Repair Moratorium	SCV_ACH	27,752.00
				Asphalt Repairs-19923 Avenue of the Oaks 3 patches at Scenic Hills	SCV_ACH	3,113.00
				Asphalt Repairs-Various locations	SCV_ACH	10,690.00
				Asphalt Repairs -Various locations	SCV_ACH	8,737.00
				Asphalt Repairs- Various locations	SCV_ACH	8,888.00
				Asphalt Repairs @ Violin Canyon Road & Oxford Lane	SCV_ACH	8,632.00
				Asphalt Repairs @ Chucker Court	SCV_ACH	7,394.00
				Asphalt Repairs @ Shadyview, Friendly Valley, W. Hills, Falling Stare	SCV_ACH	8,614.00
				Rick Franklin Construction, Inc.		142,761.00
10	03-23-2022	11563	X-Act Technology Solutions, Inc.	Azure Cloud Backup Agreement February 2022	SCV_ACH	4,075.00
				Agreement Managed IT Support Services	SCV_ACH	16,434.00
				Agreement Managed IT Support Services	SCV_ACH	16,434.00
				Managed Security Services Agreement March 2022	SCV_ACH	11,200.00
				Managed Security Services Agreement February 2022	SCV_ACH	11,200.00
				Azure Agreement Usage February 2022	SCV_ACH	19,877.83
				Office 365 Agreement March 2022	SCV_ACH	10,305.25
				Managed Security Agreement January 2022	SCV_ACH	11,200.00
				Office 365 Agreement February 2022	SCV_ACH	10,478.03
				Azure Cloud Backup Agreement March 2022	SCV_ACH	4,075.00
				Azure Usage Agreement March 2022	SCV_ACH	15,268.79
			X-Act Technology Solutions, Inc.		130,547.90	

Total 2,085,828.22

Total-All Disbursements Issued During March 2022 6,174,155.55

Largest Ten Vendor Payments as Compared to Total 34%

Director Stipends

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DIRECTORS STIPENDS PAID IN APRIL 2022
For the Month of March 2022

Director Kathy Armitage

Date	Meeting	Amount
03/01/22	Regular Board Meeting	\$239.00
03/03/22	Executive Committee Meeting of the Special Districts of North LA County	\$239.00
03/15/22	Regular Board Meeting	\$239.00
03/17/22	Public Outreach and Legislation Committee Meeting	\$239.00
	Meeting between staff member of Congressman Garcia and Special Districts of North LA County	\$239.00
03/23/22	Executive Committee Meeting of the Special Districts of North LA County	\$0.00
03/24/22	Special Public Outreach and Legislation Committee Meeting	\$239.00
03/29/22	Special Board Meeting	\$239.00
03/31/22	Special Districts Assoc. of North LA County Membership Meeting	\$239.00
	Stipend Total	\$1,912.00
	Total Paid Days	8
	Total Meetings	9

Director Beth Braunstein

Date	Meeting	Amount
03/01/22	Regular Board Meeting	\$239.00
03/15/22	Regular Board Meeting	\$239.00
03/21/22	Finance and Administration Committee Meeting	\$239.00
03/29/22	Special Board Meeting	\$239.00
	Stipend Total	\$956.00
	Total Paid Days	4
	Total Meetings	4

Director William Cooper

Date	Meeting	Amount
03/01/22	Regular Board Meeting	\$239.00
03/03/22	Engineering and Operations Committee Meeting	\$239.00
03/08/22	ACWA Finance Committee Meeting	\$239.00
03/09/22	Water Resources and Watershed Committee Meeting	\$239.00
03/15/22	Regular Board Meeting	\$239.00
03/24/22	Travel to Sacramento	\$239.00
03/25/22	ACWA Board Meeting	\$239.00
03/28/22	Agenda Planning Meeting	\$239.00
03/29/22	Special Board Meeting	\$239.00
03/30/22	Special SCV-GSA Board Meeting	\$239.00
	Stipend Total	\$2,390.00
	Total Paid Days	10
	Total Meetings	10

Director B. J. Atkins

Date	Meeting	Amount
03/01/22	Regular Board Meeting	\$239.00
03/09/22	Water Resources and Watershed Committee Meeting	\$239.00
03/15/22	Regular Board Meeting	\$239.00
03/17/22	Public Outreach and Legislation Committee Meeting	\$239.00
03/24/22	Special Public Outreach and Legislation Committee Meeting	\$239.00
03/29/22	Special Board Meeting	\$239.00
03/30/22	Special SCV-GSA Board Meeting	\$239.00
	Stipend Total	\$1,673.00
	Total Paid Days	7
	Total Meetings	7

Director Ed Colley

Date	Meeting	Amount
03/01/22	Regular Board Meeting	\$239.00
03/09/22	Water Resources and Watershed Committee Meeting	\$239.00
03/15/22	Regular Board Meeting	\$239.00
03/21/22	Finance and Administration Committee Meeting	\$239.00
03/29/22	Special Board Meeting	\$239.00
	Stipend Total	\$1,195.00
	Total Paid Days	5
	Total Meetings	5

Director Jeff Ford

Date	Meeting	Amount
03/01/22	Regular Board Meeting	\$239.00
03/03/22	Engineering and Operations Committee Meeting	\$239.00
03/09/22	Water Resources and Watershed Committee Meeting	\$239.00
03/15/22	Regular Board Meeting	\$239.00
03/29/22	Special Board Meeting	\$239.00
	Stipend Total	\$1,195.00
	Total Paid Days	5
	Total Meetings	5

Director Reimbursements

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CA Govt. Code Section 53065.5

List of Reimbursement for "Individual Charges" = \$100 or more

Annual Disclosure for Fiscal Year 21 AP Transactions Updated as of: 03/31/2022

DIRECTORS

P-Card (VISA) Transactions Updated as of: 3/31/22 *March PCard transactions affect April cash.

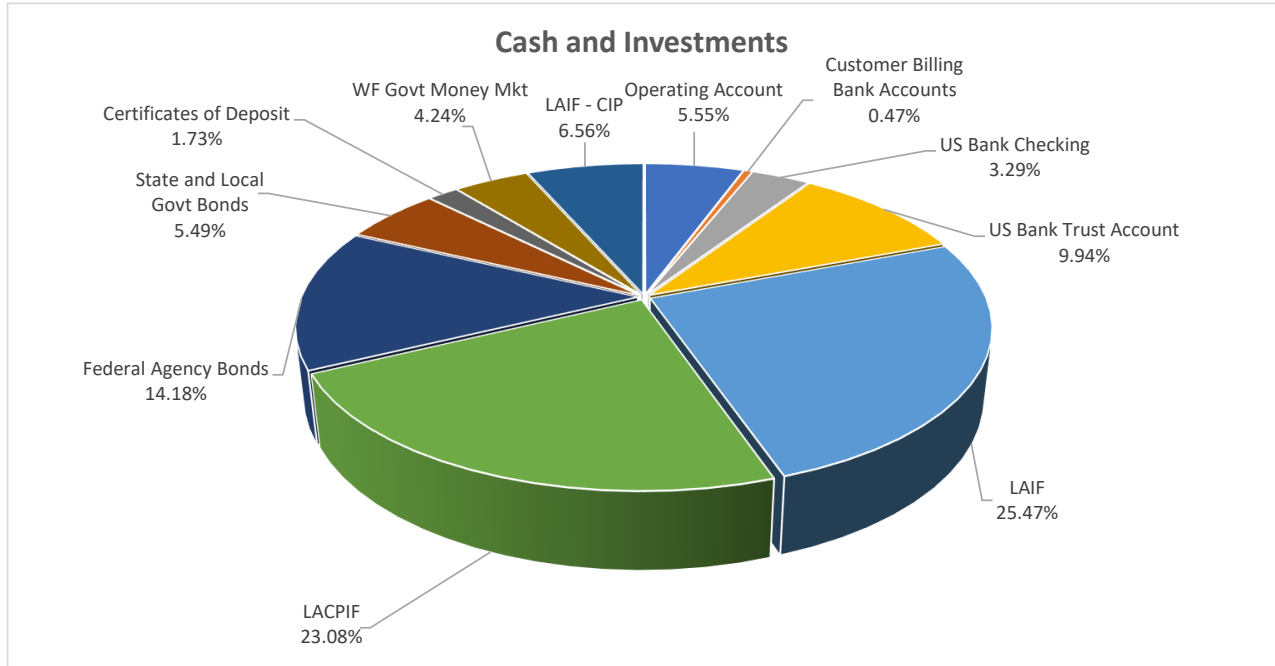
Date	Recipient of Reimbursement	Reason for Reimbursement	Amount
01/28/22	Cooper, William	P-CARD (VISA) - SCV Chamber of Commerce Awards and Installation - 3/18/22 - Registration	125.00
01/28/22	Martin, Gary	P-CARD (VISA) - SCV Chamber of Commerce Awards and Installation - 3/18/22 - Registration	125.00
01/28/22	Martin, Gary	P-CARD (VISA) - UWI 2022 Spring Conference - 2/16-2/18/22 - Registration	250.00
01/28/22	Martin, Gary	P-CARD (VISA) - UWI 2022 Spring Conference - 2/16-2/18/22 - Registration Credit	(275.00)
02/28/22	Armitage, Kathye	P-CARD (VISA) - 2022 Special District Leadership Academy SD - Registration - 04/03-04/06/22	600.00
02/28/22	Braunstein, Beth	P-CARD (VISA) - 2022 Special District Leadership Academy SD - Registration - 04/03-04/06/22	400.00
02/28/22	Braunstein, Beth	P-CARD (VISA) - ACWA 2022 Spring Conference 05/03-05/05/22 - Registration	775.00
02/28/22	Cooper, William	P-CARD (VISA) - ACWA 2022 Spring Conference - 05/03-05/05/22 - Registration	775.00
02/28/22	Kelly, R.J.	P-CARD (VISA) - ACWA 2022 Spring Conference - 05/03-05/05/22 - Registration	775.00
02/28/22	Kelly, R.J.	P-CARD (VISA) - SCV Chamber of Commerce Annual Awards & Installation - 03/18/22 - Registration	125.00
02/28/22	Martin, Gary	P-CARD (VISA) - UWI 2022 Spring Conference, Costa Mesa 2/16/22-2/18/22- Expense (Lodging)	(202.29)
02/28/22	Martin, Gary	P-CARD (VISA) - ACWA 2022 Spring Conference - 05/03/22-05/05 - Registration	775.00
02/28/22	Orzechowski, Piotr	P-CARD (VISA) - SCV Chamber of Commerce Annual Awards & Installation - 03/18/22 - Registration	125.00
			4,372.71

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Investment Report

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Santa Clarita Valley Water Agency
Cash and Investment Summary
3/31/22



Operating Account-Incl FCF's, SWP & CIP	XXX-10101	\$ 16,315,721	5.55%
Customer Billing Bank Accounts	101-10105	1,371,794	0.47%
US Bank Checking (1% Prop Tax)	101-10201	9,677,423	3.29%
US Bank Trust Account (1% Prop Tax)	101-10202	29,211,235	9.94%
LAIF - Operating	101-11061	74,878,017	25.47%
LAC Pooled Investment Fund	101-11062	67,842,208	23.08%
Federal Agency Bonds	101-11064	41,684,835	14.18%
State and Local Government Bonds	101-11065	16,148,995	5.49%
Certificates of Deposit	101-11066	5,073,760	1.73%
WF Government Money Mkt Fund	101-11067	12,474,234	4.24%
LAIF - CIP	220-11002	19,254,868	6.56%
		<u>\$ 293,933,090</u>	<u>100.00%</u>

Rochelle Patterson
Treasurer/Director of Finance & Administration

Amy Aguer
Controller

All investment actions executed since the last report have been made in full compliance with the Investment Policy, and the Agency will meet its expenditure obligations for the next six months as required by Government Code Section 53646(b)(2) and (3), respectively.

SCV Water
Consolidated Cash & Investment Summary
3/31/2022

	<u>Note</u>	<u>Acct #</u>	<u>Balance</u>	<u>Total</u>	<u>% of Total</u>
<u>AGENCY FUNDS</u>					
Cash & Sweep Accounts					
Operating Account-Incl FCF's, SWP & CIP		XXX-10101	\$ 16,315,721		
Less: Restricted Cash (FCFs, SWP & CIP)	1	2XX-10101	(7,629,494)		
Customer Billing - enQuesta Account		101-10105	576,401		
Customer Billing - Northstar Account		101-10107	795,393		
US Bank Checking (1% Prop Tax)		101-10201	9,677,423		
US Bank Trust Account (1% Prop Tax)		101/204-10202	29,211,235		
Less: Restricted Cash US Bank Accts -SWP	1	204-10201/10202	(25,542,993)		
Subtotal - Cash & Sweep Accounts Unrestricted				\$ 23,403,686	7.96%
Investments - Unrestricted					
Local Agency Investment Fund		101-11061	\$ 74,878,017		
LAC Pooled Investment Fund		101-11062	67,842,208		
Federal Agency Bonds		101-11064	41,684,835		
State and Local Government Bonds		101-11065	16,148,995		
Certificates of Deposit		101-11066	5,073,760		
WF Government Money Mkt Fund		101-11067	12,474,234		
Less: Restricted Investments - FCF	2	202-11002	(9,883,306)		
Less: Restricted Investments - SWP	3	204-11002	(50,953,763)		
Subtotal - Investments Unrestricted				\$ 157,264,980	53.50%
Cash and Investments - Restricted					
Facility Capacity Fee Fund - Cash	4	202-10101	\$ 4,359,053		
Facility Capacity Fee Fund - Investments	5	202-11002	9,883,306		
State Water Project - Cash (WF & US Bank)	6	204-10XXX	25,543,046		
State Water Project - Investments	7	204-11002	50,953,763		
Subtotal - Investments Restricted				90,739,168	30.87%
TOTAL AGENCY CASH & INVESTMENTS				<u>\$ 271,407,834</u>	
<u>CAPITAL IMPROVEMENT PROJECT FUNDS</u>					
Cash & Sweep Accounts	8	220-10101	\$ 3,270,388		
Local Agency Investment Fund - Restricted		220-11002	19,254,868		
TOTAL CAPITAL IMPROVEMENT PROJECT FUNDS				<u>\$ 22,525,256</u>	7.66%
TOTAL CASH AND INVESTMENTS				<u>\$ 293,933,090</u>	100.00%

Notes

- 1 Less: Restricted Cash - FCF's, SWP & CIP
- 2 Less: Restricted Investments - FCF's Legacy SCWD
- 3 Less: Restricted Investments - State Water Project
- 4 Restricted Cash - FCF's (Regional Legacy)
- 5 Restricted Investments - FCF's (SCWD Legacy)
- 6 Restricted Cash - SWP (State Water Project)
- 7 Restricted Investments - SWP (State Water Project)
- 8 Restricted Cash - CIP 2020A Bond Proceeds

3/31/22

Agency-wide General Funds Invested:

<u>Description</u>	<u>Cost</u>	<u>Rate</u>	<u>Yield</u>	<u>Purchase Date</u>	<u>Maturity Date</u>	<u>Life Days</u>	<u>Rem. Days</u>	<u>Average Interest</u>
State and Local Agency Investment Portfolio								
Wells Fargo records these at Par value								
San Bernardino Com College Dist Bonds	1,050,078.70	1.964%	1.964%	03/22/22	08/01/23	497	488	20,624
State of California GO Bonds	1,946,780	2.250%	2.862%	01/25/19	10/01/23	1710	549	43,803
Semitropic Improvement District	1,302,045	2.262%	2.262%	10/30/19	12/01/23	1493	610	29,452
State of California GO Bonds	3,098,130	3.000%	3.000%	05/28/19	04/01/24	1770	732	92,944
San Diego Successor Agency	1,147,938	3.000%	2.052%	10/23/19	09/01/24	1775	885	34,438
L.A. Cnty MET Transp BA Bonds	3,159,800.00	5.130%	5.130%	12/29/21	06/01/25	1,250	1158	162,098
Univ of Cal Ca Revenues Txbl-Relief	1,270,703.25	3.063%	3.063%	12/29/21	07/01/25	1,280	1188	38,922
Cal St Txbl-Various Purpose-Bid group	3,173,520.00	3.063%	3.063%	12/29/21	04/01/26	1,554	1462	97,205
	<u>\$ 16,148,995</u>		<u>3.223%</u>				<u>7,072</u>	<u>519,485</u>

Certificates of Deposit

						<u>Avg Remaining Life</u>	<u>884 Days</u>	
Sally Mae Bank - WF CD	250,000	2.600%	2.600%	04/10/19	04/11/22	1097	11	6,500
American Express Bk FSB - WF CD	250,000	2.350%	2.350%	05/03/17	05/03/22	1826	33	5,875
CITIBANK - WF CD	250,000	3.000%	3.000%	05/16/18	05/23/22	1468	53	7,500
Comenity Capital Bank - WF CD	250,000	3.150%	3.150%	07/16/18	07/18/22	1463	109	7,875
Live Oak Bkg Co - WF CD	250,000	1.550%	1.550%	03/06/20	09/06/22	914	159	3,875
Goldman Sachs Bank - UBS CD	200,000	2.290%	2.290%	10/24/17	11/01/22	1834	215	4,580
UBS Bank USA Salt LA UT- UBS CD	200,000	0.150%	0.150%	11/13/20	11/21/22	738	235	300
WEBBANK - WF CD	250,000	0.100%	0.100%	12/28/20	12/28/22	730	272	250
SYNCHRONY Bank - UBS CD	200,000	1.280%	1.280%	04/13/20	04/17/23	1099	382	2,560
BMW Bank North AME - UBS CD	200,000	0.250%	0.250%	11/13/20	05/22/23	920	417	500
Beal Bank USA - WF CD	250,000	0.600%	0.600%	01/05/22	01/03/24	728	643	1,500
First State Bank/NE - WF CD	250,000	0.500%	0.500%	01/12/22	01/12/24	730	652	1,250
TIAA FSB Florida - UBS CD	200,000	0.400%	0.400%	03/31/21	04/09/24	1105	740	800
American National Bk - UBS CD	244,388	0.250%	0.250%	06/08/21	05/21/24	1078	782	611
New York Cmnty Bk - UBS CD	245,000	0.350%	0.350%	06/08/21	06/03/24	1091	795	858
Leader Bank NA MA - UBS CD	244,373	0.250%	0.250%	06/08/21	06/03/24	1091	795	611
Greenstate Credit AI US - UBS CD	245,000	0.450%	0.450%	06/08/21	06/17/24	1105	809	1,103
LUANA Savings Bank- WF CD	250,000	0.250%	0.250%	12/30/20	07/01/24	1279	823	625
Texas Exchange Bank - UBS CD	200,000	0.500%	0.500%	07/22/21	07/30/24	1104	852	1,000
UBS Bank - UBS CD	200,000	0.700%	0.700%	10/14/20	10/28/24	1475	942	1,400
Morgan Stanley PRI NY - UBS CD	245,000	1.640%	1.640%	04/01/20	03/05/25	1799	1070	4,018
Sallie Mae Bank - UBS CD	200,000	1.880%	1.880%	11/22/19	11/20/24	1825	965	3,760
	<u>\$ 5,073,760</u>						<u>11754</u>	<u>57,350</u>
		<u>Weighted Avg Yield</u>	<u>1.130%</u>			<u>Avg Remaining Life</u>	<u>534 Days</u>	

Federal Government Agency Investment Portfolio
Wells Fargo records these at Par value

FFCB - WF	2,000,560	0.120%	0.120%	02/02/21	01/12/23	709	287	2,401	#
FFCB - WF	2,000,000	0.180%	0.180%	01/13/21	07/13/23	911	469	3,600	#
FHLB - UBS	3,000,000	1.800%	1.800%	02/28/22	02/27/24	729	698	54,000	
FHLB - WF	2,996,580	2.125%	2.125%	03/25/22	02/28/24	705	699	63,677	
FHLB - UBS	2,000,000	1.875%	1.875%	03/14/22	03/14/24	731	714	37,500	
FHLB - UBS	2,000,000	1.500%	1.500%	03/25/22	03/28/24	734	728	30,000	
FFCB - WF	5,000,000	0.270%	0.270%	01/05/21	04/05/24	1186	736	13,500	#
FHLB - UBS	200,005	0.750%	0.750%	11/24/21	05/24/24	912	785	1,500	#
FHLB - UBS	235,000	1.350%	1.350%	02/24/22	05/24/24	820	785	3,173	
FHLB - UBS	4,500,000	0.400%	0.400%	06/08/21	08/29/24	1178	882	18,000	#
FFCB - WF	1,997,700	0.875%	0.875%	11/18/21	11/18/24	1096	963	17,480	#
FHLB - WF	2,000,000	0.400%	0.400%	02/26/21	11/26/24	1369	971	8,000	#
FHLB - WF	996,470	3.063%	3.063%	01/03/22	01/13/25	1106	1019	30,522	#
FHLB - WF	2,000,000	0.690%	0.690%	06/10/21	06/10/25	1461	1167	13,800	#
FNMA - WF	3,985,680	0.500%	0.500%	11/12/20	11/07/25	1821	1317	19,928	#
FNMA - WF	1,992,840	0.500%	0.500%	11/12/20	11/07/25	1821	1317	9,964	#
FHLB - UBS	280,000	0.500%	5.000%	04/15/21	04/29/26	1840	1490	1,400	#
FHLB - UBS	1,500,000	0.600%	0.600%	06/09/21	06/30/26	1847	1552	9,000	#
FHLB - UBS	3,000,000	0.500%	0.500%	06/08/21	06/30/26	1848	1552	15,000	#
	<u>\$ 41,684,835</u>						<u>18131</u>	<u>352,445</u>	
# Callable		Weighted Avg Yield	<u>0.877%</u>		Avg Remaining Life		<u>954</u>	Days	

Credit Card Register

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**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
8870 ROYAL	1,234.25
8" Louvers for Starter Enclosures	104.57
Load Center, Breakers, Rating Plug	271.52
LOTO Tags, Elect. Tape, Tie Wraps	106.26
Tie Wraps, LOTO Parts	101.57
Wire Label Maker, Labels, Tie Wraps, Terminal Blocks	588.77
Wire Terminals, Wire Connectors	61.56
ADAFRUIT INDUSTRIES	44.18
Solder Removal Tool	44.18
ADMINISTRATIVE PROFESS	89.00
Subscription for Administrative Professionals Newsletter	89.00
ADOBE ACROPRO SUBS	5,774.64
Adobe Acrobat Pro monthly licenses	2,887.32
Adobe subscription licenses	2,887.32
ADOBE CAPTIVATE SUBS	101.97
Adobe monthly subscription to Captivate.	33.99
Monthly Adobe Captivate license for training development.	33.99
Monthly license for Adobe Captivate.	33.99
ADOBE PS CREATIVE CLD	14.25
Monthly Adobe creative suite license for WR.	14.25
ADOBE STOCK	159.98
Photo Stock	79.99
Publication	79.99
ALBERTSONS #1360	339.85
Sodas for 12/15 Holiday Lunch	22.27
Retirement Greeting card for D. Hare	5.07
Retirement Gift Card for P. Zepperio	312.51
ALL ELECTRONICS CORP	81.49
Indicating LED Bulbs	35.92
Replacement LED Lamps for Auma Actuators	45.57
ALLIED ELECTRONICS INC	368.10
Power Conditioner	368.10
AMAZON.COM	(19.91)
Order Never Received - Cancelled Tape and Ink Pen Refills	(19.91)
AMAZON.COM AMZN.COM/BILL	(35.54)
Creamer Packets for Rio Vista Kitchen - Order was never received. Returned while in transit.	(35.54)
AMAZON.COM*073RL43G3 AMZN	45.79
Office Supplies	45.79
AMAZON.COM*075JJ6PY3	19.91
Scotch Tape - J. Martinez Ramirez., Ink Pen Refills - L. Moncada	19.91
AMAZON.COM*EW61V9X33 AMZN	39.11
Vending Machine Supplies	39.11
AMAZON.COM*IX2N42QY3 AMZN	55.11
Accidental Personal Charge, Reimbursed Agency on 12/15	55.11

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
AMAZON.COM*J25IX0393 AMZN	31.81
Office Supplies	31.81
AMAZON.COM*JH1SF21X3 AMZN	5,500.00
Employee Birthday Gift Cards	5,500.00
AMAZON.COM*MC1HB4MN3 AMZN	35.54
Creamer Packets for Rio Vista Kitchen. Order was never received. Credit was received. See	35.54
AMAZON.COM*O74SQ90V3 AMZN	140.16
Airtags locators to test on equipment.	140.16
AMAZON.COM*OO3LG7SV3	365.95
Supplies - Warehouse	365.95
AMAZON.COM*OY8LX7QN3	168.38
Case of Coffee Cups for RVWTP Kitchen	168.38
AMAZON.COM*QY0UK0NC3	33.64
Office Supplies	33.64
AMAZON.COM*RN2SK6QU3	49.69
Lysol Disinfectant Handi-Pack Wipes, Multi-Surface Antibacterial Cleaning Wipes, for Disinfect	49.69
AMAZON.COM*SQ2SY9IS3 AMZN	33.05
Battery Tester for Vehicles	33.05
AMAZON.COM*XF6ZV92J3	32.84
Portable Personal Heater - Office	32.84
AMAZON.COM*XO8SL1TN3	34.92
Office Supplies	34.92
AMZN MKTP US	14,139.28
1 box of yellow inter-office envelopes for Rio Vista	167.46
100PCS 3 Ply Black Disposable Face Mask Filter Protection Face Masks	54.30
Accidental P-Card Purchase; Repaid Agency via check 12/29	15.97
Automotive dome light	228.18
Backpack for Laptop	75.03
Black Face Mask 100pcs Disposable Masks Breathable 3 Layer Masks Mouth Cover for Adult M	16.41
Door Draft Stopper - Admin Dept.	23.79
Door Draft Stopper - Returned	(23.79)
Employees Holiday Gift Cards	486.45
Floor vac system	638.17
Headsets for phone system.	441.27
HEPA air filters for MPR, Cove, and Tech Conference Room	851.92
KN95 Face Mask 50 PCS, Breathable Protection Masks, 5-Ply KN95 Black Masks, Cup Dust Safe	4,761.60
M&R: Vehicles and Equipment (Vehicle Key Storage)	413.97
Mobile Standing Desk for Vehicle Maintenance	145.62
Office Supplies	86.80
Office Supplies - 3 Anker 6ft Premium Nylon Lightning Cable [2-Pack]	65.67
Office supplies for dry erase boards.	152.16
Office Supply	284.68
Phone desktop headsets for customer service.	2,682.12
PLC replacement batteries	258.36

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
Replacement camera for security unit	31.07
Supplies and Parts - Brass Quick Connect Tank Fitting	113.70
Supplies and Parts - Extended Run Fuel Gas Cap Red	15.11
Supplies Pine	262.76
Tea and Creamer Packets for RVWTP Kitchen	32.70
Tea for Rio Vista Kitchens	14.49
TV audio/video stand.	236.51
Vehicle M&R: Mobile Stand	65.69
Vehicle M&R: Portable Power Station	437.99
Vending Machine Supplies	47.55
Vending Machine Supplies Credit	(24.60)
Wood Dresser Chest for Jose H. at Rockefeller	179.57
WWDOLL KN95 Face Mask 25 Pack, 5-Layers Mask Protection, Breathable KN95 Masks White	74.17
Desk Pad Protectors for Board of Directors	15.32
Order Never Received - Cancelled Tape and Ink Pen Refills	19.91
Office Supplies - J. Huerta/GIS Dept.	45.10
M&R Vehicles and Equipment Diagnostic Tool for Vehicles	44.88
Headset adapters for handphone to computer.	556.20
Parts/Materials Attwood 8896LP6 Acetal 3/8-Inch Barb Fuel Hose Female Tank Fitting for Yam	68.40
Office Supplies - Water Quality Dept	76.62
APPLE.COM/BILL	19.99
Duet Display annual subscription fee (necessary for wireless connection).	19.99
AQUA-FLO SUPPLY INC #3	771.44
2 sump pumps	509.35
PVC Parts and Material for Ammonia Injection	262.09
ASCE PURCHASING	300.00
ASCE Membership J.Yim	300.00
ASSOCIATED SPRING RAYMOND	102.55
Truck Tool Box Springs	102.55
ASSOCIATION OF CALIFORNI	2,635.00
ACWA 2022 Spring Conference - Registration - 05/03-05/05/22 - Director Braunstein	775.00
ACWA 2022 Spring Conference - Registration - 05/03-05/05/22 - Director Cooper	775.00
ACWA 2022 Spring Conference - Registration - 05/03-05/05/22 - Director Kelly	775.00
ACWA 2022 Virtual Legislative Symposium - Registration - 1/25/22 - K. Martin	155.00
ACWA Legislative Symposium Registration	155.00
ATEK ACCESS TECHNOLOGI	835.80
Fuel tank monitor	835.80
AUTOZONE #4070	27.36
Truck #59 wheel cover	27.36
AUTOZONE #4135	82.05
Supplies and Materials	82.05

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
AWWA.ORG	409.00
Digital document. AWWA Risk and Resilience Guide	107.00
AWWA Membership J. Yim	216.00
AWWA Membership California-Nevada Section J. Yim	86.00
BARNEY'S PASADENA	17.76
CAPPO Conference: Dinner for J. Hithe on 1/31/22	17.76
BEST BUY 00001131	536.51
Camera and batteries for Raw water pipeline inspection	536.51
BESTBUYCOM806602659609	109.48
Ethernet Switches for SCADA	109.48
BJ'S RESTAURANTS 414	90.56
Ops Admin Lunch with Jessica Hithe, Lisa Terranova, Theresa Whatley	90.56
BOX, INC.	1,800.00
File share host	1,200.00
File share subscription	600.00
BROWN AND CALDWELL	400.00
BC Water EH&SS Job Posting 1-13 to 2-12-22	200.00
TPO Job Posting	200.00
BURTEC WASTE INDUSTRIES	5,258.74
Inv N114764935, 3yd Rental/Services - Aug/Sept 2021	2,336.34
Inv N114786414, 3yd Rental/Service - November 2021	1,461.20
Inv N114790115, 3yd Rental/Service - December 2021	1,461.20
CA SECRETARY OF STATE WEB	25.00
SCVWA Financing Corporation Statement of Information Submission	25.00
CAL OSHA REPORTER	217.80
CalOSHA Reporter Job Posting EH&SS for 3 weeks	217.80
CALIFORNIA ASSOCIATION OF	625.00
CAPPO Conference	495.00
CAPPO Membership	130.00
CALIFORNIA SPECIAL DISTRI	1,315.00
2022 Special District Leadership Academy SD - Registration - 04/03-04/06/22 - Director Armita	600.00
2022 Special District Leadership Academy SD - Registration - 04/03-04/06/22 - Director Braun:	400.00
Brown Act Compliance Manual 2nd Edition	90.00
CSDM Renewal Fee	50.00
Rate Setting Under Proposition 218 and 26 - Registration - 03/30-03/31/22 - E. Campbell	175.00
CA-NV SECTION, AWWA	499.00
AWWA Seminar Fee	499.00
CANYON DISCOUNT MUFFLER	286.00
M&R Vehicles and Equipment: Smog checks for N44, N62, and S105	286.00
CAPIO - CA ASSOCIATION OF	105.00
Webinar Registration - L. Gibson	50.00
Webinar Registration - L. Gallegos and C.Gordon	55.00
CAPITOL DIRECTORIES INC	497.74
Congressional Directories	497.74

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
CARLS JR 1100608	80.79
Lunch for crew who fixed leak Ridge Route BLVD in Castaic	80.79
CARROT-TOP INDUSTRIES	394.28
Restock American flags	394.28
CCFST/SWAGELOK LOS ANGEL	1,014.18
Fittings	1,014.18
CDW GOVT #R380823	275.57
Laptop memory External RAM	275.57
CDW GOVT #R946209	2,473.26
Adobe existing photoshop/illustrator licenses	2,473.26
CDW GOVT #S036474	556.47
Adobe team licenses	556.47
CHEVRON 0382805	71.62
Diesel	71.62
CHIPOTLE ONLINE	83.17
Lunch for staff who worked on pipeline inspection	83.17
CMAA	1,015.83
CMAA Membership for S. Bader	140.83
CMAA Seminar for S.Bader	875.00
CMTA	95.00
CMTA Membership Renewal	95.00
CORNER BAKERY 0208	125.00
Lunch for HR Meeting for A. Mantis, L. Pointer, J. Joo, J. Brison, and M. Aragon	125.00
COSTCO DELIVERY 653	1,412.29
Credit for 1 Pkg of Cups - Office Supplies - December Order	(14.89)
Office Supplies - Non Taxable	931.66
Office Supplies - Taxable	495.52
COSTCO MEM PR V #0844	300.00
Membership Renewal - Feb 2022-2023	300.00
COSTCO WHSE #0447	849.30
2 batteries for Tesoro tank 2	424.65
Batteries for Tesoro Tank	424.65
COURSRA77FPQHKJ4Y7XRL	117.00
Cousera Subscription Payment	117.00
COURTYARD SAN DIEGO MI	1,649.64
CSFMO Conference K.Grass	839.14
CSFMO Conf R.Patterson	810.50
CURRENCY CONVERSION FEE	0.60
International Conversion Fee from Linktree Australia	0.60
DAPPER DANS CARWASH	59.85
Car Wash	59.85
DIGICERT INC	995.00
Annual SSL certificate renewal for Webconnect server.	995.00

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
DINKS DELI & BAGEL BAKER	150.93
Bagels for Staff	25.40
Breakfast for Customer Care	125.53
DLR RESORT RES CRO	297.18
AWWA Hotel Deposit	297.18
DMI* DELL BUS ONLINE	1,237.87
Dell 55" LED conference monitor	1,237.87
DNH*DOMAIN HOSTING SRVCS	651.27
DNH monthly.	8.68
DNH renewal for 1yr.	12.17
DNH server hosting for SCADA.	599.97
DNS renewal for .INFO	21.77
Monthly Domain Name Hosting.	8.68
DNH*DOMAIN NAME/HOSTING	67.99
Annual SSL cert for Field Mapplet.	67.99
DNH*GODADDY.COM	172.98
Domain Host Renewal	2.99
SSL renewal	169.99
DNH*SUCURI WEBSITE SECURI	29.97
Agency Website Maintenance	19.98
GSA Website Maintenance	9.99
DOCUSIGN	300.00
DocuSign Renewal 11/30/21-11/29/22	300.00
DOMINO'S 7877	98.64
Lunch for Crew	98.64
DOMINO'S 8465	99.60
Dinner For Crew	99.60
DUNGAREES LLC	284.69
Jacket for new employee, D. Hoffman.	284.69
DXP ENTERPRISES	8.64
Shipping for the Check Valve	8.64
EBAY O*26-08218-41239	146.09
Antennas for meter reading system	146.09
EHS CAREERS.COM INC.	200.00
EHS Careers Job Posting EH&SS 30 days	200.00
EIG	945.00
Constant Contact - eNews	315.00
Digital Publication	315.00
eNews	315.00
EPIC-LA	3,741.50
County Permit	3,444.00
Permit	297.50

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
EVEREST BURGERS	308.80
January Birthday and Anniversary	252.98
Lunch for Crew working on Saturday	52.23
Meals for Crew	3.59
FACEBK *N6MX4CKKH2	19.37
Website Online Presence	19.37
FACEBK *PVST8A3KH2	5.63
Website Online Presence	5.63
FEDEX	69.75
Bubble wrap shipping laptop	4.40
Shipping: Return Packages for Agency Apparel	65.35
FERGUSON ENT #616	20.39
Filters	20.39
FREEWAY TOWING SC	684.00
Vehicles and Equipment: Tow charges for vehicle (I61) involved in traffic collision	684.00
FRESHWATERSYSTEMS	224.19
Food Grade Grease for water fittings	224.19
GALCO INDUSTRIAL ELECTRO	281.71
Replacement Electrical Panel Latches	281.71
GOVERNMENT FINANCE OFFIC	490.00
D Conner Registration	490.00
GOVERNMENT FINANCE OFFICE	460.00
Award Submission fee for FY 2021 ACFR	460.00
GRAC.ORG	100.00
Webinar Registration - R. Viergutz	100.00
GRAINGER	198.35
Emergency Stop Push Button	147.72
Malleable Boxes and Cover	50.63
GRAYBAR ELECTRIC COMPANY	317.43
Electrical Disconnect Repair Parts.	317.43
HACH COMPANY	374.50
Registration fees for E&I employees: T.Braxhoofden & P.Woeger (classes taken 1/25-1/26/22)	374.50
HARBOR FREIGHT TOOLS 459	306.55
Jack and Stans for shop	306.55
HILTON HOTELS	-
UWI 2022 Spring Conference - Hotel Deposit - 2/16-18/22 - Director Martin	202.29
UWI Spring Conference - Hotel Credit - 02/16/22 - Director Martin	(202.29)
HIRSCH PIPE & SUPPLY 013	152.72
Toilet Water Tank for Summit Circle	152.72
HOMEDEPOT.COM	420.74
Nails for Survey Marking Flags	188.30
Trailer Parts	201.81
Tool Bag for T. Clem	30.63

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
HP *HP.COM STORE	79.99
Warranty extension for desktop	79.99
HR MANUFACTURING CO	110.93
Extension Socket for Cla Valve repair	110.93
IN *CALIFORNIA NEVADA SEC	1,800.00
American Water Works Association Webinars taken in January by employees (E. Lugo, B. Zvarz)	1,800.00
IN *PAJONO WOODWORKS, INC	324.15
Wood Plugs for leaks	324.15
IN *REVEL ENVIRONMENTAL M	112.12
Filter media flood control pine street	112.12
IN N OUT BURGER 107	45.00
Dinner For Crew	45.00
IN N OUT BURGER 171	176.56
Lunch for Crew Work on Saturday	51.41
Lunch for Crew Working	58.14
Meal for Crew	67.01
INTERNATIONAL RIGHT OF WA	1,005.00
IRWA Membership for K. Jacob	270.00
Course 100 – Principles of Land Acquisition IRWA - K. Jacob	465.00
IRWA Membership J.Yim	270.00
IPMA-HR	200.00
IPMA-HR Renewal for A. Mantis	200.00
JACK IN THE BOX 3344	63.46
Bought crew dinner /Service leak	63.46
JBM DELI	67.64
Safety department meeting/lunch	67.64
JOHNSTONE SUPPLY VALENCIA	2,909.64
Filters for B&G	2,675.30
Thermometers	162.09
Thermostat	72.25
LAS DELICIAS GOLDEN VALL	120.32
Meals for Crew Working	120.32
LED LIGHT EXPERT	1,342.32
M&R: Yard Outdoor Lights	1,342.32
LIFECOM INC	290.93
Rental of (10) emergency escape packs for dewatering of raw water line project/inspection.	290.93
LINDE GAS & EQUIP	398.83
Welding supplies	398.83
LINE-X OF SANTA CLARITA	225.00
Install Lightbar on Unit V-62	225.00
LINGO SYSTEMS LLC	675.48
Translation for Customer messaging	675.48
LINKTREE* LINKTREE	60.00
Online Presence	60.00

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
LOGMEIN	379.99
Logmein subscription. Will be cancelled for the next year.	349.99
Log Me In Monthly Subscription	30.00
LOWES #01510	2,396.94
2 - boxes of outlet cover plates	7.42
2 Heaters	109.48
Air Hose	42.68
Bathroom improvements	33.29
Batteries, Nitrile Gloves	42.11
Box of 4 foot LED lamps for Rio Vista	87.58
Bucket and Lid for N61	21.83
Caster	62.55
Cordless Blower	152.21
Deer Fence for Rio Vista	14.16
Gloves, Masking Tape, Wire Brush, Paint	88.87
Hand Pumps	72.23
Hole Cover, 2-wire Tie Twisters, Bag of Wire Ties	53.55
Instrument Battery	14.20
Insulated Cables and other Materials	68.14
Light Cover for Golden Valley Warehouse	15.86
Lights for Pipeline Inspection	90.78
Magnet with Hook	4.36
Paint for Walls at Pine St	35.84
Parts & Materials	398.90
Piezo Chime Kit	27.35
Rags and Gloves for RV Shop	116.51
Screws, Toggle Bolts, Hinge	27.94
String Line	13.45
Tape and Paint	28.93
tool bag and gloves to replace ones lost in accident	73.09
Various Parts & Materials	474.66
Wire nuts, Velcro, screws, Heater for C.Mael office	113.97
Wire Ties and Wire Twisters	39.37
3gl. Vinegar to Flush Ice Machine	65.63
LOWES #01972	206.05
Materials and Supplies	122.37
Tote, Razor Knife, WD40	83.68
LUCKY BOY ENTERPRISE	18.84
CAPPO Conference - Dinner for J.Hithe on 2/1/22	18.84
MCMMASTER-CARR	493.50
2 buckets of desiccant.	243.78
Auto Drain Device for Compressed Air Tank	224.59
Lock Nuts	25.13

SCV Water
Credit Card Charges
Paid Jan-March 2022

Merchant Name and Description	Total
NAPA AUTO PARTS	73.34
Gloves	73.34
NEWEGG MARKETPLACE	68.97
Power adapter for HP	68.97
NEWHALL VALENCIA LOCK &	25.37
2 - keys	5.80
Duplicate Keys	19.57
NNA SERVICES LLC	957.32
Nat'l Notary Assoc. 4 year membership	199.00
Nat'l Notary Assoc. Webinar and renewal	758.32
OFFICE DEPOT #2263	40.80
Calculator for desk	19.48
M&R: Vehicles and Equipment (Camera Installation Supplies)	21.32
ONLINECOMPONENTSCOM	220.69
Pinetree RMS	220.69
O'REILLY AUTO PARTS 2822	43.78
Vehicle supplies	43.78
OWPSACSTATE	166.53
Certification for Treatment and Distribution	166.53
PANERA BREAD #204228 O	473.38
M&R: Vehicles and Equipment (Refreshments for CHP Training)	164.03
WR Staff Meeting - Educational Staff	116.11
Breakfast ordered for Respiratory Training/FIT Testing held 2/17, per J. Diaz.	111.24
Breakfast ordered for Respiratory Training/FIT Testing held 2/23, per J. Diaz.	82.00
PANERA BREAD #204229 O	1,204.81
Safety Training	995.74
WR Dept Staff Meeting	209.07
PARTY CITY BOPIS	24.10
Balloons for D. Hare's retirement	24.10
PATTONS METAL WORKING SOL	328.06
Steel Tubing	328.06

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
PAYPAL	919.90
Association of Water Agencies of Ventura County - Training R. Pulido	33.00
AWA WaterWise Breakfast Series - Registration - 1/20/22 - Director Ford	43.00
AWA/CCWUC Educational Program - Registration - 1/26/22 - E. Campbell	33.00
Standard Pro Annual Subscription	149.90
UWI 2022 Spring Conference - Registration - 2/16-18/22 - Director Martin	775.00
UWI 2022 Spring Conference - Registration Credit - 2/16-18/22 - Director Martin	(275.00)
First CCWUC Training of 2022--Jan 26 - J. Yim	33.00
Registration for CWUC Virtual Training - J. Yim	33.00
UWI 2022 Spring Conference - Registration - 2/16-18/22 - M. Stone	250.00
UWI 2022 Spring Conference - Registration - 2/16-18/22 - M. Stone Credit	(250.00)
AWA WaterWise Breakfast Series - Registration - 02/17/22 - Directors Armitage, Director Brau	95.00
PP*PASADENACEN	15.00
ACWA Fall Conference Parking	15.00
QR-CODES.COM	29.97
Online Presence	19.98
Publication	9.99
RALPHS #0147	120.13
Individual Creamers for RVWTP Kitchen	17.96
Vending Machine Supplies	102.17
RATTLERS BAR B QUE - 1	1,194.01
Dirk's retirement luncheon on 12/16	570.00
Supervisor Lunch	49.43
Retirement Luncheon for P. Zeppeiro	501.00
New employee lunch w/ C. McIntyre, H. Wade, and R. Hitchen	73.58
RATTLERS BBQ - 1 - CATERI	-
Refunded by Rattler's; cancelled original delivery order of 12/15 due to dine in at restaurant.	(734.30)
Original delivery order for D. Hare's retirement; was cancelled on 12/15 & refunded on 1/10/22	734.30
REPUBLIC SERVICES TRASH	2,525.60
20yd Rental/Service 11/1-11/30/21	97.61
20yd Rental/Service 12/1-12/31	97.61
20yd Service/Rental 1/1-1/31/22	97.61
3yd Rental/Service 1/1-1/31/22	334.86
3yd Rental/Service 12/1-12/31/21	334.86
3yd Rental/Service 2/1-2/28/22	334.86
40yd Rental/Service 1/1-1/31/22	233.61
40yd Rental/Service 11/1-11/30/21	233.61
40yd Rental/Service 12/1-12/31	760.97
RSTUDIO PBC	117.00
Online Customer Rate Calculator	78.00
Online Rate Calculator	39.00

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
SAMS CLUB #4824	659.05
Cups, Plates, Bowls for break room	130.85
Kitchen supplies	80.80
Supplies	165.85
Vending Machine Supplies	281.55
SAMS MEMBERSHIP	109.50
Fraud Transaction; Reported the Fraud, Got a new Card, & Wells Fargo Refunded on 3/8	109.50
SAMSCLUB #4824	723.39
Floor Mats for Vehicles	43.76
Supplies	242.11
Supplies and Materials	288.15
Vending Machine Supplies	149.37
SAMSCLUB.COM	196.90
Floor Mats for Vehicles	196.90
SANTA CLARITA AUTO GLASS	595.00
Windshield S-4	595.00
SANTA CLARITA VALLEY CHAM	690.00
Employment Law Update - Registration - 3/7/22 - R. Patterson	65.00
SCV Chamber Annual Awards & Installation - Registration - 03/18/22 - S. Cole	125.00
SCV Chamber of Commerce Annual Awards & Installation - Registration - 03/18/22 - Director t	125.00
SCV Chamber of Commerce Annual Awards & Installation - Registration - 03/18/22 - Director C	125.00
SCV Chamber of Commerce Awards and Installation - Registration - 3/18/22 - Director Cooper	125.00
SCV Chamber of Commerce Awards and Installation - Registration - 3/18/22 - Director Martin	125.00
SCPMA-HR	75.00
Renewal for J. Brison	25.00
Renewal for A.Mantis	25.00
Renewal for L. Pointer	25.00
SJWATER	300.00
Sponsorship	300.00
SMART AND FINAL 468	299.61
Kitchen and office supplies	76.67
Kitchen supplies	42.96
Supplies and Materials	153.31
Supplies Pine	26.67
SMART AND FINAL 483	29.00
Vending Machine Supplies	29.00
SNC MANUFACTURING CO IN	1,816.61
Rio Vista Intake Pump Station Transformers; requested by L.Margueritis.	1,816.61
SOUTHWES	87.96
ACWA Spring Conference Flight	87.96
SOVOS COMPLIANCE LLC	650.00
Escheat Software Annual Fee	650.00
SPROUT SOCIAL, INC	3,576.00
Public Outreach Service	3,576.00

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
SPUDNUTS DONUTS	149.34
Doughnuts for morning tailgate/Safety meeting	29.38
OPS/Bobby's Crew Safety Tailgate Meeting-snacks	15.91
Rockefeller FCSR Safety Tailgate Meeting-snacks	27.82
Rockefeller safety meeting - FCSR	50.49
Snacks for water systems department safety tailgate 12/15/2021	25.74
SQ *KUPCAKE KITCHEN	787.50
Employees Holiday Luncheon	787.50
SQ *LIMA LIMON	251.67
D. Hare's retirement lunch with Engineers	251.67
SQ *SAFEWAY LOCKSMITH	67.74
Keys for Lockbox	67.74
SQ *VINCENZO'S PIZZA SAUG	95.96
Pizza for crew; Night Job	95.96
STAPLES 00114686	27.90
Blank Sticker labels for sample bottles	10.39
Office Supplies - file organizer	17.51
STONEFIRE GRILL - 1	123.93
Staff meeting - Relocating Staff	123.93
STONEFIRE GRILL - 1 - CAT	1,471.79
Holiday lunch for F&A	645.61
Staff meeting - Relocating Staff	826.18
STONEFIRE GRILL - 1 - ECO	213.51
Day 1 Meeting with SCS Engineers Consultant (RMP)	173.37
Lunch for M. Passamani & J. Lemaster: SCS Engineers Consultant meeting	40.14
SUPPLYHOUSE.COM	121.02
Thread Sealant for Pipe Fittings	121.02
THE HOME DEPOT #0653	1,083.17
6 Foot Ladder for Utility Truck	108.37
Cat #6 Wire for Pine Street	194.91
Counter Top Receptacles for Rockefeller	18.58
Extension Cords for Admin at Rio	135.75
Golden Triangle Warehouse Pole Lights	114.84
Home Depot Warehouse Bathroom remodel parts 1-4-22	55.78
Material for Workshop at Rio Vista B&G department	74.09
Materials	69.57
Repairs for Water Damage ESFP	156.17
Romex Connectors for Golden Triangle Warehouse	64.54
Vinyl Tubes	41.69
Waste Bags	30.05
Parts for Admin at Rio Vista	18.83

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
THE HOME DEPOT #1055	995.50
Adjustable wrench, Screw Driver, Tape Measure	56.81
Caster	77.59
Cleaning Supplies For Rio	108.22
Counter Top Receptacles for Rockefeller	187.66
Credit for Returned Item	(174.10)
ESFP Contractor repair	23.55
Extensions Cords	143.93
Face Masks	57.42
Flash Light Replacement for Crew Trucks	76.57
Grounding Terminal Block	21.79
Paint for Walls at Pine St	59.05
Safety Equipment Face Masks	16.39
Screws	1.40
Screws & Bolts	26.43
Spray Cans of Primer for Utility Truck	50.82
Supplies and Materials	20.28
Tape Measure, Rotary Bits	34.94
Tools truck 67	146.70
Voltage Rated Screw Drivers	60.05
THE HOME DEPOT 1055	1,091.06
20 Volt Hammer Drill	217.91
Parts for truck 57	316.32
Rigid Air Mover	217.91
Paint supplies repair of SCADA Cabinets	87.04
Misc. copper fitting for valve installation	251.88
THE HOME DEPOT 653	2,053.24
Compact Drill Kit & 20 Volt Grinder	332.81
Materials for bathrooms improvements	814.68
Rigid Cutter & Impact Wrench	418.89
Various Parts & Tools	486.86
THE UPS STORE 3272	98.35
Ship Pump for warranty work	98.35
TOOLBARN.COM	689.77
Ditch Witch Parts	492.69
Pressure tips for Ditch witch N-06	197.08
TOPPERS PIZZA PLACE VALEN	102.45
Pizza for Quarterly Operators Meeting of 2/16/22.	102.45
TST* NOTHING BUNDT CAKES	254.80
December Birthday and Anniversary	46.00
Dessert for Finance & Admin Holiday lunch	69.00
Dessert for D. Hare's retirement	139.80
TST* SETTEBELLO PIZZERIA	40.00
CAPPO Conference: J. Hithe Dinner on 1/30	40.00

**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
TST* VINCENZOS	173.81
Supervisor Lunch & Crew	173.81
TWITTER ONLINE ADS	13.00
Twitter online ads	13.00
UPS	22.50
Shipping and Handling for Gas Detection Equipment	22.50
USPS PO 0569500155	1,630.00
Santa Clarita PO Box Renewal	1,630.00
USPS PO 0569520150	14.00
Postage for Package	14.00
USPS PO BOXES ONLINE	760.00
Newhall PO Box Renewal	760.00
VALLEY INDUSTRIAL ASSOCIA	165.00
VIA Dec Luncheon	35.00
VIA December Monthly Luncheon - Registration - 12/17/21 - Director Plambeck	55.00
VIA Monthly Luncheon - Registration - 1/18/22 - Director Martin	20.00
VIA Monthly Luncheon - Registration - 12/17/21 - Director Kelly	55.00
VERIZON WIRELESS	67.57
Phone accessories/supplies K. Abercrombie	67.57
VERIZONWRLSS	62,427.85
10/11-11/10/21 Services	15,208.99
CIMIS 10/11-11/10/21	38.01
CIMIS 11/11-12/10	38.01
CIMIS 12/11-1/10/22	38.01
Equipment 10/11-11/10/21	9,544.05
Equipment 11/11-12/10	581.85
Equipment 12/11-1/10/22	6,094.32
Services 11/11-12/10	15,260.77
Services 12/11-1/10/22	15,623.84
VONS #2111	26.10
Drinks and Snacks for Training class-Qualified Rigging class at pine street 12/07/2021	26.10
VONS #3138	19.26
Pine supplies	19.26
VONS #3325	306.95
Retirement gift card for D. Hare	306.95
VZWRLSS*IVR VB	2,411.97
Telemetry 10/24-11/23/2021	895.25
Telemetry 11/24-12/23/21	743.24
Telemetry 12/24-1/23/22	773.48
WALMART.COM AA	185.83
Pintal Pin and chain for vehicle hitches	46.08
Steering Wheel Covers for Vehicles	139.75

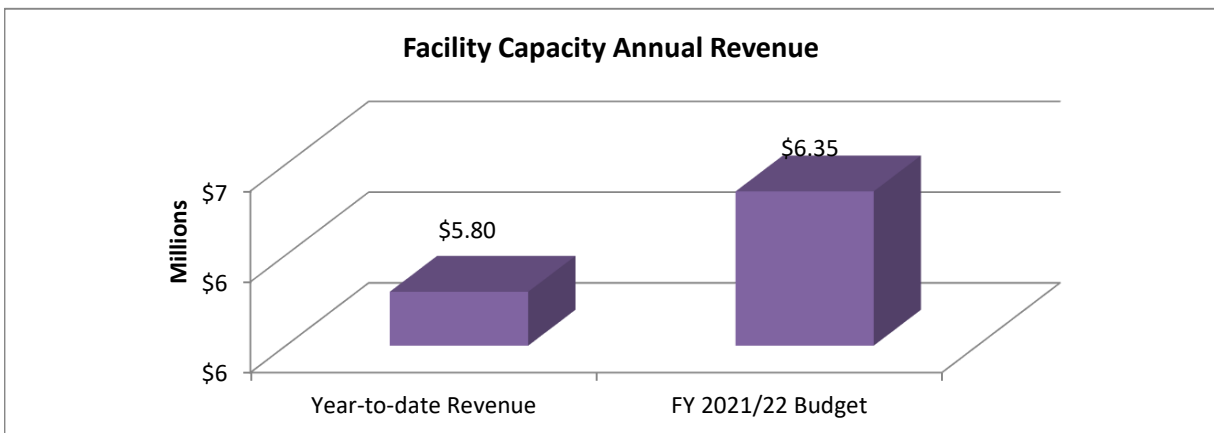
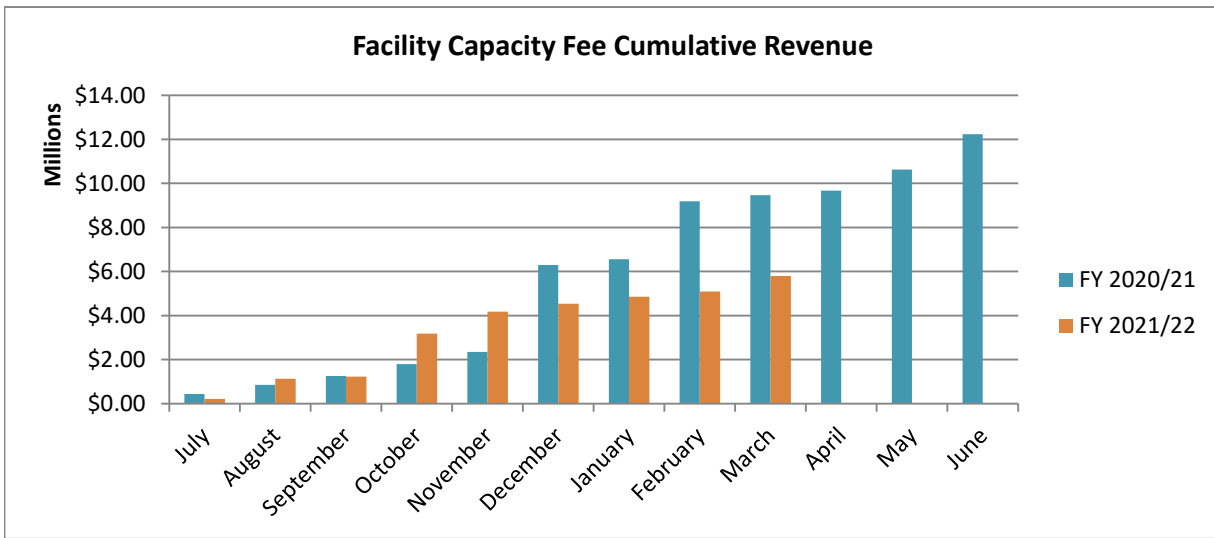
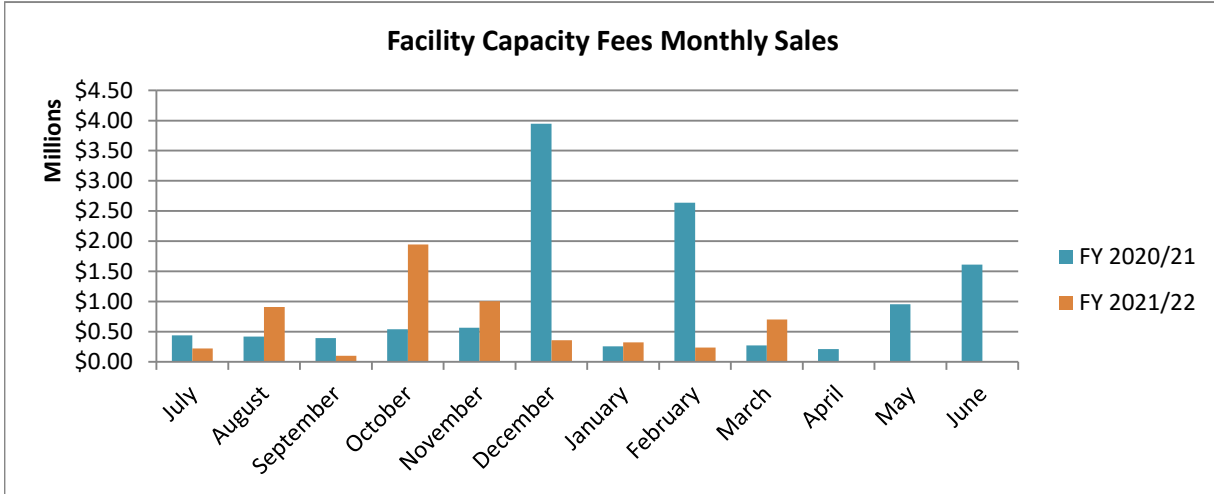
**SCV Water
Credit Card Charges
Paid Jan-March 2022**

Merchant Name and Description	Total
WEB	23.97
Domain Hosting	15.98
Web Hosting	7.99
WM SUPERCENTER #5162	5.96
M&R: Vehicles and Equipment (Camera Installation Tools)	5.96
WPONCALL.COM	147.00
GSA Website Maintenance	147.00
Grand Total	180,258.49

Facility Capacity Fee Revenues

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SCV WATER FACILITY CAPACITY FEE REVENUES FY 2021/22 as of March 31, 2022



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BOARD MEMORANDUM

DATE: May 16, 2022
TO: Board of Directors
FROM: Dirk Marks 
Director of Water Resources
SUBJECT: Adopt a Resolution Approving the SB 610 Water Supply Assessment for the Entrada South/Valencia Commerce Center Project

SUMMARY

The County of Los Angeles, Department of Regional Planning, acting as lead agency in the preparation of an Environmental Impact Report (EIR) for the Entrada South Project (VTTM No. 53295) and Valencia Commerce Center Project (VTPM No. 18108) (Entrada South/VCC Project), has requested that the Santa Clarita Valley Water Agency (SCVWA) provide an SB 610 Water Supply Assessment (WSA) for the Projects. For Board consideration, staff prepared a Draft WSA for the project that concludes, consistent with the 2020 Urban Water Management Plan, current and future water supplies are sufficient to meet demands for the Projects.

BACKGROUND AND DISCUSSION

SB 610 requires that a Water Supply Assessment (WSA) be prepared for all development projects of 500 or more dwelling units, or that have a commercial footprint of more than 500,000 square feet. It also requires that the "entity serving domestic water supplies whose service area includes the project site" shall prepare the WSA and that "the governing body of each public water system...shall approve the assessment...at a regular or special meeting." The most recently adopted Urban Water Management Plan, along with other planning and analysis documents, serve as the basis of the WSA.

SCVWA staff has prepared the attached Draft WSA for the Entrada South/Valencia Commerce Center Projects. The WSA is largely based on the 2020 UWMP with some noted updates to reflect the (1) revised timing for recovery of capacity from certain wells from perchlorate and PFAS contamination and (2) reduced near term average SWP reliability from 58% to 56% as indicated in the recently released SWP Delivery Capability Report. Additionally, the Draft WSA also contains a more in-depth discussion on how climate change and other uncertainties are addressed. Overall, the Draft WSA evaluated the long-term water needs (water demand) within the SCVWA service area and has compared these needs against existing and future water supplies. Demand projections are based on applicable population projections and County and City land use plans, and account for conservation as well as climate change impacts and other relevant factors. Results indicate that the total projected water supplies available to the SCV Water service area through 2050 during normal, single-dry, and multiple-dry year (5-year drought) periods are sufficient to meet the total projected water demands throughout the Valley including that of the proposed Entrada South/VCC Project demand (between 1,411 and 1,496 acre-feet per year); provided that SCVWA continues to utilize available SWP Table A Amounts, and will continue to incorporate conjunctive use (coordinated use of surface water and groundwater), water conservation, water transfers, recycled water, and water banking as part of

the total water supply portfolio and management approach to long-term water supply planning and strategy.

The Draft WSA concludes adequate water availability to serve the Project based on a review of numerous water supply planning documents, including the 2020 Urban Water Management Plan, the 2019 California Department of Water Resources Draft State Water Project Delivery Reliability Report and the 2021 SCV Reliability Plan Update. All these sources were used to determine current and future supply and were compared with the anticipated water demand, including those for the proposed Project.

Legal Requirement to Adopt a WSA

As the water supplier for this project, SCVWA is required by Water Code Section 10910(g)(1) to adopt a Water Supply Assessment within 90 days of the request from the County (extensions are allowed). Failure to prepare a WSA subjects the Agency to a challenge by writ of mandamus. In the WSA, the Agency must provide detailed information about its existing and planned supplies to support the project and the Board of Directors can conclude one of two things; (1) that water supplies are sufficient to provide water to the project, or (2) that water supplies are insufficient. If the Board of Directors concludes that supplies are insufficient to provide water to the project, the Water Code requires that the WSA include plans, and setting forth measures, for acquiring and developing additional water supplies.

On May 11, 2022, the Water Resources and Watershed Committee considered staff's recommendation to adopt a resolution approving the SB 610 Water Supply Assessment for the Entrada South/Valencia Commerce Center Project.

FINANCIAL CONSIDERATIONS

None.

RECOMMENDATIONS

The Water Resources and Watershed Committee recommends that the Board of Directors adopt the attached Resolution approving the SB 610 Water Supply Assessment for the Entrada South/Valencia Commerce Center Project and direct staff to forward the WSA to the County of Los Angeles Department of Regional Planning.

RGV

Attachments

RESOLUTION NO. ____

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SANTA CLARITA VALLEY WATER AGENCY
ADOPTING THE SB 610 WATER SUPPLY ASSESSMENT
FOR THE ENTRADA SOUTH/VALENCIA COMMERCE CENTER
(VTTM No. 53295 & VTPM No. 18108)**

WHEREAS, the Santa Clarita Valley Water Agency (SCVWA) provides retail water service to portions of the City of Santa Clarita and to unincorporated portions of Los Angeles County in the Santa Clarita Valley; and

WHEREAS, the SCVWA is a "public water system" as defined by California Government Code section 66473.7(a)(3) and California Water Code section 10912 and may receive requests from time to time to prepare a Water Supply Assessment pursuant to Water Code section 10910 et seq. (commonly referred to as SB 610) and/or a Water Supply Verification pursuant to Government Code section 66473.7 (commonly referred to as SB 221); and

WHEREAS, the SCVWA received a request from the Department of Regional Planning of the County of Los Angeles for SCVWA to prepare a Water Supply Assessment for projects within the County for Vesting Tentative Tract Map No. 53295 and Vesting Tentative Parcel Map No. 18108, otherwise referred to as the Entrada South/Valencia Commerce Center Project (the Project), where the County is the lead agency for the Project under the California Environmental Quality Act (CEQA) and the County is responsible for all land use decisions related to the Project; and

WHEREAS, the Project is within SCVWA's service area, and, therefore, SCVWA is the public water system to provide water service to the Project; and

WHEREAS, pursuant to the County's request for SCVWA to prepare a Water Supply Assessment for the Project, SCVWA has prepared a Water Supply Assessment for the Project in accordance with the requirements of Water Code section 10910 et seq.

NOW THEREFORE, BE IT RESOLVED that, the Board of Directors of SCVWA, as the governing body of the Santa Clarita Valley Water Agency, (1) has determined that all of the foregoing Recitals are true and correct and are incorporated herein and made an operative part of this Resolution; (2) has reviewed the Water Supply Assessment for the Project; (3) has determined, exercising its independent judgment, that a "sufficient water supply" is available for the Project based on the requirements of Water Code section 10910 et seq., the information and analyses contained in the Water Supply Assessment, the documentation contained in the administrative record in support of the Water Supply Assessment, and other relevant records on file with SCVWA; and (4) hereby approves the Water Supply Assessment for the Project, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.

RESOLVED FURTHER that, the Agency's General Manager or his designee is authorized and directed to forward a copy of the approved Water Supply Assessment to the County of Los Angeles in response to the County's request, and to take any and all actions necessary in furtherance of the matters authorized or contemplated by the foregoing Resolution.

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EXHIBIT 1



Water Supply Assessment

Entrada South and Valencia
Commerce Center Project
(VTTM No. 53295 and VTPM
No. 18108)

May 11, 2022

Prepared by

Santa Clarita Valley
Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

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Table of Contents

<i>List of Tables</i>	v
<i>List of Figures</i>	vi
<i>List of Appendices</i>	vi
<i>List of Acronyms</i>	vi
Section 1: Introduction	1-1
1.1 Background	1-1
1.2 Purpose	1-1
1.3 Project Description	1-2
1.4 Santa Clarita Valley Water Agency	1-3
1.4.1 Water Management Within SCV Water.....	1-4
1.5 2020 Urban Water Management Plan.....	1-4
1.6 SCV Water Policies and Regulatory Approvals/Permits	1-5
1.7 Information Used or Relied Upon in Preparing this WSA.....	1-6
Section 2: Historical and Projected Water Demands.....	2-1
2.1 Existing and Projected SCV Water Demands	2-1
2.2 Projected Water Use	2-3
2.2.1 Potable Water Use Projections	2-3
2.3 Entrada South and Valencia Commerce Center Project Demands.....	2-77
Section 3: Existing and Projected Water Supplies	3-1
3.1 Imported Water Supplies.....	3-2
3.2 State Water Project Supplies	3-2
3.2.1 SWP Facilities.....	3-2
3.2.2 SWP Water Supply Contract Amendments.....	3-2
3.2.3 SWP Water Supplies.....	3-4
3.2.4 Factors Affecting SWP Table A Supplies.....	3-6
3.2.5 Biological Opinion	3-7
3.2.6 SWP Table A Supply Assessment	3-9
3.2.7 SWP Water Supply Estimates.....	3-10
3.2.8 Coordinated Operations Agreement	3-12
3.2.9 Delta Conveyance Project.....	3-13
3.2.10 Emergency Freshwater Pathway Description (Sacramento-San Joaquin Delta)	3-13
3.2.11 Sisk Dam Raise and San Luis Reservoir Expansion	3-15
3.2.12 SWP Seismic Improvements.....	3-15
3.2.13 Water Quality Control Plan/Voluntary Agreement.....	3-15

Table of Contents (cont'd)

3.2.14	Delta Reliance.....	3-16
3.2.15	Other Imported Supplies	3-16
3.2.15.1	Buena Vista-Rosedale Rio Bravo	3-17
3.2.15.2	Nickel Water - Newhall Land.....	3-17
3.2.15.3	Yuba Accord Water.....	3-18
3.3	Groundwater	3-18
3.3.1	Santa Clara River Groundwater Basin – East Subbasin.....	3-18
3.3.2	Groundwater Management Planning	3-18
3.3.2.1	Groundwater Sustainability Plan.....	3-19
3.3.2.2	Groundwater Management Plan	3-19
3.3.2.3	Available Groundwater Supplies.....	3-21
3.3.2.4	Alluvium	3-26
3.3.2.5	Saugus Formation	3-38
3.3.3	Existing and Planned Groundwater Pumping	3-48
3.3.3.1	Impacted Well Capacity	3-48
3.3.3.2	Alluvium	3-49
3.3.3.3	Saugus Formation	3-50
3.3.3.4	Summary	3-50
3.4	Transfers and Exchanges	3-54
3.4.1	Core Transfers	3-54
3.4.2	Spot Market Transfers.....	3-54
3.4.3	Option Contracts	3-55
3.4.4	Future Market Transfers.....	3-55
3.4.5	Water Exchanges.....	3-55
3.5	Groundwater Banking Programs.....	3-56
3.5.1	Semitropic Banking Program	3-57
3.5.2	Rosedale-Rio Bravo Banking Program	3-58
3.5.3	Semitropic Banking Program – Newhall Land.....	3-59
3.5.4	Other Opportunities.....	3-59
3.6	Planned Water Supply Projects and Programs	3-60
3.6.1	Sites Reservoir.....	3-60
3.7	Recycled Water	3-61
3.7.1	Recycled Water Master Planning Efforts	3-62
3.7.2	Existing Wastewater Treatment Facilities	3-63
3.7.3	Wastewater Treatment Facility Improvements and Expansions.....	3-64
3.7.4	New Drop Program	3-65
3.7.5	Instream Flow Requirements	3-67
3.7.6	Other Potential Sources of Recycled Water.....	3-68
3.7.7	Recycled Water Supply and Demand	3-69
3.7.8	Recycled Water Demand	3-70
3.7.9	Recycled Water Comparison	3-72
3.7.10	Methods to Encourage Recycled Water Use	3-73
3.7.11	Optimization Plan for Recycled Water	3-73

Table of Contents (cont'd)

	3.7.12 Additional Considerations Relating to the Use of Recycled Water	3-74
	3.7.13 Capital Outlay Program.....	3-74
Section 4:	Supply Reliability Planning and Accounting for Uncertainties Associated with Groundwater Contamination, and other Factors	4-1
4.1	Water Quality	4-1
4.2	Water Quality Constituents of Interest.....	4-2
4.2.1	Perchlorate.....	4-2
4.2.2	Per- and Polyfluoroalkyl Substances (PFAS).....	4-7
4.2.3	Metals and Salts.....	4-8
4.2.4	Disinfection By-Products	4-9
4.2.5	Total Trihalomethanes	4-9
4.2.6	Microbiological	4-9
4.2.7	Radiological Tests.....	4-9
4.2.8	Organic Compounds	4-10
4.3	Imported Water Quality	4-11
4.4	Surface Water Quality	4-11
4.5	Groundwater Quality	4-12
4.5.1	Water Quality - Alluvium.....	4-13
4.5.2	Water Quality - Saugus Formation.....	4-14
4.6	Water Quality Impacts on Reliability.....	4-14
4.7	Review of Pending Water Quality Permitting for Saugus Wells	4-15
4.7.1	Process Memo 97-005 Requirements.....	4-19
4.7.2	Existing and Future Saugus Wells	4-19
4.7.2.1	Saugus Well 201.....	4-19
4.7.2.2	Saugus Well 205.....	4-20
4.7.2.3	Saugus Wells 3 and 4.....	4-20
4.7.2.4	Saugus Wells 5 and 6.....	4-20
4.7.2.5	Saugus Wells 7 and 8.....	4-21
4.8	Potential Effects of Climate Change.....	4-21
4.9	Pending Water Use Efficiency.....	4-27
4.10	Water Supply Reliability Modeling.....	4-29
4.11	Water Conservation and Water Shortage Contingency Planning ...	4-333
Section 5:	Water Supply Assessment.....	5-1
5.1	Water System Operations and Reliability Planning.....	5-1
5.1.1	Historical Operation of Santa Clarita Valley Water System.....	5-55
5.1.2	Average/Normal Year Supplies and Demand Comparison	5-77
5.1.3	Single Dry-Year Supplies and Demand	5-1111

Table of Contents (cont'd)

5.1.4	Multiple Dry-Year Supplies and Demand	5-155
5.2	Additional Water Supply Reliability Analysis	5-199
5.3	Conclusion	5-2020
Section 6:	References Used or Relied Upon in Preparing this WSA	6-1

APPENDIX A: ENTRADA SOUTH SITE PLAN

APPENDIX B: VALENCIA COMMERCE CENTER SITE PLAN

List of Tables

Table 2-1 Historical Water Use In the SCV Water Service Area (AF)
Table 2-2 Summary of Water Supplies Used in 2020 (AF)
Table 2-3 SCV Water Projected Normal/Average Year Demands (AFY)
Table 2-4 SCV Water Projected Single-Dry Year Demands (AFY)
Table 2-5 SCV Water Projected Multiple-Dry Year Demands (AFY)
Table 2-6 Water Demand Estimates – Entrada South and Valencia Commerce Center Project
Table 3-1 SWP Table A Supply Reliability (AF)
Table 3-2 Groundwater Operating Plan For The Santa Clarita Valley
Table 3-3 Recent Historical Groundwater Production (AF)
Table 3-4 Projected Groundwater Production (Normal Year) (AF)
Table 3-4 A Active Municipal Groundwater Source Capacity — Alluvial Aquifer Wells
Table 3-4 B Active Municipal Groundwater Source Capacity – Existing, Future and Recovered Alluvial Aquifer Wells Normal Year Detail (2021-2030)
Table 3-4 C Active Municipal Groundwater Source Capacity – Existing, Future and Recovered Alluvial Aquifer Wells Dry Year Detail (2021-2030)
Table 3-5 A Municipal Groundwater Source Capacity- Existing, Future, And Recovered Saugus Formation Wells
Table 3-5 B Municipal Groundwater Source Capacity- Existing, Future, And Recovered Saugus Formation Wells Normal Year Detail (2021-2030)
Table 3-5 C Municipal Groundwater Source Capacity- Existing, Future, And Recovered Saugus Formation Wells Dry Year Detail (2021-2030)
Table 3-6 Average/Normal Year Existing And Planned Groundwater Usage (AF)
Table 3-7 Single-Dry Year Existing And Planned Groundwater Usage (AF)
Table 3-8 Multiple Dry Year (5-Year) Existing And Planned Groundwater Usage (AF)
Table 3-9 Participating Entities
Table 3-10 Existing And Projected Recycled Water Demand
Table 3-11 Projected Recycled Water Use
Table 3-12 Recycled Water Uses – Projection Compared With Actual Use (AFY)
Table 4-1 Status of Impacted Wells

Table 4-2 Current And Projected Water Supply Changes Due To Water Quality (Percent Change)

Table 4-3 Anticipated Schedule For Permitting And Operation Of Saugus Wells

Table 4-4 Recommended Indoor Water Use Standards

Table 4-5 Various SCV Water Supply Scenarios

Table 5-1 SCV Water Historical Sources of Supply (AFY)

Table 5-2 Projected Average/Normal Year Supplies And Demands (AF)

Table 5-3 Projected Single-Dry Year Supplies And Demands (AF)

Table 5-4 Projected Five-Year Dry Year Supplies and Demands (AF)

List of Figures

Figure 1-1 Project Location Map

Figure 2-1 Historical Water Use in the SCV Water Service Area (AF)

Figure 3-1 New Drop Program Process

Figure 4-1 Monthly Distribution of ETo Compared to Baseline

Figure 4-2 Monthly Distribution of Precipitation Compared to Baseline

Figure 4-3 Final Reliability Results with Active Conservation

List of Appendices

A Engineering Site Plans

List of Acronyms

AF	Acre-Feet
AFY	Acre-Feet Per Year
AIP	Agreement in Principle
AVEK	Antelope Valley East-Kern Water Agency

Bay-Delta	San Francisco Bay/Sacramento-San Joaquin Delta Estuary
BO	Biological Opinion
BVWSD	Buena Vista Water Storage District
Cal OES	California Office of Emergency Services
CASGEM	California Statewide Groundwater Elevation Monitoring
CCR	California Code of Regulations
CCWA	Central Coast Water Authority
CEC	California Energy Commission
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CEPA	California Environmental Protection Agency
CDFW	California Department of Fish and Wildlife
cfs	Cubic Feet Per Second
CII	Commercial, Industrial, Institutional
CLWA	Castaic Lake Water Agency
CNRA	California National Resources Agency
COA	Coordinated Operation Agreement
CORPS	Corps of Engineers
CVP	Central Valley Project
BPD	Disinfection By-Products
DCP	Delta Conveyance Project
DCP	Delivery Capability Report
DDW	Division of Drinking Water
DFW	Department of Fish and Wildlife
DLR	Detection Level for Reporting
DPH	California Department of Public Health
DPR	Direct Potable Reuse
DSS	Decision Support System
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
FBR	Fluidized Bed Reactor
FWS	Fish and Wildlife Service
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWMP	Groundwater Management Plan

HET	High Efficiency Toilets
HEU	High Efficiency Urinals
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FBR	fluidized bed reactor
GIS	Geographic Information System
HAA5	Haloacetic Acids
KCWA	Kern County Water Agency
IRWMP	Integrated Regional Water Management Plan
LACWWD 36	Los Angeles County Water Works District 36
LARWQCB	Los Angeles Regional Water Quality Control Board
MAF	Million Acre-Feet
MGD	Million Gallons per Day
MGL	Micrograms per Liter
MOU	Memorandum of Understanding
NCWD	Newhall County Water District
NEPA	National Environmental Policy Act
Ng/L	nanograms per liter
NL	Notification Level
NLF	Newhall Land and Farming
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NOP	Notice of Preparation
NWD	Newhall Water Division
OAL	Office of Administrative Law
OVOV	One Valley One Vision
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctonic acid
PFOS	Perflurooctane sulfonate
PWAs	Public Water Agencies
RL	Response Level
RRBWSD	Rosedale Rio-Bravo Water Storage District
RWMP	Recycled Water Management Plan
SATP	Saugus Aquifer Treatment Plant

SB	Senate Bill
SCWD	Santa Clarity Water Division
SCVSD	Santa Clarita Valley Sanitation District
SCV Water	Santa Clarita Valley Water Agency
Semitropic	Semitropic Water Storage District
SGMA	Sustainable Groundwater Management Act
SLDMWA	San Luis & Delta Mendota Water Authority
SNMP	Salt and Nutrient Management Plan
SOC	Synthetic organic compounds
SWRCB	State Water Resources Control Board
SWP	State Water Project
SWRU	Stored Water Recovery Unit
THMS	Trihalomethanes
TTHMs	Total Trihalomethanes
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
USCR	Upper Santa Clara River
VOC	Volatile Organic Compound
WMT	Water Management Tools
WQOs	Water Quality Objectives
WSA	Water Supply Assessment
WUESP	Water Use Efficiency Strategic Plan
ug/L	micrograms per liter
UIF	Unimpaired Flow
UWCD	United Water Conservation District
USEPA	United State Environmental Protection Agency
USBR	United States Bureau of Reclamation
UWMP	Urban Water Management Plan
UV	Ultra-Violet
WKWD	West Kern Water District
WQR	Water Quality Report
WRP	Water Reclamation Plant
VWC	Valencia Water Company
VWD	Valencia Water Division

Section 1: Introduction

1.1 Background

This Water Supply Assessment (WSA) has been prepared by the Santa Clarita Valley Water Agency (SCV Water) for the Entrada South and Valencia Commerce Center Project (VTTM No. 53295 and VTPM No.18108) (Project), a residential community with commercial space located in unincorporated Los Angeles County, in the Santa Clarita Valley. The WSA is prepared pursuant to the requirements of California Water Code Sections 10910, et seq., commonly known as Senate Bill 610 (SB 610; Costa; Chap. 643, Stats. 2001) and has been further amended from time to time.

SB 610 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of a public water system prepare a water supply assessment to be included in the environmental documentation of certain proposed projects.

Once a city or county determines that a project, as defined by California Water Code section 10912, is subject to the California Environmental Quality Act, Public Resources Code section 21000, et seq. (CEQA), SB 610 requires the city or county to identify a public water system that may supply water for the project, and request that the public water system prepare a water supply assessment.¹

A “public water system” is defined by the Water Code to mean “a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections.” SCV Water serves piped water to the public (i.e., residents of the Santa Clarita Valley) within its current service area, and the area includes about 73,542 service connections in the City of Santa Clarita and in the unincorporated Los Angeles County communities. As a result, SCV Water is the “public water system” for the purposes of this WSA.

As noted above, a WSA is required for any “project” as defined by Water Code Section 10912 that is subject to CEQA. In this case, the Project proposes, among other things, a residential development of more than 500 dwelling units, and therefore a WSA is required.² SCV Water is the retail purveyor for the Project site, and thus SCV Water is required to prepare a WSA for the Project, pursuant to a request by CEQA lead agency the County of Los Angeles.³

1.2 Purpose

The general purpose of a WSA is to evaluate the following question:

Whether the public water system’s total projected water supplies available during normal, single-dry, and multiple-dry water years during a 20-year projection will meet the

¹ California Water Code §§ 10910(b), 10910(c)(1).

² Water Code § 10912(a)(1). This section also includes other types of development that are defined as a “project” by this section of the code.

³ Water Code § 10910(b).

*projected water demand of the Project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.*⁴

If, as a result of its WSA, the public water system concludes that its water supplies are or will be insufficient, the public water system must provide to the applicable land use authority its plans for acquiring additional water supplies, setting forth the measures being undertaken to acquire and develop those supplies.⁵ The WSA must include, among other information, an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the project, and water received in prior years by the public water system pursuant to those entitlements, rights, or contracts.⁶

The WSA is required to be included in any environmental document prepared for the project pursuant to CEQA.⁷ In this case, the County of Los Angeles is the lead agency under CEQA, and it has determined that a Supplemental Environmental Impact Report (EIR) is required for the Project; thus, this WSA will be included as part of the Entrada South and Valencia Commerce Center Project Draft Supplemental EIR. This WSA evaluates water supplies that are or will be available during normal, single-dry, and multiple-dry water years during a 30-year projection to meet existing demands, expected demands of the Project, and reasonably foreseeable planned future water demands served by SCV Water.

1.3 Project Description

The Entrada South Project (VTTM No. 53295) is located on the west side of the Old Road between Valencia Blvd. and Magic Mountain Parkway in unincorporated Los Angeles County. The Valencia Commerce Center Project (VTTM No. 18108) is located on the west side of The Old Road between State Hwy 126 and Commerce Center Drive, also in unincorporated Los Angeles County in the State of California. The Project is located within SCV Water's service area as shown in Figure 1-1. The Entrada South Project is located on 127.2 acres for residential and mixed-use land uses and 312.4 acres for recreation, arterial and open space land uses. The Entrada South Project consists of 371 multi-family detached residential units, 894 multi-family attached residential units and 309 mixed-use attached residential units as well as 582,025 square feet of mixed-use commercial, a 100-room hotel, a 750-student elementary school, 8.3-acre community park, 53.7 acres of irrigated slopes, 4.1 acres of irrigated medians and parkways and 119.1 acres of open space. The Valencia Commerce Center Project is located on 328.7 acres for commercial land uses. The Valencia Commerce Center Project consists of 2,909,700 square feet of mixed-use office development on 101.3 acres, 490,300 square feet of commercial retail and business park development on 17.1 acres, 41.8 acres of irrigated slopes, 0.5 acres of irrigated medians and parkways and 168 acres of open space. The total estimated water demand for the Project at build-out is approximately 1,411 AFY in an average/normal year. The Project Site Plan is shown in Appendix A.

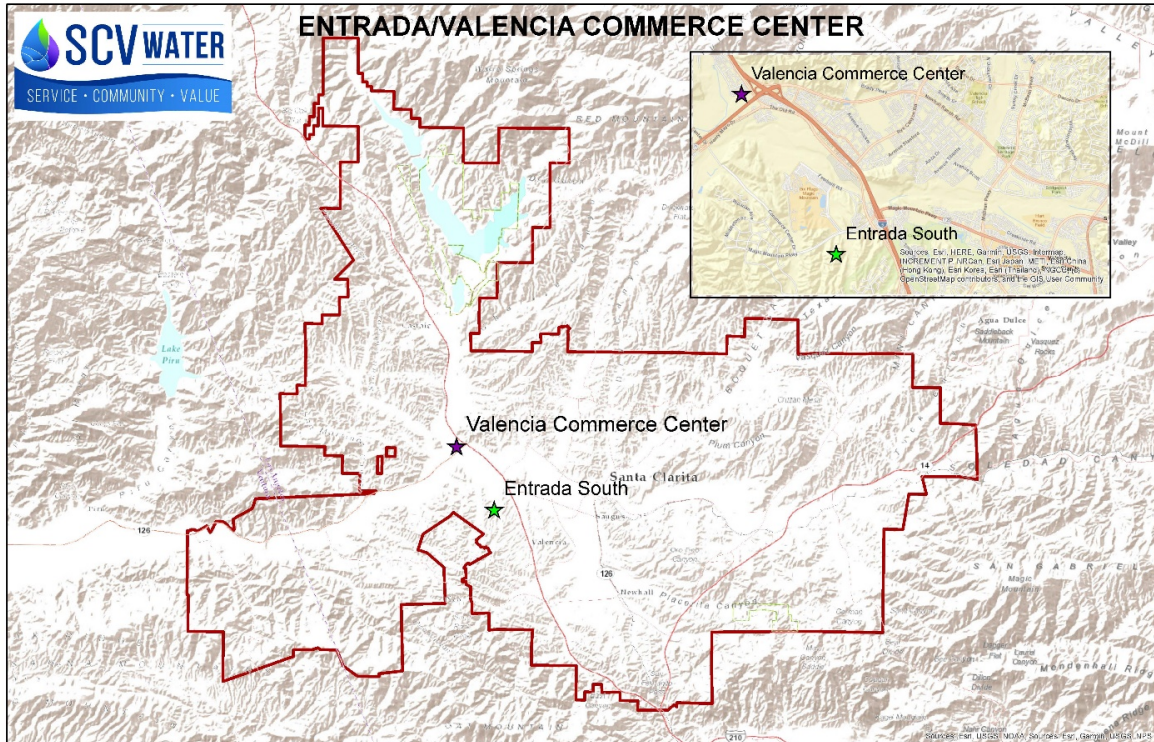
⁴ Water Code § 10910(c).

⁵ Water Code § 10911(a).

⁶ Water Code § 10910(d).

⁷ Water Code § 10911(b).

Figure 1-1 Project Location Map



1.4 Santa Clarita Valley Water Agency

SCV Water is located in the northwestern portion of Los Angeles County. SCV Water is the regional water wholesaler and retailer for the Santa Clarita Valley. The Project site is located within SCV Water's service area and therefore, SCV Water is the water supplier for the Project.

SCV Water's service area includes nearly the entire city of Santa Clarita and unincorporated portions of Los Angeles County. SCV Water's current service area includes a mix of residential and commercial, and light industrial land uses, mostly comprised of single-family homes, apartments, condominiums, and several local shopping centers and neighborhood commercial developments. SCV Water serves approximately 73,542 service connections. SCV Water generally meets potable water demands using a mix of local groundwater, banked groundwater supplies, imported State Water Project (SWP) water and other imported supplies. Recycled water is delivered to some customers for non-potable uses, such as landscape irrigation.

The groundwater basin in the Santa Clarita Valley is un-adjudicated, meaning that SCV Water does not have specific adjudicated, or defined, water rights or specific limitations that dictate its water supply. However, in practice, SCV Water assesses available groundwater supplies pursuant to appropriate groundwater rights in the basin and in accordance with a groundwater operating plan developed by SCV Water and other retail water purveyors in the Santa Clarita Valley and complemented by analyses based on a numerical groundwater flow model of the

basin. SCV Water is also a member of the Santa Clarita Valley Groundwater Sustainability Agency (SCV-GSA) for the Santa Clara River East Subbasin. In preparing the basin's Groundwater Sustainability Plan (GSP), it conducted additional numeric modeling that further refined the groundwater operating plan for the basin as further discussed in Section 3.3.2.1.

1.4.1 Water Management Within SCV Water

SCV Water was formed on January 1, 2018, when the Castaic Lake Water Agency (CLWA), which included Santa Clarita Water Division (SCWD) and Newhall County Water District (NCWD), merged to become a single agency pursuant to state legislation (SB 634, Chapter 833 2017). Later in January 2018, Valencia Water Company (VWC) was dissolved, and its assets were transferred to SCV Water. The SCV Water service area is shown on Figure 1-1. The formation of SCV Water occurred through a collaborative process. Until the merger, CLWA served as the regional wholesaler to the Santa Clarita Valley, encompassing a service area of 195 square miles in Los Angeles and Ventura Counties. SCV Water now serves the same service area and is made up of three water divisions with separate but interconnected distribution systems: NWD, SCWD, and VWD. Those divisions cover nearly the entire City of Santa Clarita and unincorporated portions of Los Angeles County. In addition, SCV Water serves as a wholesale water provider to LACWWD 36 whose service area includes the Hasley Canyon and the Val Verde communities in the Los Angeles County unincorporated area. LACWWD 36, which is in the SCV Water service area, relies primarily on its own groundwater. SCV Water provides imported water as a supplemental supply.

1.5 2020 Urban Water Management Plan

Pursuant to SB 610 requirements, if the projected water demand associated with the proposed project was accounted for in the most recently adopted Urban Water Management Plan (UWMP),⁸ then relevant information from that document may be incorporated into the WSA. The 2020 UWMP was adopted by the SCV Water Board of Directors in June 2021 and filed with DWR.⁹ It is noted that since the 2020 UWMP was submitted to DWR in 2021, additional information has become available which staff incorporated into this WSA. These updates primarily reflect revised SWP reliability data, that became available from the December 31, 2021 Draft SWP Delivery Capability Report (DCR) (see Section 3.2.7 SWP Water Supply Estimate).as well as updated planning, construction and permitting schedule for several groundwater well recovery projects (see Section 3.3.2.3 Available Groundwater Supplies) The 2020 UWMP information was therefore updated to provide the SCV Water Board with the most current information when it considers adoption of this WSA.

The 2020 UWMP is a planning document covering the SCV Water service area. The 2020 UWMP encouraged extensive public participation that included information dissemination; public workshops, meetings, and hearings; plan adoption; and plan submittal to DWR. The 2020 UWMP includes the following ten major sections:

Section 1: Introduction

Section 2: Water Use

⁸ California Urban Water Management Planning Act (UWMP Act), Water Code § 10610, et seq.

⁹ The 2020 UWMP, Section 1.

Section 3: SBX7-7 Baseline, Targets, and 2020 Compliance
Section 4: Water Resources
Section 5: Recycled Water
Section 6: Water Quality
Section 7: Reliability Planning
Section 8: Demand Management Measures
Section 9: Catastrophic Interruptions in Water Service
Section 10: References

Consistent with the UWMP Act, the 2020 UWMP accomplishes water supply planning over the required 20-year period in five-year increments. While not required, SCV Water exceeded the requirements of the UWMP Act by including a span of 30 years in the 2020 UWMP, extending out to 2050. The 2020 UWMP identifies and quantifies adequate water supplies for existing and future demands, in normal/average, single-dry, and multiple-dry years, and describes implementation of conservation and efficient use of urban water supplies.

The Project's total projected water demand was accounted for in the 2020 UWMP because the Project demand details were known when preparing the document. Also, in order to estimate demand out to 2050 (assumed year of designated land use-buildout), population and water use projections were made based upon existing land uses and planned land use development compiled for the service area, including the City of Santa Clarita and County of Los Angeles land use plans, also known as the One Valley One Vision general plan (OVOV). The Project is located in the unincorporated area of LA County covered by the OVOV. It is SCV Water's understanding that this development is contained in and consistent with the OVOV plan. As the UWMP is based on the housing and commercial development projected in the OVOV plan, the project's water demand has already been incorporated into the existing UWMP demand projections. This information is incorporated by reference in this WSA and can be found on SCV Water's website at <https://yourscvwater.com/uwmp/>. Demands for the Project are included in Section 2.3 of this WSA.

1.6 SCV Water Policies and Regulatory Approvals/Permits

SCV Water Policies. The Project will be subject to all SCV Water policies that govern development and connection to the SCV Water public water system. As with other projects within its service area, the Project applicant is responsible for making appropriate financial and contractual arrangements with SCV Water to assure the necessary improvements are made to the water supply infrastructure to serve the Project site.

Other Regulatory Approvals/Permits. SCV Water is regulated by the State Water Resources Control Board – Division of Drinking Water (DDW) and must meet rigorous water quality standards. In addition, the Project is located in unincorporated Los Angeles County, therefore LA County will evaluate the Project, conduct extensive environmental oversight, and review, and independently determine the sufficiency of the water supplies to serve the Project site. (Water Code § 10911(b)-(c).) In doing so, the County will determine if the Project will be provided with an acceptable level of water supply based on the criteria set forth in the County's General Plan, because the Project is located within the Santa Clarita Valley, and because it includes a subdivision map application. In making this determination, the County may use water-related

data set forth in documents such as the 2020 UWMP and other information provided by SCV Water.

1.7 Information Used or Relied Upon in Preparing this WSA

This WSA used or relied on information contained in the documents listed below. Documents may be available online or by contacting the SCV Water - Water Resources Department at (661) 297-1600. The documents are part of SCV Water's record for the preparation of this WSA.

- California Department of Water Resources, 2021 Draft State Water Project Delivery Capability Report
- California Department of Water Resources 2019 State Water Project Delivery Capability Report
- California Department of Water Resources. 2018. Delta Flood Emergency Plan.
- California Department of Water Resources. 2018a. Guidance for Climate Change Data Use During Groundwater Sustainability Plan Development
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- Carollo Engineers, June 2015. Santa Clarita Valley Water Agency Water Resources Reconnaissance Study
- CH2M Hill, 2004a. Regional Ground water Flow Model for the Santa Clarita Valley, Model Development and Calibration
- CH2M Hill, 2004 b. Analysis of Perchlorate Containment in Ground water Near the Whittaker-Bermite Property, Santa Clarita, California, Prepared in support of the 97-005 Permit Application
- CH2M Hill, 2005a. Technical Memorandum, Calibration Update of the Regional Ground Water Flow Model for the Santa Clarita Valley, Santa Clarita, California
- CH2M Hill and Luhdorff & Scalmanini, Consulting Engineers, 2005. Analysis of Ground Water Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin, Los Angeles County, California, prepared for Upper Basin Water Purveyors
- Geoscience. 2014. Salt and Nutrient Management Plan for the Upper Santa Clara River Groundwater Basin Volumes 1 and 2
- Geosyntec Water Supply Reliability Plan, 2021

- GSI Water Solutions (GSI), Inc. 2022. Santa Clara River Valley East Groundwater Sustainability Plan
- GSI Water Solutions (GSI), Inc. 2020a. Water Budget Development for the Santa Clara River Valley East Groundwater Subbasin, Draft Technical Memorandum
- GSI Water Solutions, Inc. 2020. Development of a Numerical Groundwater Flow Model for the Santa Clara River Valley East Groundwater Subbasin
- GSI & LSCE. 2014. Draft Report: Perchlorate Containment Plan for Well V201 and Saugus Formation Groundwater in the Santa Clarita Valley (Task 3 of the Well V201 Restoration Program)
- Kennedy/Jenks Consultants. 2021. Santa Clarita Valley Water Agency Groundwater Treatment Implementation Plan
- Kennedy/Jenks Consultants. 2021. Santa Clarita Valley 2020 Urban Water Management Plan
- Kennedy/Jenks Consultants. 2002. Recycled Water Master Plan Update
- Kennedy/Jenks Consultants. 2016a. Recycled Water Master Plan Update
- Kennedy/Jenks Consultants. 2016b. Santa Clarita Valley Recycled Water Rules and Regulations Handbook
- Kennedy/Jenks Consultants. 2015. Final Preliminary Design Report for the Recycled Water System Phase 2B
- Kennedy/Jenks Consultants. 2014 and 2018 Update. Integrated Regional Water Management Plan for the Upper Santa Clara River Region
- Los Angeles Regional Water Quality Control Board (LARWQCB). 1994. Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 2020 version
- Luhdorff & Scalmanini, Consulting Engineers, 2021. 2020 Santa Clarita Valley Water Report
- Luhdorff & Scalmanini, Consulting Engineers, 2020. 2019 Santa Clarita Valley Water Report
- Luhdorff & Scalmanini and GSI Water Solutions. August 2009. Analysis of Ground Water Supplies and Ground water Basin Yield, Upper Santa Clara River Ground Water Basin, East Subbasin
- Luhdorff and Scalmanini, 2005. Consulting Engineers, Impact and Response to Perchlorate Contamination, Valencia Water Company Well Q2, prepared for Valencia Water Company
- Luhdorff & Scalmanini, Consulting Engineers, December 2003. Ground Water Management Plan for the Santa Clara Valley Ground Water Basin, East Subbasin
- M&N. 2007. Levee Repair, Channel Barrier, and Transfer Facility Concept Analyses to Support Emergency Preparedness Planning
- Maddaus Water Management (MWM), Inc. 2021. Draft 2021 SCV Demand Study: Land-Use-Based Demand Forecast Analysis
- Maddaus Water Management (MWM), Inc. 2016. SCV Demand Study Update: Land-Use Based Demand Forecast, Final Technical Memorandum No.2
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- Santa Clarita Valley Water Agency (SCVWA). 2021. Final Water Shortage Contingency Plan
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- Slade, R. C. Hydrogeologic Assessment of the Saugus Formation in the Santa Clara Valley of Los Angeles County, California, Vols. I and II, prepared for Castaic Lake Water Agency, 1988
- Slade, R. C. Hydrogeologic Investigation of Perennial Yield and Artificial Recharge Potential of the Alluvial Sediments in the Santa Clarita River Valley of Los Angeles County, California, Vols. I and II, prepared for Upper Santa Clara Water Committee, 1986
- Wang, Jianzhong, Hongbing Yin, Erik Reyes, Tara Smith, Francis Chung (California Department of Water Resources). 2018. Mean and Extreme Climate Change Impacts on the State Water Project. California's Fourth Climate Change Assessment. Publication number: CCCA4-EXT-2018-004
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- Santa Clarita Valley Water Agency 2014, Agreement in Principle with the Department of Water Resources for extension of contracts, September 12, 2014
- Department of Water Resources Contract Extension Amendment, February 2019
- Santa Clarita Valley Water Agency 2015, Agreement with Ventura County for use of their Flexible Storage Account
- Department of Water Resources Coordinated Operations Agreement with the Bureau of Reclamation, 1986
- Department of Water Resources Addendum to the Coordinated Operations Agreement with the Bureau of Reclamation, December 2018
- Santa Clarita Valley Water Agency Transfer Agreement with Buena Vista Water Storage District and Rosedale Rio Bravo Water Storage District
- Santa Clarita Valley Water Agency 2018, Yuba Accord Agreement
- Santa Clarita Valley Water Agency Two-for-One Water Exchange Program with Antelope Valley-East Kern Water Agency (AVEK), 2019

- Santa Clarita Valley Water Agency Two-for-One Water Exchange Program with United Water Conservation District, 2019
- Santa Clarita Valley Water Agency Agreement with Semitropic Water Storage District for participation in the Storage Water Recovery Unit (SWRU), 2015
- Santa Clarita Valley Water Agency Water Banking and Exchange Program Agreement with Rosedale Rio Bravo Water Storage District, 2005-2015
- Santa Clarita Valley Water Agency contract with the Santa Clarita Valley Sanitation District
- Santa Clarita Valley Water Agency, Biennial Budget for FY 2021/22, and FY 2022/23

Section 2: Historical and Projected Water Demands

This section describes historical and projected water use in the SCV Water service area and the methodology used to project future demands within SCV Water service area. In order to estimate demand out to 2050 (assumed year of designated land use-buildout), population and water use projections were made based upon existing land uses and planned land use development compiled for the service area, including the City of Santa Clarita and County of Los Angeles land use plans, also known as the One Valley One Vision general plan (OVOV). The Project is located in the unincorporated area of Los Angeles County covered by the OVOV. It is SCV Water's understanding that this development is contained in and consistent with the OVOV plan. As the UWMP is based on the housing and commercial development projected in the OVOV plan, the Project's water demand has already been incorporated into the existing UWMP demand projections. In addition, weather and water conservation effects on water usage were considered for this WSA consistent with the approach of the 2020 UWMP.

2.1 Existing and Projected SCV Water Demands

As part of the 2020 UWMP update, an analysis was performed that combined growth projections with water use data to forecast total water demand in future years. Water uses were broken out into specific categories and assumptions were made to accurately project water use over the next 30 years. The demand projections include econometric modeling and plumbing code changes and assume that water conservation programs will continue to be implemented. Climate change impacts on demands were assessed and incorporated in the demand projections. These projections were based on the 2021 Maddaus Technical Memorandum, which serves as the land-use demand forecast for SCV Water and its service area. The historical potable water demands for SCV Water's service area are shown in Table 2-1 and graphically in Figure 2-1. The current water use in SCV Water's service area (2020) is shown in Table 2-2.

TABLE 2-1 HISTORICAL WATER USE IN THE SCV WATER SERVICE AREA (AF)^(a)

Year	SCV Water	LACWWD 36 ^(b)	Total
1995	45,196	477	45,673
1996	49,614	533	50,147
1997	53,388	785	54,173
1998	48,280	578	48,858
1999	56,596	654	57,250
2000	60,188	800	60,988
2001	59,784	907	60,691
2002	67,156	1,069	68,225
2003	66,272	1,175	67,447
2004	71,062	1,234	72,296
2005	69,568	1,200	70,768
2006	72,837	1,289	74,126
2007	76,086	1,406	77,492
2008	74,546	1,354	75,900

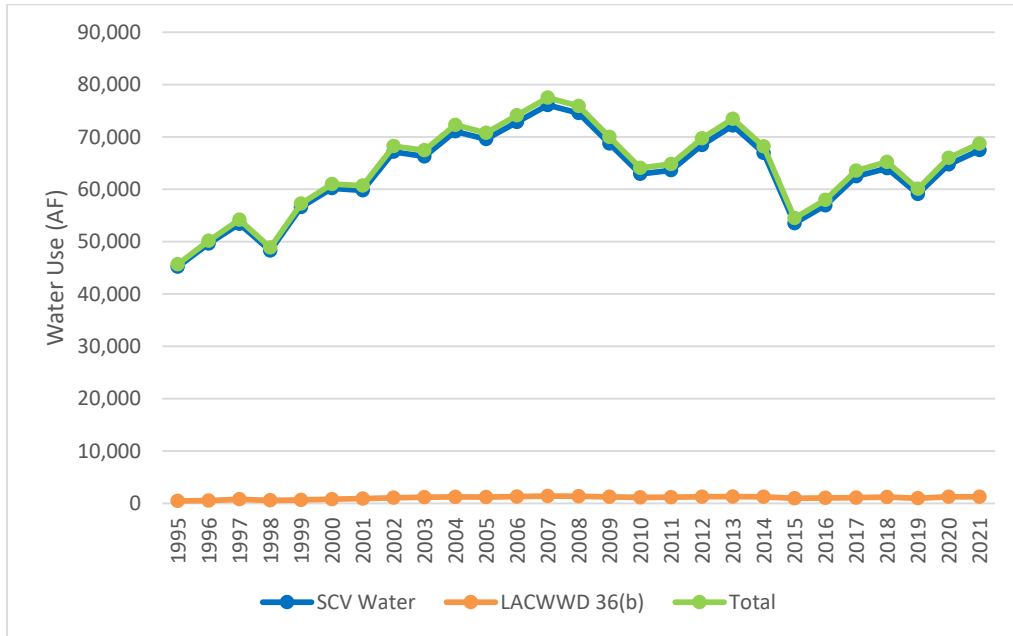
2009	68,731	1,243	69,974
2010	62,925	1,141	64,066
2011	63,633	1,172	64,805
2012	68,447	1,265	69,712
2013	72,164	1,296	73,460
2014	66,936	1,242	68,178
2015	53,515	976	54,491
2016	56,916	1,050	57,966
2017	62,461	1,094	63,555
2018	64,011	1,209	65,220
2019	59,098	979	60,077
2020	64,734	1,262	65,996
2021 ^(c)	67,470	1,244	68,714

Source: 2019 Santa Clarita Valley Water Report (July 2020) and 2020 and 2021 data provided by SCV Water and LACWWD 36

Notes:

- (a) Total potable and non-potable water use.
- (b) LACWWD 36 is included for purposes of providing regional completeness; however, it is not required to prepare an UWMP.
- (c) Does not include required groundwater discharge to the stormwater system during initial operation at multiple SCV Water Groundwater Treatment Facilities.

FIGURE 2-1 Historical Water Use in the SCV Water Service Area (AF)



Source: 2019 Santa Clarita Valley Water Report (July 2020) and 2020 and 2021 data provided by SCV Water and LACWWD 36.

Note: Water use shown here includes potable and non-potable (recycled water) use. Recycled water makes up less than 1 percent of total use.

**TABLE 2-2
SUMMARY OF WATER SUPPLIES USED IN 2021 (AF)**

	2021^(a)
Existing Groundwater	
Alluvial Aquifer	14,067
Saugus Formation	11,478
Total Groundwater^(b)	25,545
Recycled Water	
Total Recycled	480
Imported Water	
State Water Project	7,510
Buena Vista-Rosedale	9,685
Yuba Accord Water	1,253
SWC Dry Year Transfer Program	208
Total Imported	18,656
Existing Banking and Exchange Programs	
Rosedale Rio-Bravo Bank	16,320
Semitropic Bank	5,000
Rosedale Rio-Bravo Exchange	0
Antelope Valley East Kern Water Agency Exchange	0
West Kern Exchange	0
Total Bank/Exchange	21,320
Total Supplies	66,001

Notes:

- (a) Actual 2021 supplies utilized. These values are not indicative of available future supplies
- (b) Reflects temporary greater pumping of Saugus Formation to mitigate for lost Alluvial Aquifer pumping pending installation of PFAS treatment described in Tables 3-4A, 3-4B, 3-4C, 3-5A, 3-5B and 3-5C. Additional details on water quality impacts to groundwater supply availability is provided in Section 3.3.

2.2 Projected Water Use

The demand projections for the SCV Water service area have been estimated through 2050. For the UWMP, a land use-based approach was used (which incorporates information from a population-based approach) because such an approach can further reflect assumptions regarding how future development is planned. It can also demonstrate how water usage patterns have evolved from what they were in the past as the Santa Clarita Valley approaches buildout.

2.2.1 Potable Water Use Projections

Potable water use projections are based on a combination of SCV Water and LACWWD 36 demands. For SCV Water's three retail water divisions, the potable demand forecast was determined from land-use-based estimates from 2020 through 2050 (buildout). The land use-

based estimates were determined in a land use analysis that compiled data from planned development contracts and the OVOV General Plan. In general, the land use analysis leveraged the following information:

- Estimated dwelling units provided by City of Santa Clarita and Los Angeles County Planning Department,
- Land use-based GIS map shape files from City of Santa Clarita and Los Angeles County planners for determining the appropriate number of dwelling units and non-residential building area,
- Queries from GIS maps to determine dwelling units were multiplied by persons per household from the U.S. Census appropriate to each retailer's service area,
- Monthly billing data by customer category (single-family, multi-family, non-residential, etc.),
- Climate and economic adjustment factors for normalizing demands, and
- Future demand factors.

The LACWWD 36 potable demand projections relied on a population-based approach using OVOV-based population estimates. Based on these estimates for SCV Water and LACWWD 36, potable demand projections were developed using a Least Cost Planning Decision Support System Model (DSS Model), which incorporates econometric-based adjustments to better develop an accurate forecast through the year 2050. The DSS Model accounts for existing and future potable water consumption by water customers and estimated passive and active water conservation savings. Demand adjustments include accounting for climate change, drought rebound, weather normalization, work-at-home trends, and overwatering/irrigation equipment efficiency degradation.

In addition, recent legislation provides that, where available, demand projections “shall” display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area. If such information is reported, the assessment will provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections. The UWMP must indicate the extent that the demand projections consider savings from codes, standards, ordinances, or transportation and land use plans (referred to as savings from passive conservation).

The demand forecast conducted for the UWMP accounts for savings from passive conservation and active conservation. Passive conservation savings focus on plumbing code change impacts on indoor fixtures and include the following laws, codes, and regulations:

- National Plumbing Code (also known as the Energy Policy Act) – Passed in 1992, has long required more efficient plumbing fixtures to be for sale throughout the United States.

- Assembly Bill (AB) 715 – California Plumbing Code includes the new California Code of Regulations (CCR) Title 20 Appliance Efficiency Standards requiring High Efficiency Toilets and High Efficiency Urinals to be exclusively sold in the state by January 1, 2014.
- SB 407 and SB 837 – SB 407 addresses plumbing fixture retrofits on resale or remodel, requiring single family residential property owners of pre-1994 buildings or dwelling units to replace existing plumbing fixtures with water conserving fixtures by 2017 and multi-family and commercial property owners of pre-1994 buildings to replace fixtures by 2019. It also requires all owners to upgrade existing buildings upon any remodel initiated after January 1, 2014, and authorizes the enactment of local ordinances for greater water savings. SB 837 (enacted in 2011) requires that sellers of real estate property disclose on their Real Estate Transfer Disclosure Statement whether their property complies with these requirements. Both laws are intended to accelerate the replacement of older, low efficiency plumbing fixtures, and ensure that only high efficiency fixtures are installed in new residential and commercial buildings.
- 2019 CALGreen and 2015 California Code of Regulations Title 20 Appliance Efficiency Regulations – Fixture characteristics in the DSS Model are tracked in new accounts, which are subject to the requirements of the 2019 California Green Building Code and 2015 California Code of Regulations Title 20 Appliance Efficiency Regulations adopted by the California Energy Commission (CEC) on September 1, 2015. The CEC 2015 appliance efficiency standards apply to the following new appliances, if they are sold in California: showerheads, lavatory faucets, kitchen faucets, metering faucets, replacement aerators, wash fountains, tub spout diverters, public lavatory faucets, commercial pre-rinse spray valves, urinals, and toilets. The DSS Model accounts for plumbing code savings due to the effects these standards have on showerheads, faucet aerators, urinals, toilets, and clothes washers.
- AB 1881 – State Model Water Efficient Landscape Ordinance adopted by the City of Santa Clarita effective January 1, 2010; improves efficiency in water use in new and existing urban irrigated landscapes.

The conservation savings analysis includes SCV Water's current active water conservation measures and also passive water savings such as indoor plumbing code measures as follows:

- | | |
|--|------------------------------------|
| • Fixture Retrofit on Resale or Water Account Change | • Smart Controller Rebates |
| • New Development Submetering | • Irrigation Incentives |
| • Landscape & Irrigation Codes | • Irrigation Check-Ups |
| • Water Waste Implementation | • Pool Cover Rebates |
| • AMI | • Residential Check-Ups |
| • Real Water Loss Reduction | • Hot Water on Demand Rebate |
| • Education | • CII Check-Ups |
| • Water Smart Workshop Credit | • CII HET and HEU Rebates |
| • Landscape Transformation Incentives | • High Efficiency Fixture Giveaway |
| | • Schools Retrofits |

This active conservation methodology is an update from SCV Water's 2016 Water Use Efficiency Strategic Plan (WUESP) and the 2015 UWMP analysis.

Table 2-3 provides a summary of the projected total water use for the SCV Water service area in a normal/average water year. Table 2-4 provides projected demands in a single-dry year and Table 2-5 provides demands in a multiple-dry year.

Additional details of the demand projections analysis are provided in the 2021 Maddaus Technical Memorandum (Maddaus 2021).

TABLE 2-3 SCV WATER PROJECTED NORMAL/AVERAGE YEAR DEMANDS (AFY)^{(a)(b)}

Year	2025	2030	2035	2040	2045	2050
Total Water Use	76,400	81,700	88,700	93,600	97,500	101,000

Source: Maddaus Water Management (MWM), Inc. 2021. Draft 2021 SCV Demand Study: Land-Use-Based Demand Forecast Analysis. April. Table 5 Estimated total demand with active conservation and plumbing code savings. Demands include climate change and recycled water.

^a LACWWD 36 is included for purposes of providing regional completeness; however, it is not required to prepare an UWMP.

^b Demands include the Entrada South and Valencia Commerce Center Project.

TABLE 2-4 SCV WATER PROJECTED SINGLE-DRY YEAR DEMANDS (AFY)^{(a)(b)(c)}

Year	2025	2030	2035	2040	2045	2050
Total Water Use	81,000	86,600	94,000	99,200	103,400	107,100

Source: WSA5-3. Demands include savings from plumbing code and standards, and active conservation. Demands account for an estimated increase from climate change.

^a LACWWD 36 is included for purposes of providing regional completeness; however, it is not required to prepare an UWMP.

^b Demands include the Entrada South and Valencia Commerce Center Project.

^c Demands assume a 6% increase above normal demand during dry years.

TABLE 2-5 SCV WATER PROJECTED MULTIPLE-DRY YEAR DEMANDS (AFY)^{(a)(b)(c)}

Year	2025	2030	2035	2040	2045	2050
Total Water Use	77,830	83,620	90,570	95,780	99,670	102,870

Source: WSA Table 5-4.

^a LACWWD 36 is included for purposes of providing regional completeness; however, it is not required to prepare an UWMP.

^b Demands include the Entrada South and Valencia Commerce Center Project.

^c Demands are weather adjusted for dry 1988-1992 hydrology.

2.3 Entrada South and Valencia Commerce Center Demands

Following the methodology used to calculate the water demands in the 2020 Urban Water Master Plan, the total estimated water demand for the Project at build-out is approximately 1,411 AFY in an average/normal year. These demands reflect updated residential unit counts in Entrada South as well as modification to commercial/industrial land use in the Valencia Commerce Center. These changes in land use led to a decrease in Project water demand of 511 AFY compared to the 2020 UWMP. Water demand for the Project at build-out may increase by approximately six percent in a single dry year to a total of 1,496 AFY and approximately two percent in multiple dry years to a total of 1,439 AFY. The total estimated water demand for the Project at build-out is summarized in Table 2-6 below.

Consistent with the 2020 UWMP, these demands reflect water use factors from the August 18, 2020, GSI Water Solutions, Inc., Updated Water Demand Projections for West Side Communities Draft Technical Memorandum and incorporate a 3.77% increase for climate change, a 26.5% adjustment for over watering of outdoor residential use and a 26.5% increase for over watering of commercial outdoor water use. The potential exists for the Project's outdoor water use to be reduced from the level incorporated into the WSA if irrigation practices are consistent with the Model Water Efficiency Landscape Ordinance (MWELo) irrigation design criteria and incorporated into the project. At this time, however, there are no means to compel the efficient irrigation practices envisioned under MWELo. While SCV Water would be interested in pursuing such arrangements, in their absence, this WSA incorporates overwatering adjustment based on studies prepared for the 2020 UWMP.

TABLE 2-6 WATER DEMAND ESTIMATES - ENTRADA SOUTH AND VCC PROJECTS						
Project	Land Use	# of Units	Unit	Potable Demand (AFY)	Non-Potable Demand (AFY)	Total Demand (AFY)
Entrada	Low-Medium Density/ Multi-Family Detached	371	Dwelling Units	83	26	108
Entrada	Medium Density/ Multi-Family Attached	894	Dwelling Units	199	42	242
Entrada	High Density Mixed Use/ Multi-Family	309	Dwelling Units	69	4	73
Entrada	Mixed Use Retail	1.5	acres	1	1	2
Entrada	Mixed Use Office	52.5	acres	26	33	59
Entrada	Business Park Office	0	acres	1	0	1
Entrada	Hotel	5.6	acres	33	5	38
Entrada	Schools	10.3	acres	17	13	29
Entrada	Parks	8.3	acres	1	27	28
Entrada	Landscape Areas	4.1	acres	0	10	10
Entrada	Irrigated Slopes	53.7	acres	0	134	134
Entrada	Irrigated Open Space	15.5	acres	0	35	35
VCC	Mixed Use Office	101.3	acres	147	63	210
VCC	Commercial Retail	0.6	acres	4	0	4
VCC	Business Park Industrial	16.5	acres	100	10	111
VCC	Landscape Areas	0.5	acres	0	1	1
VCC	Irrigated Slopes	41.8	acres	0	105	105
Total Average Year Demands (AFY)						1411
Projected Single Dry Year Demands (AFY)						1496
Projected Multiple-Dry Year Demands (AFY)						1439

Note: Totals reflect additional overwatering factor of 26.5% for residential and 25.6% for commercial uses and 3.77% climate change factor

Section 3: Existing and Projected Water Supplies

Water Code Section 10910(b) requires a WSA to identify any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the Project and describe the quantities of water received in prior years by the public water system. The identification of existing water supply entitlements, water rights, or water service contracts held by the public water system must be demonstrated by providing information related to the following:

1. Written contracts or other proof of entitlement to an identified water supply;
2. Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system;
3. Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply; and
4. Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

In accordance with SB 610 (Water Code Section 10910(d)), Section 2 of the 2020 UWMP (June 2020) and the 2019 Santa Clarita Valley Water Report summarize the total quantity of water used by SCV Water to meet water demand since importation of SWP water began in 1980. Also, Section 1.7, above, contains a list of documents with information related to the identification of the existing water supply entitlements, water rights, or water service contracts relevant to meet the Project's water demand, in addition to the existing and projected water supplies reported in the 2020 UWMP and the most recent 2019 and 2020 Santa Clarita Valley Water Reports.

SCV Water has existing water entitlements, rights, and contracts to meet demand as needed over a 25-year horizon and beyond and has committed sufficient capital resources and planned investments in various water programs and facilities to serve all its existing and planned customers. As discussed herein, SCV Water also has identified an operational strategy combined with a prudent and flexible management approach to ensure water supply reliability.

SCV Water's existing supplies include imported water, local groundwater, recycled water, and water from existing groundwater banking programs. Planned supplies include new groundwater production as well as additional banking programs. The mix of supplies can vary significantly depending on local and statewide hydrology, access to groundwater, and other factors. For example, in 2019, a wet year, imported water supplies made up 58%, groundwater 41%, and recycled water less than 1%. In 2020 dry hydrology and perchlorate and PFAS in local groundwater resulted in groundwater production making up approximately 26% of SCV Water's total supplies, imported water making up 39%, recycled water making up less than 1% of supplies, and existing banking and exchange programs making up approximately 34% of total supplies. A further description of the variability of the mix of supplies is included in Section 5.1 of this WSA.

3.1 Imported Water Supplies

SCV Water's imported water supplies consist primarily of SWP supplies, which were first delivered to SCV Water (CLWA at the time) in 1980. From the SWP, SCV Water also has access to water from Flexible Storage Accounts in Castaic Lake, which are planned for dry-year use, but are not strictly limited as such. In addition to its SWP supplies, SCV Water has an imported supply from the Buena Vista Water Storage District (BVWSD) and Rosedale Rio-Bravo Water Storage District (RRBWSD) in Kern County, which was first delivered to SCV Water (CLWA at the time) in 2007. Additionally, Newhall Land and Farming Company (Newhall Land or NLF) (now also referred to as Five Point) has a water transfer supply from a source in Kern County, referred to as Nickel Water that for planning purposes is anticipated to be available beginning in 2035.

3.2 State Water Project Supplies

3.2.1 SWP Facilities

The SWP is the largest state-built, multi-purpose water project in the country. It was authorized by the California State Legislature in 1959, with the construction of most initial facilities completed by 1973. Today, the SWP includes 28 dams and reservoirs, 26 pumping and generating plants and approximately 660 miles of aqueducts. The primary water source for the SWP is the Feather River, a tributary of the Sacramento River. Storage released from Oroville Dam on the Feather River flows down natural river channels to the Sacramento-San Joaquin River Delta (Delta). While some SWP supplies are pumped from the northern Delta into the North Bay Aqueduct, the vast majority of SWP supplies are pumped from the southern Delta into the 444-mile-long California Aqueduct. The California Aqueduct conveys water along the west side of the San Joaquin Valley to Edmonston Pumping Plant, where water is pumped over the Tehachapi Mountains and the aqueduct then divides into the East and West Branches. SCV Water takes delivery of its SWP water at Castaic Lake, a terminal reservoir of the West Branch. From Castaic Lake, SCV Water delivers its SWP supplies to its customers through an extensive transmission pipeline system.

3.2.2 SWP Water Supply Contract Amendments

SWP Contract and Extension

The Department of Water Resources (DWR) provides water supply from the SWP to 29 SWP Contractors (Contractors) in exchange for Contractor payment of all costs associated with providing that supply. DWR and each of the Contractors entered into substantially uniform long-term water supply contracts (Contracts) in the 1960s with 75-year terms. The first Contract terminates in 2035, and most of the remaining Contracts terminate within three years after that. SCV Water is one of the 29 Contractors that have an SWP Contract with DWR.

The majority of the capital costs associated with the development and maintenance of the SWP is financed using revenue bonds. These bonds have historically been sold with 30-year terms. It has become more challenging in recent years to affordably finance capital expenditures for the SWP because bonds used to finance these expenditures are limited to terms that only extend to the year 2035, fewer than 15 years from now. To ensure continued affordability of debt service to Contractors, it was necessary to extend the termination date of the Contracts to allow DWR to continue to sell bonds with 30-year terms.

Public negotiations to extend the Contracts took place between DWR and the Contractors during 2013 and 2014. An Agreement in Principle (AIP) was reached and was the subject of analysis under the requirements of the CEQA (Notice of Preparation dated September 12, 2014). On December 11, 2018, the DWR Director approved the Water Supply Contract Extension Project. In accordance with CEQA, DWR also filed its Notice of Determination for the project with the Governor's Office of Planning and Research. In addition, DWR filed an action in Sacramento County Superior Court to validate the Contract Extension Amendments (<https://Water.ca.gov/Programs/State-Water-Project/Management/Water-Supply-Contract-Extension>). After CEQA was completed and contract language was finalized, DWR and 22 contractors have executed the Extension Amendment, including SCV Water, which executed the amendment in February 2019. The Extension Amendment extends the contracts through 2085 or the period ending with the latest maturity date of any bond issued to finance the construction costs of Project facilities, whichever is longer. The Extension Amendment will improve the project's overall financial integrity and management. The Extension Amendment is the subject of a validation action and two CEQA lawsuits.

Water Management Tools Contract Amendment

In a December 2017 Notice to Contractors, DWR indicated its desire to supplement and clarify existing SWP Contract's water transfer and exchange provisions to provide improved water management among public water agencies (PWAs). The purpose was to seek greater flexibility to manage the system in order to address changes in hydrology and further constraints placed on DWR's operation of the SWP. To this end, PWAs and DWR conducted public negotiations in 2017 with the purpose of improving these water management tools (WMT). Importantly, the transfers and exchanges provided for in a WMT Contract amendment are limited to those transfers and exchanges between PWAs with SWP Contracts.

In June 2018, PWAs and DWR agreed upon an Agreement in Principle (AIP), which included specific principles to accomplish this goal. These principles included a process for transparency for transfers and exchanges, new flexibility for single and multi-year non-permanent water transfers, allowing PWAs to set terms of compensation for transfers and exchanges, and providing for the limited transfer of carryover and Article 21 water.

In October 2018, a Draft Environmental Impact Report (DEIR) was circulated based on the agreed upon AIP principles for a WMT Contract amendments. At that time, the AIP included cost allocation for the California WaterFix project (WaterFix). In early 2019, Governor Newsom decided not to move forward with WaterFix, and DWR rescinded its approvals for WaterFix. After this shift, the PWAs and DWR held a public negotiation session and agreed to remove the WaterFix cost allocation sections from the AIP, but to keep all the water management provisions in the AIP. The AIP for water management provisions was finalized on May 20, 2019. In February 2020, DWR amended and recirculated the Partially Recirculated DEIR for the SWP Supply Contract Amendments for Water Management and in August 2020, DWR certified the Final EIR. The EIR is being challenged in court. The WMT Amendment became effective for those PWAs who executed the amendment on February 28, 2021. The transfer and exchange tools are available during litigation and will remain in effect unless there is a final court order that prohibits their continuation.

Delta Conveyance Project Agreement in Principle

On March 29, 2021, as part of a public negotiation that began in 2019, DWR and PWAs agreed upon an Agreement in Principle for a Contract amendment on a Delta Conveyance Project

(DCP). The objective of the DCP AIP is to develop an agreement to equitably allocate costs and benefits among SWP PWAs of a potential Delta Conveyance Facility that preserves operational flexibility. A decision by each participating PWA for approving a contract amendment with DWR would not occur until after the environmental review for the DCP is completed. That decision would likely occur in 2023, at the earliest.

3.2.3 SWP Water Supplies

Each SWP contractor's SWP Contract contains a "Table A," which lists the maximum amount of contract water supply, or "Table A Water," an agency may request each year throughout the life of the contract. The Table A Amounts in each contractor's SWP Contract ramped up over time, based on projections at the time the contracts were signed and future increases in population and water demand, until they reached a maximum Table A Amount. Most contractor's Table A Amounts reached their maximum levels in the early to mid-1990s. Table A Amounts are used in determining each contractor's proportionate share, or "allocation," of the total SWP Water supply DWR determines to be available each year.

The total planned annual delivery capability of the SWP and the sum of all contractors' maximum Table A Amounts was originally 4.23 million acre-feet (MAF). The initial SWP storage facilities were designed to meet contractors' water demands in the early years of the SWP, with the construction of additional storage facilities planned as demands increased. However, essentially no additional SWP storage facilities have been constructed since the early 1970s. SWP conveyance facilities were generally designed and have been constructed to deliver maximum Table A amounts to all contractors. After the permanent retirement of some Table A amount by two agricultural contractors in 1996, the maximum Table A Amounts of all SWP contractors now total about 4.17 MAF. Currently, SCV Water's annual Table A Amount is 95,200 AF,¹⁰

The primary supply of SWP water made available under the SWP Contracts is allocated Table A supply.

In addition to Table A supplies, the SWP Contracts provide for additional types of water that may periodically be available, including "Article 21" water and water made available through transfers from other SWP Contractors pursuant to the WMT amendment described above (amended Article 56). Article 21 water (which refers to the SWP Contract provision defining this supply) is water that may be made available by DWR when excess flows are available in the Delta (i.e., when Delta outflow requirements have been met, SWP storage south of the Delta is full and conveyance capacity is available beyond that being used for SWP operations and delivery of allocated and scheduled Table A supplies). Article 21 water is made available on an unscheduled and interruptible basis and is typically available only in average to wet years, generally only for a limited time in the late winter.

The availability of Article 21 water and water from transfers with other SWP Contractors can fluctuate significantly. When available, these supplies provide additional water that SCV Water may be able to use, either directly to meet demands or for later use after storage in its groundwater banking programs. Because of the fluctuations in availability of Article 21 water

¹⁰ SCV Water's original SWP Contract with DWR was amended in 1966 for a maximum annual Table A Amount of 41,500 AF. In 1991, SCV Water (CLWA at the time) purchased 12,700 AF of annual Table A Amount from a Kern County Water district, and in 1999 purchased an additional 41,000 AF of annual Table A Amount from another Kern County Water district, for a current total annual Table A Amount of 95,200 AF.

and water from transfers, supplies of these types of SWP water are not included in this WSA. However, to the extent SCV Water is able to make use of these supplies when available, SCV Water may be able to improve the reliability of its SWP supplies beyond the values used throughout the 2020 UWMP and this WSA.

While not specifically provided for in the SWP Contracts, DWR or the State Water Contractors have in dry years facilitated Dry Year Water Purchase Programs for contractors needing additional supplies. Through these programs, water is purchased from willing sellers in areas that have available supplies and is then sold to contractors willing to purchase those supplies. The availability of these supplies is annually variable and therefore they are not included in this WSA. However, SCV Water's access to these supplies when they are available would enable it to improve the reliability of its dry-year supplies beyond the values used throughout this WSA.

Flexible Storage Account

As part of its SWP Contract with DWR, SCV Water has access to a portion of the storage capacity of Castaic Lake. This Flexible Storage Account allows SCV Water to utilize up to 4,684 AF of the storage in Castaic Lake for SCV Water. Any of this amount that SCV Water withdraws must be returned to storage by SCV Water within five years of its withdrawal. SCV Water manages this storage by keeping the account full in normal and wet years and then delivering that stored amount (or a portion of it) during dry periods. The account is refilled during the next year that adequate SWP supplies are available to SCV Water to do so. In 2005 and again in 2015, SCV Water negotiated with Ventura County SWP contractor agencies to obtain the use of their Flexible Storage Account. This allows SCV Water access to another 1,376 AF of storage in Castaic Lake. With the extension to the term of the agreement, SCV Water access to this additional storage is available on a year-to-year basis through 2025. While it is expected that SCV Water and Ventura County will extend the existing flexible storage agreement beyond the 2025 term, it is not assumed to be available beyond 2025 in the 2020 UWMP or this WSA.

Water Management Provisions

The SWP Contract includes a number of provisions that give each contractor flexibility in managing the supplies that are available to it in a given year. For example, a contractor may take delivery of its allocated SWP supplies for direct use or storage within its service area, store that water outside its service area for later withdrawal and use within its service area, carry over a portion of that supply for storage on an as-available-basis in SWP reservoirs for delivery in following years (commonly referred to as "carryover"), exchange a portion of that supply with others for return in a future year, or transfer water with other PWAs pursuant to the newly approved WMT amendment. The SWP Contract also provides for DWR to deliver non-SWP water supplies for contractors through SWP conveyance facilities.

SCV Water takes advantage of these water management provisions in wetter years by storing excess SWP allocated water supply, either in groundwater banking programs or as carryover, or by exchanging supplies with another contractor or water agency. Then in drier years, SCV Water withdraws its previously stored supplies or recovers water from its exchange partner(s). Water stored in groundwater banking programs has the benefit of remaining available until needed, and the water SCV Water currently has in storage is assumed to be available as described in the 2020 UWMP and incorporated herein. At current demand levels, SCV Water also regularly stores a portion of any excess supply as carryover in SWP reservoirs, which can provide it with additional supply for use in following years. Carryover is a no-added-cost storage option, is an easily and quickly accessible supply, and is a valuable benefit if the next year is

dry. However, SCV Water carryover water may be lost when SWP reservoirs fill, which can occur in wetter years. Although the carryover water is considered in the 2021-2025 water drought assessment, because of the variability in how frequently SWP reservoir space would be available to store SCV Water's carryover, it is not specifically included in other supply projections of the 2020 UWMP or this WSA.

3.2.4 Factors Affecting SWP Table A Supplies

While Table A identifies the maximum annual amount of Table A Water a SWP contractor may request, the amount of SWP water actually available and allocated to SWP contractors each year is dependent on a number of factors and can vary significantly from year to year. The primary factors affecting SWP supply availability include: the availability of water at the source of supply in northern California, the ability to transport that water from the source to the primary SWP diversion point in the southern Delta, and the magnitude of total contractor demand for that water.

Availability of SWP Source Water

SWP supplies originate in northern California, primarily from the Feather River Watershed. The availability of these supplies is dependent on the amount of precipitation in the Watershed, the amount of that precipitation that runs off into the Feather River, water use by others in the Watershed, and the amount of water in storage in the SWP's Lake Oroville at the beginning of the year. Variability in the location, timing, amount, and form (rain or snow) of precipitation, as well as how wet or dry the previous year was, produces variability from year to year in the amount of water that flows into Lake Oroville. However, Lake Oroville acts to regulate some of that variability, storing high inflows in wetter years that can be used to supplement supplies in dry years with lower inflows.

In DWR's 2019 State Water Project Delivery Capability Report (2019 DCR), climate change adds another factor in estimating the future availability of SWP source water. Current projections indicate that global warming may change precipitation patterns in California from the patterns that have occurred historically. While different climate change models show differing effects, potential changes are anticipated to include more precipitation falling in the form of rain rather than snow and earlier snowmelt, which would result in more runoff occurring in the winter and early spring rather than spread out over the winter and spring, creating challenges in capturing this runoff for later use in the SWP delivery system.

Ability to Convey SWP Source Water

As discussed previously, water released from Lake Oroville flows down natural river channels into the Delta. The Delta is a network of channels and reclaimed islands at the confluence of the Sacramento and San Joaquin rivers. The SWP and the federal CVP use Delta channels to convey water to the southern Delta for diversion, making the Delta a focal point for water distribution throughout the state.

A number of issues affecting the Delta can impact the ability to divert water supplies from the Delta, including water quality, fishery protection and levee system integrity. Water quality in the Delta can be adversely affected by both SWP and CVP diversions, which primarily affect salinity, as well as by urban discharge and agricultural runoff that flows into the Delta, which can

increase concentrations of constituents such as mercury, organic carbon, selenium, pesticides, toxic pollutants and reduce dissolved oxygen. The Delta also provides a unique estuarine habitat for many resident and migratory fish species, some of which are listed as threatened or endangered. The decline in some fish populations is likely the result of a number of factors, including water diversions, habitat destruction, degraded water quality, and the introduction of non-native species. Delta islands are protected from flooding by an extensive levee system. Levee failure and subsequent island flooding can lead to increased salinity requiring the temporary shutdown of SWP pumps. In addition, climate change analyses also project that salinity issues will increase with sea level rise, requiring extra Delta outflow to dilute more brackish Delta water to meet environmental standards.

In order to address some of these issues, SWP and CVP operations in the Delta are limited by a number of regulatory and operational constraints. These constraints are primarily incorporated into the SWRCB Water Rights Decision 1641 (D-1641), which establishes Delta water quality standards and outflow requirements with which the SWP and CVP must comply. In addition, SWP and CVP operations are further constrained by requirements included in Biological Opinions (BOs) for the protection of threatened and endangered fish species in the Delta issued by the FWS in December 2008 and the NMFS in June 2009, and most recently in 2019 by the FWS as described in Section 4.2. The requirements in the BOs are based on real-time physical and biological phenomena (such as turbidity, water temperature, and location of fish), which results in uncertainty in estimating potential impacts on supply of the additional constraints imposed by the BOs.

Demand for SWP Water

The reliability of SWP supplies is affected by the total amount of water requested and used by SWP contractors, since an increase in total requests increases the competition for limited SWP supplies. As previously mentioned, contractor Table A Amounts in the SWP Contracts ramped up over time, based on projected increases in population and water demand at the time the contracts were signed. Urban SWP contractors' requests for SWP water were low in the early years of the SWP, but have increased steadily over time, although more slowly than the initial ramp-up in their Table A Amounts, which reached a maximum for most contractors in the early to mid-1990s. Since that time, urban contractors' requests for SWP water have continued to increase until recent years when nearly all SWP contractors are requesting their maximum Table A Amounts.

Consistent with other urban SWP contractors, SWP deliveries to SCV Water have increased as its requests for SWP water have increased. Historical total SWP deliveries to SCV Water are shown in Section 3. The table shows deliveries to the SCV Water service area for supply to the purveyors, as well as delivery of SCV Water supplies to storage programs outside the service area and to exchange partners. SCV Water demand projections provided to DWR are typically conservative in order to maximize water deliveries available to SCV Water in any given year for both deliveries and to current and future storage programs.

3.2.5 Biological Opinion

In late 2019, the FWS and NMFS issued new Biological Opinions (BOs) for the Long-Term Operation of the CVP and SWP. Consultation on the BOs began in 2016 to update the prior 2008 and 2009 BO and provide Federal Endangered Species Act (ESA) compliance for the CVP and SWP. Additionally, in early 2020, the California Department of Fish and Wildlife (DFW)

issued DWR an Incidental Take Permit for the Long-Term Operation of the SWP pursuant to the California Endangered Species Act (CESA) with regards to state-protected longfin smelt and state- and federally protected delta smelt, winter-run Chinook and spring-run Chinook. Previously, DFW had issued the SWP an Incidental Take Permit for the state-listed longfin smelt and Consistency Determinations with the 2008 and 2009 Biological Opinions for the state and federally listed species, not a separate permit. Some of the operational restrictions in the 2019 Biological Opinions differ from those in the 2020 Incidental Take Permit. Specifically, even though the projects' operations are coordinated, the SWP is subject to additional operational constraints that reduce SWP supplies and create operational conflicts. Both the 2019 BOs and the 2020 Incidental Take Permit are subject to multiple court challenges that are ongoing.

Biological Opinion Litigation. Two cases were filed challenging the BOs under the ESA, Administrative Procedure Act, and National Environmental Policy Act (NEPA). The first case, *Pacific Coast Federation of Fisherman's Association, et al. v. Ross* (Case No. 1:20-CV-00431-DAD-SAB ("*PCFFA v. Ross*")), was brought by six environmental organizations. The second case, *California Natural Resources Agency, et al. v. Ross* (Case No. 1:20) ("*CNRA v. Ross*"), was brought by the California Natural Resources Agency (CNRA), the California Environmental Protection Agency, and the California Attorney General. The State's case includes a cause of action under CESA alleging that the federal CVP must comply with CESA. The cases were coordinated and transferred to the Eastern District. State and federal water contractors have intervened as defendants in both cases. On October 1, 2021, the federal agencies announced re-initiation of consultation on the BOs. The court is currently considering motions by the Federal defendants, State plaintiffs, and environmental plaintiffs to impose an interim operations plan for the first year of reinitiated consultation.

CESA Incidental Take Permit Litigation. Eight cases, listed below, have been filed in state court by public agencies, environmental organizations, and a Native American tribe challenging DWR's approval of the Long-Term Operations of the SWP and associated environmental review. Most of the cases also challenge CDFW's issuance of an Incidental Take Permit for the SWP.

- *North Coast Rivers Alliance, et al. v. Department of Water Resources, et al.*, County of San Francisco Superior Court Case No. CPF-20-517078, filed April 28, 2020;
- *State Water Contractors, et al. v. California Department of Water Resources, et al.*, County of Fresno Superior Court Case No. 20CECG01302, electronically filed April 28, 2020;
- *Tehama-Colusa Canal Authority, et al. v. California Department of Water Resources, et al.*, County of Fresno Superior Court Case No. 20CECG01303, electronically filed April 28, 2020;
- *The Metropolitan Water District of Southern California, et al. v. California Department of Water Resources, et al.*, County of Fresno Superior Court Case No. 20CECG01347, electronically filed April 28, 2020;
- *Sierra Club, et al. v. California Department of Water Resources*, County of San Francisco Superior Court Case No. CPF-20-517120, filed April 29, 2020;
- *Central Delta Water Agency, et al. v. California Department of Fish and Wildlife, et al.*, County of Sacramento Superior Court Case No. 34-2020-80003368, filed May 6, 2020;

- *San Bernardino Valley Municipal Water District v. California Department of Water Resources, et al.*, County of Fresno Superior Court Case No. 20CECG01556, filed May 28, 2020;
- *San Francisco Baykeeper, et al. v. California Department of Water Resources, et al.*, County of Alameda Superior Court Case No. RG20063682, filed June 5, 2020.

The challenges are raised on several legal grounds, including CESA, California Environmental Quality Act, the Delta Reform Act, Public Trust Doctrine, area of origin statutes, breach of contract, and breach of covenant of good faith and fair dealing. All eight cases have been coordinated in Sacramento County Superior Court.

Litigation over the 2019 BOs and 2020 Incidental Take Permit will likely take several years. The projects began operating in accordance with the new requirements in 2020. Throughout implementation, any party may seek preliminary injunctive relief during the litigation, such as that described above. It is likely that the 2019 BOs and 2020 Incidental Take Permit, or some form of interim operations, will govern operations until final judicial determinations on the merits are made or the reinitiated consultation results in a new Biological Opinion and amended Incidental Take Permit. Thus, it is unlikely that SWP water supply would increase beyond that resulting from the limitations in the 2019 BOs and 2020 Incidental Take Permit during this timeframe.

3.2.6 SWP Table A Supply Assessment

DWR prepares a biennial report to assist SWP contractors and local planners in assessing the availability of supplies from the SWP. DWR issued its most recent update, the 2019 DCR, in August 2020. In this update, DWR provides SWP supply estimates for SWP Contractors to use in their planning efforts, including for use in their 2020 UWMPs. The 2019 DCR includes DWR's estimates of SWP water supply availability under both existing (2020) and future conditions (2040).

DWR's estimates of SWP deliveries are based on a computer model that simulates monthly operations of the SWP and Central Valley Project systems. Key inputs to the model include the facilities included in the system, hydrologic inflows to the system, regulatory and operational constraints on system operations, and contractor demands for SWP water. In conducting its model studies, DWR must make assumptions regarding each of these key inputs.

In the 2019 DCR for its model study under existing conditions, DWR assumed: existing facilities, hydrologic inflows to the model based on 82 years of historical inflows (1922 through 2003), current regulatory and operational constraints including 2018 Coordinated Operation Agreement Amendment, 2019 BOs and 2020 Incidental Take Permit, and contractor demands at maximum Table A Amounts. The long-term average allocation reported in the 2019 DCR for the existing conditions study provides an appropriate estimate of the SWP water supply availability under current conditions.

To evaluate SWP supply availability under future conditions, the 2019 DCR included a model study representing hydrologic and sea level rise conditions in the year 2040. The future condition study used all the same model assumptions as the study under existing conditions, but reflected changes expected to occur from climate change, specifically, projected temperature and precipitation changes centered around 2035 (2020 to 2049) and a 45 cm sea level rise. For the long-term planning purposes of this WSA and the 2020 UWMP, the long-term average allocations reported for the future conditions study from 2019 DCR is the most appropriate estimate of future SWP water supply availability.

3.2.7 SWP Water Supply Estimates

In the 2019 DCR, DWR estimates that for all Contractors combined, the SWP can deliver on a long-term average basis a total Table A supply of 58 percent of total maximum Table A Amounts under existing conditions and 52 percent under future conditions.

DWR's 2019 DCR indicates that the modeled single dry year SWP water supply allocation is 7% under the existing conditions. However, historically the lowest SWP allocations were at 5% in 2014 and initial allocations in 2021. Due to extraordinarily dry conditions in 2013 and 2014, the initial 2014 SWP allocation was a historically low 5% of Table A Amounts, was later reduced to 0% in January 2014, and was later raised back to 5%, the lowest ever final total SWP water supply allocation. In 2021, the initial allocation was 0%, the lowest ever on record and later increased to 5%. Similarly, the initial allocation for 2022 was set at 0% with DWR prioritizing deliveries to Human Health and Safety where alternative supplies were not available. Significant precipitation occurred in October and December of 2021. In January 2022, DWR raised its initial allocation to 15%.

Each year by October 1, SWP contractors submit their requests for SWP supplies for the following calendar year. By December 1, DWR estimates the available water supply for the following year and sets an initial supply allocation based on the total of all contractors' requests, current reservoir storage, forecasted hydrology through the next year, and target reservoir storage for the end of the next year. The most difficult of these factors to evaluate is the forecasted hydrology. In setting water supply allocations, DWR uses a conservative 90% hydrologic forecast, where nine out of ten years will be wetter and one out of ten years drier than assumed. DWR re-evaluates its estimate of available supplies throughout the runoff season of winter and early spring, using updated reservoir storage and hydrologic forecasts, and revises SWP supply allocations as warranted. Since most of California's annual precipitation falls in the winter and early spring, by the end of spring the supply available for the year is much more certain, and in most years DWR issues its final SWP allocation by this time. While most of the water supply is certain by this time, runoff in the late fall remains somewhat variable as the next year's runoff season begins. A drier than forecasted fall can result in not meeting end-of-year reservoir storage targets, which means less water available in storage for the following year.

Water year 2013 was a year with two hydrologic extremes. October through December 2012 was one of the wettest fall periods on record but was followed by the driest consecutive 12 months on record. The supply allocation for 2013 was a 35% allocation. However, the 2013 hydrology ended up being even drier than DWR's conservative hydrologic forecast, so the SWP began 2014 with reservoir storage lower than targeted levels and less stored water available for 2014 supplies. Compounding this low storage situation, 2014 also was a critically dry year, with runoff for water year 2014 the fourth driest on record.

The exceedingly dry sequence from the beginning of January 2013 through the end of 2014 was one of the driest two-year periods in the historical record. The dry-year sequence in 2020 through 2021 also represents an extreme hydrologic event in terms of temperature and precipitation. Water Year 2020 was California's fifth driest year on record based on statewide runoff, followed by Water Year 2021 which was the second driest year and warmest year on record. The warmer temperatures in 2014 and 2021 resulted in an increased climatic water deficit. This historical data has shown that California's climate is transitioning to a much warmer setting where historical relationships among temperature, precipitation and runoff are changing, and these conditions may become more frequent. As noted above, the circumstances that led to the low 2014 and 2021 SWP water supply allocation were unusual, and likely have a low probability of frequent occurrence in the future. Thus, the assumption for SWP contractors such as SCV Water is that a 5% allocation in 2014 and 2021 represents the "worst-case" scenario.

The 2020 UWMP reflected information from DWR's 2019 DCR. The report was based on DWR's CALSIM 2 model that utilizes a repeat of the historic hydrologic period of 1922 through 2003. DWR's analysis of existing (2020) conditions was used to estimate SWP supplies between 2020 and 2040 and its analysis of future (2040) conditions is used to estimate 2040-2050 SWP supplies. SWP supplies for the five-year increments between 2020 and 2040 are interpolated between these values. SWP supplies for years beyond 2040 are assumed to be the same as for 2040.

On December 31, 2021, DWR released its Draft 2021 DCR. This draft report is based on DWR's new CALSIM 3 model that extends the hydrologic period through 2015 thus incorporating the historic dry years of 2014 and 2015 but does not include the wet years in 2017 and 2019. This report reduces the 2020 average yield from 58% to 56%. The Draft 2021 DCR does not contain an analysis for 2040 conditions as it was not contained in the 2019 DCR. Thus, the SWP reliability shown in Table 3-1 reflects reduced reliability of 56% in 2020 and other year's supplies are interpolated between 2020 and 2040 values.

The Draft 2021 DCR also reduced the single year delivery capability in 2020 to 5%. As the 2020 UWMP was already using that value for its Single Years SWP supply, that value was not changed in the single year dry period. This is reflected in Table 3-1.

The Draft 2021 DCR did not provide Table A allocations for each individual year that would enable a re-analysis of the five-year multiple dry year period. The report does contain a summary of six-year drought that indicate an average allocation of 25% of Table A amounts. That is the same average value that was used in the 2020 UWMP. Thus, for purposes of this WSA, Table 3-1 reflects the same five-year multiple dry year analysis.

TABLE 3-1 SWP TABLE A SUPPLY RELIABILITY (AF)^{(a)(b)}

Wholesaler (Supply Source)	2020	2025	2030	2035	2040-2050
Average Water Year^(c)					
SWP Table A Supply	53,312	52,360	51,408	50,456	49,504
% of Table A Amount ^(d)	56%	55%	54%	53%	52%
Single-Dry Year					
SWP Table A Supply ^(e)	6,664	7,616	8,568	9,520	10,472
% of Table A Amount ^(e)	7%	8%	9%	10%	11%
SWP Table A Supply ^(f)	4,760	4,760	4,760	4,760	4,760
% of Table A Amount ^(f)	5%	5%	5%	5%	5%
Multiple-Dry Year^(h)					
SWP Table A Supply ^(g)	23,800	23,800	23,800	23,800	23,800
% of Table A Amount ^(d)	25%	25%	25%	25%	25%

Notes:

- (a) Supplies to SCV Water are based on DWR analyses presented in its 2021 draft DCR and 2019 DCR, assuming existing SWP facilities and current regulatory and operational constraints (except as indicated in Note f).
- (b) Table A supplies include supplies allocated in one year that are carried over for delivery the following year.
- (c) Based on average deliveries over a repeat of the study's historic hydrologic period of 1922 through 2003 for 2019 DCR, and 1922 through 2015 for the 2021 draft DCR.
- (d) Supply as a percentage of SCV Water's Table A Amount of 95,200 AF.
- (e) Based on a repeat of the worst case historic single dry year of 1977 (from 2019 DCR)
- (f) Based on the worst-case actual allocation of 2014.
- (g) Supplies shown are annual averages over five consecutive dry years, based on a repeat of the historic five-year dry period of 1988-1992.

3.2.8 Coordinated Operations Agreement

The Coordinated Operation Agreement (COA) was originally signed in 1986 and defines how the state and federal water projects share the available water supply and the obligations including senior water right demands, water quality and environmental flow requirements imposed by regulatory agencies. The agreement calls for periodic review to determine whether updates are needed in light of changed conditions. After completing a joint review process, DWR and the Bureau of Reclamation agreed to an addendum to the COA in December 2018, to reflect water quality regulations, biological opinions and hydrology updated since the agreement was signed.

The COA Addendum includes changes to the percentages for sharing responsibilities for in basin uses, sharing available export capacity, and the review process. The 1986 Agreement required CVP to meet 75% of the in basin uses and the SWP to meet 25%. The COA Addendum now distinguishes responsibility based on water year type and CVP responsibilities range from 80% in wet years to 60% in critical years. SWP responsibility ranges from 20% in wet years to 40% in critical years. Additionally, the COA Addendum changed sharing export capacity. Previously, export capacity was shared 50% to CVP and 50% to SWP. The COA addendum changed this formula to be 65% CVP and 35% SWP during balanced conditions and 60% CVP and 40 % SWP during excess conditions. Overall, based on modeling, these changes result in an approximately 115,000 AFY on average reduction in SWP supplies.

Finally, the 2018 COA Addendum updated the review process to require review of the COA Agreement and Addendum every 5 years. Litigation regarding the COA addendum environmental review is ongoing. The litigation is unlikely to change the negotiated COA addendum and implementation has already begun.

3.2.9 Delta Conveyance Project

Consistent with Executive Order N-10-19, in early 2019, the state announced a new single tunnel project, which proposed a set of new diversion intakes along Sacramento River in the north Delta for the SWP. In 2019, DWR initiated planning and environmental review for a single tunnel DCP to protect the reliability of SWP supplies from the effects of climate change and seismic events, among other risks. DWR's current schedule for the DCP environmental planning and permitting extends through the end of 2024. DCP will potentially be operational in 2040 following extensive planning, permitting and construction.

DWR estimates of SWP supply reliability in its 2019 DCR are based on existing facilities, and so do not include the proposed conveyance facilities that are part of the DCP. Since the 2020 UWMP uses DWR's 2019 DCR to estimate SWP supplies at 2040, any changes in SWP supply reliability that would result from the proposed DCP are not included in the UWMP. If the DCP is implemented, SWP reliability would improve, but to be conservative, that analysis is not incorporated in this WSA.

3.2.10 Emergency Freshwater Pathway Description (Sacramento-San Joaquin Delta)

It has been estimated by DWR that in the event of a major earthquake in or near the Delta, water supplies could be interrupted for up to three years, posing a significant and unacceptable risk to the California business economy. A post-event strategy would provide necessary water supply protections to avert this catastrophe. Such a plan has been coordinated through DWR, Corps of Engineers (Corps), Reclamation, California Office of Emergency Services (Cal OES), the Metropolitan Water District of Southern California, and the State Water Contractors.

DWR Delta Flood Emergency Management Plan: The Delta Flood Emergency Management Plan (DWR, 2018) provides strategies for response to Delta levee failures, up to and including earthquake-induced multiple island failures during dry conditions when the volume of flooded islands and saltwater intrusion are large, resulting in curtailment of export operations. Under these severe conditions, the plan includes a strategy to establish an emergency freshwater pathway from the central Delta along Middle River and Victoria Canal to the export pumps in the south Delta. The plan includes the prepositioning of emergency construction materials at existing and new stockpile and warehouse sites in the Delta, and development of tactical modeling tools (DWR Emergency Response Tool) to predict levee repair logistics, timelines of levee repair and suitable water quality to restore exports. The Delta Flood Emergency Management Plan has been extensively coordinated with state, federal and local emergency response agencies. DWR, in conjunction with local agencies, the Corps and Cal OES, conduct tabletop and field exercises to test and revise the plan under real time conditions.

DWR and the Corps provide vital Delta region response to flood and earthquake emergencies, complementary to Cal OES operations. These agencies perform under a unified command structure and response and recovery framework. The Northern California Catastrophic Flood Response Plan (Cal OES, 2018) incorporates the DWR Delta Flood Emergency Management

Plan. The Delta Emergency Operations Integration Plan (DWR and USACE, 2019) integrates personnel and resources during emergency operations.

Pathway Implementation Timeline: The Delta Flood Emergency Management Plan has found that using pre-positioned stockpiles of rock, sheet pile and other materials, multiple earthquake-generated levee breaches and levee slumping along the freshwater pathway can be repaired in less than six months. A supplemental report (Levee Repair, Channel Barrier, and Transfer Facility Concept Analyses to Support Emergency Preparedness Planning, M&N, August 2007) evaluated among other options, the placement of sheet pile to close levee breaches, as a redundant method if availability of rock is limited by possible competing uses. The stockpiling of sheet pile is vital should more extreme emergencies warrant parallel and multiple repair techniques for deep levee breaches. Stockpiles of sheet pile and rock to repair deep breaches and an array of levee slumping restoration materials are stored at DWR and Corps stockpile sites and warehouses in the Delta.

Emergency Stockpile Sites and Materials: DWR has acquired lands at Rio Vista and Stockton as major emergency stockpile sites, which are located and designed for rapid response to levee emergencies. The sites provide large loading facilities, open storage areas and new and existing warehousing for emergency flood fight materials, which augment existing warehousing facilities throughout the Delta. The Corps maintains large warehousing facilities in the Delta to store materials for levee freeboard restoration, which can be augmented upon request of other stockpiles in the United States. Pre-positioned rock and sheet pile are used for closure of deep levee breaches. Warehoused materials for rapid restoration of slumped levees include muscle (k-rail) walls, super sacks, caged rock containers, sandbags, stakes, and plastic tarp. Stockpiles will be augmented as materials are used.

Emergency Response Drills: Earthquake-initiated multiple island failures will mobilize DWR and Corps resources to perform Delta region flood fight activities within an overall Cal OES framework. In these events, DWR and the Corps integrate personnel and resources to execute flood fight plans through the Delta Emergency Operations Integration Plan (DWR and USACE, 2019). DWR, the Corps and local agencies perform emergency exercises focusing on communication readiness and the testing of mobile apps for information collection and dissemination. The exercises train personnel and test the readiness of emergency preparedness and response capabilities under unified command and provide information to help to revise and improve plans.

Levee Improvements and Prioritization: The DWR Delta Levees Subventions and Special Projects Programs have prioritized, funded, and implemented levee improvements along the emergency freshwater pathway and other water supply corridors in the central and south Delta. These efforts are complementary to the Delta Flood Emergency Management Plan, which along with pre-positioned emergency flood fight materials, ensures reasonable seismic performance of levees and timely pathway restoration after a severe earthquake. These programs have been successful in implementing a coordinated strategy of emergency preparedness to the benefit of SWP and CVP export systems.

Significant improvements to the central and south Delta levees systems along Old and Middle Rivers began in 2010 and are continuing to the present time. This complements substantially improved levees at Mandeville and McDonald Islands and portions of Victoria and Union Islands. Levee improvements along the Middle River emergency freshwater pathway and Old River consist of crest raising, crest widening, landside slope fill and toe berms, which improve seismic stability, reduce levee slumping, and create a more robust flood-fighting platform. Urban

agencies, including Metropolitan, Contra Costa Water District, East Bay Municipal Utility District, and others have participated in levee improvement projects along or near the Old and Middle River corridors.

3.2.11 Sisk Dam Raise and San Luis Reservoir Expansion

Reclamation and San Luis & Delta Mendota Water Authority (SLDMWA) are proposing to raise Sisk Dam and increase storage capacity in San Luis Reservoir. The proposed 10-foot dam raise is in addition to the ongoing 12-foot raise of Sisk Dam to improve dam safety and would expand San Luis Reservoir storage by 130 thousand AF. The final supplemental EIS/EIR, released on December 18, 2020, estimated that the SWP exports could potentially reduce by about 23 thousand AFY on average under the preferred alternative. This project is currently undergoing design, environmental planning, and permitting. Construction is estimated to complete by 2030, following environmental planning and permitting.

DWR estimates of SWP supply reliability in its 2019 DCR are based on existing facilities, and do not include this project.

3.2.12 SWP Seismic Improvements

DWR's recent SWP seismic resiliency efforts have focused heavily on SWP Dam Safety. The most prominent is the joint Reclamation/DWR corrective action study of Sisk Dam which will result in a massive seismic stability alteration project and is expected to begin construction in 2021. Several analyses have been conducted on SWP dam outlet towers/access bridges which has resulted in seismic upgrades (some completed/some on-going). Castaic Reservoir outlet towers were determined to be vulnerable to a major earthquake. DWR is currently undertaking retrofits to the access bridge to the Castaic outlet tower. That work is scheduled to be completed in 2022. Updated dam seismic safety evaluations are being performed on the Oroville Dam embankment and the radial gate control structure on the flood control spillway.

Seismic retrofits have also been completed on 23 SWP bridges located in four Field Divisions with additional retrofits in various development stages. DWR has also updated the earthquake notification procedures and has replaced and expanded instrumentation for the SWP's seismic network.

3.2.13 Water Quality Control Plan/Voluntary Agreement

The State Water Board is responsible for adopting and updating the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan), which establishes water quality control objectives and flow requirements needed to provide reasonable protection of beneficial uses in the Watershed. The State Water Board has been engaged for many years in updating the Bay Delta Plan.

The Bay-Delta Plan is being updated through phases. Phase 1 is updating the Bay-Delta Plan objectives for the San Joaquin River and its major tributaries and the southern Delta salinity objectives. Phase 2 is updating the objectives for the Sacramento River and Delta and their major tributaries. (Plan amendments). On December 12, 2018, through State Water Board Resolution No. 2018-0059, the State Water Board adopted the Phase 1 Plan amendments and Final Substitute Environmental Document (SED) establishing the Lower San Joaquin River flow objectives and revised southern Delta salinity objectives. On February 25, 2019, the Office of Administrative Law approved the Plan amendments. The 2020 UWMP requires an adaptive

range of 30-50 percent of the unimpaired flow to be maintained from February through June in the Stanislaus, Tuolumne, and Merced Rivers, with a starting point of 40 percent of the unimpaired flow. During this same time period, the flows at Vernalis on the San Joaquin River, as provided by the unimpaired flow objective, are required to be no lower than a base flow of 1,000 cubic feet per second (cfs), with an adaptive range between 800 and 1,200 cfs, inclusive. Phase 1 plan amendments are the subject of litigation.

The State Water Board is also considering Phase 2 Plan amendments focused on the Sacramento River and its tributaries, Delta eastside tributaries (including the Calaveras, Cosumnes, and Mokelumne rivers), Delta outflows, and interior Delta flows. Staff is recommending an adaptive range of 45-65 percent Unimpaired Flow (UIF) objective with a starting point of 55 percent. Once the State Water Board adopts Phase 2 Plan amendments, the Board will need to conduct hearings to determine, consistent with water rights, water users' responsibilities for meeting the objectives in both Phase 1 and 2. At this time, the potential impacts to the SWP are unknown, but this objective would have a large impact on water users in the Phase 2 planning area.

The State and several water users began working on an alternative to the Bay-Delta Plan update in 2018, known as the Voluntary Agreement process. The Voluntary Agreement process offers an alternative to the State Water Board staff's flow only approach. A Voluntary Agreement, if agreed to by the State Water Board, would be a substitute for the UIF approach and would become the Program of Implementation for the Plan amendments. Implementing the Voluntary Agreement would not require a water rights hearing because the parties are agreeing to take the actions. The Voluntary Agreement approach would provide flow, and funding for flows, habitat actions, and a robust science program. The Voluntary Agreement approach could provide an opportunity to combine flow and habitat actions to protect public trust resources, while providing certainty for water users. If successful, it provides a pathway to avoid years of hearings and litigation.

3.2.14 Delta Reliance

Approximately half of SCV Water's water supply comes from the Delta. The 2020 UWMP Guidebook describes how urban water suppliers that anticipate participating in or receiving water from a "covered action" related to the Delta should provide information in their 2020 UWMPs to demonstrate consistency with *Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance* (Reduced Reliance Policy). SCV Water completed such documentation which is included in Appendix K of the 2020 UWMP.

3.2.15 Other Imported Supplies

The following supplies are available to SCV Water through agreements that have been executed since 2005. These supplies are now part of the imported supplies available to the service area.

3.2.15.1 Buena Vista-Rosedale Rio Bravo

SCV Water has executed a long-term transfer agreement for 11,000 AFY with BVWSD and RRBWSD. These two districts, both located in Kern County, joined together to develop a program that provides both a firm water supply and a water banking component. Both districts are member agencies of the Kern County Water Agency (KCWA), a SWP contractor, and both districts have contracts with KCWA for SWP Table A Amounts. The supply is based on existing long-standing Kern River water rights held by BVWSD and is delivered by exchange of the two districts' SWP Table A supplies or directly to the California Aqueduct via the Cross Valley Canal. This water supply is firm; that is, the total amount of 11,000 AFY is available in all water year types based on the Kern River Water right. SCV Water began taking delivery of this supply in 2007.

SCV Water has entered into agreements that reserved 3,378 AF of the Buena Vista-Rosedale Rio Bravo water for potential annexations into its service area. 389 AF is reserved for the second phase of the Tesoro Del Valle development. This development is scheduled to be completed by the end of 2025. 489 AF has been reserved for the Tapia Ranch development with development estimated to be completed in the late 2020s. 2,500 AF is reserved for the planned Legacy Village development. This development is assumed to occur after 2030 but before 2035. During the periods before demands for these developments occur, or if these developments occur but do not use all the amounts reserved for them in any year or years, the remaining supply would be available to the entire SCV Water service area.

3.2.15.2 Nickel Water - Newhall Land

Newhall Land has acquired a water supply from Kern County sources known as the Nickel water. This source of supply totals 1,607 AFY. As provided in its water purchase agreement, the Nickel water provides a firm source of supply and is available in all hydrologic water year types. This source of supply was acquired in anticipation of the development of the Newhall Ranch Specific Plan Development. Newhall Land currently stores its annual supply of Nickel water in its Semitropic Water Storage District Water Banking Program. Upon completion of the Newhall Ranch Specific Plan, Newhall Land will transfer its rights to this supply to SCV Water. In the 2020 UWMP, it is assumed for planning purposes that Newhall Ranch will be developed and that this water supply will be transferred to SCV Water in 2035 (i.e., the assumed completion of the Newhall Ranch Specific Plan), thereafter becoming available as an annual supply to SCV Water. Prior to any permanent transfer to SCV Water, Newhall Land may make this supply available to SCV Water for purchase. However, because there is no history of such purchases, the 2020 UWMP, and this WSA, does not assume this Nickel water will be generally available to meet SCV Water demands until 2035. Further, SCV Water is not aware of any agreement that Newhall Land has entered into to sell this water to other public water systems prior to the transfer of the Nickel water to SCV Water.

SCV Water and NLF will monitor the use and storage of Nickel water. SCV Water is required to undertake this effort to manage its overall supply portfolio, to meet SCV Water's obligations under applicable state law, and by request of the County of Los Angeles in the Specific Plan EIR. Based on current estimates, the Nickel water and the stored water in the Semitropic bank provide adequate reserves for potential future needs within the Specific Plan area. Under the Specific Plan EIR, NLF is to transfer Nickel water from its Semitropic Water Bank to make up a shortfall.

3.2.15.3 Yuba Accord Water

In 2008, SCV Water entered into the Yuba Accord Agreement, which allows for the purchase of water from the Yuba County Water Agency through DWR to 21 SWP contractors (including SCV Water) and the San Luis and Delta-Mendota Water Authority. Yuba Accord water comes from north of the Delta, and the water purchased under this agreement is subject to losses associated with transporting it through the Delta. These losses can vary from year to year, depending on Delta conditions at the time the water is transported. Under the agreement, an estimated average of up to 1,000 AFY of non-SWP supply (after losses) is available to SCV Water in dry years, through 2025. In 2021, with a SWP allocation of 5% of Table A Amount, a supply of 1,640 AF north of the Delta is available to SCV Water (based on September 27, 2021, estimate). Under certain hydrologic conditions, additional water may be available to SCV Water from this program. SCV Water received 284 AF from this source in 2020.

3.3 Groundwater

This section presents information about groundwater supplies, including a summary of the previously adopted groundwater management plan (GWMP) along with the recently adopted GSP.

3.3.1 Santa Clara River Groundwater Basin – East Subbasin

The sole source of local groundwater for urban water supply in the Valley is the groundwater Basin identified in the DWR Bulletin 118 (DWR 2016) as the Santa Clara River Valley Groundwater Basin, East Subbasin (Basin) (Basin No. 4-4.07). The un-adjudicated Basin is comprised of two aquifer systems, the Alluvium and the Saugus Formation. The Alluvium generally underlies the Santa Clara River and adjacent areas, including its several tributaries, to maximum depths of about 200 feet; and the Saugus Formation underlies practically the entire Upper Santa Clara River (USCR) area, to depths of at least 2,000 feet. There are also some scattered outcrops of Terrace deposits in the Basin that likely contain limited amounts of groundwater. However, since these deposits are located in limited areas situated at elevations above the regional water table and are also of limited thickness, they are of no practical significance as aquifers for municipal water supply; consequently, they have not been developed for any significant water supply in the Basin and are not included as part of the existing or planned groundwater supplies described in this WSA. The Basin is defined in Bulletin 118 as being bordered on the north by the Piru Mountains, on the west by impervious rocks of the Modelo and Saugus Formations and a constriction in the alluvium, on the south by the Santa Susana Mountains, and on the south and east by the San Gabriel Mountains (DWR 2016). The extent of the basin generally coincides with the outer extent of the Alluvium and Saugus Formation.

The Santa Clara River Valley Groundwater Basin, East Subbasin has been identified by DWR as a high priority basin, not subject to critical conditions of overdraft, thereby requiring preparation of a GSP, described below.

3.3.2 Groundwater Management Planning

As part of legislation authorizing SCV Water to provide retail water service to individual municipal customers, Assembly Bill (AB) 134 (2001) included a requirement that SCV Water prepare a GWMP (provided as Appendix I of the 2020 UWMP) in accordance with the provisions of Water Code Section 10753, which was originally enacted by AB 3030. This

legislation has since been superseded by the passage of SGMA in 2014 and the submittal of a GSP to DWR by the SCV-GSA in January 2022. The GSP is available at <https://scvgsa.org/wp-content/uploads/2021/12/SCV-GSP-Sections-Combined-20211217.pdf>. The GSP was in large part built on the GWMP with the groundwater basin operating within the yields identified in the GWMP. A summary of GWMP and the GSP are provided below.

3.3.2.1 Groundwater Sustainability Plan

The Santa Clarita Valley Groundwater Sustainability Agency (SCV-GSA) operates under a Joint Powers Agreement, which was executed by member Agencies in 2018. The SCV-GSA has adopted the State-required GSP for the East Subbasin of the Santa Clara River Valley Groundwater Basin. The plan represents a significant multi-year undertaking concluding with its adoption and submittal to DWR in January 2022. Development of the GSP reflected a significant stakeholder engagement effort with the involvement of a Stakeholder Advisory Committee to reflect the views from private well owners, members at large, environmental interests, and the business community. This Stakeholder Advisory Committee met regularly to review technical memoranda and provided advisement to the GSA on materials and assistance with several public workshops.

The final Board- adopted GSP is consistent with the current groundwater operating plan as described in the GWMP (AB 3030 plan), and its 2009 update, described below. The GSP, however refined the technical analysis as it utilized a new groundwater flow model (an unstructured grid version of ModFlow called ModFlow USG) that models the groundwater operating plan. These refinements include updates such as redistribution of pumping and current Basin conditions. The plan also developed minimum thresholds as a basis to determine that the groundwater basin is being managed in a sustainable manner. The SCV-GSA will conduct the required annual monitoring and reports for the GSP.

3.3.2.2 Groundwater Management Plan

The general contents of the GWMP were outlined in 2002, and a detailed plan was adopted in 2003 to satisfy the requirements of AB 134. The plan both complements and formalized a number of existing water supply and water resource planning and management activities in SCV Water's service area, which effectively encompass the East Subbasin of the Santa Clara River Valley Groundwater Basin. Notably, the GWMP also includes a basin-wide monitoring program, the results of which provide input to annual reporting on water supplies and water resources in the Basin, as well as input to assessment of Basin yield for water supply as described herein. Groundwater level data from the existing groundwater monitoring program is reported to DWR as part of SBX7-6 implementation CASGEM. SCV Water serves as the monitoring entity for CASGEM for the basin. Available groundwater level data for the CASGEM program is submitted twice a year. SCV Water will continue to provide groundwater level data consistent with the CASGEM program.

The GWMP contains four management objectives, or goals, for the Basin including (1) development of an integrated surface water, groundwater and recycled water supply to meet existing and projected demands for municipal, agricultural and other water uses; (2) assessment of groundwater basin conditions to determine a range of operational yield values that use local groundwater conjunctively with supplemental SWP supplies and recycled water to avoid groundwater overdraft; (3) preservation of groundwater quality, including active characterization and resolution of any groundwater contamination problems, and (4) preservation of interrelated surface water resources, which includes managing groundwater to not adversely impact surface and groundwater discharges or quality to downstream basin(s).

Prior to preparation and adoption of the GWMP, a local MOU process among the former CLWA, the CLWA retail water purveyors and UWCD in neighboring Ventura County, downstream of the East Subbasin of the Santa Clara River Valley, produced the beginning of local groundwater management. This is now embodied in the GWMP prepared and implemented in 2001. The MOU was a collaborative and integrated approach to several aspects of water resource management included in the GWMP. As a result of the MOU, the cooperating agencies integrated their respective database management efforts and continued to monitor and report on the status of Basin conditions, as well as on geologic and hydrologic aspects of their respective parts of the overall stream-aquifer system. Following adoption of the GWMP, the water suppliers developed and utilized a numerical groundwater flow model for analysis of groundwater basin yield and for analysis of extraction and containment of groundwater contamination. The results of those basin yield and contamination analyses, updated in 2009 by Luhdorff and Scalmanini Consulting Engineers and GSI Water Solutions, Inc. (LSCE & GSI, 2009), are bases for the amounts and allocations of groundwater supplies in the 2020 UWMP.

The adopted GWMP includes 14 elements intended to accomplish the Basin management objectives listed above. In summary, the plan elements include:

- Monitoring of groundwater levels, quality, production, and subsidence
- Monitoring and management of surface water flows and quality
- Determination of Basin yield and avoidance of overdraft
- Development of regular and dry-year emergency water supply
- Continuation of conjunctive use operations
- Long-term salinity management
- Integration of recycled water
- Identification and mitigation of soil and groundwater contamination, including involvement with other local agencies in investigation, cleanup, and closure
- Development and continuation of local, state, and federal agency relationships
- Groundwater management reports
- Continuation of public education and water conservation programs
- Identification and management of recharge areas and wellhead protection areas
- Identification of well construction, abandonment, and destruction policies
- Provisions to update the groundwater management plan

Work on a number of the GWMP elements had been ongoing for some time prior to the formal adoption of the GWMP and expanded work on implementation of the GWMP will continue on an ongoing basis through the administration of the GSP. The GSP evaluates the operating plan going forward and these analyses of the groundwater basin are reflected in the 2020 UWMP and this WSA. Notable in the implementation of the GWMP has been the annual preparation of a Santa Clarita Valley Water Report (Annual Report) that summarizes (1) water requirements, (2) all three sources of water supply (groundwater, imported surface water and recycled water, all as part of the GWMP's overall management objectives), and (3) projected water supply availability to meet the following year's projected water requirements. Besides for addressing GWMP requirements, the Annual Report is also prepared in response to a request by the Los Angeles County Board of Supervisors and the MOU between the water purveyors in the Basin and UWCD. SGMA also requires preparation of an annual report on basin conditions. The first report being due in April of 2022 will address much of the same information but framed in the context of the GSP Sustainability Criteria discussed below.

3.3.2.3 Available Groundwater Supplies

The groundwater component of overall water supply in the Valley derives from a groundwater operating plan developed and analyzed to meet water requirements (municipal, agricultural, small domestic) while maintaining the Basin in a sustainable condition, specifically no long-term depletion of groundwater or interrelated surface water. The operating plan also addresses groundwater contamination issues in the Basin, all consistent with the GWMP described above. The groundwater operating plan and the GSP are based on the concept that pumping can vary from year to year to allow increased groundwater use in dry periods and increased recharge during wet periods to collectively assure that the groundwater Basin is adequately replenished through various wet/dry cycles. As ultimately formalized in the GWMP and described in the Basin Yield Report (LSCE and GSI, 2009), and in the GSP, the operating yield concept has been quantified as ranges of annual pumping volumes to capture year-to-year pumping fluctuations in response to both hydrologic conditions and customer demand.

Ongoing work through implementation of the GWMP has produced three detailed technical reports in addition to the annual Water Reports (the most recent of which, for 2020, was the twenty-third annual report). The first detailed technical report (CH2M Hill, April 2004) documents the construction and calibration of the groundwater flow model for the Valley. The second report (CH2M Hill and LSCE, August 2005) presents the initial modeling analysis of the purveyors' original groundwater operating plan. The most recent report, an updated analysis of the Basin (LSCE & GSI, 2009) presents the modeling analysis of the current groundwater operating plan, including restoration of two Saugus Formation wells for municipal supply after treatment and also presents a range of potential impacts deriving from climate change considerations. All those results are reflected in this WSA. The primary conclusion of the technical analysis is that the groundwater operating plan will not cause detrimental short- or long-term effects to the groundwater and surface water resources in the Valley and is therefore sustainable. The analysis of sustainability for groundwater and interrelated surface water is described in detail in "Analysis of Groundwater Supplies and Groundwater Basin Yield, USCR Groundwater Basin, East Subbasin" (Basin Yield Analysis) prepared August 2009 (LSCE & GSI, 2009).

Additional technical work performed for the SCV-GSA in preparation of its GSP confirmed previous conclusions that the basin plan was sustainable. Utilizing the new MODFLOW-USG model, additional analysis of the basin plan operating plan was performed for the Water Budget Development for the Santa Clara River Valley East Groundwater Subbasin report, GSI Water Solutions Inc, October 2021. The analysis was based on the existing operating plan, modified spatial pumping distribution, incorporated updated climate change data, and made other refinements. The analysis concluded that chronic lowering of groundwater levels and groundwater storage would not occur under the operating plan and therefore operation was within the safe yield of the Basin.

The updated groundwater operating plan (LSCE & GSI, 2009), as well as operations anticipated under the GSP are summarized in Table 3-2, is as follows:

- **Alluvium:** Pumping from the Alluvial Aquifer in a given year is governed by local hydrologic conditions in the eastern Santa Clara River Watershed. Pumping for municipal, agricultural, and private purposes ranges between 30,000 and 40,000 AFY during normal and above-normal rainfall years. However, due to hydrogeologic constraints in the eastern part of the Basin along with distribution of groundwater pumping, pumping is reduced to between 30,000 and 35,000 AFY during locally dry

years. These amounts result in an ability to operate supply wells in the Basin in a feasible and sustainable manner.

- Saugus Formation:** Pumping from the Saugus Formation in a given year is tied directly to the availability of other water supplies, particularly from the SWP. During average-year conditions within the SWP system, Saugus pumping ranges between 7,500 and 15,000 AFY. Planned dry-year pumping from the Saugus Formation ranges between 15,000 and 25,000 AFY during a drought year and can increase to between 21,000 and 25,000 AFY if SWP deliveries are reduced for two consecutive years and between 21,000 and 35,000 AFY if SWP deliveries are reduced for three consecutive years. Such high pumping would be followed by periods of reduced (average-year) pumping, at rates between 7,500 and 15,000 AFY, to further enhance the effectiveness of natural recharge processes that would recover water levels and groundwater storage volumes after the higher pumping during years with low SWP allocations.

TABLE 3-2 GROUNDWATER OPERATING PLAN FOR THE SANTA CLARITA VALLEY

Aquifer	Groundwater Production (AF)			
	Normal Years	Dry Year 1	Dry Year 2	Dry Years 3-5
Alluvium	30,000 to 40,000	30,000 to 35,000	30,000 to 35,000	30,000 to 35,000
Saugus Formation	7,500 to 15,000	15,000 to 25,000	21,000 to 25,000	21,000 to 35,000
Total	37,500 to 55,000	45,000 to 60,000	51,000 to 60,000	51,000 to 70,000

Within the groundwater operating plan, three factors affect the availability of groundwater supplies: sufficient source capacity (wells and pumps), sustainability of the groundwater resource to meet pumping demand on a renewable basis, and protection of groundwater sources (wells) from known contamination, or provisions for treatment in the event of contamination. These factors are discussed below.

Protection of groundwater sources and provisions for treatment in the event of contamination is briefly discussed below and discussed further in Section 4.

Perchlorate has been a water quality concern since 1997 when first detected in SCV Water’s service area. Several Saugus Formation and Alluvial wells were initially removed from service. Treatment facilities for two wells, Saugus 1 and Saugus 2, have been installed and are currently operational. A treatment facility has been installed for the V201 well and awaits final permitting. Treatment system design has been initiated for Well 205. Additionally, two new wells, Saugus 3 and 4 have been designed and await permitting from DDW prior to drilling. Additional details on DDW permitting and associated timeline for Saugus wells are provided in Section 4.

Recently, USEPA provided a health advisory of lifetime exposure to PFOA and PFOS of 70 parts per trillion (or 70 nanogram per liter (ng/l)) for polyfluoroalkyl substances (PFAS). The health advisory is non-enforceable and non-regulatory and is intended to provide technical information to local and state agencies. In August of 2019, DDW set notification level (NL) and response levels for various PFAS constituents. SCV Water wells were tested and as of February 2020, over 60% of Alluvium wells exceeded the NL or RL resulting in 18 wells being taken out of service. Treatment for three of these wells (N-Wells) has been installed and the

wells are now operational. Construction is also currently underway at the Valley Center Wells with a scheduled completion in 2022. Design is underway for treatment of two additional wells, Honby and Santa Clara, scheduled to be back online by 2023. Preliminary design for an additional 6 wells is under way and they are anticipated to be back online between 2024 and 2025. The remaining wells are anticipated to have treatment installed by 2030.

During this interim period of operation, pumping from non-impacted alluvium wells and Saugus Formation wells will be increased to partially mitigate for lost production capacity. The pumping distribution for alluvium wells and Saugus wells is shown in Table 3-4A and Table 3-4B respectively and summarized in Table 3-4 below. The originally anticipated schedule for installation of treatment for alluvium wells and Saugus Formation wells is contained in Appendix E of the 2020 UWMP. Updated Detailed Water Supply Tables are provided in Tables 3-4B, 3-4C, 3-5B and 3-5C (these tables updated planning and construction and permitting schedules and have been prepared in consultation with SCV Water's Engineering and Operations divisions.). For example, the online date for Saugus Formation Well 201 was changed from 2022 to 2024 to reflect inclusion of VOC treatment facilities. Similarly, the Santa Clara and Honby alluvial wells, originally scheduled to be online in 2023, are now scheduled to be available in 2024 to reflect scheduling experience gained from the previously treatment facilities constructed at the N wells. These tables reflect a likely operation moving forward but will be adjusted to reflect operational conditions that may develop.

Recent historical groundwater pumping by SCV Water and other groundwater users is summarized in Table 3-3. The quantity of groundwater used can significantly vary year to year based on a number of factors. For example, in 2016 continued dry conditions in northern California resulted in an allocation of only 20% of SCV Water's Table A amount and SCV Water relied more heavily on groundwater. In contrast 2017 and 2019 were wet years in the watersheds that provide SWP supplies, and higher SWP allocations allowed SCV Water to reduce groundwater extraction allowing the basin to recover storage. 2020 groundwater production was significantly curtailed due to newly implemented PFAS regulatory actions.

Planned future groundwater pumping in normal years, by the retail water purveyors as well as by other groundwater users, is summarized in Table 3-4. Existing and planned groundwater pumping by SCV Water as well as by other groundwater users, for normal, single-dry and multiple-dry year periods, are summarized in Section 4 and in Table 3-6 through Table 3-8 below.

TABLE 3-3 RECENT HISTORICAL GROUNDWATER PRODUCTION (AF)^(a)

Santa Clara River Valley East Subbasin	2016	2017	2018	2019	2020
SCWD	6,892	3,900	5,383	5,948	5,311
Alluvium	3,485	907	2,465	2,762	2,517
Saugus Formation ^(b)	3,407	2,993	2,918	3,186	2,794
LACWWD 36	1,047	1,093	1,204	972	1,257
Alluvium	0	0	0	0	0
Saugus Formation	1,047	1,093	1,204	972	1,257
NCWD/NWD	4,468	2,303	2,608	3,708	4,591
Alluvium	626	780	728	1,044	1,322
Saugus Formation	3,842	1,523	1,880	2,664	3,269
VWC/VWD	13,922	9,107	13,674	6,919	6,173
Alluvium	11,133	7,737	10,837	5,243	3,732
Saugus Formation	2,789	1,370	2,837	1,676	2,441
Total Purveyor	26,329	16,403	22,869	17,547	17,332
Alluvium	15,244	9,424	14,030	9,049	7,571
Saugus Formation	11,085	6,979	8,839	8,498	9,761
Agricultural and Other ^{(d)(c)}	14,359	13,438	13,071	12,510	12,300
Alluvium	13,605	12,554	12,437	11,967	9,190
Saugus Formation	754	884	843	1,067	1,060
Total Basin	40,688	29,841	36,149	30,581	27,582
Alluvium	28,849	21,978	26,467	21,016	16,761
Saugus Formation	11,839	7,863	9,682	9,565	10,821
Groundwater Fraction of Total Municipal Water Supply	56%	39%	46%	42%	36%

Notes:

- (a) From 2019 Santa Clarita Valley Water Report (July 2020) and recorded amounts for 2020.
- (b) Represents pumping from Saugus 1 and Saugus 2 wells.
- (c) Includes agricultural and other small private well pumping.
- (d) 2020 Agricultural and Other alluvial production includes Pitches Detention Center = 1,282 AF, Sand Canyon Country Club 116 AF, Small Pumpers = 500 AF and 2020 Newhall Land and Farming pumping = 7,292 AF for a total of 9,190 AF. Saugus includes private irrigation pumping from Valencia Country Club and Vista Valencia Golf Course 612 AF Saugus and Whittaker Bermite Treatment = 448 AF, for a total of 1,060 AF.

TABLE 3-4 PROJECTED GROUNDWATER PRODUCTION (NORMAL YEAR) (AF)

Basin Name	Groundwater Pumping (AF)				
	2025	2030	2035	2040	2050
Santa Clara River Valley East Subbasin					
Purveyor					
Alluvium ^(a)	19,240	28,050	30,790	30,790	30,790
Saugus Formation ^(b)	17,450	9,900	9,900	9,900	9,900
Total Purveyor	36,690	37,950	40,690	40,690	40,690
Non-Purveyor (Agricultural and Other)^(c)					
Alluvium ^(d)	11,540	9,150	6,410	6,410	6,410
Saugus Formation	1,200	1,200	1,200	1,200	1,200
Total Agricultural and Other	12,740	10,350	7,610	7,610	7,610
Basin					
Alluvium	30,780	37,200	37,200	37,200	37,200
Saugus Formation	18,650	11,100	11,100	11,100	11,100
Total Basin	49,430	48,300	48,300	48,300	48,300

Notes:

- (a) Includes existing, future (associated with the assumed development under the Newhall Ranch Specific Plan) and recovered pumping capacity after PFAS and Perchlorate treatment.
- (b) Saugus Normal Year pumping in 2025 is higher than normal to mitigate for lost alluvial pumping capacity due to impacted PFAS wells.
- (c) Non purveyor pumping includes Five Point (Newhall Ranch Agriculture), Pitches Detention Center, and Small Private Domestic pumping and irrigation at Sand Canyon Country Club, private irrigation pumping from Valencia Country Club and Vista Valencia Golf Course, as well as projected Whittaker-Bermite pumping for perchlorate treatment.
- (d) Reflects reduction of up to 7,038 AF associated with the assumed development under the Newhall Ranch Specific Plan.

As reflected in Table 3-4, the groundwater operating plan recognizes ongoing pumping for the two major uses of groundwater in the Basin, municipal and agricultural (including private pumpers) water supply. Consistent with the groundwater operating plan, projected groundwater pumping includes an ongoing conversion of pumping, coincident with planned land-use changes, from agricultural to municipal water supply. This is shown in Table 3-4, with projected pumping by agricultural and other users decreasing as purveyor pumping increases in such a manner that overall pumping remains within the basin operating plan. The reduction in pumping for agricultural supply is primarily due to the development of Newhall Ranch (expected buildout date of 2034) and is expected to shift to an increase in pumping by SCV Water. The groundwater operating plan and projected pumping also includes other small private domestic and related pumping. As shown in Table 3-4, total projected groundwater pumping by all users within each aquifer is within the ranges for normal year pumping identified in the groundwater operating plan (Table 3-2). SCV Water recognizes that these estimates of projected groundwater use are subject to adjustment based on various factors and conditions occurring from time to time. These estimates are provided for the planning purposes of this report and the UWMP, and do not constitute an allocation of groundwater from the local groundwater basins.

3.3.2.4 Alluvium

Based on a combination of historical operating experience and groundwater modeling analyses (2005 and 2009 groundwater operation plan updates), the Alluvial Aquifer can supply groundwater on a long-term sustainable basis in the overall range of 30,000 to 40,000 AFY, with a probable reduction in dry years to a range of 30,000 to 35,000 AFY. Both of those ranges include 13,000 to 6,400 AFY (as reflected in Table 3-6 and Table 3-7) of Alluvial pumping for agricultural and other non-municipal water uses. The dry year reduction is a result of practical constraints in the eastern part of the Basin, where lowered groundwater levels in dry periods have the effect of reducing pumping capacities in that shallower portion of the aquifer. The GSP will also consider potential impacts on Groundwater Dependent Ecosystems throughout the basin and available analysis supports a determination that historic pumping patterns and future pumping patterns consistent with the Groundwater Basin Operating Plan were protective of these systems. In addition, in general, increased water conservation practices are expected to reduce both indoor and outdoor irrigation demands. Less outdoor irrigation water use creates less return flow to the basin and less indoor water use creates less recycled water both for use within SCV Water and for return to the Santa Clara River. SCV Water will monitor these effects to ensure that pumping by SCV Water does not impact groundwater supply for other uses, including groundwater dependent ecology. Additionally, it is anticipated that the SCV-GSA will monitor groundwater conditions and implement management actions if Sustainable Management Criteria, or Groundwater Dependent Ecosystem triggers are reached so as to protect resources and ensure sustainable operation of the basin.

One notable change in the future geographic patterns of production compared to historical distributions concerns the historic distribution of agricultural pumping compared to future distribution among SCV Water wells. Under the Newhall Ranch Specific Plan, NLF is to dedicate up to 7,038 AFY by fallowing lands and reducing agricultural pumping on its lands. Under the Specific Plan, SCV Water would then have the ability to pump water to serve the new development. The project will be constructed in stages over a number of years depending on market conditions. Likewise, SCV Water pumping would increase over time in such a manner that the overall pumping remains within the basin operating plan. The Specific Plan

development is projecting to implement water conservation practices which will reduce both indoor and outdoor irrigation demands. This reduces the overall water demand of the development. Consistent with the above, SCV Water will monitor the transfer of water from NLF to ensure it does not impact other uses

If the 7,038 AFY dedicated by NLF is not sufficient to support the Specific Plan Development, NLF (or its successor in interest), will transfer additional water to SCV Water from the Nickel Water and/or the Semitropic Water Bank to backstop demands. In anticipation of this development, VWC, a PUC regulated private utility then owned by NLF, installed four wells. However, to manage future potential reductions in groundwater levels in the vicinity of these new wells, particularly during drought conditions, the GSP Water Budget Analysis indicated it would be desirable to install several wells located near the confluence of Castaic Creek and the Santa Clara River near the existing “C” wells that are currently used for agricultural production for Newhall Land’s operations in Los Angeles County.

Adequacy of Supply

Three factors affecting the availability of groundwater are (1) sufficient source infrastructure capacity (wells and pumps), (2) sustainability of the groundwater resource to meet pumping demand on a renewable basis, and (3) protection of groundwater sources (wells) from known contamination or from potential sources of contamination.

For source infrastructure, existing and planned wells, and pumps, SCV Water has a combined pumping capacity from active Alluvial wells of approximately 51,000 gallons per minute (gpm), which translates into a current full-time Alluvial source pumping capacity of approximately 83,000 AFY. The higher individual and cumulative pumping capacities are primarily for operational reasons (i.e., to meet daily and other fluctuations from average day to maximum day and peak hour system demands). Further, to achieve these levels of production, SCV Water must complete treatment facilities for PFAS compliance. The timing for returning PFAS and Perchlorate impacted wells is shown in the 2020 UWMP and incorporated herein. Alluvial pumping capacity from all the active and future municipal supply wells is summarized in Table 3-4C.

In terms of adequate source capacity to provide flexible and adaptive management in the sustainable use of groundwater resources, the current and projected availability of Alluvial groundwater source capacity of municipal wells is approximately 83,000 AFY. This source capacity is more than sufficient to meet the 21,400 AFY in 2025 and increases to 30,800 in 2035 (Table 3-4). The higher individual and cumulative pumping capacities are primarily for operational reasons (i.e., to meet daily and other fluctuations from average day to maximum day and peak hour system demands). As illustrated on Table 3-4C, the balance of all Alluvial pumping 37,200 AFY, including non-SCV Water pumping, remains within the operating plan range of 30,000 to 40,000 AFY.

TABLE 3-4A ACTIVE MUNICIPAL GROUNDWATER SOURCE CAPACITY — ALLUVIAL AQUIFER WELLS^(a)

Well	Permitted Capacity (gpm)	Max. Annual Capacity (AF)	GSP Water Budget Analysis ^(b)	
			Normal Year (AF)	Dry Year (AF)
Existing Wells^(c)				
Castaic 1	640	1,030	430	420
Castaic 2	500	810	220	220
Castaic 4	330	530	-	-
Castaic 6	600	970	-	-
Castaic 7	2,000	3,230	580	730
Pinetree 3	550	890	310	-
Pinetree 4	500	810	-	-
Guida	1,000	1,610	560	560
Lost Canyon 2 ^(d)	800	1,290	410	250
Lost Canyon 2A ^(d)	1,000	1,610	420	160
N. Oaks West	750	1,210	-	-
Sand Canyon	1,200	1,940	730	310
Well E-15 ^(d)	1,400	2,260	725	620
Well W9	800	1,290	1,010	700
Well W11	1,000	1,610	1,180	1,000
Well E-17 ^(d)	1,200	1,940	725	620
<i>Existing Subtotal</i>	<i>14,270</i>	<i>23,030</i>	<i>7,300</i>	<i>5,590</i>
Future^(e) and Recovered Wells				
Pinetree 1 ^(f)	300	480	190	0
Pinetree 5 ^(f)	500	810	200	0
Clark ^(f)	550	890	380	270
Honby ^(f)	950	1,530	760	110
Mitchell 5B ^(f)	1,000	1,610	200	60
N. Oaks Central ^(f)	1,200	1,940	500	340
N. Oaks East ^(f)	950	1,530	500	220
Santa Clara ^(f)	1,500	2,420	770	250
Sierra ^(f)	1,000	1,610	400	60
Valley Center ^(f)	1,200	1,940	1,000	610
Well D ^(f)	1,050	1,690	1,210	920
Well N ^(f)	1,250	2,020	630	1,060
Well N7 ^(f)	2,500	4,040	1,470	1,680
Well N8 ^(f)	2,500	4,040	1,430	1,680
Well Q2 ^{(g)(f)}	1,200	1,940	770	850
Well S6 ^(f)	2,000	3,230	640	2,080

Well	Permitted Capacity (gpm)	Max. Annual Capacity (AF)	GSP Water Budget Analysis ^(b)	
			Normal Year (AF)	Dry Year (AF)
Well S7 ^(f)	2,000	3,230	620	780
Well S8 ^(f)	2,000	3,230	610	760
Well T7 ^(f)	1,200	1,940	880	360
Well U4 ^(f)	1,000	1,610	940	570
Well U6 ^(f)	1,250	2,020	1,050	660
Well W10 ^(f)	1,500	2,420	1,700	1,490
Well E-14 ^(h)	1,200	1,940	725	610
Well E-16 ^(h)	1,200	1,940	725	610
Well G-45 ^(h)	1,200	1,940	1,670	1,430
Well C-11 ^(h)	2,000	3,230	1,600	1,360
Well C-12 ^(h)	2,000	3,230	1,600	1,360
S9 (Mitchell 5A Replacement) ^(h)	1,000	1,610	320	320
Future Subtotal	37,200	60,060	23,490	20,500
Total	51,470	83,090	30,790	26,090

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the GSP (GSI 2022) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) Production for Normal and Dry years represented in this table represent the period after all impacted wells (PFAS and Perchlorate impacts) are recovered. Dry-year production represents anticipated maximum dry year production. Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 in Appendix M of the 2020 UWWMP.
- (c) Existing Category includes all wells currently online and in use.
- (d) E Wells and Lost Canyon have been below the RL so are not impacted wells but they are anticipated to be connected into central treatment systems.
- (e) Future Category includes all wells restored from PFAS and Perchlorate water quality issues, and other future alluvial wells including those associated with development under the Newhall Ranch Specific Plan.
- (f) PFAS impacted well.
- (g) Perchlorate impacted well.
- (h) Future wells.

TABLE 3-4B
ACTIVE MUNICIPAL GROUNDWATER SOURCE CAPACITY -
EXISTING, FUTURE AND RECOVERED ALLUVIAL AQUIFER WELLS^(a)
NORMAL YEAR DETAIL (2021-2030)

Well	Permitted Capacity (gpm)	Max. Annual Capacity (AF)	Normal Year (AF) ^(b)									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Existing Wells^(c)												
Castaic 1	640	1,030	430	430	430	430	430	430	430	430	430	430
Castaic 2	500	810	220	220	220	220	220	220	220	220	220	220
Castaic 4	330	530	-	-	-	-	-	-	-	-	-	-
Castaic 6	600	970	-	-	-	-	-	-	-	-	-	-
Castaic 7	2,000	3,230	580	580	580	580	580	580	580	580	580	580
Pinetree 3	550	890	310	310	310	310	310	310	310	310	310	310
Pinetree 4	500	810	-	-	-	-	-	-	-	-	-	-
Guida	1,000	1,610	560	560	560	560	560	560	560	560	560	560
Lost Canyon 2 ^(d)	800	1,290	410	410	410	410	410	410	410	410	410	410
Lost Canyon 2A ^(e)	1,000	1,610	420	420	420	420	420	420	420	420	420	420
N. Oaks West	750	1,210	-	-	-	-	-	-	-	-	-	-
Sand Canyon	1,200	1,940	730	730	730	730	730	730	730	730	730	730
Well E-15 ^(d)	1,400	2,260	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,600
Well W9	800	1,290	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,010
Well W11	1,000	1,610	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,180	1,180
Well E-17 ^(d)	1,200	1,940	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	730

	14,270	23,030	8,900	8,900	8,900	8,900	8,900	8,900	8,840	8,840	8,180	8,180
Existing Subtotal												
Future(e) and Recovered Wells												
Pinetree 1 ^(f)	300	480	-	-	-	-	-	-	-	-	-	190
Pinetree 5 ^(f)	500	810	-	-	-	-	-	-	-	-	-	200
Clark ^(f)	550	890	-	-	-	-	-	-	-	-	-	380
Honby ^(f)	950	1,530	-	-	760	760	760	760	760	760	760	760
Mitchell 5B ^(f)	1,000	1,610	-	-	-	-	-	-	-	-	-	200
N. Oaks Central ^(f)	1,200	1,940	-	-	-	-	-	-	-	-	-	500
N. Oaks East ^(f)	950	1,530	-	-	-	-	-	-	-	-	-	500
Santa Clara ^(f)	1,500	2,420	-	-	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010
Sierra ^(f)	1,000	1,610	-	-	-	-	-	-	-	-	-	400
Valley Center ^(f)	1,200	1,940	-	1,190	1,190	1,030	1,030	1,030	1,030	1,030	1,030	1,030
Well D ^(f)	1,050	1,690	-	-	-	-	-	-	-	1,210	1,210	1,210
Well N ^(f)	1,250	2,020	980	870	870	630	630	630	630	630	630	630
Well N7 ^(f)	2,500	4,040	2,600	2,180	2,180	1,470	1,470	1,470	1,470	1,470	1,470	1,470
Well N8 ^(f)	2,500	4,040	2,600	2,180	2,180	1,430	1,430	1,430	1,430	1,430	1,430	1,430
Well Q2 ^{(g)(f)}	1,200	1,940	-	940	940	770	770	770	770	770	770	770
Well S6 ^(f)	2,000	3,230	-	-	-	640	640	640	640	640	640	640
Well S7 ^(f)	2,000	3,230	-	-	-	620	620	620	620	620	620	620
Well S8 ^(f)	2,000	3,230	-	-	-	610	610	610	610	610	610	610
Well T7 ^(f)	1,200	1,940	-	-	-	750	750	750	750	750	750	750
Well U4 ^(f)	1,000	1,610	-	-	-	700	700	700	700	700	700	700
Well U6 ^(f)	1,250	2,020	-	-	-	800	800	800	800	800	800	840
Well W10 ^(f)	1,500	2,420	-	-	-	-	-	1,650	1,650	1,650	1,650	1,650
Well E-14 ^(h)	1,200	1,940	-	-	-	740	740	740	740	740	740	740

Well E-16 ^(h)	1,200	1,940	-	-	-	250	650	650	650	650
Well G-45 ^(h)	1,200	1,940	-	-	-	-	-	-	1,670	1,670
Well C-11 ^(h)	2,000	3,230	-	-	-	-	-	-	-	-
Well C-12 ^(h)	2,000	3,230	-	-	-	-	-	-	-	-
S9 (Mitchell 5A Replacement) ^(h)	1,000	1,610	-	-	-	-	320	320	320	320
Future Subtotal	37,200	60,060	6,180	7,360	7,360	10,340	12,930	14,580	15,790	17,460
Total	51,470	83,090	15,080	16,260	16,260	18,500	21,830	23,420	24,630	25,640

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 in Appendix M of the 2020 UWMMP. 2023 through 2025 adjustments based on January 2022 engineering project schedule updates.
- (c) Existing Category includes all wells currently online and in use.
- (d) E Wells and Lost Canyon have not come below the RL so are not impacted wells but are anticipated to be connected into central treatment systems.
- (e) Future Category includes all wells restored from PFAS and Perchlorate water quality issues, and other future alluvial wells including those associated with development under the Newhall Ranch Specific Plan.
- (f) PFAS impacted well.
- (g) Perchlorate impacted well.
- (h) Future wells.

TABLE 3-4 C
ACTIVE MUNICIPAL GROUNDWATER SOURCE CAPACITY
EXISTING, FUTURE AND RECOVERED ALLUVIAL AQUIFER WELLS^(a)
DRY YEAR DETAIL (2021-2030)

Well	Permitted Capacity (gpm)	Max. Annual Capacity (AF)	Dry Year (AF) ^(b)									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Existing Wells^(c)												
Castaic 1	640	1,030	420	420	420	420	420	420	420	420	420	420
Castaic 2	500	810	220	220	220	220	220	220	220	220	220	220
Castaic 4	330	530	-	-	-	-	-	-	-	-	-	-
Castaic 6	600	970	-	-	-	-	-	-	-	-	-	-
Castaic 7	2,000	3,230	730	730	730	730	730	730	730	730	730	730
Pinetree 3	550	890	0	0	0	0	0	0	0	0	0	0
Pinetree 4	500	810	-	-	-	-	-	-	-	-	-	-
Guida	1,000	1,610	560	560	560	560	560	560	560	560	560	560
Lost Canyon 2 ^(d)	800	1,290	250	250	250	250	250	250	250	250	250	250
Lost Canyon 2A ^(e)	1,000	1,610	160	160	160	160	160	160	160	160	160	160
N. Oaks West	750	1,210	-	-	-	-	-	-	-	-	-	-
Sand Canyon	1,200	1,940	310	310	310	310	310	310	310	310	310	310
Well E-15 ^(d)	1,400	2,260	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,360
Well W9	800	1,290	940	940	940	940	940	940	940	940	940	700
Well W11	1,000	1,610	1,210	1,210	1,210	1,210	1,210	1,210	1,210	1,210	1,210	1,000
Well E-17 ^(d)	1,200	1,940	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	620
Existing Subtotal	14,270	23,030	7,300	7,300	7,300	7,300	7,300	7,300	7,300	7,300	7,300	6,330

Future^(e) and Recovered Wells

Pinetree 1 ^(f)	300	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Pinetree 5 ^(f)	500	810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Clark ^(f)	550	890	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270
Honby ^(f)	950	1,530	-	-	-	110	110	110	110	110	110	110	110	110	110	110	110	110	110
Mitchell 5B ^(f)	1,000	1,610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
N. Oaks Central ^(f)	1,200	1,940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	340
N. Oaks East ^(f)	950	1,530	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220
Santa Clara ^(f)	1,500	2,420	-	-	-	250	250	250	250	250	250	250	250	250	250	250	250	250	250
Sierra ^(f)	1,000	1,610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
Valley Center ^(f)	1,200	1,940	-	800	800	800	800	610	610	610	610	610	610	610	610	610	610	610	610
Well D ^(f)	1,050	1,690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	920
Well N ^(f)	1,250	2,020	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060
Well N7 ^(f)	2,500	4,040	2,310	2,310	2,310	2,310	2,310	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Well N8 ^(f)	2,500	4,040	2,310	2,310	2,310	2,310	2,310	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Well Q2 ^{(g)(f)}	1,200	1,940	-	1,110	1,110	1,110	850	850	850	850	850	850	850	850	850	850	850	850	850
Well S6 ^(f)	2,000	3,230	-	-	-	-	-	-	2,080	2,080	2,080	2,080	2,080	2,080	2,080	2,080	2,080	2,080	2,080
Well S7 ^(f)	2,000	3,230	-	-	-	-	-	-	780	780	780	780	780	780	780	780	780	780	780
Well S8 ^(f)	2,000	3,230	-	-	-	-	-	-	760	760	760	760	760	760	760	760	760	760	760
Well T7 ^(f)	1,200	1,940	-	-	-	-	-	360	360	360	360	360	360	360	360	360	360	360	360
Well U4 ^(f)	1,000	1,610	-	-	-	-	-	570	570	570	570	570	570	570	570	570	570	570	570
Well U6 ^(f)	1,250	2,020	-	-	-	-	-	660	660	660	660	660	660	660	660	660	660	660	660
Well W10 ^(f)	1,500	2,420	-	-	-	-	-	-	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,490
Well E-14 ^(h)	1,200	1,940	-	-	-	-	-	620	620	620	620	620	620	620	620	620	620	620	620
Well E-16 ^(h)	1,200	1,940	-	-	-	-	-	580	580	580	580	580	580	580	580	580	580	580	580

Well G-45 ^(h)	1,200	1,940	-	-	-	-	-	650	690
Well C-11 ^(h)	2,000	3,230	-	-	-	-	-	-	-
Well C-12 ^(h)	2,000	3,230	-	-	-	-	-	-	-
S9 (Mitchell 5A Replacement) ^(h)	1,000	1,610	-	-	-	320	320	320	320
<i>Future Subtotal</i>	<i>37,200</i>	<i>60,060</i>	<i>5,680</i>	<i>7,590</i>	<i>7,590</i>	<i>12,970</i>	<i>14,000</i>	<i>14,920</i>	<i>15,570</i>
Total	51,470	83,090	12,980	14,890	14,890	20,270	21,300	22,220	22,870

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) Dry-year production represents anticipated maximum dry year production. Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 in Appendix M of the 2020 UWMP. 2023 through 2025 adjustments based on January 2022 engineering project schedule updates.
- (c) Existing Category includes all wells currently online and in use.
- (d) E Wells and Lost Canyon have not come below the RL so are not impacted wells but are anticipated to be connected into central treatment systems.
- (e) Future Category includes all wells restored from PFAS and Perchlorate water quality issues, and other future alluvial wells including those associated with development under the Newhall Ranch Specific Plan.
- (f) PFAS impacted well.
- (g) Perchlorate impacted well.
- (h) Future wells.

Sustainability

Until 2003, the long-term renewability of Alluvial groundwater was empirically determined from approximately 60 years of pumping and groundwater level records. Generally, those long-term observations included stability in groundwater levels and storage, with some dry-period fluctuations in the eastern part of the Basin. During this period, the total Alluvial pumpage ranged from a low of about 20,000 AFY to as high as about 43,000 AFY. Those empirical observations have since been complemented by the development and application of a numerical groundwater flow model, which has been used to simulate aquifer response to the planned operating ranges and distribution of pumping. The numerical groundwater flow model has also been used to analyze the control of perchlorate contaminant migration. The model was used to evaluate the likelihood of perchlorate migration to the then VWC wells, in particular Well Q2 and the wells in the VWC Pardee wellfield. The assessment of perchlorate migration also evaluated the sustainability and reliability of water supplies from the Alluvial aquifer. This analysis (LSCE, 2005) concluded that there was sufficient production capacity in the Alluvium to meet water demands in the case of VWC Well Q2 and/or the Pardee well field being temporarily taken out of service due to perchlorate impacts.

To examine the yield of the Alluvium, or more specifically the sustainability of the Alluvium on a renewable basis, the original groundwater flow model was used to examine the long-term projected response of the aquifer to pumping for municipal and agricultural uses in the 30,000 to 40,000 AFY range under average/normal and wet conditions, and in the 30,000 to 35,000 AFY range under locally dry conditions, documented in the 2005 basin yield analysis (2005 Basin Yield Analysis), prepared by CH2M Hill & LSCE, 2005. To examine the response of the entire aquifer system, the original model also incorporated pumping from the Saugus Formation in accordance with the normal (7,500 to 15,000 AFY) and dry year (15,000 to 35,000 AFY) operating plan for that aquifer. The model was run over a synthetic 78-year hydrologic period, which was selected from actual historical precipitation to examine a number of hydrologic conditions expected to affect both groundwater pumping and groundwater recharge and including projected impacts from climate change.

Simulated Alluvial Aquifer response to the range of hydrologic conditions and pumping stresses was essentially a long-term repeat of the historical conditions that have resulted from similar pumping over the last several decades. The resultant response included (1) generally constant groundwater levels in the middle to western portion of the Alluvium, and fluctuating groundwater levels in the eastern portion as a function of wet and dry hydrologic conditions, (2) variations in recharge that directly correlate with wet and dry hydrologic conditions and (3) no long-term decline in groundwater levels or storage. Consequently, the Alluvial Aquifer was considered in the 2005 UWMP to be a sustainable water supply source to meet the Alluvial portion of the operating plan for the groundwater Basin.

In 2008, partly in preparation for the 2010 UWMP and partly in response to concerns about events expected to impact the future reliability of supplemental water supply from the SWP, an updated analysis was undertaken to assess groundwater development potential and possible augmentation of the groundwater operating plan. In addition to extending the model's calibration, the updated analysis simulated the historical record of climate and incorporated SWP deliveries for those climatic conditions for an 86-year period from 1922 through 2007, in place of the original model's synthetic 78-year hydrologic period that had been developed prior

to the availability of combined climate and SWP deliveries since 1922. While the overall operating plan ranges in the updated basin yield analysis did not change from the original operating plan, prevailing land-use conditions and the specific distributions of pumping were found to produce the same kinds of resultant Alluvial groundwater conditions as concluded to be sustainable in 2005 – (1) no long-term declines in Alluvial groundwater levels and storage; (2) multi-year periods of locally declining, or locally increasing, groundwater levels in response to cycles of below-normal and above-normal precipitation and (3) short-term impacts on pumping capacities in eastern parts of the basin due to declining groundwater levels during dry periods, mitigable by short-term redistribution of pumping to wells located in the central and western portions of the Basin (reflected in pumping volumes included in this WSA and the 2020 UWMP) and by conformance with the dry-period reduction in Alluvial pumping in the operating plan (Table 3-2). Based on the results of the updated basin yield analysis (LSCE & GSI, 2009), the operating plan is considered to reflect ongoing sustainable groundwater supply rates. In the Alluvium, sustainability was found via explicit simulation of pumping in wet/normal years near the upper end of the operating plan range. In dry years, sustainability was found via explicit simulation of pumping throughout the dry-year operating plan range, with the additional consideration that some redistribution of municipal pumping (reflected in this WSA and the 2020 UWMP and experienced in the dry years of 2014 and 2015) be implemented to achieve pumping rates near the dry-period range.

The SCV-GSA's work on Basin sustainability for the GSP has advanced the technical understanding of basin conditions since the 2009 basin yield analysis and confirms the previous conclusion. A new groundwater flow model using the U.S Geological Survey software MODFLOW-USG was developed calibrated and peer reviewed. The MODFLOW-USG model improves the spatial resolution and employs more sophisticated methods of representing stream/aquifer interactions among other advancements over the previous model. A more thorough discussion is documented in Development of a Numerical Groundwater Flow Model for the Santa Clara River Valley East Groundwater Subbasin GSI September 22, 2020. Additionally, the GSP Water Budget Analysis reflects updated climate change assumptions provided by DWR. New GSP technical reports defining the extent and nature of groundwater dependent ecosystems informed potential future adjustments of pumping distributions throughout the Alluvial Aquifer and Saugus Formation when considering sustainability criteria including potential impacts on groundwater dependent ecosystems. Accordingly, the 2020 UWMP reflects adjusted pumping distributions that are reflected in this WSA's Table 3-4C.

On January 3, 2022, the GSP was adopted which reflects updated technical resources and analysis, and a robust public involvement and review process. The plan can be accessed at <https://scvgsa.org/wp-content/uploads/2021/12/SCV-GSP-Sections-Combined-20211217.pdf>.

The plan reached the following conclusions relating to sustainability:

1. Chronic Lowering of Groundwater Levels – Alluvium and Saugus Formation pumping consistent with the basin operating plan does not result in chronic lowering of groundwater levels.
2. Reduction of Groundwater Storage - Alluvium and Saugus Formation pumping consistent with the basin operating plan does not result in long-term groundwater storage depletion.

3. Degraded Water Quality – Implementation of treatment for known contaminants support continued Alluvium and Saugus Formation groundwater use consistent with the operating plan.
4. Land Subsidence – An evaluation of the available information indicates there is no evidence of land subsidence occurring. The GSP does identify additional data collection needs to ensure land subsidence remains a non-issue while achieving the basin operation plan. The GSP incorporates active monitoring stations.
5. Depletion of Interconnected Surface Water/Groundwater Dependent Ecosystems – Existing riparian habitat along the Santa Clara River is considered by resource agencies as having very high value. The extent and quality of the habitat can vary significantly from year to year in response to very wet or dry conditions and demonstrates considerable resiliency. Certain aquatic habitats are critical for known protected species such as the Three Spined Unarmored Stickle Back. The GSP incorporates a process that avoids groundwater pumping related permanent loss of riparian habitat or the temporary loss of critical aquatic habitat. Active monitoring of groundwater levels will occur and when trigger levels (set at or above historical groundwater levels) are reached, an assessment of the cause would be conducted. If impacts are related to pumping, then responsive measures and/or projects would be implemented. These could include a reduction of groundwater pumping.
6. Seawater Intrusion – The significant distance of the Alluvial Aquifer and Saugus Formation from the ocean, as well as differences in elevation, do not allow for seawater intrusion into the upper basin.

Considering the results of the 2009 basin yield analysis and the results of the updated groundwater analysis performed by the SCV-GSA for its GSP which included the pumping distributions consistent with those shown in Table 3-4C, the basin can be sustainably operated without chronic lowering of groundwater levels or groundwater storage.

3.3.2.5 Saugus Formation

Based on historical operating experience and recent (2005 and 2009) groundwater modeling analysis, the Saugus Formation can supply water on a long-term sustainable basis in a normal range of 7,500 to 15,000 AFY. Intermittent increases to 25,000 to 35,000 AF in dry years have not been historically experienced operationally, however, investigations of the Saugus Formation, historical groundwater level monitoring data, and numerical modeling indicate that the Saugus Formation can be pumped sustainably at these higher rates in dry years, followed by reductions in pumping in wet to normal years. The dry-year increases, based on modeled projections, demonstrate that the 25,000 to 35,000 AFY is a small amount of the large groundwater storage in the Saugus Formation and these amounts can be pumped over a relatively short (dry) period. This would be followed by recharge (replenishment) of that storage during a subsequent normal-to-wet period when the Saugus pumping would be reduced to 7,500 to 15,000 AFY.

Adequacy of Supply

For municipal water supply with existing wells, SCV Water has a combined pumping capacity from active Saugus wells of nearly 16,200 gpm, which translates into a full-time Saugus

Formation source capacity of about 26,120 AFY. Additionally, LACWWD 36 completed a Saugus Formation Well with a pumping capacity estimated at 2,000 gpm and an annual capacity of 3,220 AFY. Saugus Formation pumping capacity from all the existing active municipal supply wells is summarized in Table 3-5A, as well as restored, replacement, and planned new supply wells. The active wells include two Saugus Formation wells contaminated by perchlorate (Saugus 1 and 2), which were returned to service in 2010 with treatment facilities for use of the treated water for municipal supply under permit from the California Department of Public Health (DPH). The permit is now with DDW. The active wells also include the most recent replacement well, Well 207, in a non-impacted part of the basin. Also included in Table 3-5A is Well 201, which was impacted by the detection of perchlorate and removed from service in 2010. The well has been equipped with treatment facilities for perchlorate and was awaiting final DDW approval), however, a second treatment train is being designed for treatment of VOCs. Well 201 is anticipated to provide a total of 2,000 gpm of pumping capacity and is anticipated to return to service sometime in 2024. Similarly, Well 205, was taken out of service for perchlorate. Treatment for this facility is under the early stages of design and it is anticipated to return to service in 2024 as shown in Table 3-6.

To achieve full dry year production of 33,800 AFY six additional Saugus wells are planned. Two of these wells, Saugus 3 and 4, located behind Magic Mountain, have been designed and rebid after consultation with DDW on the criteria for obtaining an operating permit as related to issues surrounding the proximity of abandoned oil wells. It is estimated that these wells should be available in 2025. The next wells anticipated to be available are Saugus 5 and 6, located in the Castaic Junction area. Sites have been secured for these wells and they are anticipated to be available in 2027. To accommodate the shifting of pumping patterns associated with treatment being added at Well 201 and Well 205 the GSP Water Budget Analysis concluded that two additional dry-year wells would be required to meet the Saugus Formation pumping objectives. These final two wells, Saugus 7 and Saugus 8, do not have specific sites. The GSP Water Budget Analysis assumed these wells would be located near the South Fork of the Santa Clara River in the vicinity of the existing well 12 and 13. These wells are anticipated to become available in 2030. Additional details on DDW permitting and associated timeline for Saugus wells are provided in Section 4.7.

In terms of adequacy and availability, the combined active (existing) Saugus groundwater source capacity of municipal wells of about 29,340 AFY is more than sufficient to meet the planned use of Saugus groundwater in normal years of 7,500 to 15,000 AFY. This existing active capacity is also more than sufficient to meet near term dry year water demands, in combination with other sources. In order to supplement long term dry-year supplies, additional Saugus Formation wells are planned to be operational within the next ten years.

With the restored capacity of Wells 201 and 205 and the additional planned new Saugus Formation wells, the total dry year combined capacity will increase to about 54,680 AFY. As shown in Table 3-5C, this combined capacity is more than sufficient to meet the multiple dry year municipal production target of 33,880 AFY.

TABLE 3-5A MUNICIPAL GROUNDWATER SOURCE CAPACITY- EXISTING, FUTURE, AND RECOVERED SAUGUS FORMATION WELLS^(a)

Well	Permitted Capacity (gpm)	Max. Annual Capacity (AF)	GSP Water Budget Analysis ^(b)		
			Normal Year (AF)	Dry Year (AF)	
Existing Wells^(c)					
LACWWD36 ^(d)	Palmer	2,000	3,220	500	1,250
SCV Water					
	12 ⁽ⁱ⁾	2,500	4,030	530	2,280
	13	2,500	4,030	540	2,280
	160	2,000	3,230	0	680
	206	2,500	4,030	180	2,830
	207	2,500	4,030	140	2,860
	Saugus 1	1,100	1,770	1,450	1,450
	Saugus 2	1,100	1,770	1,350	1,350
	SCV Water Subtotal	14,200	22,890	4,190	13,730
Existing Purveyor Subtotal					
		16,200	26,110	4,690	14,980
Future^(f) and Recovered Wells					
	201 ^(e)	2,000	3,230	2,420	2,900
	205 ^(g)	2,700	4,360	2,610	2,920
	Saugus 3 ^(h)	2,500	4,030	30	2,620
	Saugus 4 ^(h)	2,500	4,030	30	2,620
	Saugus 5 ^(h)	2,000	3,230	30	1,940
	Saugus 6 ^(h)	2,000	3,230	30	1,940
	Saugus 7 ^(h)	2,000	3,230	30	1,940
	Saugus 8 ^(h)	2,000	3,230	30	1,940
	Future Subtotal	17,700	28,570	5,210	15,920
	Total Purveyors	33,900	54,680	9,900	33,800

Notes:

(a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the GSP (GSI 2022) and the updated Basin Yield Analysis (LSC & GSI 2009).

- (b) Production for Normal and Dry years represented in this table represent the period after all impacted wells (PFAS and Perchlorate impacts) are recovered. See Tables 3-5B and 3-5C for anticipated production from 2021-2030. Dry-year production represents anticipated maximum dry year production. Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 in Appendix M of the 2020 UWMP.
- (c) Existing Category includes all wells currently online and in use.
- (d) LAWWD36 anticipated production for normal and dry years.
- (e) Well 201 is awaiting VOC treatment and DDW permitting, returning to service in 2024.
- (f) Future Category includes two wells restored from Perchlorate and VOC water quality issues, and other future Saugus wells.
- (g) Well 205 is impacted by Perchlorate and is expected to return to service in 2024.
- (h) Future wells, Saugus 3 & 4, are planned replacement wells, Saugus 5-8 are new Dry Year wells. The new dry-year wells would not typically be operated during average/normal years.
- (i) Permitted at 2,500 gpm but capacity was reduced to 2,000 gpm during last rehab.

**TABLE 3-5 B
MUNICIPAL GROUNDWATER SOURCE CAPACITY
EXISTING, FUTURE AND RECOVERED SAUGUS FORMATION WELLS^(a)
NORMAL YEAR DETAIL (2021-2030)**

Well	Permitted Capacity (gpm)	Max. Annual Capacity (AF)	Normal Year (AF) ^(b)									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Existing Wells ^(c)												
LACWWWD36 ^(d)												
Palmer	2,000	3,220	500	500	500	500	500	500	500	500	500	500
12 ⁽ⁱ⁾	2,500	4,030	2,220	2,220	2,220	2,220	2,220	2,220	2,220	2,220	2,220	2,420
13	2,500	4,030	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,420
160	2,000	3,230	-	-	-	-	-	-	-	-	-	-
201 ^(e)	2,000	3,230	-	-	-	2,580	2,580	2,580	2,480	2,480	2,420	2,420
206	2,500	4,030	2,830	2,830	2,830	2,020	2,020	2,020	200	200	200	180
207	2,500	4,030	2,860	2,860	2,860	2,040	2,040	2,040	180	180	180	140
Saugus 1	1,100	1,770	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450
Saugus 2	1,100	1,770	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350
SCV Water Subtotal	16,200	26,120	12,990	12,990	12,990	13,940	13,940	13,940	6,730	6,670	6,670	6,610
Existing Purveyor Subtotal	18,200	29,340	13,490	13,490	13,490	14,440	14,440	14,440	7,230	7,170	7,170	7,110
Future^(f) and Recovered Wells												
205 ^(g)	2,700	4,360	-	-	-	3,010	2,610	2,610	2,610	2,610	2,610	2,610
Saugus 3 ^(h)	2,500	4,030				200	30	30	30	30	30	30
Saugus 4 ^(h)	2,500	4,030				200	30	30	30	30	30	30
Saugus 5 ^(h)	2,000	3,230							30	30	30	30
Saugus 6 ^(h)	2,000	3,230							30	30	30	30

Saugus 7 ^(h)	2,000	3,230																		30
Saugus 8 ^(h)	2,000	3,230																		30
<i>Future Subtotal</i>	15,700	25,340	0	0	3,010	3,010	2,670	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,790
Total Purveyors (l)	33,900	54,680	13,490	13,490	17,450	17,450	17,450	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 in Appendix M of the 2020 UWMP. 2022 and 2023 updates based on permitting and treatment project schedule changes.
- (c) Existing Category includes all wells currently online and in use.
- (d) LAWWD36 anticipated production for normal and dry years.
- (e) Well 201 could have been put online through 97-005 permitting process, however treatment plans were altered and Well 201 is now awaiting supplemental VOC treatment and DDW permitting. Anticipate return to service in 2024.
- (f) Future Category includes one well restored from Perchlorate water quality issues, and other future Saugus wells.
- (g) Well 205 is impacted by Perchlorate and is expected to return to service in 2024.
- (h) Future wells, Saugus 3 & 4, are planned replacement wells, Saugus 5-8 are new Dry Year wells. The new dry-year wells would not typically be operated during average/normal years.
- (i) Permitted at 2,500 gpm but capacity was reduced to 2,000 gpm during last rehab.

**TABLE 3-5 C
MUNICIPAL GROUNDWATER SOURCE CAPACITY
EXISTING, FUTURE AND RECOVERED SAUGUS FORMATION WELLS^(a)
DRY YEAR DETAIL (2021-2030)**

Well	Permitted Capacity (gpm)	Max. Annual Capacity (AF)	Dry Year (AF) ^(b)									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Existing Wells ^(c)												
LACWWD36 ^(d)												
Palmer	2,000	3,220	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
SCV Water												
12 ^(f)	2,500	4,030	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280
13	2,500	4,030	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280	2,280
160	2,000	3,230	680	680	680	680	680	680	680	680	680	680
201 ^(e)	2,000	3,230	-	-	-	2,900	2,900	2,900	2,900	2,900	2,900	2,900
206	2,500	4,030	2,830	2,830	2,830	2,830	2,830	2,830	2,830	2,830	2,830	2,830
207	2,500	4,030	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860
Saugus 1	1,100	1,770	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450
Saugus 2	1,100	1,770	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350
SCV Water Subtotal	16,200	26,120	13,730	13,730	13,730	16,630	16,630	16,630	16,630	16,630	16,630	16,630
Existing Purveyor Subtotal	18,200	29,340	14,980	14,980	14,980	17,880	17,880	17,880	17,880	17,880	17,880	17,880
Future^(f) and Recovered Wells												
205 ^(g)	2,700	4,360	-	-	-	3,050	3,050	3,050	3,050	3,050	3,050	2,920
Saugus 3 ^(h)	2,500	4,030				3,020	3,020	3,020	2,620	2,620	2,620	2,620
Saugus 4 ^(h)	2,500	4,030				3,020	3,020	3,020	2,620	2,620	2,620	2,620
Saugus 5 ^(h)	2,000	3,230				2,420	2,420	2,420	2,420	2,420	2,420	1,940

Saugus 6 ^(h)	2,000	3,230		2,420	2,420	1,940
Saugus 7 ^(h)	2,000	3,230				1,940
Saugus 8 ^(h)	2,000	3,230				1,940
<i>Future Subtotal</i>	15,700	25,340	0	0	3,050	9,090
						13,130
						13,130
						15,920
Total Purveyors	33,900	54,680	14,980	14,980	20,930	26,970
						31,010
						31,010
						33,800
						0

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) Dry-year production represents anticipated maximum dry year production. Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 in Appendix M of the 2020 UWMP. 2022 and 2023 updates based on permitting and treatment project schedule changes.
- (c) Existing Category includes all wells currently online and in use.
- (d) LAWWD36 anticipated production for normal and dry years.
- (e) Well 201 could have been put online through 97-005 permitting process, however treatment plans were altered and Well 201 is now awaiting supplemental VOC treatment and DDW permitting. Anticipate return to service in 2024.
- (f) Future Category includes one well restored from Perchlorate water quality issues, and other future Saugus wells.
- (g) Well 205 is impacted by Perchlorate and is expected to return to service in 2024.
- (h) Future wells, Saugus 3 & 4, are planned replacement wells, Saugus 5-8 are new Dry Year wells. The new dry-year wells would not typically be operated during average/normal years.
- (i) Permitted at 2,500 gpm but capacity was reduced to 2,000 gpm during last rehab.

Sustainability

Until 2003, the long-term sustainability of Saugus Formation groundwater was empirically estimated from limited historical experience. Historically (and continuing to the present), pumping from the Saugus Formation has been fairly low in most years, with one four-year period of increased pumping up to about 15,000 AFY that had short-term water level impacts but produced no long-term depletion of the substantial groundwater storage in the Saugus Formation. Those empirical observations have now been complemented by the development and application of the numerical groundwater flow model. The numerical groundwater flow model has also been used to analyze the control of perchlorate contaminant migration on two separate occasions under selected pumping conditions. The first occasion resulted in the implementation of a plan to restore, with treatment, pumping capacity that was formerly inactivated due to perchlorate contamination detected in the Saugus 1 and Saugus 2 wells in the Basin. The second occasion utilized the numerical groundwater flow model to evaluate preferred plans to control the migration of perchlorate in the vicinity of Well 201. As discussed in Section 3, those restoration efforts have been undertaken and the restoration of that pumping is reflected in the Saugus Formation operating plan (Table 3-2) and pumping distribution (Table 3-5A).

To examine the yield of the Saugus Formation, or its sustainability on a renewable basis, the original groundwater flow model was used to examine long-term projected response to pumping from both the Alluvium and the Saugus Formation over the synthetic 78-year period of hydrologic conditions that incorporated alternating wet and dry periods as have historically occurred (CH2M Hill and LSCE, 2005). The model was based upon field investigations and historical data collected from numerous sources including annual reports prepared by LSCE and investigations of Saugus Formation and Alluvial aquifers by CH2M Hill and Richard C. Slade and Associates among others (CH2M Hill, 2004a, 2004b, 2005a; CH2M Hill & LSCE 2005; LSCE 2005; Slade & Associates 1986, 1988, 2002). The pumping simulated in the model was in accordance with the then-current operating plan for the Basin. For the Saugus Formation, simulated pumping included the then-planned restoration of historic pumping from the wells impacted by perchlorate at that time (Saugus 1 and Saugus 2).

The originally simulated Saugus Formation response to the ranges of operating plan pumping under assumed recurrent historical hydrologic conditions was consistent with actual experience under smaller pumping rates: (1) short-term declines in groundwater levels and storage near pumped wells during dry-period pumping, (2) recovery of groundwater levels and storage after cessation of dry-period pumping and (3) no long-term decreases or depletion of groundwater levels or storage. The combination of actual experience with Saugus Formation recharge and pumping up to about 15,000 AFY, complemented by modeled projections of aquifer response that showed long-term utility of the Saugus Formation at 7,500 to 15,000 AFY in normal years and rapid recovery from higher pumping rates during intermittent dry periods, was the basis for concluding that the Saugus Formation could be considered a sustainable water supply source to meet the Saugus Formation portion of the operating plan for the groundwater Basin.

As discussed under Sustainability of the Alluvium above, an updated basin yield analysis was undertaken in 2008 to assess groundwater development potential and possible augmentation of the groundwater operating plan. After extended and updated model calibration and

incorporation of extended historical records, the overall operating plan (Table 3-2) and specific distribution of Saugus Formation pumping were found to produce the same kinds of resultant Saugus Formation groundwater conditions as concluded to be sustainable in 2005 – (1) long-term stability of groundwater levels, with no sustained declines; (2) groundwater levels slightly below historic Saugus Formation levels, in response to greater long-term utilization of the Saugus and (3) maintenance of sufficiently high Saugus Formation groundwater levels to ensure achievement of planned individual pumping capacities (Table 3-5). Thus, the operating plan for the Saugus Formation, with fairly low pumping in wet/normal years and increased pumping through dry periods, is concluded to reflect sustainable groundwater supply rates.

The SCV-GSA's work on basin sustainability for the GSP has advanced the technical understanding of basin conditions since the 2009 basin yield analysis and confirms the previous conclusion. A new groundwater flow model using the U.S Geological Survey software MODFLOW-USG was developed calibrated and peer reviewed. The MODFLOW-USG model improves spatial resolution and employs more sophisticated methods of representing stream/aquifer interactions among other advancements over the previous model. A more thorough discussion is documented in Development of a Numerical Groundwater Flow Model for the Santa Clara River Valley East Groundwater Subbasin (GSI 2020). Additionally, the GSP Water Budget Analysis reflects updated climate change assumptions provided by DWR. New GSP technical reports defining the extent and nature of groundwater dependent ecosystems informed potential future adjustments of pumping distributions throughout the Alluvial Aquifer and Saugus Formation when considering likely sustainability criteria and potential impacts on groundwater dependent ecosystems. Accordingly, the 2020 UWMP reflects adjusted pumping distributions that are reflected in this WSA's Table 3-5A.

On January 3, 2022, the SCV GSP adopted the GSP which reflected updated technical resources and analysis, and a robust public involvement and review process. The plan can be accessed at: <https://scvgsa.org/wp-content/uploads/2022/02/Santa-Clara-River-Valley-East-Groundwater-Subbasin-GSP.pdf>

The plan reached the following conclusions relating to sustainability:

1. Chronic Lowering of Groundwater Levels – Alluvium and Saugus Formation pumping consistent with the basin operating plan does not result in chronic lowering of groundwater levels.
2. Reduction of Groundwater Storage - Alluvium and Saugus Formation pumping consistent with the basin operating plan does not result in long-term groundwater storage depletion.
3. Degraded Water Quality – Implementation of treatment for known contaminants support continued Alluvium and Saugus Formation pumping consistent with the operating plan.
4. Land Subsidence – An evaluation of the available information indicates there is now evidence of land subsidence occurring. The GSP does identify additional data

collection needs to ensure land subsidence remains a non-issue while achieving the basin operating plan. The GSP incorporates active monitoring stations.

5. Depletion of Interconnected Surface Water/Groundwater Dependent Ecosystems – Existing riparian habitat along the Santa Clara River is considered by resource agencies as having very high value. The extent and quality of the habitat can vary significantly from year to year in response to very wet or dry conditions and demonstrates considerable resiliency. Certain aquatic habitats are critical for known protected species such as the Three Spined Unarmored Stickle Back. The GSP incorporates a process that avoids groundwater pumping related to permanent loss of riparian habitat or the temporary loss of critical aquatic habitat. Active monitoring of groundwater levels will occur and when trigger levels (set at or above historical groundwater levels) are reached, an assessment of the cause would be conducted. If impacts are related to pumping, then responsive measures and/or projects would be implemented. These could include a reduction of groundwater pumping
6. Sea Water Intrusion – The proximity of the Alluvial Aquifer and Saugus Formation to the ocean as well as differences in elevation, do not allow for seawater intrusion into the upper basin.

The results of the 2009 basin yield analysis and the results of the updated groundwater analysis performed by the SCV-GSA for the GSP, which included pumping distributions consistent with those shown in Table 3-5A, show that the basin can be sustainably operated without chronic lowering of groundwater levels or groundwater storage.

Thus, the operating plan for the Saugus Formation, with fairly low pumping in wet/normal years and increased pumping through dry periods, is concluded to reflect sustainable groundwater supply rates.

3.3.3 Existing and Planned Groundwater Pumping

3.3.3.1 Impacted Well Capacity

As discussed in Section 6, USEPA recently implemented a new lifetime health advisory level of 70 parts per trillion (or 70 nanogram per liter (ng/l)) for polyfluoroalkyl substances (PFAS). In August of 2019, DDW set notification level (NL) and response levels for various PFAS constituents. SCV Water wells were tested and as of February 2020, over 60% of Alluvium wells exceeded the NL or RL resulting in 18 wells being taken out of service. Treatment for three of these wells (N-Wells) has been installed and is now operational. Design is underway for treatment of two additional wells, Honby and Santa Clara, that are scheduled to be returning to service by 2023. Preliminary design for an additional 6 wells is under way and these are anticipated to be returning to service between 2024 and 2025. The remaining wells are anticipated to have treatment installed by 2030. A feasibility assessment and schedule for completion of these wells are shown in the April 2021 Technical Memorandum, Groundwater Treatment Implementation Plan (Kennedy Jenks 2021). The Capital Improvement Section of SCV Water's FY 2021/222 and FY2022/23 Biennial Budget provides near term funding treatment for PFAS impacted alluvial wells.

As discussed in Section 6.2.1 of the 2020 UWMP and incorporated herein, certain wells in the Basin were impacted by perchlorate contamination and thus represented a temporary loss of well capacity within SCV Water's service area. Six wells were initially taken out of service upon the detection of perchlorate including four Saugus wells and two Alluvial wells. All have either been (1) abandoned and replaced, (2) returned to service with the addition of treatment facilities that allow the wells to be used for municipal Water supply as part of the overall water supply systems permitted by DDW, or (3) will be replaced under an existing perchlorate litigation settlement agreement (see Section 4). The restored wells (two Saugus wells and one Alluvial well), one Saugus well which is currently being restored, and the replacement wells (one Saugus and one Alluvial well), which collectively restore much of the temporarily lost well capacity, are now included as parts of the municipal groundwater source capacities. Additional wells will be drilled to fully restore the impacted well capacity, thus restoring the operational flexibility that existed prior to perchlorate contamination being discovered.

In August 2010, Well 201, located downgradient from the Whittaker-Bermite site and downgradient from the initially impacted Saugus 1 and Saugus 2 wells and well 157 had detections of perchlorate and was removed from service. Treatment facilities were constructed, are operational, and are now awaiting final DDW approval to be returned to potable drinking water service, similar to the Saugus 1 and Saugus 2 wells. Well 201 is anticipated to provide a total of 2,000 gpm of pumping capacity (for a dry-year production capacity of 2,900 AFY) and is shown in Table 3-5A. Similarly, Well 205, was taken out of service for perchlorate. Treatment for this facility is under the early stages of design and it is anticipated to return to service in 2024 as shown in Tables 3-5B and 3-5C. Additional details on DDW permitting and associated timeline for Saugus wells 201 and 205 are provided in Section 4.7.

To achieve full dry-year production of 33,800 AFY six additional Saugus wells are planned. Two of these wells Saugus 3 and 4, located west of Magic Mountain, have been designed and are being rebid. As indicated above, this delay was related to issues surrounding the proximity to abandoned oil wells and discussion with DDW resulted in an approach that should facilitate DDW issuing an operating permit. It is estimated that these wells should be available in 2025. The next wells anticipated to be available are Saugus 5 and 6, located in the Castaic Junction area. Sites for these wells have been secured and the wells are anticipated to be available in 2027. The final two wells, Saugus 7 and 8, do not have specific sites. The GSP Water Budget Analysis (GSI 2020a) assumed these wells would be located near the South Fork of the Santa Clara River in the vicinity of the existing well 12 and 13. These wells are anticipated to become available in 2030. Additional details on DDW permitting and associated timeline for Saugus wells are provided in Section 4.7.

3.3.3.2 Alluvium

In terms of adequacy and availability, the current Alluvial Aquifer groundwater pumping capacity is constrained, however the current reductions in supply are being met by other sources of supply such as imported SWP water or banked water supplies. The schedule for recovery of this supply is shown in Table 3-4B for normal years and Table 3-4C for dry years. When well capacity is recovered in 2030 and other future wells are in service in 2035 the combined Alluvial Aquifer groundwater source municipal well capacity of approximately 83,090 AFY will be sufficient to meet anticipated demands. The higher cumulative pumping capacities are for

operational reasons (i.e., to meet daily and other fluctuations from average day to maximum day and peak hour system demands).

Table 3-4B and 3-4C include future and recovered Alluvial Aquifer supplies. These planned supplies do not increase the total quantity of water being withdrawn from the Alluvial Aquifer but represent anticipated or potential shifts in pumping involving different or new wells.

For example, as shown on Table 3-4, planned Alluvial Aquifer supplies assume a reduction of Newhall Land agricultural uses and a corresponding increase in SCV Water Alluvial water use for the Newhall Ranch Specific Plan area. Total purveyor and non-purveyor supplies remain consistent with the operating plan shown on Table 3-2. Based on existing information the conclusion of the analysis is that total Alluvial Aquifer pumping is sustainable. However, should droughts extend for periods longer than those shown in the historical record, potential exists for future curtailments.

3.3.3.3 Saugus Formation

In terms of adequacy and availability, the combined active Saugus groundwater source municipal well capacity of 26,120 AFY (29,340 including LACWD36 well) is more than sufficient to meet the planned use of Saugus groundwater in normal years of 7,500 to 15,000 AFY (Table 3-5A). Near term dry-year supplies will be augmented once Well 205 is restored to service by 2024 utilizing treatment technologies currently being used in the Santa Clarita Valley. In order to accommodate the longer-term demands, current GSP Water Budget Analysis indicates six additional wells will be required. Two of these wells have been designed and await permitting, sites for two additional wells have been secured and the final two wells need to be sited. These additional Saugus wells would provide for meeting the planned maximum purveyor use of 33,800 AFY of Saugus groundwater during a multiple-dry year period. That amount combined with non-purveyor pumping of 1,200 AFY is at the maximum of 35,000 AFY consistent with operating plan shown on Table 3-2. The conclusion of the analysis is that the Saugus operating plan is sustainable. However, associated with the implementation of the GSP, the potential exists for some future curtailment of pumping during extreme long-term drought events over the upcoming twenty years. Table 3-6, Table 3-7, and Table 3-8 include planned Saugus Formation supplies.

3.3.3.4 Summary

Overall, the total municipal supply in the 2020 UWMP, incorporated herein, includes a groundwater component that is, in turn, part of the overall groundwater supply of the Santa Clarita Valley. As such, the municipal groundwater supply recognizes the existing and projected future uses of groundwater by overlying interests in the Valley, such that the combination of municipal and all other groundwater pumping, remains within the groundwater operating plan (Table 3-2) that has been analyzed for sustainability.

TABLE 3-6 AVERAGE/NORMAL YEAR EXISTING AND PLANNED GROUNDWATER USAGE (AF)^(a)

Alluvium Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	8,900	8,180	7,300	7,300	7,300	7,300
Purveyors Future and Recovered ^(b)	10,340	19,870	23,490	23,490	23,490	23,490
<i>Purveyors Total</i>	<i>19,240</i>	<i>28,050</i>	<i>30,790</i>	<i>30,790</i>	<i>30,790</i>	<i>30,790</i>
Non-Purveyors (Agricultural & Other) ^(c)	11,540	9,150	6,410	6,410	6,410	6,410
Total Alluvium Production	30,780	37,200	37,200	37,200	37,200	37,200
<i>Alluvial Operating Plan Range for Average/Normal Year (30,000-40,000)</i>						
Saugus Formation Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	14,440	7,110	7,110	7,110	7,110	7,110
Purveyors Future and Recovered ^(d)	3,010	2,790	2,790	2,790	2,790	2,790
<i>Purveyors Total</i>	<i>17,450</i>	<i>9,900</i>	<i>9,900</i>	<i>9,900</i>	<i>9,900</i>	<i>9,900</i>
Non purveyors ^(e)	1,200	1,200	1,200	1,200	1,200	1,200
Total Saugus^(f)	18,650	11,100	11,100	11,100	11,100	11,100
<i>Saugus Operating Plan Range for Average/Normal Year (7,500-15,000)</i>						

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) These values account for recovery of alluvial PFAS and Perchlorate impacted wells along with additional pumping to supply Newhall Ranch Specific Plan.
- (c) Alluvial non purveyor pumping includes Five Point (Newhall Ranch Agriculture), Pitches Detention Center, and Small Private Domestic pumping and irrigation at Sand Canyon Country Club. Decline in pumping rates incorporate reduced pumping by Five Point of 7,038 AFY for Newhall Ranch Specific Plan.
- (d) This includes Saugus Perchlorate impacted wells 201 and 205, two replacement wells (Saugus 3 & 4), and up to four new wells (Saugus 5-8) planned to provide additional dry-year supply. The new dry-year wells would not typically be operated during average/normal years.
- (e) This includes private irrigation pumping from Valencia Country Club and Vista Valencia Golf Course, as well as projected Whittaker-Bermite pumping for perchlorate treatment, assumed constant.
- (f) Higher total Saugus Production from 2021 to 2026 reflect temporary increase in purveyor production to mitigate for lost Alluvial pumping capacity due to PFAS impacted wells.

TABLE 3-7 SINGLE-DRY YEAR EXISTING AND PLANNED GROUNDWATER USAGE (AF) ^(a)

Alluvium Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	7,300	6,330	5,590	5,590	5,590	5,590
Purveyors Future and Recovered ^(b)	9,030	17,020	20,500	20,500	20,500	20,500
<i>Purveyors Total</i>	<i>16,330</i>	<i>23,350</i>	<i>26,090</i>	<i>26,090</i>	<i>26,090</i>	<i>26,090</i>
Non-Purveyors (Agricultural & Other) ^(c)	11,540	9,150	6,410	6,410	6,410	6,410
Total Alluvium Production	27,870	32,500	32,500	32,500	32,500	32,500
<i>Alluvial Operating Plan Range for Single Dry Year (30,000-35,000)</i>						
Saugus Formation Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	17,880	17,880	17,880	17,880	17,880	17,880
Purveyors Future and Recovered ^(d)	9,090	15,920	15,920	15,920	15,920	15,920
<i>Purveyors Total</i>	<i>26,970</i>	<i>33,800</i>	<i>33,800</i>	<i>33,800</i>	<i>33,800</i>	<i>33,800</i>
Non purveyors ^(e)	1,200	1,200	1,200	1,200	1,200	1,200
Total Saugus	28,170	35,000	35,000	35,000	35,000	35,000
<i>Saugus Operating Plan Range for Single Dry Year (21,000-35,000)</i>						

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) These values account for recovery of alluvial PFAS and Perchlorate impacted wells along with additional pumping to supply Newhall Ranch Specific Plan.
- (c) Alluvial non purveyor pumping includes Five Point (Newhall Ranch Agriculture), Pitches Detention Center, and Small Private Domestic pumping and irrigation at Sand Canyon Country Club. Decline in pumping rates incorporate reduced pumping by Five Point of 7,038 AFY for Newhall Ranch Specific Plan.
- (d) This includes Saugus Perchlorate impacted well 205, two replacement wells (Saugus 3 & 4), and up to four new wells (Saugus 5-8) planned to provide additional dry-year supply. The new dry-year wells would not typically be operated during average/normal years.
- (e) This includes private irrigation pumping from Valencia Country Club and Vista Valencia Golf Course, as well as projected Whittaker-Bermite pumping for perchlorate treatment, assumed constant.

TABLE 3-8 MULTIPLE DRY YEAR (5-YEAR) EXISTING AND PLANNED GROUNDWATER USAGE (AF) ^(a)

Alluvium Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	7,300	6,330	5,890	5,590	5,590	5,590
Purveyors Future and Recovered ^(b)	11,930	16,310	19,900	20,500	20,500	20,500
<i>Purveyors Total</i>	19,230	22,640	25,790	26,090	26,090	26,090
Non-Purveyors (Agricultural & Other) ^(c)	11,490	9,190	6,710	6,410	6,410	6,410
Total Alluvium Production	30,720	31,830	32,500	32,500	32,500	32,500
<i>Alluvial Operating Plan Range for Single Dry Year (30,000-35,000)</i>						
Saugus Formation Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	17,880	17,610	17,610	17,610	17,610	17,610
Purveyors Future and Recovered ^(d)	5,750	8,020	8,020	8,020	8,020	8,020
<i>Purveyors Total</i>	23,630	25,630	25,630	25,630	25,630	25,630
Non purveyors ^(e)	1,200	1,200	1,200	1,200	1,200	1,200
Total Saugus	24,830	26,830	26,830	26,830	26,830	26,830
<i>Saugus Operating Plan Range for Single Dry Year (21,000-35,000)</i>						

Notes:

- (a) The quantities of groundwater extracted by existing or future and recovered well capacity will vary depending on operating conditions. However, overall pumping remains within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- (b) These values account for recovery of alluvial PFAS and Perchlorate impacted wells along with additional pumping to supply Newhall Ranch Specific Plan.
- (c) Alluvial non purveyor pumping includes Five Point (Newhall Ranch Agriculture), Pitches Detention Center, and Small Private Domestic pumping and irrigation at Sand Canyon Country Club. Decline in pumping rates incorporate reduced pumping by Five Point of 7,038 AFY for Newhall Ranch Specific Plan.
- (d) This includes Saugus Perchlorate impacted well 205, two replacement wells (Saugus 3 & 4), and up to four new wells (Saugus 5-8) planned to provide additional dry-year supply. The new dry-year wells would not typically be operated during average/normal years.
- (e) This includes private irrigation pumping from Valencia Country Club and Vista Valencia Golf Course, as well as projected Whittaker-Bermite pumping for perchlorate treatment, assumed constant.

3.4 Transfers and Exchanges

An opportunity available to SCV Water to increase water supplies is to participate in voluntary Water transfer programs. Since the drought of 1987-1992, the concept of water transfer has evolved into a viable supplemental source to improve supply reliability. The initial concept for water transfers was codified into law in 1986 when the California Legislature adopted the “Katz” Law (California Water Code, Sections 1810-1814) and the Costa-Isenberg Water Transfer Law of 1986 (California Water Code, Sections 470, 475, 480-483). These laws help define parameters for water transfers and set up a variety of approaches through which water or water rights can be transferred among individuals or agencies.

Up to 27 million AF of water are delivered for agricultural use every year. Over half of this water use is in the Central Valley, and much of it is delivered by, or adjacent to, SWP and CVP conveyance facilities. This proximity to existing water conveyance facilities could allow for the voluntary transfer of water to many urban areas, including SCV Water, via the SWP. Such water transfers can involve water sales, conjunctive use and groundwater substitution and water sharing. They usually occur as a form of spot, option, or core transfers agreements. The costs of a water transfer would vary depending on the type, term, and location of the transfer.

One of the most important aspects of any resource planning process is flexibility. A flexible strategy minimizes unnecessary or redundant investments (or stranded costs). The voluntary transfer of water between willing sellers and buyers can be an effective means of achieving flexibility. However, not all water transfers have the same effectiveness in meeting resource needs. Through the resource planning process and ultimate implementation, several different types of Water transfers could be undertaken.

3.4.1 Core Transfers

Core transfers are agreements to purchase a defined quantity of water every year. These transfers have the benefit of more certainty in costs and supply, but in some years can be surplus to imported water (available in most years) that is already paid for.

3.4.2 Spot Market Transfers

Spot market transfers involve water purchased only during a time of need (usually a drought). Payments for these transfers occur only when water is actually requested and delivered, but there is usually greater uncertainty in terms of costs and availability of supply. Examples of such transfers were the Drought Water Banks of 1991, 1992 and 1994 and DWR Dry Year Water Purchase Programs in 2001 through 2004 and 2008 along with transfers between willing sellers and buyers during the current drought period. In 2021, the Dry Year Water Purchase Program provided approximately 200 AF. An additional risk of spot market transfers is that the purchases may be subject to institutional limits or restricted access (e.g., requiring the purchasing agency to institute rationing before it is eligible to participate in the program).

3.4.3 Option Contracts

Option contracts are agreements that specify the amount of water needed and the frequency or probability that the supply will be called upon (an option). Typically, a relatively low up-front option payment is required and, if the option is actually called upon, a subsequent payment would be made for the amount called. These transfers have the best characteristics of both core and spot transfers. With option contracts, the potential for redundant supply is minimized, as are the risks associated with cost and supply availability.

SCV Water has entered into one such transfer, for Yuba Accord water, as discussed previously. SCV Water and a number of other entities entered into the Yuba Accord Agreement, which allows for the purchase of water from the Yuba County Water Agency through DWR. Under the agreement, an estimated average of up to 1,000 AFY of Water (after losses) is available to SCV Water in dry years, through 2025. Under certain hydrologic conditions, additional water may be available to SCV Water under this program. In 2014, 2020, and 2021, SCV Water received approximately 1,900 AF from this source (see Table 5-1).

3.4.4 Future Market Transfers

The most viable types of water transfers are core and option transfers and, as such, are a part of SCV Water's long-term strategy.

3.4.5 Water Exchanges

In addition to water transfers, short-term water exchanges may also serve as a means to enhance water reliability.

In 2011 SCV Water entered into two unbalanced exchange agreements to enhance the management of its water supplies. SCV Water executed a Two-for-One Water Exchange Program with RRBWSD, whereby SCV Water can recover one acre-foot of water for each two acre-feet SCV Water delivered to RRBWSD (less losses). SCV Water delivered 15,602 AF to the program in 2011, delivered another 3,969 AF in 2012 and, after program losses, had about 9,500 AF of recoverable water. The term for this agreement was ten years. In 2020, 9,500 AF of water was withdrawn from this exchange account, completing the execution of this agreement.

SCV Water also entered into a Two-for-One Water Exchange Program with the West Kern Water District (WKWD) in Kern County and SCV Water delivered 5,000 AF in 2011, resulting in a recoverable total of 2,500 AF. The term of the agreement was ten years. In 2014, 2,000 AF of water was withdrawn from this exchange program leaving a balance of 500 AF. In 2020, the remaining balance of 500 AF of water was withdrawn, completing the execution of this agreement.

In 2014, SCV Water entered into an unbalanced exchange agreement to enhance the management of its water supplies. SCV Water executed a Two-for-One Water Exchange Program with the NLF, whereby SCV Water could recover one acre-foot of water for every two acre-feet SCV Water delivered to NLF's Semitropic Water Storage District Banking Program. SCV Water transferred 10,000 AF of water to the program in 2014 and recovered 4,950 AF in

2014, fully executing the exchange. Additional details on the Semitropic Banking Program are provided below.

In 2016, SCV Water entered into an unbalanced exchange agreement to enhance the management of its water supplies. SCV Water executed a Two-for-One Water Exchange Program with the Central Coast Water Agency (CCWA) on behalf of the Santa Barbara County Flood Control and Water Conservation District (Santa Barbara), whereby SCV Water could recover one acre-foot of water for every two acre-feet SCV Water delivered to CCWA. SCV Water delivered 1,500 AF to the program in 2016 and recovered 750 AF in 2019, fully executing the exchange.

In 2019, SCV Water entered into three separate unbalanced exchange agreements to enhance the management of its water supplies. First, SCV Water executed a Two-for-One Water Exchange Program with RRBWSD whereby SCV Water could recover one acre-foot of water for every two acre-feet SCV Water delivered to RRBWSD (less losses). SCV Water delivered 11,000 AF to the program in 2019 and recovered 5,500 AF in 2020, fully executing the exchange.

In 2019, SCV Water also executed a Two-for-One Water Exchange Program with Antelope Valley-East Kern Water Agency (AVEK), whereby SCV Water could recover one acre-foot of water for every two acre-feet SCV Water delivered to AVEK. SCV Water delivered 7,500 AF to the program in 2019 and has 3,750 AF of recoverable water. In 2020, 1,406 AF of Water was withdrawn from this exchange program leaving a balance of 2,344 AF. Recovery of the balance is limited to years where the SWP allocation is at least 30%. The term for this agreement is for ten years.

In 2019, SCV Water also executed a Two-for-One Water Exchange Program with UWCD, whereby SCV Water could recover one acre-foot of water for every two acre-feet SCV Water delivered to UWCD. SCV Water delivered 1,000 AF to the program in 2019 and has 500 AF of recoverable water. Recovery of the balance is limited to years where the SWP allocation is at least 30%. The term for this agreement is for ten years.

3.5 Groundwater Banking Programs

With the development of conjunctive use and groundwater banking, the water supply reliability for SCV Water has improved significantly. Conjunctive use is the coordinated operation of multiple water supplies to achieve improved supply reliability. Most conjunctive use concepts are based on storing surface supplies in groundwater basins in times of surplus for withdrawal and use during dry periods and drought when surface water supplies would likely be reduced.

Groundwater banking programs involve storing available SWP surface water supplies during wet years in groundwater basins in, for example, the San Joaquin Valley. Water would be stored either directly by surface spreading or injection, or indirectly by supplying surface water to farmers for their use in lieu of their intended groundwater pumping. During water shortages, the stored water could be pumped out and conveyed through the California Aqueduct to SCV Water as the banking partner or used by the farmers in exchange for their surface water allocations, which would be delivered to SCV Water as the banking partner through the California Aqueduct.

SCV Water is a partner in two existing groundwater banking programs, the Semitropic Banking Program and RRBWSD Banking Program, respectively. Newhall Land is also a partner in the Semitropic Banking Program, described below. In addition, SCV Water has updated its plan to enhance its overall supply reliability, including the need for additional banking programs.

3.5.1 Semitropic Banking Program

Semitropic Water Storage District (Semitropic) provides SWP Water to farmers for irrigation. Semitropic is located in the San Joaquin Valley in the northern part of Kern County immediately east of the California Aqueduct. Using its available groundwater storage capacity (approximately 1.65 million AF), Semitropic has developed a groundwater banking program, which takes available SWP supplies in wet years and returns the water in dry years. As part of this dry-year return, Semitropic can either leave its SWP Water in the Aqueduct for delivery to a banking partner and increase its groundwater production for its farmers, or Semitropic can pump groundwater that can be pumped into a Semitropic canal and, through reverse pumping plants, be delivered to the California Aqueduct. Semitropic's original banking program currently has six long-term first priority banking partners: the Metropolitan Water District of Southern California (Metropolitan), Santa Clara Valley Water District, Alameda County Water District, Alameda County Flood Control and Water Conservation District Zone 7, Newhall Land and Farming, and San Diego County Water Authority. The total amount of storage capacity under contract in the original banking program is 1 million AF, with approximately 700,000 AF currently in storage. Under its original program, Semitropic can pump back a maximum of 90,000 AFY of water into the California Aqueduct.

Semitropic has recently expanded its groundwater banking program to incorporate its Stored Water Recovery Unit (SWRU). This supplemental program includes an additional storage capacity of 650,000 AF and an expansion of pumpback recovery capacity by 200,000 AFY. That pumpback capacity includes well connections and conveyance facility improvements to increase the existing Semitropic pumpback capacity to the California Aqueduct by an additional 50,000 AFY, and the future development of a new well field with approximately 65 wells along with new collection and transmission facilities to convey an additional 150,000 AFY to the California Aqueduct. Participants in the SWRU include Poso Creek Water Company, San Diego County Water Authority, City of Tracy, Homer LLC, Harris Farms, Shows Family Farms, Lazy Dog Orchard, and SCV Water.

In 2002, SCV Water entered into a temporary storage agreement with Semitropic and stored an available portion of its Table A supply (24,000 AF) in an account in Semitropic's program. In 2004, 32,522 AF of SCV Water's available 2003 Table A supply was stored in a second temporary Semitropic account. In accordance with the terms of SCV Water's storage agreements with Semitropic, 90 percent of the banked amount, or a total of 50,870 AF, was recoverable through 2013 to meet SCV Water demands when needed. SCV Water executed an amendment for a ten-year extension of each banking agreement with Semitropic in April 2010. After storage withdrawals in 2009, 2010, and 2014 (and with 5,000 AF given to Newhall Land in consideration for SCV Water's use of Newhall Land's first priority extraction capacity), the storage balance available to SCV Water was 35,970 AF.

In 2015 SCV Water entered into an agreement with Semitropic to participate in the SWRU. Under this agreement, the two short-term accounts containing 35,970 AF were transferred into this new program. Under the SWRU agreement, SCV Water can store and recover additional Water within a 15,000 AF storage account. SCV Water increased storage in the SWRU by 4,806 AF in 2017, and 4,502 AF in 2019, and recovered 5,000 AF in 2020, leaving the total storage available at 40,278 AF. The term of the Semitropic Banking Program extends through 2035 with the option of two 10-year renewals. SCV Water may withdraw up to 5,000 AFY from its account.

Current operational planning includes use of the water stored in Semitropic for dry-year supply. Accordingly, it is reflected in the available supplies delineated in this section and in the Annual Reports prepared for SCV Water. It is also reflected as contributing only to dry-year supply reliability in Section 7, through 2045.

3.5.2 Rosedale-Rio Bravo Banking Program

Also located in Kern County, immediately adjacent to the Kern Water Bank, RRBWSD has developed a Water Banking and Exchange Program. SCV Water has entered into a long-term agreement with RRBWSD with a total storage capacity of 100,000 AF. Between 2005 and 2012 SCV Water delivered sufficient water from the SWP and other supplies to fill its 100,000 AF account. SCV Water began storing water in this program in 2005 and stored water in 2005, 2006, 2007, 2010, 2011, and 2012. In 2012, the maximum storage capacity of 100,000 AF was reached. Withdrawals from the water bank occurred in 2014, 2015 and 2020. Storage into the water bank occurred in 2016 leaving storage at 98,800 AF currently available for withdrawal.

SCV Water's existing firm withdrawal capacity in this program is 10,000 AFY. To enhance dry-year recovery capacity, in 2015 SCV Water in cooperation with RRBWSD and Irvine Ranch Water District initiated construction of additional facilities that were completed in 2019. These facilities became available in 2020 and increased the firm extraction capacity for SCV Water to 10,000 AFY. In addition, SCV Water has the right under the contract to develop four additional wells which would bring the firm recovery capacity to 20,000 AFY. This additional capacity is anticipated to be available by 2030. In addition to existing firm recovery capacity, in moderately dry years Rosedale is required to use other available recovery capacity to meet its recovery obligations under the banking agreement, up to 20,000 AFY. This occurred in 2021 when RRBWSD was able to recover a total of 20,000 AF of SCV Water's banked supply.

This project is a water management program to improve the reliability of SCV Water's existing dry-year supplies. It is not an annual supply that could support growth. Accordingly, it is reflected in the available supplies delineated in this section and it is also reflected as contributing only to dry-year supply reliability.

3.5.3 Semitropic Banking Program – Newhall Land

As mentioned above, one of Semitropic's long-term groundwater banking partners is Newhall Land (now owned by Five Point). In its agreement with Semitropic, Newhall Land has available to it a pump-back capacity of 4,950 AFY and a total storage capacity of 55,000 AF. At the end of 2020, Newhall Land had a storage balance of approximately 38,000 AF. This storage volume is primarily the result of Newhall Land storing its annual allotment of Nickel Water in the program as well as 5,000 AF of exchange water provided by SCV Water.

Newhall Land entered into this groundwater banking program in anticipation of the development of Newhall Ranch. It provides a supply that is committed by Newhall Land under the Newhall Ranch Specific Plan to make up shortfalls in water supply for Newhall Ranch should such shortfall be shown to exist. Under its agreement with Semitropic, Newhall Land may transfer its rights to this program to SCV Water (as the successor to CLWA). In this WSA and in the 2020 UWMP, it is assumed for planning purposes construction of the Newhall Ranch Specific Plan will be completed by 2035 and that Newhall Land's rights in this banking program will be transferred to SCV Water at that time. Based on previous cooperation between CLWA and Newhall Land in 2009 and 2014, when Newhall Land effectively made its withdrawal capacity available to CLWA, it is likely that this practice would continue and SCV Water could access additional water from its Semitropic account using Newhall Land's firm extraction capacity. However, as no such contract to accomplish this is currently in place a conservative assumption has been made in the 2020 UWMP and this WSA that supplies associated with this source will not be available prior to 2035 when SCV Water is presumed to control this program.

3.5.4 Other Opportunities

In addition to those dry year water supplies identified in the 2020 UWMP, SCV Water has identified two additional groundwater banking programs. While not a part of the resource mix currently incorporated into the water supply reliability tables in the 2020 UWMP or this WSA, these projects represent projects that SCV Water could consider providing redundancy or substitute for some portion of the UWMP's programs if those were not brought online.

The first is the High Desert Water Bank being developed by the Antelope Valley East Kern Water Agency. The project overlies an adjudicated groundwater basin in the Antelope Valley. The Metropolitan Water District of Southern California has contracted with AVEK to develop the first phase of the project's four phases. The first phase will store up to 200,000 AFY with 70,000 AFY of recovery capacity. AVEK is currently working with SCV Water and other SWP Contractors including Santa Clara Valley Water District, and Palmdale Water District to define the second phase. The second phase may incorporate a direct connection to the West Branch of the California Aqueduct to facilitate return deliveries. The location of this water bank is desirable as it is located south of the San Andreas Fault. The second phase could provide SCV Water with up to 80,000 AF of storage with recovery capacity of up to 20,000 AFY.

The second is the Aquaterra Water Bank being developed by the McMullin Groundwater Sustainability Agency. This water bank in Fresno County adjacent to Delta Mendota Pool, is projected to store up to 800,000 AF and have an extraction capacity of 146,000 AFY. Water would be available to SWP Contractors and Central Valley Project Contractors through an exchange with the Central Valley Project participating Contractors. The McMullin GSA intends to initiate environmental review for this project in 2022. SCV Water could potentially participate in this project at levels similar to those contemplated for the AVEK High Desert Water Bank.

3.6 Planned Water Supply Projects and Programs

SCV Water prepared the Water Resources Reconnaissance Study (Study) (Carollo, 2015). The Study discusses the potential for acquiring additional water supplies. The Study evaluated a series of supply measures in the hopes that an additional 10,000 AFY of supply could be made available to the service area. The study identified two local measures that might enable SCV Water to get at least part way to that goal: (1) a groundwater recharge project using recycled water and (2) an imported water injection project during wet years to augment Saugus formation groundwater storage. Both projects were evaluated at the conceptual level, but significantly more investigation would need to be completed before either was implemented.

While the recycled groundwater recharge measure is not currently being pursued, as detention and dilution challenges were analyzed by Trussell Technologies Inc in its USCR Watershed Recharge Feasibility Study, 2017. SCV Water continues investigating the potential to spread imported water directly into the Alluvial Aquifer at several sites. Promising infiltration tests have been conducted on SCV Water owned property adjacent to Castaic Creek. Additional siting is being conducted along the easterly portions of the Santa Clara River. Further, the potential exists to cooperate with the City of Santa Clarita to use future storm water detention facilities. One such site is located near along the Santa Clara River near the intersection of Whites Canyon Road and Via Princesa.

3.6.1 Sites Reservoir

Sites Reservoir is a proposed new 1,500,000 acre-feet off-stream storage reservoir in northern California near Maxwell. Sacramento River flows will be diverted during excess flow periods and stored in the off-stream reservoir and released for use in the drier periods. Sites Reservoir is expected to provide water supply, environmental, flood, and recreational benefits. The proponents of Sites Reservoir include 23 entities including several individual SWP PWAs including SCV Water. Sites Reservoir is expected to provide approximately 240,000 AFY (Sites Reservoir Value Planning Report, 2020, Table 8-1) of additional deliveries on average to participating agencies under existing conditions. SCV Water's current participation is 3% of that total. Further, SCV Water would operate its share of project storage so as to maximize delivery during dry and critically dry years and the project is projected to provide between 9,800 and 7,100 AFY depending on final project configuration and level of Federal participation by the United States Bureau of Reclamation (USBR). Sites Reservoir is currently undergoing environmental planning and permitting. Full operations of the Sites Reservoir are estimated to start by 2029 following environmental planning, permitting, and construction. Sites was conditionally awarded \$816 million from the California Water Commission for ecosystem, recreation, and flood control benefits under Proposition 1. Reclamation may also invest in Sites

under the Water Infrastructure Improvements for the Nation (WIIN) Act and recently transmitted a final Federal Feasibility Report to Congress for the project.

DWR estimates of SWP supply reliability in its 2019 DCR are based on existing facilities, and do not include the proposed Sites Reservoir. SCV Water along with other SWP public water agencies and north of Delta participants, however, are members of the Sites Reservoir Committee and are sharing costs, to advance environmental, permitting, and other planning activities. The Sites Reservoir staff has performed modeling of potential water supply from this project. While not identified as a project in the reliability tables provided in this WSA, the project is analyzed as part of the SCV Water's Updated Water Reliability Report and could serve as an alternative if other future water supply programs are not feasible. The Capital Improvement section of SCV Water's current FY 2021-22 FY2022-23 Capital Budget provides for continued participation in the planning of Sites Reservoir. At the end of the planning period the project is anticipated to complete CEQA and NEPA documentation, have acquired water rights and key permits including incidental take permits. The project is scheduled to become operational in 2030.

3.7 Recycled Water

This section of the WSA describes the existing and future recycled water opportunities available to the SCV Water service area. The description includes estimates of potential recycled water supply and demand through 2050 in five-year increments, as well as SCV Water's proposed incentives and implementation plan for recycled water.

As discussed below, SCV Water's source of supply for current and planned recycled water consists of flows coming from the Valencia Water Reclamation Plant and the future Newhall Ranch Water Reclamation plant as well as the Vista Canyon Ranch Water Factory (Vista Canyon WRP). SCV Water recently extended the term of its recycled water purchase agreement with the Santa Clarita Valley Sanitation District (SCVSD) and is currently negotiating a recycled water purchase agreement with the City of Santa Clarita for supplies from the Vista Canyon WRP. An additional recycled water purchase agreement with the Newhall Ranch Sanitation District is anticipated when it becomes operational. Collectively these sources are anticipated to make 8,961 AFY available to SCV Water. That supply includes 450 AFY to existing users identified under SCVSD's approved State Water Resources Control Board petition. Currently planned additional supplies would be developed under the SCV Water's New Drop Program, which is based on using wastewater flows from new customers rather than treated wastewater that has historically been discharged into the Santa Clara River. The New Drop Program would not require a requested change to the SCVSD's existing petition. This is particularly important because there are potential regulatory challenges to using additional recycled water that would reduce flows in the Santa Clara River. This is discussed in more detail below.

Recycled water is dependent on potential user demands, availability of supplies, and the economics and feasibility of serving those users. The Draft Update of the Recycled Water Master Plan identified over 20,000 AFY of existing and future landscape demands that could potentially be irrigated using recycled water. However, due to the potential need for instream flows and feasibility considerations including costs, SCV Water plans call for a recycled water distribution system that would be sufficient to meet demands of 9,749 AFY. This includes SCV

Water's Phase 1 project, which is currently serving 450 AF of demand, along with its Phase 2 projects and certain non-potable irrigation systems to be constructed by a developer for a specific project described in more detail below.

As discussed below, additional opportunities to further expand recycled water use will be evaluated as part of SCV Water's Water Resilience Initiative, however, these have not been incorporated into the prospective water supplies accounted for in Section 3.

3.7.1 Recycled Water Master Planning Efforts

It is anticipated that water demands will continue to increase as a result of a growing population. Accordingly, SCV Water is planning to secure additional reliable sources of water to help meet projected water demands. SCV Water recognizes that recycled water is an important and reliable source of additional water that should be pursued as an integral part of the SCV Water's water supply portfolio. Recycled water enhances reliability in that it provides an additional source of supply and allows for more efficient utilization of potable groundwater and imported water supplies. Draft Recycled Water Master Plans for the SCV Water service area were completed in 1993 and 2002. These master plans considered various factors affecting recycled water sources, supplies, users and demands so that SCV Water could develop a cost-effective recycled water system within its service area. In 2007, SCV Water completed CEQA analysis of the 2002 Recycled Water Master Plan (RWMP). This analysis consisted of a Programmatic EIR covering the various phases for a recycled water system as outlined in the RWMP. The Programmatic EIR was certified by the, then, CLWA Board in March 2007.

An update to the RWMP was initiated in 2016 (Kennedy/Jenks 2016) based on recent developments affecting recycled water sources, supplies, uses, and demands. The update was not completed but it provides important guidance on feasible projects in the short term. One reason the study was not finalized was in part due to ongoing litigation related to recycled water supplies between the Affordable Clean Water Alliance and SCVSD, which is SCV Water's main supplier of recycled water. Further, SCV Water anticipates undertaking a water resiliency planning process that would in part explore the interconnection of future groundwater operations, recycled water usage, and environmental uses of water in the USCR Watershed. It is anticipated that this effort would inform future environmental evaluations and permitting for future projects and programs. Overall, recycled water uses included in this WSA and the 2020 UWMP update include uses prioritized in the Kennedy/Jenks 2016 report and available supplies from the SCV Water New Drop program.

Table 3-9 provides a list of entities that participate in the implementation of the RWMP and RWMP Update. In accordance with Water Code section 10633, the preparation of the 2020 UWMP was also coordinated with these entities.

TABLE 3-9 PARTICIPATING ENTITIES^(a)

Participating Entities	Role in Plan Development
SCV Water	Retail and Wholesale water provider
Los Angeles County Waterworks District No. 36	Retail water purveyor
Santa Clarita Valley Sanitation District	Recycled Water supplier
Berry Petroleum	Potential recycled water supplier
City of Santa Clarita ^(b)	Potential recycled water supplier

Notes:

- (a) The Newhall Ranch Water Reclamation Plant would serve the Newhall Ranch Specific Plan and will be owned and operated by the Newhall Ranch Sanitation District.
- (b) The City of Santa Clarita will eventually operate the Vista Canyon Water Reclamation Plant.

SCV Water has constructed Phase 1 of the 2002 RWMP (Kennedy Jenks 2002), which delivers on average approximately 450 AFY. Although the original SCVSD contract and applicable permits anticipate the use of 1,600 AFY for this initial phase project, demands for recycled water have not developed at all the specific places of use identified in the SCVSD's SWRCB Water Code Section 1211 petition. Deliveries of recycled water began in 2003 for irrigation water supply and currently serve a golf course, a shopping center, and roadway median strips. Use of the remaining volumes at new locations would require submission and approval of a revised petition, triggering a similar State Water Resources Control Board petition process to the new petition described below.

Phase 2 is planned to expand recycled water use within Santa Clarita Valley and consists of four projects currently in various stages of design and/or construction. All available recycled water from the SCV Water's New Drop Program in the peak summer months is anticipated to be used to meet the demands of these Phase 2 expansions currently in design and construction, including planned developments by Five Point that are referred to as the Westside communities.

3.7.2 Existing Wastewater Treatment Facilities

SCVSD owns and operates two Water Reclamation Plants (WRPs), the Saugus WRP and the Valencia WRP, within the SCV Water service area. The water is treated to disinfected tertiary levels and, with the exception of water used in Phase I of the RWMP, is discharged to the Santa Clara River. The Newhall Ranch and Vista Canyon developments will have their own dedicated tertiary treatment WRPs, and non-potable recycled water from these sources, when available, is anticipated to be incorporated directly into the recycled water system.

The Valencia WRP, completed in 1967, is located on The Old Road near Magic Mountain Amusement Park. The Valencia WRP has a current treatment capacity of 21.6 million gallons per day (MGD), equivalent to 24,190 AFY, developed over time in stages. The average annual production is 15,500 AFY of tertiary recycled water. Use of recycled water from the Valencia WRP for irrigation use is permitted under Los Angeles Regional Water Quality Control Board (LARWQCB) Order Nos. 87-48 and 97-072.

The Saugus WRP, completed in 1962, is located southeast of the intersection of Bouquet Canyon Road and Soledad Canyon Road. The Saugus WRP has a current treatment capacity of 6.5 MGD (7,280 AFY). No future expansions are possible at the plant due to space limitations at the site. In 2020 the Saugus WRP produced 5,150 AFY of tertiary recycled water. Use of recycled water from this facility is permitted under LARWQCB Order Nos. 87-49 and 97-072.

The Saugus and Valencia WRPs operated independently of each other until 1980, at which time the two plants were linked by a bypass interceptor. The interceptor was installed to transfer a portion of flows received at the Saugus WRP to the Valencia WRP. Together, the Valencia and Saugus WRPs have a design capacity of 28.1 MGD (31,470 AFY) and produce 20,450 AFY of treated effluent on average. The primary sources of wastewater to the Saugus and Valencia WRPs are domestic. Both plants are tertiary treatment facilities and produce high quality effluent. Historically, the effluent from the two WRPs has been discharged to the Santa Clara River. The Saugus WRP effluent outfall is located at Bouquet Canyon Road. Effluent from the Valencia WRP is discharged to the Santa Clara River at a point approximately 2,000 feet downstream (west) of The Old Road Bridge.

SCVSD is currently constructing advanced treatment facilities (AWT) to desalinate tertiary recycled water with a capacity of approximately 6,000 AFY to comply with the Regional Water Quality Control Board, Los Angeles Region Chloride Total Maximum Daily Load (TMDL). The facilities are sized to treat enough disinfected tertiary recycled water to blend down the chloride levels for discharge to the Santa Clara River at the design capacity of the combined Saugus and Valencia WRPs at chloride levels during a drought. Since design capacities will not be reached for a decade or more and chloride levels on average are much lower during average precipitation years, the AWT will have excess capacity that could be utilized to produce desalinated water for reuse purposes for sale to SCV Water. Desalinated recycled water could be used to improve water quality or for indirect potable reuse in the future but only with the construction of additional treatment.

3.7.3 Wastewater Treatment Facility Improvements and Expansions

A third reclamation plant, the Vista Canyon Water Factory (Vista Canyon WRP), has been constructed as a part of the Vista Canyon Project. The plant is located near Highway 14, just south of the Santa Clara River and will be operated by the City of Santa Clarita. The plant will have an ultimate capacity of 440 AFY (Kennedy Jenks, 2015). The Vista Canyon Development is anticipated to use 137 AFY of the recycled water supply and the remaining excess flow would be available for reuse as part of Vista Canyon Recycled Water Main Extension (Phase 2B) of the RWMP currently under construction.

It is intended that the Vista Canyon WRP would not discharge recycled water into the Santa Clara River. Excess recycled water production from the Vista Canyon WRP would be sent to the Valencia WRP.

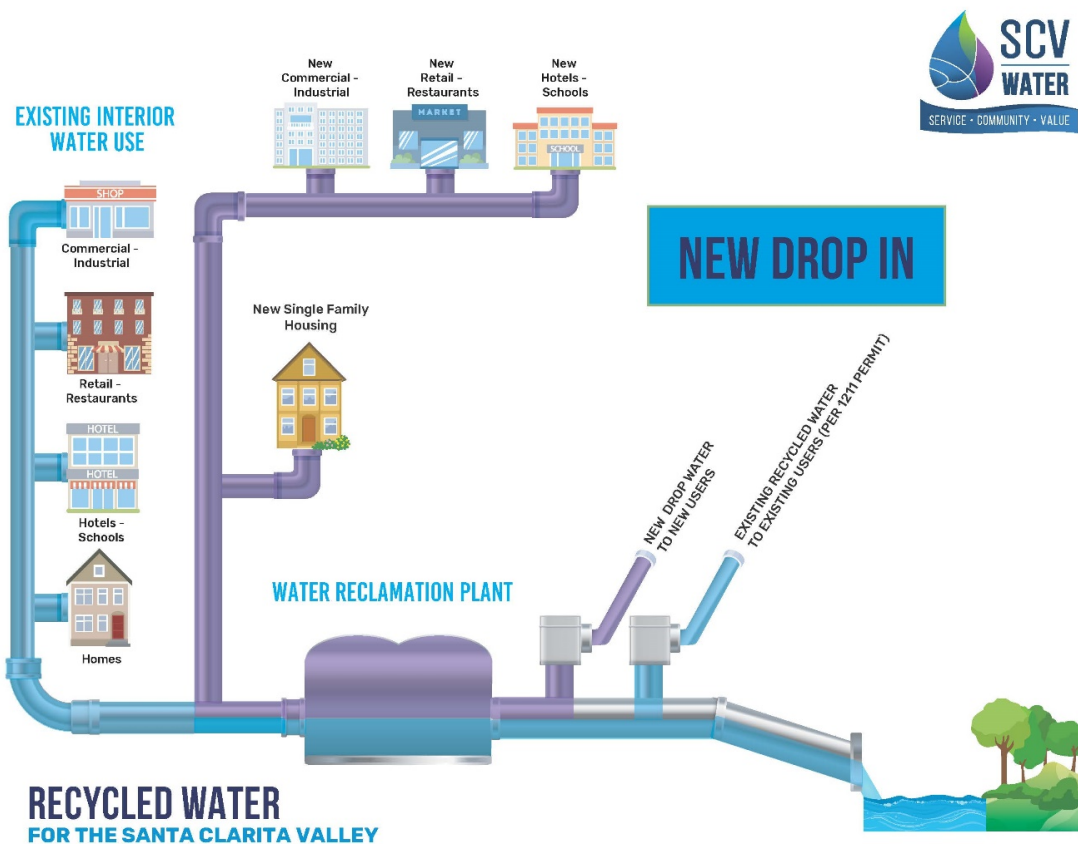
A fourth Santa Clarita Valley (Valley) reclamation plant, the Newhall Ranch WRP, is proposed as part of the Newhall Ranch project. This proposed facility would be located near the western edge of the development project along the south side of State Route 126. The Newhall Ranch WRP would serve the Newhall Ranch Specific Plan and will be owned and operated by the Newhall Ranch Sanitation District. Prior to Newhall Ranch WRP being available, Newhall Ranch Specific Plan generated wastewater would be temporarily treated at the Valencia WRP, based on the need to build up an adequate, steady flow of wastewater before constructing the initial

increment of capacity at Newhall Ranch WRP. The Valencia WRP has sufficient capacity to tertiary-treat wastewater from the Newhall Ranch Specific Plan during this interim period, consistent with the Interconnection Agreement approved by SCVSD in 2002 and the Joint Sewerage Services Agreement entered between SCVSD and NRSD in 2017. The Newhall Ranch WRP currently has a permitted capacity of 2.0 MGD (approximately 2,200 AFY) but is anticipated to produce 4,200 AFY at ultimate buildout. Recycled water from the Valencia WRP would be used to meet the remainder of the non-potable demands there, to the extent available in accordance with the Interconnection Agreement. If for any reason, however, recycled water supplies from the Valencia WRP and/or other local WRPs are not available in the amounts anticipated to meet the projected recycled water demands for that development, other sources of supply available to SCV Water as provided in the 2020 UWMP would be utilized to serve non-potable demands until such time as recycled water supplies may become available.

3.7.4 New Drop Program

As a means of developing additional recycled water supplies, without increasing the diversion of recycled water flows discharged to the Santa Clara River, SCV Water has developed the New Drop Program to utilize and account for “new” recycled water flows. These additional recycled water supplies would be derived from wastewater flows generated from new residential and commercial development. The New Drop Program accounts for the increase in wastewater flows associated with new development and separates these projected wastewater flows from existing flows discharged to the Santa Clara River. As new development occurs, potential additional recycled water supplies would be quantified through calculations and measurements. The New Drop Program is illustrated in Figure 3-1 below.

FIGURE 3-1 NEW DROP PROGRAM PROCESS



The use of recycled water under the New Drop Program does not constitute a reduction to a surface stream, specifically a reduction in flow in the Santa Clara River. As a result, a Section 1211 wastewater change petition is not required to implement the recycled water program. However, in order to utilize these recycled water supplies in accordance with SWRCB requirements, SCV Water has been working to obtain formal approvals. A Notice of Applicability under the General Order No. WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use, was issued in April 2020 for SCV Water’s use of recycled water from the Valencia WRP for non-irrigation uses as part of the New Drop Program. Upon review of the Title 22 Report and related project documentation, the LARWQCB and the SWRCB determined that the New Drop Program satisfies the general and specific conditions of the General Order and does not require a change of use permit under Water Code section 1211. SCV Water is also in the process of requesting expanded use of the New Drop Program recycled water from the Valencia WRP for irrigation uses, currently allowed under Order No. 97-072. An addendum to the original Title 22 Engineering Report was submitted in December 2020 for Phase 2D. The final revised Engineering report is scheduled to be submitted during the first half of 2022.

3.7.5 Instream Flow Requirements

In general, the use of recycled water from the WRPs is limited and can be affected by various state water laws, codes, and regulatory and court decisions, which are summarized in the RWMP Update. The production, discharge, distribution, and use of recycled water are subject to federal, state, and local regulations; the primary objectives of which are to protect public health. Appendix B of the RWMP summarizes the regulatory requirements and their administration, with an emphasis on regulations relating to the distribution and use of recycled water in California. Use of recycled water from the Valencia and Saugus WRPs is permitted under Los Angeles RWQCB Order Nos. 87-48 and 87-49, respectively and re-adopted by Order No. 97-072. Copies of these recycled water permits, along with SCVSD Ordinances and Requirements for Recycled Water Users in Santa Clarita Valley and Los Angeles County Department of Public Health (CDPH) guidelines and inspection requirements, are provided in the Santa Clarita Valley Rules and Regulations Handbook (Kennedy Jenks 2016b).

SCV Water has a contract with the SCVSD to use recycled water from the Valencia WRP, which was recently extended through 2026. The contract permits SCV Water to receive 1,600 AFY, corresponding to the amount of recycled water permitted for reuse by the SWRCB. However, as noted above that permit limited uses to specific approved sites and because demand at some of those sites has not materialized, current use is limited to only about 450 AFY.

The New Drop Program will generate additional supplies and those supplies will be available to multiple new use sites when and as they are connected to the expanding recycled water system.

At this time, SCVSD is not seeking an amendment to its SWRCB petition to increase the amount of recycled water it may deliver that has historically been discharged into the Santa Clara River. In the future, if SCV Water develops feasible projects to use recycled water in amounts greater than the New Drop Program supplies, it is anticipated that SCV Water and SCVSD would cooperate in obtaining any necessary permits from the SWRCB. Obtaining an approved petition will require compliance with CEQA. However, as indicated above and described in more detail below, SCVSD's previous evaluations of potential withdrawals of discharge from the Santa Clara River to use for recycled water have been the subject of litigation.

In October 2013, the SCVSD Board certified an EIR (2013 EIR) that included two components: (1) the Chloride Compliance Project to remove chloride from wastewater to meet the Chloride TMDL and (2) a Recycled Water Project to make treated wastewater available for reuse. The Chloride Compliance Project consists of 3 main elements that include ultraviolet disinfection at the Saugus and Valencia WRPs, AWT at Valencia WRP, and brine management and disposal. The Recycled Water Project was designed to support municipal reuse of recycled water and was solely focused on proposed future reductions in discharges of recycled water to the Santa Clara River.¹¹

¹¹ No recycled water infrastructure, such as treatment, pump stations or pipelines, were included in the scope of the Recycled Water Project.

The 2013 EIR was subsequently challenged by the Affordable Clean Water Alliance (ACWA) on the grounds that the document failed to comply with CEQA. The LA Superior Court (the Court) did not find any deficiencies in the environmental analysis related to the Chloride Compliance Project; however, the Court found two aspects of the 2013 EIR did not fully comply with CEQA. First, the Court found that the 2013 EIR lacked substantial evidence to support the conclusion of no significant impacts on populations of the unarmored threespine stickleback fish (UTS) with respect to the reduced discharge to the Santa Clara River associated with the Recycled Water Project; and second, the 2013 EIR lacked a clear brine management alternative because of the "abandonment" of the deep well injection brine management method approved in the 2013 EIR, making the Chloride Compliance Project incomplete.

In an effort to move forward with the Chloride Compliance Project, SCVSD separated the Chloride Compliance Project from the Recycled Water Project and, in 2017, certified a Recirculated EIR evaluating the Chloride Compliance Project separate from the Recycled Water Project.

SCVSD proceeded with the Recycled Water Project on a separate, but parallel path. SCVSD retained a consultant and engaged in consultations with CDFW. SCVSD released a Notice of Preparation (NOP) in August 2016. In response to the NOP, CDFW wrote a letter indicating that they could not conclude that the project would not result in take of UTS and recommended that SCVSD do additional studies and consider applying for an Incidental Take Permit under the California Endangered Species Act prior to implementing the project. Further, in summer 2018, CDFW requested additional review to analyze potential impacts to groundwater and surface water levels because of the proposed reduction in discharge from the Valencia WRP. At the time, a comprehensive model needed to evaluate surface water and groundwater level impacts did not exist. Given that the SWRCB defers to CDFW in matters related to habitat when considering petitions for reduction in discharges and the positions expressed by CDFW, SCVSD determined that obtaining a 1211 petition from the SWRCB for a reduction in discharge would be very difficult.

By resolution dated February 2019 SCVSD stated it had no current intent to proceed with an EIR related to the support of additional recycled water development by reducing existing discharge to the Santa Clara River. The decision by SCVSD to remove the recycled water component and approve the modified chloride compliance project had been challenged in separate lawsuits filed in Los Angeles Superior Court from 2017-2019. The cases have recently resolved in favor of SCVSD, who is proceeding with its chloride compliance project.

SCV Water would undertake thorough and careful evaluation of effects on the Santa Clara River and would consult with California Department of Fish and Wildlife (CDFW) before proposing any project to reduce existing discharges and supply additional recycled water within the SCV service area.

3.7.6 Other Potential Sources of Recycled Water

Oilfield produced water is a by-product of oil production generated when oil is extracted from the oil reservoir. It is generally of poor quality and unsuitable for potable, industrial, or irrigation use without treatment. Because of the poor water quality, reinjection has often been the most cost-effective disposal option. Treatment processes can produce potable quality water; yet, because of the poor initial water quality and the organic constituents, it is often more appropriate for treated oilfield produced water to be used for irrigation or industrial purposes to offset potable water demand. The economics of oil production are market-driven and are different from those

of drinking water supplies. As oil prices rise or drop, oilfield production is increased or decreased as dictated by economics. Also, oilfields are eventually depleted of supply and abandoned. Therefore, while oilfield produced water should be considered as long-term, it is not a completely firm supply and is not permanent.

Berry Petroleum has expressed interest in the past in treating oilfield produced water from the Placerita Oilfield for sale to SCV Water for non-potable uses. Studies of the potential reuse of treated oilfield produced water from the Placerita Oilfield have indicated that approximately 44,000 barrels per day (1.8 MGD or 2,016 AFY) of treated oilfield produced water may be available. Pilot studies performed at the Placerita Oilfield have indicated that, even with reverse osmosis (RO) treatment, some organic compounds such as naphthalene, 2-butanone and ethylbenzene can be detected in the RO effluent. For irrigation reuse, the produced water would need to be cooled and treated to remove hardness, silica, total dissolved solids (TDS), boron, ammonia, and total organic carbon (TOC).

Due to water reliability and water quality issues, the use of oilfield produced water for a source of recycled water was not considered in the 2016 Salt and Nutrient Management Plan (SNMP) or in the RWMP Update and was not included as a supply opportunity in the 2020 UWMP.

3.7.7 Recycled Water Supply and Demand

Recycled water has the potential to play a critical role in meeting a portion of future water demands in the Valley, as the population grows. SCV Water is in various stages of planning and constructing its Phase 2 projects. SCV Water has included Phase 2 projects in its capital program. Phase 2B and 2D are currently under construction. Further, Phase 2C is currently under design. Additionally, Five Point's Westside development projects are proceeding with construction of the Mission Village project currently underway. A summary of demands anticipated from these activities are shown in Table 3-10.

TABLE 3-10 EXISTING AND PROJECTED RECYCLED WATER DEMAND

Phase/Project	Demand (AFY)	Timeframe for Coming Online	Source of Recycled Water	Location of Use/Water Service Area
Phase 1	450	Existing	Valencia WRP	VWD
Phase 2A	560	2029	Valencia WRP	NCWD, VWD
Phase 2B	300	2021-2023	Vista Canyon WRP	SCWD
Phase 2C	759	2021-2023	Valencia WRP	NCWD, VWD
Phase 2C – Golf Course ^(a)	600	2023	Valencia WRP	Valencia Golf Course
Phase 2D	221	2021-2023	Valencia WRP	VWD
Five Point ^(b)	5,174-6,505	2021-2043	Newhall Ranch/ Valencia WRP	Newhall Ranch/ Five Point
Total	8,064-9,395	2050		
Total w/ CC	8,368-9,749^(c)	2050	As shown above	As shown above

Notes:

- (a) Raw water conversion to recycled water (not an existing potable offset).
- (b) Range reflects estimated demand using MEWLO and observed over watering of 25.6% in recently developed irrigation systems.
- (c) Assumes 3.77% demand increase due to climate change.

As previously discussed, aside from the existing 450 AFY of recycled water supply, planned recycled water supplies from the Valencia, Newhall Ranch, and Vista Canyon WRPs would come from the New Drop Program. Importantly, as indicated above, water from these New Drop Program sources would not be required to maintain environmental discharges to the Santa Clara River. As a result, it would be available to meet a considerable portion of the total projected long-term recycled water demands.

Total projected recycled water use projections through 2050 are summarized in Table 3-11. As annual demands discussed above exceed supplies, recycled water usage is based on available supplies. In later years, it is projected that seasonal storage may be needed to store recycled water during the winter months to help meet peak summer demands. Additionally, potable make-up water will be needed to help meet summer peaking demands in the non-potable irrigation system.

TABLE 3-11 PROJECTED RECYCLED WATER USE

	2025	2030	2035	2040	2045	2050
Existing Recycled Water Use	450	450	450	450	450	450
New Recycled Water Use	1,849	3,696	5,091	6,498	7,499	8,511
Total Projected Recycled Water Use^(a)	2,299	4,146	5,541	6,948	7,949	8,961
Total Potential Recycled Water Demand^(b)	4,559	6,514	8,441	9,191	9,469	9,749

Notes:

(a) Total projected water use is equal to total projected recycled water supply as total potential recycled water demand exceeds total projected supply.

(b) Difference in recycled water supply and total potential recycled water demand will be made up by potable water supplies, i.e., make-up water.

In accordance with the UWMP Act, the 2020 UWMP describes and quantifies the potential uses of recycled water in the Valley based on the substantial wastewater flows and recycled water generated by the local WRPs. However, as noted above, if recycled water supplies from the local WRPs are not available in the amounts identified in Table 3-11 to meet potential uses because of regulatory or other constraints, other sources of supply available to SCV Water as provided in the 2020 UWMP would be utilized to meet non-potable demands until such time as recycled water supplies may become available.

3.7.8 Recycled Water Demand

Currently, an average of 450 AFY of recycled water is served to landscape irrigation customers, including The Oaks Club golf course (formerly known as the Tournament Players Club Golf Course). Potential recycled water users have been identified through several sources including:

- 1993 Recycled Water Master Plan
- Water consumption records for SCV Water and LACWWD 36
- Land use maps
- General Plans and Specific Plans for the City of Santa Clarita and County of Los Angeles
- Discussions with City, County, SCV Water, LACWWD 36 and land developer staff
- On-site surveys of the SCV Water service area

- 2002 Recycled Water Master Plan
- 2016 Recycled Water Master Plan Update (in development)

To be considered as a potential recycled water user, the user has to be located within SCV Water's service area and have a potential non-potable water demand of at least 50,000 gallons per day. At this time no specific or Valley-wide ordinance(s) or other enactments are proposed that would require the installation of dual distribution systems for recycled water, or that would require the use of recycled water for recirculating uses. A total existing demand of approximately 12,000 AFY (based on current non-potable uses from irrigation meters) and a future demand of 8,511 AFY (based on planned developments), totaling approximately 21,000 AFY. The majority of recycled water uses are projected to be landscape irrigation.

As noted above, Phase 1 of the RWMP has been constructed and begins with a 4,000-gpm pump station at the Valencia WRP that connects to a 1.5 MG reservoir in the Westridge area with 15,600 linear feet of 24- and 20-inch pipeline. It serves landscape customers along The Old Road and The Oaks Club at Valencia.

Four projects planned to expand recycled water use within Santa Clarita Valley, which are collectively known as Phase 2.

Phase 2A, 2C and 2D would use recycled water from the Valencia WRP and Phase 2B would use recycled water produced at the Vista Canyon WRP, which will treat flows from the planned Vista Canyon Development. Phase 2A would serve Central Park and customers along the path from the Valencia WRP to the park. Phase 2B would serve the proposed Vista Canyon Development and nearby irrigation customers. Phase 2C would serve Valencia Country Club, Vista Valencia Golf Course, College of the Canyons, California Institute of the Arts, Hart High School, and Newhall Elementary School. Phase 2D would serve West Ranch High School, Ranch Pico Junior High School, Oak Hills Elementary School, and customers along the way.

Anticipated annual demands and completion dates for Phase 2 components are listed below:

- Phase 2A: 560 AFY in 2029
- Phases 2B, 2C, 2D: 1880 AFY between 2021 and 2023 (1,200 AFY would consist of raw water conversion to non-potable at the Valencia golf course by 2023). Phase 2D and 2B are under construction.

In addition, the FivePoint project is anticipated to result in 5,174 AFY of demand between 2021 and 2043. These Phase 2 and FivePoint anticipated demands take into account demand adjustment factors over the planning period.

Future recycled water use expansion beyond Phase 2 was explored as part of the RWMP Update and could potentially include extensions of the Phase 2 alignments to utilize any additional available recycled water resulting from a decrease in discharges from the Valencia WRP. However, as discussed above there are no current plans to pursue reduction of discharges from the Valencia WRP to the Santa Clara River. Current plans call for reliance on the SCV Water's New Drop Program. Consistent with the New Drop Program there is currently no plan to use recycled water from the Saugus WRP since the majority of the effluent is committed to meeting discharge requirements in the Santa Clara River.

The RWMP Update also included a high-level assessment of opportunities for potable reuse within the Santa Clarita Valley via groundwater recharge, surface water augmentation and direct potable reuse and the development of seasonal storage (Woodard and Curran 2021). In general, due to the seasonal variability of recycled water demand, SCV Water has an excess of recycled water supply during the winter months. Excess recycled water flows are currently discharged to the Santa Clara River. These excess flows could be better utilized by constructing seasonal storage facilities which can store recycled water during winter months when the demands are low and feed the system with the stored supply in the summer months when demands exceed the operational supply. These opportunities would be evaluated further in future UWMP updates.

- **Groundwater recharge (“indirect potable reuse”) via surface spreading** at an off-stream location near the Santa Clara River could provide for recharge of excess available recycled water in the winter and off-peak irrigation months. A more detailed feasibility study would be required to confirm the volume of recycled water that could be recharged and recovered based on current regulations, source water quality, operational and cost considerations.
- **Surface Water augmentation** at Castaic Lake would require full advanced treatment of the recycled water from SCVSD, brine disposal and significant conveyance requirements at a very high cost. It is also unknown at this time whether a surface water augmentation project would be able to meet applicable regulatory criteria and how much water could be augmented.
- **Direct potable reuse (DPR)**, though not currently permitted in California, would involve the purposeful introduction of highly purified recycled water into a drinking water supply, immediately upstream of a drinking Water treatment plant or directly into the potable water supply distribution system downstream of a water treatment plant. A DPR concept could potentially utilize recycled water not already allocated or planned for non-potable reuse or determined necessary for instream use and would require full advanced treatment of the recycled water from SCVSD, brine disposal and only minimal conveyance requirements. SCV Water intends to track direct potable reuse developments in California and revisit the feasibility of DPR in the future.

3.7.9 Recycled Water Comparison

The 2015 UWMP projected a total recycled water demand of 1,015 AFY by the year 2020. Actual data shows 468 AF was served in 2020 which reflects the existing golf course and landscape demands. 2020 demand is lower than originally predicted because the recycled water distribution system expansion did not occur as anticipated. Table 3-12 provides a comparison of the projected versus the actual 2020 demand. Based on current estimates, recycled water demand over the next five years is anticipated to increase 10-fold as shown in Table 3-12.

TABLE 3-12 RECYCLED WATER USES - PROJECTION COMPARED WITH ACTUAL USE (AFY)

User Type	2015 Projection for 2020	2020 Actual Use
Landscape	622	99
Golf Course Landscape	393	375
Total	1,015	468

3.7.10 Methods to Encourage Recycled Water Use

Currently, to the extent feasible SCV Water is offering recycled water as available at a lower rate to encourage the use of recycled water and to help offset some of the conversion costs. SCV Water is considering pricing options to encourage participation in the recycled water program. In addition to pricing incentives SCV Water is committed to a Valley-wide messaging regarding recycled water benefits and costs. At its March 2, 2021, Board Meeting, SCV Water authorized the General Manager to implement a Purple PREP (Planning Readiness and Effectuating Program) Pilot to facilitate conversion of the Phase 2B and 2D customer irrigation systems to recycled water. Under the program customers can choose either direct installation of required retrofit materials or receive a financial incentive up to the actual cost of the retrofit. Other incentives may include financial assistance to offset the costs to convert (or retrofit) potable water systems or the development of a Valley-wide recycled water ordinance, which would require the use of recycled water if available, rather than relying solely on pricing incentives and voluntary connections.

It is important to note that SCV Water's New Drop Program is a critical component for optimizing recycled water use across the service area. As described above, this program allows SCV Water to develop additional recycled water supplies from wastewater flows generated from new residential and commercial development, without increasing the diversion of recycled water flows discharged to the Santa Clara River.

3.7.11 Optimization Plan for Recycled Water

Currently, the amount of recycled water available from the WRPs is not adequate to meet the total demands of the completed recycled water system, which relates to both infrastructure and regulatory factors. Notably, however, as potable water demands increase in the Valley over time, wastewater flows will increase and the amount of recycled water production to meet future system demands would also increase. Therefore, SCV Water anticipates that construction of the recycled water system will be phased to utilize the increases in WRP production. A detailed discussion of the recommended phasing plan was provided in the RWMP Update.

Phasing implementation of the recycled water system is recommended for the following reasons:

- A number of the potential recycled water users are future users that do not yet need recycled water.
- The current amount of recycled water available from the local WRPs is not yet adequate to meet the total demands of all the existing *and* planned future identified recycled water users.
- Capital funding requirements would be spread over the current planning period through 2050.

The implementation phases are prioritized based on the status of the potential recycled water users (existing or future), the anticipated construction schedule of future users and the proximity of the users to the non-potable water source (e.g., Valencia WRP, Vista Canyon WRP and Newhall Ranch WRP).

Phase 2A, 2B, 2C and 2D are planned for construction over the next 10 years and would increase recycled water deliveries by approximately 2,440 AFY. These projects are being prioritized to take advantage of available funding for recycled water projects under Proposition 1 and to align with the construction schedule for the Vista Canyon Development.

The Newhall Ranch/Five Point project represents the next major increase in recycled water use and is anticipated to be constructed over the next 20 to 25 Years. These facilities will be paid for by the developer.

As these uses come on-line, recycled water demand may exceed supplies particularly during the summer months, thus the distribution to future users would be based on the following considerations:

- Service area boundaries,
- Ease or willingness of customers to connect to recycled water,
- Capital and operational costs,
- Funding availability,
- Community impacts and development requirements,
- Supply reliability and system flexibility considerations, and
- Availability of recycled water supplies due to regulatory or other legal constraints.

3.7.12 Additional Considerations Relating to the Use of Recycled Water

Additional information relating to recycled water concerning the SCVSD Chloride Compliance Plan, and the groundwater basin's Salt and Nutrient Management Plan are in the 2020 UWMP.

3.7.13 Capital Outlay Program

Financing the delivery of water supplies for SCV Water's customers, including this project, are set forth in SCV Water's Biennial Budget for FY 2021/22 and FY 2022/23. Water operations and new projects are paid from various funds as described below:

- General Fund – Fund used to account for and report all financial resources not accounted for and reported in another fund
- Capital Project Fund – Capital projects that are financed
- State Water Contract Fund – Funds received from ad valorem property taxes for payment of DWR fixed and variable costs
- Facility Capacity/Connection Fees – Funds that are collected from development or developers

The Biennial Budget describes anticipated revenues from various sources such as water sales, taxes, and fees along with anticipated expenditures associated with these funds including those to pay for existing and new sources of water supply.

Further, the budget contains a Capital improvement section (pg. 131) that identifies near term capital expenditures and their funding sources. SCV Water plans to invest \$84 million in FY 21/22 and \$86 million in FY 22/23. (pg. 133). These include projects described in this section such as installation of treatment facilities for Perchlorate and PFAS impacted wells, construction of new Saugus Formation wells, and construction of recycled water facilities.

The capital budget also contains expenditures for planning efforts for new projects such as additional extraction capacity from new banking programs and Sites Reservoir planning costs. A summary of expenditures and revenues are shown on the Tables on page 136 and 137 of the budget, with individual project summaries on the following pages. Some of the future water projects will be the subject of future budgets to be adopted by the SCV Waters Board of Directors.

Section 4: Supply Reliability Planning and Accounting for Uncertainties Associated with Groundwater Contamination, and other Factors

Planning for water supplies in California inherently involves the management of risks and uncertainties. Changes in public policy, regulatory requirements, and advancement of scientific knowledge can all affect future water supplies. This section addresses some of these risks and uncertainties that SCV Water is managing. Specifically, this section addresses risk and uncertainties associated with water quality, specifically restoration of existing wells and proposed wells given ongoing groundwater contamination, how climate change may impact various sources of supplies and demand for water, and how ongoing development of new water use efficiency may impact water supplies and demands. Finally, this section discusses how analysis undertaken by SCV Water in its Water Supply Reliability Plan Report, supplements the analysis performed in the 2020 UWMP and demonstrates how SCV Water can manage risk should the path to implementing certain future water supplies are blocked.

A key factor to meeting future demands is restoring existing groundwater supplies that are currently contaminated with Perchlorate, PFAS, and VOCs. This section provides a detailed discussion based primarily on Section 6 of the 2020 UWMP, regarding water quality and steps necessary to recover these supplies as well as access additional groundwater supplies from the Saugus Formation. The discussion in this report, however, contains certain updates regarding the schedules relating to recovery of existing well capacity impacted by contaminants. Further, anticipated climate change is projected to impact nearly all of SCV Water's water supplies. While Sections 1.7 of the 2020 UWMP provides a summary of potential effects of climate change on California and the Santa Clarita Valley, this WSA provides additional discussions on how climate change information, based largely on State provided information, was incorporated into the water demands and water supplies analyzed in the 2020 UWMP and this WSA. This information was incorporated into SCV Water's 2021 Water Supply Reliability Plan Update that analyzed not only the proposed UWMP water resource mix, but alternative scenarios to achieve water supply reliability.

Additionally, the State is in the process of implementing two policy bills enacted by the California Legislature, Assembly Bill 1668 (AB1668, Friedman) and Senate Bill 606 (SB606, Hertzberg) that will provide new water efficiency standards that will eventually lead to enforceable urban water use objectives. Although these standards have not yet been adopted, implications to recycled water availability and urban water demand are discussed below.

4.1 Water Quality

The quality of any natural water is dynamic in nature. This is true for both the imported and local groundwater of the Basin. During periods of intense rainfall or snowmelt, routes of surface water movement may change resulting variable quantities of constituents being mobilized. The quality of water changes over the course of a year. These same basic principles apply to groundwater. Depending on water depth, groundwater will pass through different layers of rock and sediment and potentially dissolve different materials from those strata, change concentrations due to oxidation or reduction reactions or precipitate constituents due to oversaturation. Water depth is a function of recharge from local rainfall and from adjacent basins due to subsurface inflow and

withdrawal from groundwater pumping. Water quality is not a static feature of surface water and groundwater, and these dynamic variables must be recognized.

Water quality regulations also change. This is the result of the discovery of new contaminants, updated understanding of the health effects of previously known as well as new contaminants, development of new analytical technology and the introduction of new treatment technology. Most water suppliers in California are subject to drinking water standards set by the United States Environmental Protection Agency (USEPA) and the SWRCB DDW, formerly the DPH. Additionally, each year prior to July 1st, a Consumer Confidence Report or Water Quality Report (WQR) is made available to all Valley residents who receive water from SCV Water. That report includes detailed information about the results of quality testing of the groundwater and treated SWP Water supplied during the preceding year (2020 WQR). Water quality is also addressed in the annual Santa Clarita Valley Water Report, which describes the current water supply conditions in the Valley and provides information about the water requirements and water supplies of the Santa Clarita Valley.

The quality of water received by individual customers will vary depending on whether they receive imported water, groundwater, or a blend. Some will receive only imported water at all times, while others will receive only groundwater. Others may receive water from one well at one time, water from another well at a different time, different blends of well and imported water at other times, and only imported water at yet other times. These times may vary over the course of a day, a week, or a year.

This section provides a general description of the water quality of the supplies within the Valley, aquifer protection and a discussion of potential water quality impacts on the reliability of these supplies.

4.2 Water Quality Constituents of Interest

SCV Water is committed to providing its customers with high quality water that meets all federal and state primary drinking water standards. Some contaminants are naturally occurring minerals and radioactive material. In some cases, the presence of animals or human activity can contribute to the constituents in the source waters. The following sections address constituents reported in the 2020 WQR and the 2019 Santa Clarita Valley Water Report (July 2020) that may impact water quality.

4.2.1 Perchlorate

Perchlorate, a chemical used in making rocket and ammunitions propellants as well as flares and fireworks, has been a water quality concern in the Santa Clarita Valley since 1997 when it was originally detected in four wells operated by SCV Water in the eastern part of the Saugus Formation, near the former Whittaker-Bermite facility. In late 2002, the contaminant was detected in a fifth well, this one located in the Alluvial Aquifer (Stadium Well) but also located near the former Whittaker-Bermite site, and which was immediately taken out of service. Of those wells, two (Well 157 and Stadium Well) were sealed and replaced by new wells (201 and Valley Center), and two others (Saugus 1 and 2) were returned to service with treatment by 2011. Well N-11 was taken out of service and remains out of service.

Perchlorate was detected again in early 2005 in a second Alluvial well (Well Q2) near the former Whittaker-Bermite site, and in 2006 in very low concentrations (below the detection limit for reporting) in a fifth Saugus well (Well N13) near one of the originally impacted wells.

In response to the detection of perchlorate at alluvial Well Q2, it was removed from active service, and the preparation of an analysis and report assessing the impact of, and response to, the perchlorate contamination of that well was commissioned. A capture zone analysis utilizing the numerical groundwater flow model was conducted to assess the potential risk of perchlorate migration to Well Q2 and other nearby alluvial wells. This analysis determined that there was a low risk of perchlorate migration to Well Q2. The response for Well Q2 was to obtain permitting for installation of wellhead treatment, followed by the installation of treatment facilities, and returning the well to water supply service in October 2005. After nearly two years of operation with wellhead treatment, including regular monitoring specified by the DPH, all of which resulted in no detection of perchlorate in Well Q2, it was requested that DPH allow treatment to be discontinued. DPH approved that request in August 2007, and treatment was subsequently discontinued. In 2019, perchlorate was detected again in Well Q2. In response, a treatment system for Well Q2 was completed in early 2021, and the well is expected to be back online by summer 2022. Additional details on DDW permitting and associated operational timeline for Well 201 are provided in Section 4.7.2.

Well N-13 has remained in service with regular sampling per DDW requirements. Perchlorate concentrations in Well N13 (and Well N12) are currently below the detection limit for reporting (DLR). In 2007, the DPH (currently the DDW) established a maximum contaminant level (MCL) for perchlorate of 6 micrograms per liter ($\mu\text{g/L}$). However, in 2021 DDW lowered the MCL for perchlorate to 2 $\mu\text{g/L}$ and subsequently is in the process of lowering the MCL to 1 $\mu\text{g/L}$ by 2024. Additional details on DDW permitting and associated operational timeline for Well 205 are provided in Section 4.7.2. It is currently assumed that, if required due to changes in future regulations, a centralized treatment system will be installed for Wells N12 and N13 at the Well N12 location.

For Wells Saugus 1 and Saugus 2, DDW has imposed a requirement that perchlorate levels be below the Detection Level for Reporting (DLR) of 2 $\mu\text{g/L}$. These wells are in active service utilizing approved perchlorate treatment and will be treated for VOC's at the Saugus Perchlorate Treatment Facility by 2024.

In August 2010, perchlorate was detected in a sixth Saugus Formation well (Well 201) and was removed from service. Confirmation sampling in the months that followed confirmed the detection of perchlorate at concentrations that ranged from 5.7 to 12 $\mu\text{g/L}$. A perchlorate treatment system is currently installed for Well V-201 and SCV Water recently determined it will also install treatment for VOCs at Well 201. SCV Water is working with DDW to finalize a permit for operation of that treatment systems for both perchlorate and VOCs. Based on the current schedule, the well may come back online by 2024.

Following the detection of perchlorate in Well 201 in 2010, pumping from a nearby Saugus Formation well (Well 205) was minimized to reduce potential perchlorate migration. In April 2012, Well 205 was voluntarily taken out of service entirely when perchlorate was detected in low concentrations below the DLR ($<4.0 \mu\text{g/L}$). As of the date of this report, planning and CEQA activities for Well 205 treatments are in progress. This planning includes provisions for treatment of VOCs should testing determine those constituents are present in concentration sufficient to warrant treatment. The completion of a treatment system for Well 205 is anticipated

to occur by early 2024. To date, perchlorate has been detected in a total of nine wells, seven located in the Saugus Formation and two in the Alluvium. Table 4-1 summarizes the current remediation status of all wells where perchlorate has been detected.

Long-term efforts toward the remediation of perchlorate contamination since first detected in 1997 continue to this day. The objective of the perchlorate restoration and containment plan has been to stop the migration of the contaminant plume and restore lost well capacity through pump and treat methods and replacement wells. The following discussion is provided to illustrate the work that has occurred over the last 20 years to reactivate the impacted Saugus 1 and Saugus 2 groundwater supply wells, and that has been expanded to include Wells 201 and 205. SCV Water's Saugus Perchlorate Treatment Facility has been online since 2011, treating Wells Saugus 1 and Saugus 2.

A second Perchlorate Treatment Facility came online in 2017 at Well 201. Until the facility is permitted, treated Water from Well 201 is blended with other SCV Water sources to meet sulfate discharge standards then discharged to the Santa Clara River, under a National Pollutant Discharge Elimination System (NPDES) discharge permit, where it recharges the alluvial aquifer. In 2021 the facility was taken off-line while maintenance was performed. The well and perchlorate treatment facility is anticipated to be placed back into service once the availability of blend water is assessed for 2022, and discharges to the Santa Clara River would then be resumed until DDW approval is acquired for both perchlorate and VOCs. The well is anticipated to be returned to service by early 2024.

The groundwater model that was developed for use in analyzing the operating yield and sustainability of groundwater in the Basin was also used to analyze the capture and control of perchlorate contamination in the originally impacted Saugus wells. As part of the evaluation of the containment system's effectiveness, the Basin groundwater model was updated and recalibrated using actual pumping data (see LSCE & GSI, 2009). The updated model was also utilized in 2014 and 2015 to evaluate restoration and containment options and select the preferred approach to contain the migration of perchlorate downgradient of the Whittaker-Bermite site and restore Wells 201 and 205 to service (GSI and LSCE, 2014).

In addition to the offsite containment and restoration activities, significant work has continued at the Whittaker-Bermite facility to advance a Saugus Aquifer Containment and Extraction Program. To date the following efforts have been made. A Work Plan, Saugus Aquifer Pilot Remediation Well Network, OU7 was approved on December 31, 2008; and subsequently, implementation of the Work Plan started. A multi-layer groundwater flow model was developed to simulate various groundwater pumping scenarios for capture of impacted groundwater in the Saugus Aquifer beneath the site and the surrounding areas. The optimum number and locations of extraction wells were determined based on the modeling scenarios, and the extraction wells and performance monitoring wells were installed.

Construction of the Saugus Aquifer Treatment Plant (SATP) was completed and operation of the pump and treatment system started in August 2017. The SATP includes liquid granular activated carbon (LGAC) for removal of VOCs and a fluidized bed reactor (FBR) for biological treatment of perchlorate in extracted groundwater. The treated water is discharged to the Santa Clara River, in full compliance with provisions of the NPDES permit issued by the Los Angeles RWQCB. Treated water discharged to river percolates through the riverbed and recharges the alluvial aquifer beneath the riverbed.

Approximately 446,741,200 gallons of water have been treated and discharged since start-up.

TABLE 4-1 STATUS OF IMPACTED WELLS

Year Perchlorate Detected	Well	Groundwater Aquifer	Status
1997	Saugus 1	Saugus	DPH (now DDW) approved well return to service in January 2011; well in active service utilizing approved perchlorate treatment.
1997	Saugus 2	Saugus	DPH (now DDW) approved wells return to service in January 2011; well in active service utilizing approved perchlorate treatment.
1997	Well 157	Saugus	Sealed and capacity replaced by new well.
1997	Well N11	Saugus	Out of service.
2002	Stadium Well	Alluvium	Sealed and capacity replaced by new well.
2005	Well Q2	Alluvium	Due to perchlorate detection again in 2019, a treatment system was completed in early 2021 and the well is expected to be back online by summer 2021.
2006	Well N13	Saugus	Regular DDW monitoring, concentrations currently below DLR; well remains in service.
2010	Well 201	Saugus	A perchlorate treatment system was installed in 2017 and treated water discharged to Santa Clara River beginning in 2018. Design for VOC treatment facility underway. The treated groundwater from the well may be used for supply by the end of 2024.
2012	Well 205	Saugus	Voluntarily out of service. Planning for treatment at Well 205 in progress with estimated well restoration by 2024.
2022	N-Well	Alluvium	Due to perchlorate detection in 2022, the existing PFAS treatment facility will require an amendment to the Operation Permit. No physical changes to the treatment facility will be required; well remains in service.

Saugus 1 and Saugus 2

In 2002 SCV Water and the U.S. Army Corps of Engineers (ACOE) signed a cost-sharing agreement for a feasibility study of the area. Under federal and state law, the owners of the Whittaker-Bermite property have the responsibility for the groundwater cleanup. SCV Water and the Department of Toxic Substances Control (DTSC) signed an oversight agreement in 2003 (amended in 2012) regarding studies of treatment technologies for removing perchlorate from water supplies, and also worked with DDW to obtain the necessary permits for these treatment processes. Treatment method pilot studies were conducted during 2003, and in 2004 SCV Water and the purveyors selected ion exchange as the preferred treatment method for removing perchlorate.

Although that agreement expired in January 2005 the parties, under DTSC oversight, jointly developed a plan to “pump and treat” contaminated water from two of the purveyors’ impacted wells to stop migration of the contaminant plume and to partially restore the municipal well capacity that had been impacted by perchlorate. The containment plan specified that wells Saugus 1 and Saugus 2 operate at an initial continuous pumping rate of 1,100 gpm (1,772 AFY) at each well, for a combined total of 2,200 gpm (3,544 AFY) from the two wells. The annual pumping volume of 1,772 AFY per well assumes that pumping will occur continuously, except for occasional maintenance purposes.

A final settlement to fund, remediate and treat the contaminated water was completed and executed by the parties in April 2007. Construction of the treatment facility and pipelines began in November 2007 and treatment of the water began in 2010. Water from Wells Saugus 1 and Saugus 2 was initially treated and discharged into the Santa Clara River. DDW issued an amendment to the Operating Permit in December 2010, and the wells were placed back in water supply service in January 2011. Since then, SCV Water has included this water as part of its supply and has been delivering this water to purveyors.

Wells 201 and 205

While a recommendation plan was submitted to restore Well 201 to service that utilized funding from the Whittaker Corporation and its insurer for installing wellhead treatment for contaminated water from Well 201, it has subsequently been determined that treatment for VOCs at well 201 is necessary. SCV Water has initiated design of this additional treatment at Well 201 as well as initiating design for perchlorate treatment and VOC treatment at Well 205. During the time Wells 201 and 205 have been removed from service, the temporary loss of capacity was made up for from the remaining, non-impacted Saugus production facilities and imported water supplies. Restoration of Well 201, operation of Well 205, and new Saugus well construction to replace lost capacity and to expand production capacity from the Saugus Formation are planned to achieve target Saugus Formation capacity through single and multiple dry years as discussed in Section 3.3.

Returning the impacted Saugus well (Well 201) to municipal water supply service after installing treatment requires DDW approval before the water can be considered potable and safe for delivery to customers. The permit requirements are contained in Process Memo 97-005 for direct domestic use of impaired water sources.

Before issuing a permit to a water utility for use of an impaired source as part of the utility’s overall water supply permit, DDW requires that studies and engineering work be performed to demonstrate that pumping the well and treating the water will be protective of public health for users of the water. The Process Memo 97-005 requires that DDW review the water utility’s plan, establish appropriate permit conditions for the wells and treatment system, and provide overall approval of returning the impacted wells to service for potable use.

The Process Memo 97-005 requires, among other things, the completion of a source water assessment for the impacted well intended to be returned to service. The purpose of the assessment is to determine the extent to which the aquifer is vulnerable to continued migration of perchlorate and other contaminants of interest from the Whittaker-Bermite site. The assessment was completed and initially submitted to DDW for approval in 2015. The assessment includes the following:

- Delineation of the groundwater capture zone caused by operating the impacted wells.

- Identification of contaminants found in the groundwater at or near the impacted wells.
- Identification of chemicals or contaminants used or generated at the Whittaker-Bermite facility.
- Determination of the vulnerability of pumping the impacted wells to these contaminant sources.

A perchlorate treatment system is currently installed for Well 201 and planning for VOC treatment has been initiated. The well is expected to be back online for domestic use by early 2024. Well 205 is also subjected to Process Memo 97-005 and planning for treatment at Well 205 is in progress with an estimated well restoration date by 2024, as shown in Table 4-1. Additional details on DDW permitting and associated operational timeline for Wells 201 and 205 are provided in Section 4.7.

Ultimately, restoration plans and the DDW requirements are intended to ensure that the water introduced to the potable water distribution system has no detectable concentration of perchlorate and all water currently discharged from the potable water distribution system complies with all applicable drinking water standards.

4.2.2 Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that have been utilized in a wide array of industrial processes, including among others, production of stain- and water-resistant fabrics, cookware, food packaging, and fire-fighting foams. Among the nearly 5,000 types of PFAS, the two long-chained PFAS, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) have been produced in the largest amounts. While the use of PFAS has been reduced since the early 2000s, PFOS and PFOA are persistent in the environment and resistant to typical environmental degradation processes which has led to their accumulation and widespread contamination of natural resources, including groundwater supplies.

Recently, the United States Environmental Protection Agency (USEPA) implemented a new lifetime health advisory level of 70 parts per trillion (or 70 nanogram per liter [ng/L]) for the combined concentrations of PFOA and PFOS in drinking water. In August 2019, DDW set a notification level (NL) of 5.1 and 6.5 ng/L for PFOA and PFOS, respectively. Subsequently, in February 2020, the DDW set a response level (RL) of 10 ng/L for PFOA and 40 ng/L for PFOS, based on a running annual average (RAA). RL is the concentration at which DDW recommends that a well is taken out of service, pending treatment. If a chemical concentration is greater than its NL (but below the RL) in drinking water that is provided to consumers, DDW recommends that the utility inform its customers and consumers about the presence of the chemical, and about health concerns associated with exposure to it. Potential regulatory limits for several short chain PFAS compounds are currently undecided.

On February 22, 2021, USEPA published a notice in the federal register that the agency is in the process of developing a MCL for PFAS under the federal Safe Drinking Water Act. At this time, it is unclear whether the federal MCL will match the health advisory level of 70 parts per trillion, or if it will be a lower level, similar to the RL adopted DDW. SCV will monitor EPA's regulatory decisions and comply with all applicable requirements. Groundwater delivered by SCV to ratepayers will need to be treated to ensure it meets Safe Drinking Water Act standards, if the groundwater contains PFAS at levels that exceed the MCL

In accordance with an Order issued by DDW in March 2019, SCV Water was required to sample 15 wells for four consecutive quarters for PFAS. Initial quarterly samples were collected in May

2019 and one well (Valley Center), exceeded the EPA RL of 70 ng/L for combined levels of PFOA and PFOS and the well was immediately taken out of service. In addition, 10 of the initial 15 wells sampled exceeded one or both NLs for PFOS and PFOA. Public notification was provided to the SCV Water Board of Directors, the Santa Clarita City Council and Los Angeles County Board of Supervisors. At this time, SCV Water decided to voluntarily sample all wells quarterly for PFAS. PFOA and/or PFOS levels higher than NLs and RLs were observed in over 60% of the wells. Subsequent public notifications were provided to SCV Water customers, and one well that was found to exceed the RL was immediately taken out of service. In response to the revised RL from February 2020, SCV Water proactively shutdown numerous wells that were anticipated to exceed the RAA for either PFOA or PFOS.

The preparation of a Groundwater Treatment Implementation Plan was initiated in 2020 with the purpose of evaluating the feasibility and costs of PFAS and perchlorate treatment options (Kennedy Jenks 2021). A total of 28 existing SCV Water wells were identified to be impacted by PFAS, being wells showing representative values of PFOA and PFOS above 80% of the DDW RLs. Based on preliminary results of the alternatives analysis, ion exchange was identified as the preferred treatment option. According to the plan, out of the 28 wells requiring treatment, five wells would have wellhead treatment system and groundwater from the remaining wells would be treated at eight centralized treatment locations. To date, one centralized treatment system was completed for the three N-wells (N, N7 and N8). Restoration of the remaining wells is estimated to occur between 2022 and 2030 as described further in Section 3 and the Santa Clarita Valley Water Agency, Groundwater Treatment Implementation Plan Technical Memorandum (Kennedy Jenks 2021).

4.2.3 Metals and Salts

Metals and salts are tested in wells at least every three years and in Castaic Lake water every month. Concentrations of arsenic at levels less than the drinking water standard of 0.01 milligrams per liter that occur naturally from geologic materials are found in Castaic Lake and in a few wells. Inorganic compounds such as salts and metals can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. Arsenic levels in the Santa Clarita Valley have regularly been below the MCL (10 ug/L) and oftentimes below the DLR (2 ug/L), as was the case during 2019 monitoring (LSCE, 2020).

Nitrate in drinking water at concentrations above 45 mg/L is a health risk for infants less than six months of age due to the possibility of methemoglobinemia. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Principal sources of nitrogen to a watershed typically include discharges from water reclamation plants, septic systems, and recharge from agricultural activities. Nitrates are tested at least annually, and the drinking water meets federal and state MCL standards (2020 WQR).

A TMDL for chloride in the Upper Santa Clara River (Reaches 5 and 6) was adopted by the Los Angeles RWQCB and became effective on May 5, 2005. The Basin Plan Amendment for the chloride TMDL in the Upper Santa Clara River was unanimously adopted by the Los Angeles RWQCB on December 11, 2008. The TMDL identifies the Valencia and Saugus WRPs as the largest sources of chloride to the Upper Santa Clara River and established waste load allocations of 100 mg/L for the Saugus and Valencia WRPs. In 2014, the Los Angeles RWQCB adopted the most recent version of the USCR Chloride TMDL, Resolution R4-2014-010, which incorporated special study findings and assigned waste load allocations of less than 150 mg/L

as a 3-month rolling average at the Saugus, and less than 100 mg/L as a 3-month rolling average for the calculated “combined effluents” of the Saugus and Valencia WRPs. In response to the adopted chloride TMDL, the SCVSD developed a chloride compliance plan that includes source control, construction of UV disinfection facilities at the Saugus and Valencia WRPs, and construction of the AWTF at the Valencia WRP. The AWTF will help meet the chloride TMDL and is anticipated to be completed by 2022.

4.2.4 Disinfection By-Products

SCV Water uses ozone and chloramines to disinfect its water supply. Disinfection By-Products (DBPs), which include Trihalomethanes (THMs) and Haloacetic Acids (HAA5), are generated by the interaction between naturally occurring organic matter and disinfectants such as chlorine and ozone. THMs and HAA5 are measured at several points throughout the distribution system. Each location is averaged once per quarter and reported as a running annual average.

Ozone is a very powerful disinfectant that not only kills organisms that no other disinfectant can, but also destroys organic chemicals that cause unpleasant tastes and odors. However, ozone can also interact with bromide, a naturally occurring salt, to produce bromate. Bromate is measured weekly in the surface water treatment plant and compliance is based on a running annual average.

4.2.5 Total Trihalomethanes

Total Trihalomethanes (TTHMs) are byproducts created when chlorine is used as a means for disinfection. The Stage 2 Disinfectants and Disinfection Byproducts Rule, implemented by EPA in 2005, requires water systems to apply an MCL of 80 ug/L for TTHM at each compliance monitoring location (instead of as a system-wide average as in previous rules). SCV Water implements a combination of chlorination (using calcium hypochlorite) and chloramination across its system and maintains TTHM levels below the MCL, as documented in the 2020 WQR.

4.2.6 Microbiological

Microbial contaminants, such as viruses and bacteria, can be naturally occurring or result from urban stormwater runoff, sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Water is tested throughout the systems weekly for Total Coliform bacteria and testing for *Escherichia coli* (*E. coli*) occurs when coliform testing is positive. No *E. coli* was detected in any drinking waters in 2019. The MCL for total coliforms is 5 percent of all monthly tests showing positives for larger systems. Bacteriological tests met federal and state requirements. Additional microbiological tests for the water-borne parasites *Cryptosporidium parvum* and *Giardia lamblia* were performed on Castaic Lake water, and none were detected.

4.2.7 Radiological Tests

Radioactive compounds can be found in both ground and surface waters and can be naturally occurring or be the result of oil and gas production and mining activities. Testing is conducted for two types of radioactivity: alpha and beta. If none is detected at concentrations above five picoCuries per liter no further testing is required. If it is detected, the water must be checked for uranium and radium. Although naturally occurring radioactivity can be detected, existing

monitoring data indicate that alpha and beta levels are below the federal and state MCL standards.

4.2.8 Organic Compounds

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems. Organic compounds also include pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses. Water is tested for two types of organic compounds, volatile organic compounds (VOCs) and non-volatile synthetic organic compounds (SOCs). These organic compounds are synthetic chemicals produced from industrial and agricultural uses. Castaic Lake water is checked annually for VOCs and SOCs.

Although VOCs tend to escape from surface water through volatilization (evaporation) into the air, once dissolved in groundwater they are more persistent. Local wells are tested at least annually for VOCs and periodically for SOCs. Saugus 1, Saugus 2 and 201 wells are tested up to weekly for VOCs. VOCs have been measured in trace levels in some of the SCV Water wells. Trichloroethylene (TCE) represents the major VOC constituent detected in these wells. Tetrachloroethylene (PCE) has also been detected in a few samples. However, the measured levels of these constituents in these wells are well below their respective MCLs.

SCV Water's Water Supply Permit for Wells Saugus 1 and 2 sets an operational goal of no VOCs above the DLR (0.5 ug/L) in its distribution system and SCV Water. Over the last 5 years, the operational goal has been achieved in more than 95% of the samples collected. When there are detections, they are well below the MCL and just slightly above the DLR. SCV Water performed a VOC source identification study in July 2015 which concluded that the likely source was the Whittaker-Bermite site. SCV Water is currently working with DTSC to develop additional monitoring requirements for both sites. Supplemental VOC treatment of Saugus 1 and 2 wells is currently in design.

During startup of the Well 201 perchlorate treatment facility, TCE was detected slightly above the DLR. Detections of TCE in Well 201 have ranged from a high of 1.3 ug/L to <DLR. Average detections are slightly above the DLR at around 0.6 ug/L. SCV Water has determined it will supplement the perchlorate treatment facility at Well 201 with a GAC based treatment facility. This additional treatment component is currently under design. In order to bring Well 201 back into potable production, SCV Water will be subject to Process Memo 97-005 requirements. SCV Water anticipates construction and permitting to be completed by 2024. Recognizing the potential for similar challenges at Well 205, initial design incorporates the potential need for treatment of VOCs and the need to meet Process 97-005 requirements. Well 205 is anticipated to become available in 2024.

In order to address contamination at the Whittaker-Bermite site, a remedial action plan (RAP) and associated CEQA document were approved by DTSC on December 2, 2014. The RAP presents an evaluation of identified remedial alternatives for containment and cleanup of impacted groundwater at the Whittaker-Bermite site. In accordance with the RAP, a Saugus Aquifer Treatment Plant was constructed and began operation in August 2017. The treatment plant includes a fluidized bed reactor (FBR) system which provides biological treatment of perchlorate and liquid granular activated carbon which is used to remove VOCs in groundwater. Approximately 446,741,200 gallons of water have been treated since start-up.

4.3 Imported Water Quality

SCV Water provides SWP and other imported water to the Valley. The source of SWP water is rain and snow of the Sierra Nevada, Cascade, and Coastal Mountain ranges. This water travels to the Delta through a series of rivers and various SWP structures. From there it is pumped into a series of canals and reservoirs, which provide water to urban and agricultural users throughout the San Francisco Bay Area and central and southern California. The most southern reservoir on the West Branch of the SWP California Aqueduct is Castaic Lake. SCV Water receives water from Castaic Lake and distributes it to its customers following treatment.

SCV Water operates two water treatment plants, the Earl Schmidt Filtration Plant located near Castaic Lake and the Rio Vista Water Treatment Plant located in Saugus. SCV Water produces water that meets drinking water standards set by the U.S. EPA and DDW. SWP Water has different aesthetic characteristics than groundwater, with lower dissolved mineral concentrations (total dissolved solids) of approximately 250 to 400 mg/L, and lower hardness (as calcium carbonate) of about 105 to 135 mg/L. Historically, the chloride content of SWP Water varies widely from over 100 mg/L to below 40 mg/L, depending on Delta conditions. In addition, changes in SWP operations, as described below, can also result in water quality variations.

Historically, the SWP delivered only surface water from the Sacramento-San Joaquin River Delta. However, SCV Water along with other SWP contractors have integrated water supply programs also include “water banking” programs where SWP Water is stored or exchanged during wet years and withdrawn in dry years. Withdrawn water can either be delivered by exchange with SWP supplies allocated to others, or by pumping it into the SWP system. During dry periods, a greater portion of water in the SWP includes banked water supplies. The banked water has met all water quality standards established by DWR under its pump-in policy for the SWP. Source water from SCV Water’s Semitropic Bank can require treatment for 123 TCP and arsenic prior to introduction into the Aqueduct depending on the mix of wells used for recovery. To date Semitropic has successfully treated its source water through blending methods and meets DWR pump-in policy. Supplies from SCV Water’s Rosedale Bank have also met DWR pump-in criteria. In general, pumped-in water serves to reduce the chloride concentration in SWP Water. The SWP water chemistry may fluctuate and is influenced by its passage through the Delta, where large amounts of organic material are present and where mixing with salt water from the San Francisco Bay, which contributes bromide and chlorides, may occur. Chloride levels from the Delta elevate chloride locally resulting in concern for local agriculture that grows chloride sensitive crops. Additionally, bromide and TOC may react with disinfectants such as ozone, chlorine, or DBPs. All constituents met the federal and state MCL levels as reported in the 2020 WQR.

4.4 Surface Water Quality

SCV Water does not deliver and treat water from the Santa Clara River as a source of supply; however, this supply is a source of recharge to the underlying groundwater basin.

The Los Angeles RWQCB Basin Plan (Basin Plan, 1994) provides water quality objectives for surface water in the USCR. These objectives were established to protect the various beneficial uses for that particular water body or reach. The water bodies of the USCR Watershed, which

include streams, natural lakes, and reservoirs, span a wide variety of existing, potential and/or intermittent beneficial uses. The following is a list of the beneficial uses identified in the USCR:

- Municipal and Domestic Supply
- Industrial Service Supply
- Industrial Process Supply
- Agricultural Supply
- Groundwater Recharge
- Freshwater Replenishment
- Hydropower Generation
- Water Contact and Non-contact Water Recreation
- Warm and Cold Freshwater Habitat
- Wildlife Habitat
- Rare, Threatened, and Endangered Species
- Spawning, Reproduction, and/or Early Development

All of the surface water bodies in the USCR Watershed support the designated beneficial uses (either existing or intermittent) of municipal and domestic supply, agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, wildlife habitat, and warm freshwater habitat. In addition, many water bodies (such as Bouquet, San Francisquito, and Soledad Canyons) support the designated beneficial uses (either existing or intermittent) of rare, threatened, or endangered species; wetland habitat; and/or spawning, reproduction, and/or early development.

Regional reservoirs that support hydropower generation include Elderberry Forebay, Castaic Lake, Dry Canyon Reservoir, Bouquet Reservoir, and Pyramid Lake. Local surface waters are not a direct source of drinking water supply in the Region, but they are a continual source of recharge to groundwater which is used to meet municipal water demands.

Based on the 2014 and 2016 California Integrated Report and related Clean Water Act Section 303(d) list, there are a number of impairments identified for Reaches 5, 6 and 7 of the Santa Clara River, and for Lake Hughes, Lake Elizabeth, and Munz Lake, all of which are within the Upper Santa Clara River Watershed.

The Santa Clara River currently has two approved TMDLs due to non-attainment of water quality objectives, one pertaining to chloride (see Section 4) and another pertaining to bacteria. Another TMDL is in place for three lakes within the Region that are impaired with trash. Other pollutants impacting local surface waters include nutrients, metals, pesticides, and others.

Surface water quality is monitored in numerous locations throughout the Valley. Continuous sampling records are taken at two gaging stations at the Old Highway 99 Bridge and at the Los Angeles-Ventura County Line ("Blue Cut").

4.5 Groundwater Quality

The groundwater basin has two sources of groundwater, the Alluvial Aquifer whose quality is primarily influenced by recharge from rainfall and stream flow, and the Saugus Formation, which is a much thicker aquifer and recharged primarily by a combination of rainfall and deep percolation from the partially overlying Alluvium. A larger part of the Valley's groundwater supply is from the Alluvial Aquifer, between 30,000 to 40,000 AFY; and a smaller portion of the Valley's

water supply is drawn from the Saugus Formation, with a target production level between 7,500 and 15,000 AFY in normal water years.

Local groundwater does not have microbial water quality problems. Parasites, bacteria, and viruses are filtered out as the water percolates through the soil, sand, and rock on its way through the vadose zone to the water table (the top of the aquifer). Even so, disinfectants (hypochlorite) are added to local groundwater when it is pumped by wells to protect public health. Local groundwater has very little TOC and generally has very low concentrations of bromide, minimizing potential for DPB formation. Taste and odor problems from algae are not an issue with groundwater.

The mineral content of local groundwater is very different from SWP water. The groundwater is very “hard,” and it has high concentrations of calcium and magnesium (approximately 250 to 600 mg/L total hardness as CaCO₃). Groundwater may also contain higher concentrations of nitrates and sulfates when compared to SWP water. However, all groundwater meets drinking water standards.

4.5.1 Water Quality - Alluvium

Groundwater quality is a key factor in assessing the Alluvial Aquifer as a municipal and agricultural water supply. Groundwater quality details and long-term conditions, examined by integration of individual records from several wells completed in the same aquifer materials and in close proximity to each other, have been discussed previously in the annual Water Reports and in the 2020 UWMP. Historical groundwater quality as represented by TDS (which is a measure of the amount of dissolved minerals and salts in water expressed in mg/L) from representative wells in the Valley have been reviewed relative to DDW Secondary Maximum Contaminant Levels (SMCL) (Recommended, Upper and Short-term Levels). While concentrations of TDS generally respond to wet periods by exhibiting a downward trend, followed by an increasing trend during a dry period, the historical TDS data does not exhibit a long-term increasing trend and, therefore, no long-term decline in Alluvial groundwater quality. In general, groundwater quality exhibits a “gradient” from east to west, with lowest dissolved mineral content to the east, increasing in a westerly direction; and periodic fluctuations in some parts of the basin, where groundwater quality has inversely varied with recharge from precipitation and stream flow. Those variations are typically characterized by increased mineral concentrations through dry periods of lower stream flow and lower groundwater recharge, followed by lower mineral concentrations through wetter periods of higher stream flow and higher groundwater recharge.

Overall, water quality analyses demonstrate that, with the exception of occasional variances above the SMCL for TDS, groundwater of the Alluvium meets acceptable drinking water standards. The presence of long-term consistent water quality patterns, although intermittently affected by wet and dry cycles, supports the conclusion that the Alluvial aquifer is a viable ongoing water supply source in terms of groundwater quality.

The most notable groundwater quality issue in the Alluvium is PFAS contamination, described in Section 4.2.2.

4.5.2 Water Quality - Saugus Formation

As discussed above for the Alluvium, groundwater quality is a key factor in also assessing the Saugus Formation as a municipal and agricultural water supply. Long-term Saugus groundwater quality data is not sufficiently extensive to permit any sort of basin-wide analysis or assessment of pumping-related impacts on quality. However, integration of individual records from several wells has been used to examine general water quality trends. Based on those records, water quality in the Saugus Formation has not historically exhibited the precipitation-related fluctuations seen in the Alluvium. Based on available data over the last fifty years, groundwater quality in the Saugus has exhibited a slight overall increase in dissolved mineral content. Between 2000 and 2005, several wells within the Saugus Formation exhibited an increase in TDS concentrations, similar to the short-term changes in the Alluvium, possibly as a result of recharge to the Saugus Formation from the Alluvium. Between 2006 and 2010, these concentrations steadily declined, followed by an increasing trend through 2016 and decreasing trend through 2019, except for Well N12 which remained stable.

TDS concentrations in the Saugus Formation remain within the range of historic concentrations and below the (aesthetic) MCL upper level. Groundwater quality within the Saugus will continue to be monitored to ensure that degradation which could present concern relative to the long-term viability of the Saugus as an agricultural or municipal water supply does not occur.

The most notable groundwater quality issues in the Saugus Formation are perchlorate and VOC contamination.

4.6 Water Quality Impacts on Reliability

Three factors affecting the availability of groundwater are sufficient source capacity (wells and pumps), sustainability of the groundwater resource to meet pumping demand on a renewable basis and protection of groundwater sources (wells) from known contamination, or provisions for treatment in the event of contamination. The resolution of contamination for aquifer protection is addressed below.

Among the main constituents of concern with potential to impact groundwater availability are perchlorate, VOCs and PFAS. Based on the low levels of detection and blending practices with imported water supplies, VOCs are not anticipated to impact groundwater supply availability or reliability. Additionally, TCE detected at the Well 201 perchlorate treatment facility will be addressed as part of the Process Memo 97-005 DDW drinking Water permitting process. New standards for PFAS and subsequent testing results have indicated groundwater impacts in the Alluvial Aquifer from this constituent group and resulted in SCV Water's decision to shut down several wells in the recent past.

Perchlorate has been a water quality concern in the Valley since 1997 and long-term efforts are ongoing for the containment and remediation of perchlorate contamination. Currently, efforts are focused on stopping the migration of the contaminant plume and restoring the lost well capacity through pump and treat methods. SCV Water has sealed and replaced the capacity of some perchlorate impacted wells with new wells, and it has treated some of the wells and brought them back online. Some impacted wells are subjected to impaired water (97-005) compliance requirements, while others are currently in operation with a DDW approved monitoring program. Additionally, other perchlorate-impacted wells are currently offline awaiting installation (or

permit) of treatment process. As noted above, two perchlorate treatment facilities have come online since 2011 and a third system was completed in early 2021.

Recognizing the existing water quality issues that affect the local groundwater, from perchlorate and VOCs, and more recently PFAS, SCV Water has developed a groundwater treatment and implementation plan (Kennedy Jenks 2021) to improve the reliability of its local groundwater supplies and ensure suitable water quality for meeting its customer potable demands. It is understood that groundwater treatment and implementation must be developed consistent with SCV Water’s GSP, such that any relevant information pertaining to the adequacy, availability, and sustainability of supplies be consistent with the GSP and GSP implementation Plan.

Overall, the plans being developed for groundwater operation will allow SCV Water to meet near term and long-term demand within the SCV Water service area. The loss of capacity of wells impacted by water quality issues and removed from service in the near term will be met by near-term excess capacity in non-impacted wells, other water sources including imported water supplies, and/or through the installation of replacement well(s), if necessary, until remediation alternatives, including wellhead treatment, and DDW approval is obtained for restoration of the impacted supply. Therefore, no anticipated change in reliability or supply due to water quality is anticipated based on the present data, as is shown in Table 4-2.

TABLE 4-2 CURRENT AND PROJECTED WATER SUPPLY CHANGES DUE TO WATER QUALITY (PERCENTAGE CHANGE)

Water source	2020	2025	2030	2035	2040	2045	2050
Groundwater							
Alluvial ^(a)	63%	25%	0%	0%	0%	0%	0%
Saugus ^(b)	25%	0%	0%	0%	0%	0%	0%
Imported Water	0%	0%	0%	0%	0%	0%	0%
Recycled Water	0%	0%	0%	0%	0%	0%	0%
Banking Programs	0%	0%	0%	0%	0%	0%	0%

Notes:

- (a) Based on 24,170 AFY and 25,660 AFY being available to SCV Water in 2020 and 2025 respectively and calculated for normal years. Net reduction in Alluvial pumping is 15,270 and 6,420 in 2020 and 2025, respectively. Full Alluvial well capacity is restored by 2030 per groundwater treatment and implementation plan (Kennedy Jenks 2021). As discussed, this interim reduction in supply does not result in an overall supply shortfall.
- (b) Based on forgone pumping capacity of 5,950 for well 201 and 205 per Table 4-8C (provided in the 2020 UWMP and at total pumping capacity of 23,930 AFY (14,980 existing capacity + 5,950 of recovered capacity). As discussed, this interim reduction in supply does not result in an overall supply shortfall.

4.7 Review of Pending Water Quality Permitting for Saugus Wells

Based on the anticipated process for water quality permitting and current status, this section provides information supporting the proposed timeline for operation of existing Saugus wells 201, 205, and future additional Saugus wells (Saugus 3 and 4, Saugus 5 and 6, and Saugus 7 and 8) following DDW water quality permitting requirements as summarized in Table 4-3.

TABLE 4-3 ANTICIPATED SCHEDULE FOR PERMITTING AND OPERATION OF SAUGUS WELLS

Well Status	Treatment Status	DDW Permit Requirements	DDW Permit Status	Anticipated Schedule
201	Existing and operating (discharge to surface water) Perchlorate treatment since 2017	97-005 Process Memo	-	- 2021: CEQA - December 2021: Treatment design completed - Q12022: draft 97-005 documentation sections 1-5 and sequential DDW review/approval - 3Q2022 – 4Q2023: System construction - 3Q-4Q2023: Startup testing and submittal of testing data to DDW - 1Q2024: DDW review and approval of 97-005 draft documentation and ancillary documents - 2Q2024: Water supply permit application - 3Q2024: Public Hearing - 4Q2024: Water supply permit application Amended Water Supply Permit and Operation (as applicable)

Well	Well Status	Treatment Status	DDW Permit Requirements	DDW Permit Status	Anticipated Schedule
205	Existing and not operating	Preliminary design complete	97-005 Process Memo	-	<ul style="list-style-type: none"> - 2022: CEQA - 2022: Treatment design - 2023: draft 97-005 documentation sections 1-5 and sequential DDW review/approval - 1Q2023 – 1Q2024: System construction - 1Q-4-Q2024: Startup testing and submittal of testing data to DDW - 1Q2024-2Q2024: DDW review and approval of 97-005 draft documentation and ancillary documents - 1Q2024-Q22024: Water supply permit application - 3Q2024: Public Hearing - 4Q2024: Water supply permit application Amended Water Supply Permit and Operation (as applicable)
Saugus 3 and 4	Designed and drilling pending DDW permit	Not applicable, it is anticipated that technical documents to address some elements of 97-005 process memo may be required by DDW because of proximity of abandoned oilfield but	Drinking Water Source Assessment Plan	-	<ul style="list-style-type: none"> - 4Q2021-2Q2022: Draft Drinking Water Source Assessment Plan and DDW review and drilling approval - Q12022-Q2022 CEQA - 3Q2022 – 3Q2024: Well installation and testing - 2025: Amended Water Supply Permit

Well	Well Status	Treatment Status	DDW Permit Requirements	DDW Permit Status	Anticipated Schedule
		treatment will not be required			
Saugus 5 and 6	Locations identified and secured	Anticipated not applicable	Drinking Water Source Assessment Plan	- Pending draft Drinking Water Source Assessment Plan and DDW review (anticipated that wells are not subject to Process Memo 97-005) - Pending CEQA	- 2022-2023: Draft Drinking Water Source Assessment Plan, and DDW review and drilling approval - 2023: CEQA - 2024: Wells installation and testing - 2025-2027: Amended Water Supply Permit
Saugus 7 and 8	Locations TBD	Anticipated not applicable	Drinking Water Source Assessment Plan	- Pending draft Drinking Water Source Assessment Plan and DDW review (anticipated that wells are not subject to Process Memo 97-005) - Pending CEQA	- 2021-2023: Location identifications - 2024 Draft Drinking Water Source Assessment Plan and DDW review and drilling approval - 2024: CEQA - 2025-2026: Wells installation and testing - 2027-2030: Amended Water Supply Permit
N-Well	Existing and Operating	Treated for PFAS since 2020	Operating Permit Amendment	- Processing Amendment to Operating Permit to include perchlorate treatment at the existing PFAS Treatment Facility	- 2022: Operating Permit Amended

4.7.1 Process Memo 97-005 Requirements

Operation of Saugus wells 201 and 205 for drinking water supply will require an amended Water Supply Permit subjected to Process Memo 97-005 for direct domestic use of extremely impaired sources. Based on the revised Process Memo 97-005-R2020 issued by DDW in September 2020, the following studies and documents are required prior to DDW issuance of the water supply permit:

- Process Memo 97-005 documentation, including the following elements:
 - Drinking Water Source Assessment and Contaminant Assessment
 - Full Characterization of Raw Water Quality
 - Drinking Water Source Protection
 - Effective Treatment and Monitoring
 - Evaluation of Human Health Risks Associated with the Failure of the Proposed Treatment
 - Operations Maintenance and Monitoring Plan
- CEQA documentation
- Water supply permit application
- Treatment facility compliance/startup testing plan
- Startup testing data and documentation
- Public hearing

The process outlined by DDW in the revised Process Memo 97-005-R2020 is as follows:

- The water purveyor prepares and submits draft Process Memo 97-005 documentation sections to DDW
- DDW review and provide written approval of the draft Process Memo 97-005 documentation sections sequentially
- The water purveyor completes startup testing of the treatment facility and submits testing data for DDW review and approval
- The Process Memo 97-005 documentation is deemed complete by DDW, including written approval of each section
- The water purveyor applies for an amended Water Supply Permit
- The Process Memo 97-005 documentation and ancillary documents are provided for public review
- DDW and the water purveyor hold a public hearing
- DDW determine whether to issue the amended Water Supply Permit for the extremely impaired source

The anticipated schedule for operation of the Saugus wells has been determined based on the requirements and process outlined above and the current status.

4.7.2 Existing and Future Saugus Wells

4.7.2.1 Saugus Well 201

SCV Water had completed the draft Process Memo 97-005 documentation for Saugus well 201, including collection and documentation of operational data since the system started operating with discharge to surface water in 2017, however a review of submitted information in light of SCV Water's decision to incorporate VOC treatment is underway. While CEQA has been

completed for the original project, supplemental documentation may need to be provided to DDW for the additional VOC treatment for the well. Well 201 is anticipated to return to service in 2024.

4.7.2.2 Saugus Well 205

Well 205 is located in the vicinity of Well 201, and evaluation of the anticipated capture zone under different operating conditions has been completed (GSI and LSCE 2014). Because of the close proximity of Well 205 to Well 201 and the similarity of the anticipated wellhead treatment, it can be assumed that significant portions of the draft Process Memo 97-005 documentation for Well 201 will be applicable to Well 205, including:

- Drinking Water Source Assessment and Contaminant Assessment
- Drinking Water Source Protection
- Effective Treatment and Monitoring
- Operations Maintenance and Monitoring Plan

The preliminary design for the treatment system is complete and the final design is anticipated to be completed by the end of 2022. Following completion of the final design, it is anticipated that SCV Water will prepare the draft Process Memo 97-005 documentation in 2023 in close collaboration with DDW, including sequential review of draft sections and requirement of written approval. Treatment system construction and testing is anticipated in 2023-2024, and completion of Process Memo 97-005 documentation, DDW review, and public hearing is anticipated in 2024.

4.7.2.3 Saugus Wells 3 and 4

Sites for Saugus wells 3 and 4 have been identified and secured. The sites are located within approximately 2,500 feet of abandoned oilfield wells. SCV Water has been in communication with DDW about these well locations. Based on these communications and the descriptions of “extremely impaired source” in the revised Process Memo 97-005-R2020, it is not anticipated that Saugus wells 3 and 4 will be subject to Process Memo 97-005. SCV Water has provided the following information to DDW to confirm this assumption:

- Description of the local hydrogeology and drinking water well design information
- Drinking Water Source Assessment Plan
- Water quality data from monitoring wells located within the anticipated capture area

Drilling approval has been given by DDW, well installation and testing are anticipated in late 2022-early 2024 with permits in late 2024. Wells are anticipated to return to service in 2025.

4.7.2.4 Saugus Wells 5 and 6

Sites for Saugus wells 5 and 6 have been identified and secured in the Castaic Junction area. Based on the descriptions of “extremely impaired source” in the revised Process Memo 97-005-R2020, it is not anticipated that Saugus wells 5 and 6 will be subject to Process Memo 97-005. Similar to Saugus wells 3 and 4, it is anticipated that SCV Water will provide the following information to DDW prior to well installation:

- Description of the local hydrogeology and drinking water well design information
- Drinking Water Source Assessment Plan
- Water quality data from monitoring wells located within the anticipated capture area

Following review and drilling approval by DDW, well installation and testing are anticipated in 2027.

4.7.2.5 Saugus Wells 7 and 8

Sites for Saugus wells 7 and 8 have not been identified. Therefore, the schedule for operation of those wells for drinking water supply is anticipated for 2030.

4.7.2.6 N-Well

SCV Water is in the process of having the Operation Permit for the existing PFAS Treatment Facility for the N-Well amended by DDW to include monitoring and language to include perchlorate treatment. The current ion exchange treatment for PFAS treats for perchlorate as well and only minor operational changes are needed. There will be no changes to the Facility.

4.8 Potential Effects of Climate Change

A topic of increasing importance for water planners and managers is climate change and the potential impacts it could have on California's future water supplies. With a range of potential scenarios and impacts, climate change increases uncertainty of future demand conditions and local and imported water supply conditions thereby posing additional water management challenges.

California is described as one of the most "climate-challenged" regions in North America, in the Fourth Climate Change Assessment (Climate Assessment)(<https://nca2018.globalchange.gov/>), completed in 2018 in coordination with the CEC, CNRA and State Office of Planning and Research. This Climate Assessment includes updated climate projections and supports findings that the State will experience greater impacts from climate change in the future, including shifting hydrology. Among the technical reports prepared for the Climate Assessment is a report on the *Mean and Extreme Climate Change Impacts on the State Water Project* (Wang et al., 2018).

Primary climate change impacts projected by global climate models to impact the State and Santa Clarita Valley region include warming air temperatures and changes in precipitation patterns, with more frequent and intense heavy precipitation events on the one hand and more frequent and more severe droughts on the other hand, among other impacts. While studies related to the region are conclusive regarding the anticipated increase in extreme events, there is disagreement whether average precipitation changes will be towards wetter or drier conditions. Impacts outside the Santa Clarita Valley, but nevertheless of high importance include rising sea levels and declining snowpack. These conditions impact the availability and reliability of both local and imported water supplies.

Recent findings indicate that higher temperatures will lead to dryer conditions, and an increased occurrence of dry years and multiple dry years resulting in more frequent and more intense droughts. Drought risks are anticipated to be some of the greatest vulnerabilities to water supplies and demands, resulting in among other things reductions in groundwater recharge, reduced runoff, and surface water flows, and reduced local and imported water supply reliability. Additionally, warmer temperatures and changes in precipitation patterns are anticipated to result in increasing water needs as discussed in the following reports:

- Upper Santa Clara River Integrated Regional Water Management Plan
- City of Santa Clarita Climate Action Plan
- Los Angeles Countywide Sustainability Plan
- State Water Project Delivery Capability Report
- California's Fourth Climate Change Assessment
- SCV-GSA Groundwater Sustainability Plan

Climate Change was incorporated into the 2020 UWMP and reflected in this WSA. To accomplish this, an estimate of how 2050 climate is likely to differ compared to baseline normal climate. These estimates are obtained from the climate change scenarios and supporting data that DWR has made available for assessing groundwater basin sustainability to support implementation of the Sustainable Groundwater Management Act (SGMA). This is the same information that GSI Water Solutions used in preparing the GSP. (GSI Water Solutions, Inc. (2020) and the development of a Numerical Groundwater Flow Model for the Santa Clara River Valley East Groundwater Subbasin. These estimates were selected to remain consistent with climate change scenarios used for evaluating supply impacts as recommended by the DWR UWMP Guidebook. Climate change conditions for SWP supplies were incorporated consistent with DWR's 2019 SWP Delivery Capability Report.

Section 2 of the 2020 UWMP present demands used in this WSA. A more detailed discussion regarding demand development including climate change can be found in UWMP's Appendix F: Population and Demand Technical Memorandum (Maddaus) with the climate change methodology presented in Appendix F of the Maddaus report.

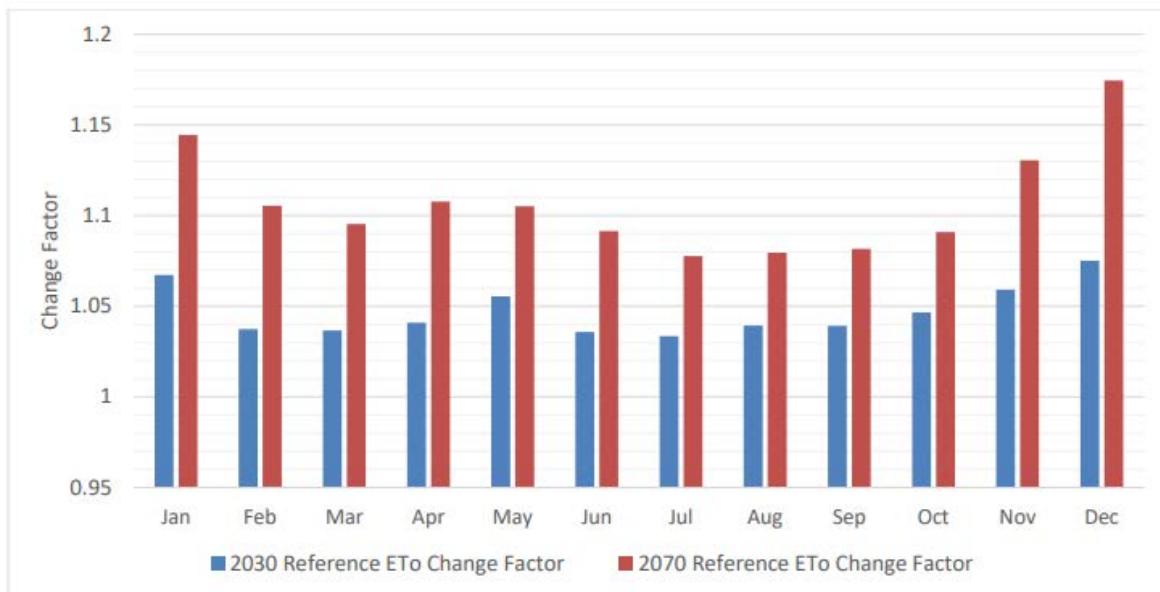
The approach uses the Department of Water Resources (2018a) Guidance for Climate Change Data Use During Groundwater Sustainability Plan Development. In the resource, DWR provides downscaled, gridded information about expected percentage changes in reference ETo and precipitation for two different time horizons (i.e., year 2030 and 2070). Each grid is roughly 6 kilometers by 6 kilometers in area, allowing for a granular assessment of local conditions. These change factors are derived as the average of 20 climate model predictions for each horizon year. These 20 climate models were selected by DWR's Climate Change Technical Advisory Group in 2015 as best representing California.

The gridded change factors are provided as a climatological time series by month and year between 1915 and 2011. It is meant to capture how historical weather during the 1915-2011 period in a grid would have been different under expected climate conditions in 2030 and 2070. This format allows groundwater modelers to simulate water budgets under alternative scenarios, such as actual historical weather, or historical weather modified by the change factors to reflect expected 2030 or 2070 weather conditions.

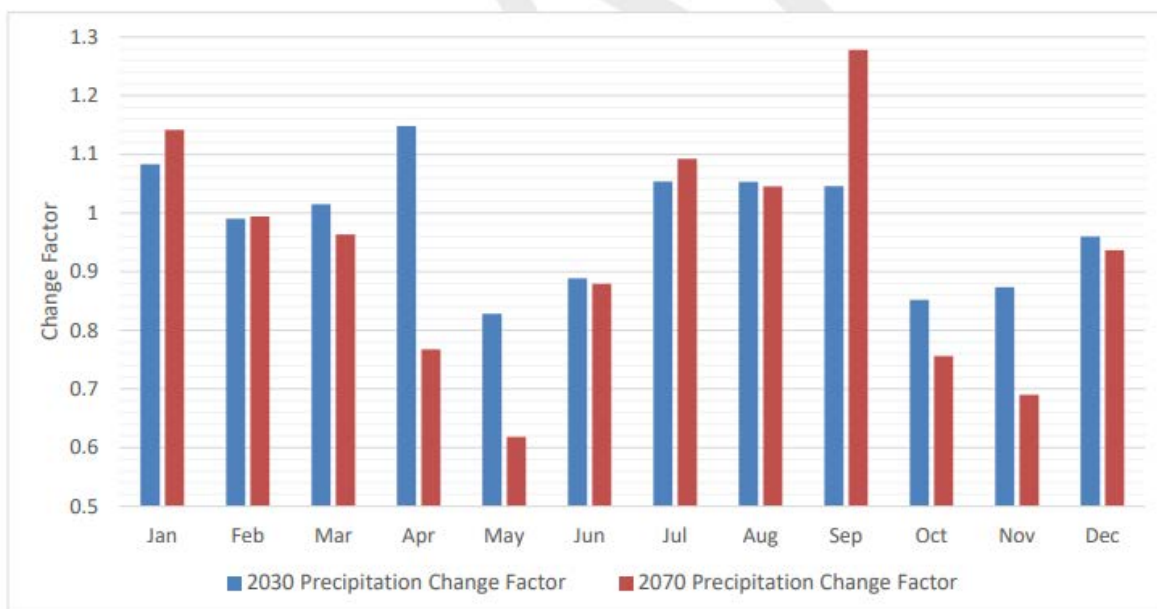
This simulation approach preserves historical inter-annual weather variability, allowing for an apples-to-apples comparison across the simulation of alternative scenarios. To capture expected future weather conditions in the Santa Clarita Valley, change factors for reference ETo and precipitation were downloaded for the two grids that cover the SCV Water service area and averaged.

Figure 4-1 shows monthly factors by which reference ETo is expected to be relatively higher in both the year 2030 and year 2070. Figure 4-2 shows the same for precipitation. Change factors are multipliers; thus, a factor of 1.0 would mean no change.

**FIGURE 4-1
MONTHLY DISTRIBUTION OF ETo COMPARED TO BASE LINE**



**FIGURE 4-2
MONTHLY DISTRIBUTION OF PRECIPITATION COMPARED TO BASELINE**



These climate change factors suggest that the monthly reference ETo in the Santa Clarita Valley is expected to be higher by approximately 5% in 2030, and 10% in 2070. Although by 2070, winter months would have experienced sharper warming than other months. With respect to precipitation, climate change is not expected to have much effect on the primary rainy months in the Santa Clarita Valley (December-March).

Overall, climate change is expected to have a more material impact on reference ETo than precipitation. To develop a climate change scenario that represents the land-use analysis' endpoint of 2050 the change factors for 2030 and 2070 were averaged since the midpoint of this period coincided with 2050.

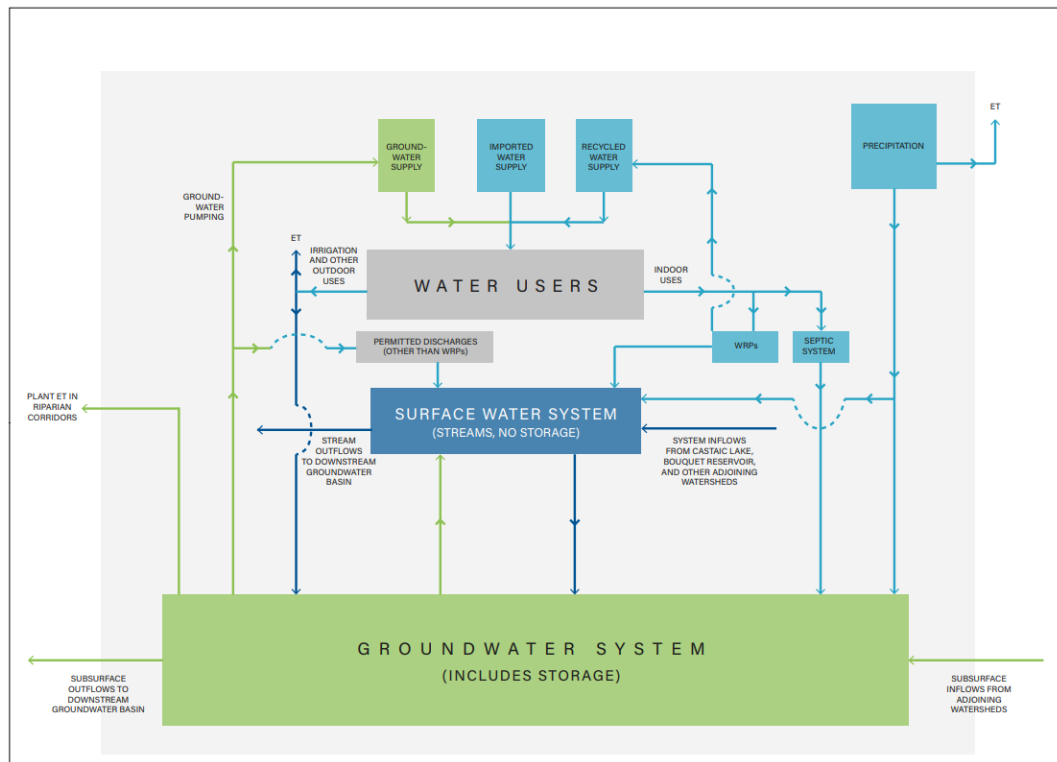
This exercise yielded 12 monthly change factors each for reference ETo and precipitation. The econometric demand model was constructed at a monthly time step and used reference ETo and precipitation to model the impact of weather. These change factors were fed into the demand study's econometric model to forecast what demand would have been in demand study's base period of 2018 and 2019. The difference worked out to a projected increase of 3.77% on total production. This is lower than the increase in ETo as this increase is only applied to outdoor water use not to interior water use.

This climate change increase in demand is expected to arrive gradually over time, essentially starting with a 0% impact in 2020 rising to 3.77% in 2050. Between these two bracketing years (2020 and 2050) the impact of climate change is layered linearly on to the baseline demand forecast.

Both Groundwater and State Water Project water are impacted by climate change and these impacts are described below.

Groundwater

As described in Section 6 of the GSP, it incorporates several water balance analyses with three climate conditions, existing conditions, 2030 conditions, and 2070 conditions. These analyses incorporate the changes in ETo and precipitation that are identified above. Section 6 and Appendix I of the GSP documents how various components of water balance analyses interact with changes in ETo and precipitation. As demonstrated in the following diagram these interconnections are relatively complex.



Changes in precipitation impact both surface and groundwater systems. Changes in ETo impact water needed by water users for irrigation as well as water used by Riparian Corridors. At the same time increases in imported supplies have the potential to increase flows to reclamation plants and discharges into surface water and the transfer of surface water to groundwater. The GSP utilized a numeric groundwater flow model (MODFLOW-USG) to account for these interactions and determine if the basin was being operated in a manner that resulted in the chronic lowering of groundwater levels or groundwater storage.

The projected water budgets, in Figures 6.1-9 through 6.1-11 in the GSP, show that the cumulative change curve for groundwater storage may shift slightly downward with climate change, the onset of slightly reduced precipitation and greater ET in the Basin. However, chronic declines in groundwater levels are not projected to occur over long periods, which indicates that SCV Water’s operating plan for the Basin is unlikely to cause an overdraft condition in the local groundwater system (i.e., it is unlikely to exceed the basin yield) in the future under the assumed climatic conditions.

State Water Project Supplies

To determine water supplies available from the SWP, SCV Water relies on computer modeling performed by DWR and reported in the DCR. The 2019 DCR was the basis for SWP supplies reported in the 2020 UWMP. While the Draft 2021 DCR became available on December 31, 2021, it does not contain updated information on future SWP water supply availability. In absence of updated information use of the 2019 data continues to represent the most appropriate estimate future SWP availability.

To evaluate SWP supply availability under future conditions, the 2019 DCR included a model study representing hydrologic and sea level rise conditions in the year 2040. The future condition study used all of the same model assumptions as the study under existing conditions, but reflected changes expected to occur from climate change, specifically, projected temperature and precipitation changes centered around 2035 (2020 to 2049) under a higher emissions assumption and more conservative (45 cm) sea level rise. For the long-term planning purposes of this WSA and the 2020 UWMP, the long-term average allocations reported for the future conditions study from 2019 DCR is the most appropriate estimate of future SWP water supply availability.

The following text from the 2019 DCR Appendix B: Future Condition with Climate Change and 45 cm Sea Level Rise Scenario, provides a more thorough explanation on development of the 2040 modeling conditions.

The DCR 2019 Future Conditions scenario uses the same climate change hydrology inputs of the Incidental Take Permit (ITP) climate change studies. ITP climate change scenario was developed centered around 2035 (2020-2049). This is the best available climate change input hydrology to be used for DCR planning horizon (year 2040). DWR (2020) explains how the climate change projections conditions were developed:

“The climate projections were derived from the ensemble of 20 Coupled Model Intercomparison Project 5 (CMIP5) global climate projections selected by the California Department of Water Resources (DWR) Climate Change Technical Advisory Group (CCTAG) as the most appropriate projections for California water resources evaluation and planning (DWR CCTAG, 2015). The 20 climate projections, selected by CCTAG, were generated from 10 global climate models run with two emission scenarios, one optimistic (Representative Concentration Pathway [RCP] 4.5) and one pessimistic (RCP 8.5), identified by the Intergovernmental Panel on Climate Change (IPCC) for the Fifth Assessment Report (AR5) (2014).”

Two Sea Level Rise (SLR) projections were evaluated before establishing the final Future Conditions SLR. Below, we explain how the final Future Conditions SLR was selected between the 1 foot (ft) and 1.5 ft SLR projections. The Ocean Protection Council released the latest Sea-Level Rise Guidance in 2018 (OPC 2018). Table B-1 (OPC 2018) presents the three levels of risk aversion: low, medium-high, and extreme. The DCR 2019 scenarios included SLR projections in between: medium (1ft SLR) and near-high risk (45 centimeter or 1.5 ft SLR) which are summarized in Table B-2. The high emissions, 2040 row (Table B-1) was selected because of the 20-year “project lifespan” of DCR Future Conditions scenarios and due to the Incidental Take Permit’s March 31, 2040, expiration date. The 1.0 ft SLR has a 1-in-20 chance or 5% exceedance probability while the 45 cm (1.476 ft) SLR has less than 0.5% exceedance probability (Table B-2).

Table B-1. Projected SLR (ft) for San Francisco (OPC 2018)

		<i>Probabilistic Projections (in feet) (based on Kopp et al. 2014)</i>			
		MEDIAN	LIKELY RANGE	1-IN-20 CHANCE	1-IN-200 CHANCE
		<i>50% probability sea-level rise meets or exceeds...</i>	<i>66% probability sea-level rise is between...</i>	<i>5% probability sea-level rise meets or exceeds...</i>	<i>0.5% probability sea-level rise meets or exceeds...</i>
				Low Risk Aversion	Medium - High Risk Aversion
High emissions	2030	0.4	0.3 - 0.5	0.6	0.8
	2040	0.6	0.5 - 0.8	1.0	1.3

Table B-2. DCR 2019 Preliminary Future Conditions (1 ft and 1.5 ft SLR projections for High Emissions, 2040)

Aversion projection (High emissions, 2040)	SLR (ft) projection
Low risk	0.8
Medium risk (DCR 19 1 ft SLR)	1.0
Medium-high risk	1.3
High risk (DCR 19 1.5 ft SLR)	1.476
Extreme risk	1.8

Between the 1 ft and 1.5 ft SLR, the 1.5 ft SLR Future Conditions scenario was chosen after feedback from management and some State Water Project Contractors.

The Appendix further provides annual water allocation for the period from 1922 through 2003. The model results in the 2019 DCR reflect a reduction in average SWP water supplies for 2020 conditions of 58% to future conditions average reliability of 52%. As discussed in Section 3.2.7 supply values between 2020 and 2040 are interpolated between these values and supplies beyond 2040 are assumed to be the same as 2040. Further the climate adjusted annual water allocation information for 2040 was used in SCV Water’s 2020 Updated Water Reliability Report.

4.9 Pending Water Use Efficiency

Recognizing the water supply challenges that California faces moving forward, in 2018, two policy bills were enacted by the California Legislature, Assembly Bill 1668 (AB1668, Friedman) and Senate Bill 606 (SB606, Hertzberg). Provisions of this legislation provide for the setting of long-term water efficient standards for 1) indoor residential use, 2) outdoor residential use, 3) outdoor irrigation used from dedicated irrigation meters and equivalent for large commercial, industrial, and institutional (CII-DIM) use, 4) water loss, 5) certain variances and incentives for potable reuse. Further, water users will be required to establish urban water use objectives no later than January 1, 2024, incorporating these standards.

Regarding indoor residential water use, DWR is tasked in coordination with the SWRCB to conduct studies and prepare a report to the legislature with recommendations to potentially

revise existing standards. This report, “Results of the Indoor Residential Water Use Study,” pursuant to Water Code Section 10609, has been submitted to the Legislature. It recommends the current standards be adjusted as indicated in the following Table 4-4.

TABLE 4-4 RECOMMENDED INDOOR WATER USES STANDARDS

Year	Current Standard (GCPD)	Recommended Standard (GCPD)
2020	55	55
2025	52.5	47
2030	50	42

As interior water use is the source of future recycled water, this has implications regarding availability of this water source. As previously discussed in Section 3, SCV Water intends to develop recycled water supplies from new development. As detailed in the Maddaus Water Demand Study, it was assumed interior water use of 50 gcpd. The recommended standard represents a 16% reduction in the availability of new recycled water supplies or from 8,511 to 7,149 AFY. When added to the existing 450 AFY this totals 7,599 AFY, a potential reduction of 912 AFY or about 1% of total water demand.

On the other hand, provisions of the legislation concerning irrigation water use efficiency will likely offset this potential reduction in supply. Under the legislation, DWR is to conduct studies and make recommendations to the SWRCB regarding outdoor water use and variances and incentives and the SWRCB shall adopt standards by June 30, 2022. The legislation specifically calls for outdoor water use standards to incorporate the principles of the MWELo (Model Water Efficient Landscape Ordinance). This will have implications for both existing and future water users.

Regarding future water users, the 2020 UWMP based future outdoor water use on MWELo plus an overwatering factor. As noted in Appendix F of the 2020 UWMP, exterior water demands for future development are based on 2015 MWELo plus 25.6% overwatering factor. This increase in exterior water use was based on a technical study that compared actual irrigation demand from properties developed after 2015 MWELo took effect. (2020 UWMP Appendix F – Population and Demand Technical Memorandum, Maddaus, April 2021 Appendix F – (Residential and Non-Residential outdoor Water Use Study pg. 11). Overall water demand attributed to new users is approximately 30 TAF and 60% of which is for outdoor water. Thus, assuming SCV Water adopts measures and or regulations that require future customers to meet MWELo requirements, water demands would be reduced by approximately 3,800 AFY. This more than offsets the reduction in supply of 1,362 AFY.

Determining the application of the MWELo principles relating to existing customers outdoor water use will be more complex. This involves producing credible data to determine landscape area while accounting for the age of existing installations and its inherent limits of design efficiency, along with a number of other factors. A draft report has been released to the stakeholders for comments but at this time DWR has not produced its report on outdoor water efficiency standards. SCV Staff following this process anticipate application of expected standards will likely require further reductions in outdoor water use.

Thus, while changes in efficient water use requirements may result in the shifting of the resource mix used to achieve water reliability standards it does not appear that such changes

would result in a less reliable water supply portfolio. Refinement of water use efficiency standards and the implied reductions in demand will be forthcoming, however, until a more thorough analysis can be conducted, it is reasonable and likely conservative to use the assumptions in the 2020 UWMP for conservation and recycled water.

4.10 Water Supply Reliability Modeling

SCV Water's strategy for achieving water supply reliability has involved the development of a diverse water supply portfolio that can accommodate the variability of wet and dry-periods endemic to California's climate. The variability in SWP supplies has the largest effect on overall supply reliability. In any given year, SWP supplies may be reduced due to dry weather conditions or regulatory factors. During such an occurrence, the remaining water demands in the SCV Water service area would be met by SCV Water's diverse alternate water supplies. The alternate supplies that would make up for any reductions in SWP supplies include a combination of supplies, such as return water from SCV Water's water storage accounts in the Semitropic Groundwater Storage Bank and the Rosedale-Rio Bravo Water Banking and Exchange Program, deliveries from SCV Water's flexible storage account in Castaic Lake Reservoir, local groundwater pumping from the Saugus Formation, short-term water exchanges, and participation in DWR's dry-year water purchase programs, among other sources. The diversity of such alternative supplies adds to the reliability because factors that may impact one supply source, such as drought, may not directly impact other sources, such as banked water.

The available water supplies and demands for SCV Water's service area were analyzed in the 2020 UWMP to assess the region's ability to satisfy demands during the following variable periods: (1) an average water year; (2) a single-dry year; and (3) multiple-dry years. The 2020 UWMP summary tables demonstrate that existing and planned supplies are available and sufficient to meet existing and projected demand under all such conditions for the projected planning period through 2050. The analysis also accounts for the water needed to serve the Project because SCV Water included the Project demand in SCV Water's current and projected water deliveries data provided as part of the adopted 2020 UWMP. Furthermore, the 2020 UWMP concludes that SCV Water's current and proposed groundwater supplies from the Alluvial Aquifer and the Saugus Formation are sustainable, and that current and future pumping levels, when combined with non-purveyor pumping, for average year, single-dry year, and multiple-dry years, remain within the basin yield.¹²

In addition to the above-mentioned UWMP reliability assessment, SCV Water periodically updates its Water Supply Reliability Plan (Plan) to identify current and future storage capacity and emergency storage needs and options for managing its water supplies. The 2019 Water Supply Reliability Plan Update (Geosyntec 2021) is the most current Plan.

This Plan evaluates six supply scenarios driven by varying assumptions regarding projected local supply availability and reliability, with each supply scenario evaluated against two demand sets (projected demands with and without active conservation).

The Plan uses an analytic spreadsheet model developed for SCV Water by MBK Engineers and updated by Geosyntec Consultants in 2021 to assess the reliability of SCV Water's water supplies. The model performs annual water operations for the SCV Water service area over a specified study period (2021 through 2060), using projected increases in demands to reflect the

¹² 2020 UWMP, p. 7-2.

uncertainty in the hydrology over this period, using supplies that would be available under multiple hydrologic sequences. For each hydrologic sequence, the model steps through each year of the study period, comparing annual supplies to demands and operating SCV Water storage programs as needed, adding to storage in years when supplies exceed demand, and withdrawing from storage when demand exceeds supplies. Results from the multiple hydrologic sequences are then compiled and summarized to provide a statistical assessment of the reliability of SCV Water's supplies and storage programs to meet its projected demands over the study period.

In addition to the hydrologic reliability of the Santa Clarita Valley's overall water supply, the Plan also discusses the physical reliability of the water delivery system in place to deliver its groundwater, imported water, and recycled water supplies. Deliveries of these supplies are dependent on an extensive network of SWP facilities used to pump, store, and convey SWP and other imported supplies, and SCV Water and purveyor facilities to treat, pump, and distribute supplies. Supply delivery can be interrupted or constrained in a number of ways, and the Plan includes an assessment of the ability to meet demands during an extended 12-month outage.

For this Plan update, the study period analyzed is 2021 through 2060 (which is 10 years after the assumed development buildout in the SCV Water's service area assumed in the 2020 Urban Water Management Plan (UWMP)). The analysis starts with a Base Scenario and evaluates five additional scenarios, with and without active conservation. This analysis builds on information contained in the 2019 DWR DCR as it incorporates 2040 climate change conditions discussed above in this Section and uses the same hydrologic sequence from the CALSIM 2 model. A further description of the model and the scenarios are contained in Section 7.45 of the 2020 UWMP and the 2019 Plan.

The reliability analysis conducted in the Plan is more rigorous and conservative than that contained in the 2020 UWMP and in Section 5.1. The Plan models the operation of SCV Water's supply portfolio through the full 82-year historical hydrologic period and incorporates projected storage balances when determining the quantity of water available from a banking program to meet water demands during dry periods. Further, while UWMP Section 5.2 incorporated a gradual decline in SWP reliability between 2020 and 2040 due to climate change, the Plan's modeling is based on SWP hydrology adjusted to reflect 2040 climate change, being applied to all years in the study period.

These scenarios represent 12 different views of future supply situations. Each supply scenario is evaluated in the Plan to determine the reliability of that scenario in meeting projected demands in SCV Water's service area. The reliability for all future scenarios (1 through 5) is greater than 95 percent.

The Plan analyzed various scenarios, which analyses can be used to answer several questions including:

1. How long current facilities could be relied upon to achieve reliability?
2. If the mix of existing and proposed facilities in the UWMP achieved reliability through 2050?

3. If certain future facilities were not constructed, (specifically some or all of the new Saugus Formation wells were either not constructed or otherwise unavailable) would alternative programs that SCV Water is investigating be able to achieve reliability?

A summary of the scenarios studied are shown in Table 4-5.

TABLE 4-5 VARIOUS SCV WATER SUPPLY SCENARIOS

	Base	1	2	3	4	5
Alluvial Pumping	✓	✓	✓	✓	✓	✓
Existing Saugus	✓	✓	✓	✓	✓	✓
SWP and BVERRB	✓	✓	✓	✓	✓	✓
Existing Banking Programs	✓	✓	✓	✓	✓	✓
Saugus Wells 3 and 4		✓	✓	✓		
Saugus Wells 5 - 8		✓				
New Rosedale Bank Capacity		✓	✓	✓	✓	
Sites Reservoir				✓	✓	✓
AVEK High Desert Bank			✓		✓	✓
McMullin GSA Aquaterra Bank						✓

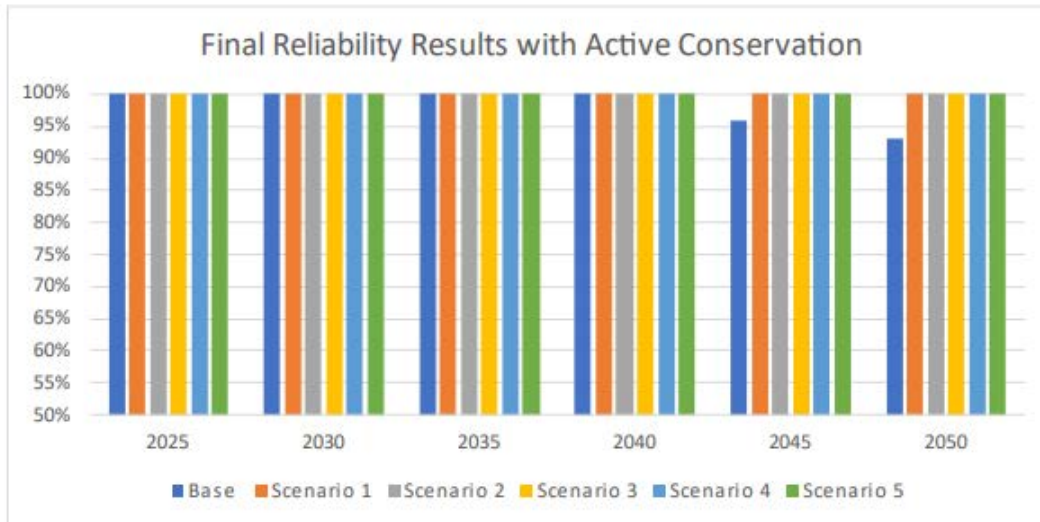
The Base represents those elements of the SCV Water’s portfolio that currently exist. This includes existing and restored groundwater supplies. As the analysis moves through the study period restoration of well capacity temporarily taken out for water quality concerns takes place consistent with Table 4-6B, Table 4-6C, Table 4-8B, and Table 4-8C in the 2020 UWMP. Imported supplies include SWP supplies based on 2040 climate conditions pursuant to DWR’s CALSIM modeling for the 2019 Delivery Capability Report, the firm Buena Vista Rosedale Transfer, and if necessary, in dry years, SWP Flexible Storage, Nickel Water (after 2035), Yuba Accord water. The Base case also includes the existing banking programs, specifically existing Rosedale Banking supplies at the existing 10,000 AFY of recovery, SCV Water Semitropic and access to the Newhall Land and Farming withdrawal capacity (after 2035), that are drawn on during years when the other previously mentioned supplies are insufficient to meet demands.

Scenario 1 adds Saugus Formation wells 3-8 and 10,000 AFY of additional extraction capacity from the Rosedale Banking Program as provided for in the 2020 UWMP.

Scenarios 2-5 were designed to analyze if in the event of the removal of some or all future Saugus Formation Wells (and in one case the expansion of the Rosedale Bank) could reliability be achieved through other programs that SCV Water is considering participating in, specifically Sites Reservoir, AVEK’s High Desert Bank and the McMullin’s Aquaterra Water Bank.

Figure 4-3 summarizes the modeling results.

FIGURE 4-3 FINAL RELIABILITY RESULTS WITH ACTIVE CONSERVATION



With respect to the first question above, the analysis shows that current supplies (including recovered groundwater capacity) along with active conservation will be sufficient through at least 2040.

Regarding the second question, to achieve reliability in subsequent years, additional investments in those programs and facilities identified in the UWMP (Scenarios 1) would be sufficient to achieve reliability through 2050.

As to the third question, Scenarios 2-5 demonstrate that alternative programs to those contained in the UWMP could offer different paths to achieve reliability or if implemented in addition to the UWMP could provide additional supplies in excess of demand.

Conclusions

As discussed above, the analysis contained in the Plan represents a more robust and conservative analysis than that contained in the 2020 UWMP. Nevertheless, the conclusions related to the ability of SWC Water to reliably meet water demands are consistent. If SCV Water continues to implement active water conservation measures, conjunctively use its imported water, groundwater, and water banking facilities, and invests in future water supply facilities as identified in the 2020 UWMP it will reliably meet water demands in its service area through 2050. The ability to implement other alternative water supply programs identified in the Plan's analysis bolsters this conclusion as alternatives exist should some of the future water supplies identified in the 2020 UWMP become unattainable.

4.11 Water Conservation and Water Shortage Contingency Planning

Water supplies may be interrupted or reduced due to a number of factors, such as a drought which limits supplies, an earthquake which damages water delivery or storage facilities, a regional power outage, or a toxic spill that affects water quality. The 2020 UWMP describes in detail how SCV Water is responding to such water supply outages, reductions, and other emergencies so that customer needs are met adequately, promptly, and equitably. With the completion of the 2020 UWMP, SCV Water also completed a comprehensive Water Shortage Contingency Plan that outlines the states of action SCV Water will take depending on the severity of a particular shortage for each supply source available to SCV Water. In addition, prohibitions, penalties, and financial impacts of shortages have been developed by SCV Water and are summarized in both the 2020 UWMP and 2020 Water Shortage Contingency Plan.

In preparing this WSA, SCV Water considered the urban water shortage contingency planning analysis set forth in the 2020 UWMP and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the proposed Project, in addition to all existing and planned future uses in SCV Water's service area within the Santa Clarita Valley. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist.

Section 5: Water Supply Assessment

Consistent with the provisions of SB 610, neither this WSA nor its approval shall be construed to create a right or entitlement to water service or any specific level of water service, and shall not impose, expand, or limit any duty concerning the obligation of SCV Water to provide certain service to its existing customers or to any future potential customers.

The WSA does not constitute a will-serve, plan of service, or agreement to provide water service to the Project, and does not entitle the Project, Project Applicant, or any other person or entity to any right, priority or allocation in any supply, capacity, or facility. To receive water service, the Project will be subject to an agreement with SCV Water, together with any and all applicable fees, charges, plans and specifications, conditions, and any and all other applicable SCV Water requirements in place and as amended from time to time. Nor does anything in this WSA prevent or otherwise interfere with SCV Water's discretionary authority to declare a water shortage emergency in accordance with the Water Code.

SCV Water is implementing plans that include projects and programs to help ensure that the existing and planned water users within the Santa Clarita Valley have an adequate supply.

The analyses presented in the following tables verify the availability of water supply for the Entrada South and Valencia Commerce Center Project, in addition to all existing and planned future uses in the SCV Water service area over a 30-year horizon (exceeding the requirements of SB 610's 20-year planning horizon) in average/normal years, a single dry-year, and in multiple-dry years.

Furthermore, while not required by SB 610, as a conservative measure, this WSA demonstrates that sufficient water supplies will be available to meet the projected water demands associated with the proposed Project during normal, single-dry, and multiple-dry years over a 30-year horizon, in addition to existing and planned future uses (including agricultural, manufacturing, and industrial uses) throughout the entire Santa Clarita Valley.

5.1 Water System Operations and Reliability Planning

As discussed herein, SCV Water has implemented a number of projects that are part of an overall program to provide the facilities needed to ensure reliable imported and local water supplies during dry years. The program involves water conservation, surface and groundwater storage, water transfers and exchanges, water recycling, additional short-term pumping from the Saugus Formation, and increasing SCV Water's imported supply. This overall strategy is designed to meet increasing water demands while assuring a reasonable degree of supply reliability. Part of the overall water supply strategy is to provide a blend of groundwater and imported water to area residents to ensure consistent quality and reliability of service. The actual blend of imported water and groundwater in any given year and location in the Santa Clarita Valley is an operational decision and varies over time due to source availability and operational capacity SCV Water's facilities. The goal is to conjunctively use available water resources so that the overall reliability of water supply is maximized while utilizing local groundwater at a sustainable rate.

The available water supplies and demands for SCV Water's service area were analyzed in the 2020 UWMP to assess the region's ability to satisfy demands during the following variable periods: (1) an average water year; (2) single-dry year; and (3) multiple-dry years, which included an assessment of a five-year dry period. The supply and demand comparison tables 5-2, 5-3 and 5-4 (shown in Sections 5.1.1 to 5.1.4 below) utilize demonstrate that existing and planned supplies are available to meet existing and projected demand under all such conditions for the projected planning period through 2050. These tables are consistent with the 7-2, 7-3 and 7-4 in the UWMP with the exception that Table 5.2 reflects updated SWP Table A Amounts consistent with the DWR's 2021 Draft DCR and Planned Future and Recovered Groundwater supplies reflect the adjusted planning, construction and planning schedules as discussed in Section 3.3.2.3 Available Groundwater Supplies.

While many of the Santa Clarita Valley's available supply sources have some variability, the variability in SWP supplies has the largest effect on overall supply reliability. In any given year, SWP supplies may be reduced due to dry weather conditions, regulatory restrictions, or other factors. As discussed above, during such an occurrence, the remaining water demands in the SCV Water's service area are planned to be met by a combination of alternate supplies such as return water from SCV Water's accounts in the Semitropic Groundwater Storage Program and the Rosedale–Rio Bravo Water Banking and Exchange Program, deliveries from SCV Water's flexible storage account in Castaic Lake Reservoir, local groundwater pumping, short-term water exchanges, and participation in DWR's dry-year water purchase programs.

As stated in the 2020 UWMP, water supply reliability for SCV Water has improved significantly with the development of conjunctive use and groundwater banking. Conjunctive use is the coordinated operation of multiple water supplies to achieve improved supply reliability. During dry periods, or when imported water supply availability is reduced, banked water can be recovered from groundwater storage to replace, or firm up, the imported water supply deliveries. SCV Water has been conjunctively utilizing local groundwater and imported water since SWP water was imported to the Santa Clarita Valley beginning in 1980. SWP and other imported water supplies have supplemented the overall supply of the Santa Clarita Valley, which previously depended solely on local groundwater supplies.

Drought periods may affect available water supplies in any single year and even for a duration that spans multiple consecutive years. Hydrologic conditions vary from region to region throughout the state. Dry conditions in northern California affecting SWP supply may not affect local groundwater and other supplies in southern California, and the reverse situation can also occur (as it did in 2002 and 2003). For this reason, SCV Water has emphasized developing a water supply portfolio that is diverse, especially in dry years. Diversity of supply is considered a key element of reliability planning, giving SCV Water the ability to draw on multiple sources of supply to ensure reliable service during dry years, as well as during average wet years.¹³

Provided below is a summary of historical water supplies used by SCV Water along with updated water supply projections presented in the 2020 UWMP that also address certain information required under SB 610 for the proposed Project.

¹³ 2020 Santa Clarita Valley Water Report (June 2021).

**TABLE 5-1
SCV WATER HISTORICAL SOURCES OF SUPPLY (AFY)**

SOURCE	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 (preliminary)
Alluvial	26,186	25,593	21,431	24,683	19,333	15,244	9,424	14,030	9,049	7,571	14,067
Saugus	7,438	8,133	8,348	9,929	10,560	11,085	6,979	8,839	8,498	9,761	11,478
TOTAL GROUNDWATER	33,624	33,726	29,779	34,612	29,893	26,329	16,403	22,869	17,547	17,332	25,545
Recycled Water	373	428	400	474	450	507	501	352	458	468	480
SWP %	80%	65%	35%	5%	20%	60%	85%	35%	75%	20%	5%
SWP Deliveries to SCV Water Service Area(a)	20,445	36,153	33,126	13,097	15,196	31,888	47,912	36,835	41,111	14,871	10,934
Table A	10,713	24,657	4,692	451	11,075	29,647	32,422	12,411	37,503	11,551	1,081
Carryover	9,332	11,496	28,434	7,743	4,121	2,241	15,490	24,424	3,608	3,036	6,523
Article 21	400	0	0	0	0	0	0	0	0	0	0
Turnback Pool Water	0	0	0	0	0	0	0	0	0	0	0
Yuba	0	0	0	445	0	0	0	0	0	284	1,170
Other DWR coordinated transfers	0	0	0	34	0	0	0	0	0	0	194
Flex Storage Withdrawals	0	0	0	4,424	0	0	0	0	0	0	1,966
SWP Deliveries to Out of Service Area Storage/Exchange(b)	21,608	10,000	0	0	4,339	1,500	5,425	24,502	0	0	5,628
RRBWS Banking	1,006	6,031	0	0	0	0	0	0	0	0	0
Semitropic WSD Banking	0	0	0	0	0	0	5,340	0	5,002	0	0
Rosedale Exchange Program	15,602	3,969	0	0	0	0	0	0	11,000	0	0
WKWD Exchange Program	5,000	0	0	0	0	0	0	0	0	0	0
CCWA Exchange Program	0	0	0	0	0	1,500	0	0	0	0	0
AVEK Exchange Program	0	0	0	0	0	0	0	0	7,500	0	0
UWCD Exchange Program	0	0	0	0	0	0	0	0	1,000	0	0
Flex Storage Refill	0	0	0	0	4,339	0	85	0	0	0	1,966
Back up San Luis Storage	0	0	0	0	0	0	0	0	0	0	3,662
Withdrawals from Out-of-Service Area Storage/Exchange (b)	0	0	0	9,774	2,998	0	0	0	750	22,957	21,323
RRBWS Banking	0	0	0	2,824	2,998	0	0	0	0	1,600	16,323
Semitropic WSD Banking	0	0	0	0	0	0	0	0	0	5,000	5,000
Rosedale Exchange Program	0	0	0	0	0	0	0	0	0	14,451	0
WKWD Exchange Program	0	0	0	2,000	0	0	0	0	0	500	0
CCWD Exchange Program	0	0	0	0	0	0	0	0	750	0	0
NLF Semitropic Banking	0	0	0	4,950	0	0	0	0	0	0	0
AVEK Exchange Program	0	0	0	0	0	0	0	0	0	1,406	0
UWCD Exchange Program	0	0	0	0	0	0	0	0	0	0	0

Other Imported Deliveries to SCV Water Service Area(c)(d)	11,000	0	0	11,000	10,995	0	0	0	0	11,000	0	11,000	9,685
Other Imported Deliveries to Out-of-Service Area	2,188	19,569	28,629	0	0	11,000	11,370	5,062	10,282	0	0	0	1,315
Storage/Exchanged(d) or Water Sale													
Total Imported Supplies to SCV Water Service Area	31,445	36,153	33,126	33,871	29,189	31,888	47,912	42,835	42,961	48,828	42,961	48,828	41,942
Total Local and Imported Supplies Utilized in SCV Water Service Area	65,442	70,307	63,305	68,957	59,532	58,724	64,816	66,056	60,966	66,628	60,966	66,628	67,967
End of the year carryover supply (left over table A and carryover noted in text)	41,651	48,809	21,482	18,048	21,899	51,571	42,788	39,211	9,013	13,466	9,013	13,466	13,633

Sources: DWR Bulletin 132, Management of the California State Water Project; and DWR delivery files.

Notes:

- Includes deliveries of Table A supplies, carryover water, Article 21 water, Turnback Pool water, local supply (from West Branch reservoirs), Yuba Accord water and water purchased through DWR.
- Out-of-service area storage includes flexible storage refill in Castaic Lake, the SCV Water Semitropic Banking Program, NLF Semitropic Banking Program and the Rosedale-Rio Bravo Banking Program. Exchanges include programs with the Rosedale-Rio Bravo, West Kern Water District, Central Coast Water Agency, Antelope Valley East Kern, and United Water Conservation District.
- Deliveries from Buena Vista.
- Includes BVRRB water sales and deliveries to Devils Den service area. Also includes BVRRB deliveries to banking programs and exchanges, or San Luis backup storage.

5.1.1 Historical Operation of Santa Clarita Valley Water System

A review of the period from 2011 through 2021 is provided in Table 5.1. This table illustrates the previous discussion in this section. Add text with specific examples to support previous points in Section 5.1.

2011 was characterized as a wet year resulting in a high SWP Table A allocation of 80%. With wet conditions and surplus Table A water, SCV Water executed two 2:1 exchange programs totaling 20,602 AF and delivered 1,006 AF of water to be stored in the RRBWSD banking program in order to utilize as much water as possible for future years. Excess Table A and carryover supplies not utilized totaled 41,651 AF to be available as carryover in 2012.

2012 was characterized by an increase in water use attributed to unseasonably high temperatures and below normal rainfall in early 2012 resulting in a longer irrigation season. The water year ended up with average precipitation which resulted in a SWP Table A allocation of 65%. SCV Water started the year with 41,651 AF of Article 56 Carryover supply, of which 30,155 AF was reclassified due to reservoir levels filling up. With surplus water, SCV Water sold 16,500 AF of BVERRB water (annual supply plus banked supply) to West Kern County Agriculture Water Districts, banked 6,301 AF into RRBWSD banking program and further exchanged 3,969 AF in the RRBWSD 2:1 exchange program. SCV Water used 11,496 AF of carryover and ended the year with 2013 carryover supplies totaling 48,809 AF.

2013 was characterized with unseasonably high temperatures and below normal rainfall resulting in a lower SWP Table A allocation of 35%. The SCV Water service area grew rapidly in 2013 with 5% increased demands and 750 new service connections added. Imported carryover and Table A water were utilized to meet imported demands. 28,000 AF of supplies were sold to other agencies to bring in revenue and reduce loss of excess supplies. Even with previous years carryover water being reclassified due to wet hydrology, SCV Water was able to reserve 21,482 AF unused Table A into carryover for the start of 2014 in preparation of continued or worsening drought conditions.

2014 was characterized by extremely dry conditions locally and statewide resulting in a historically low SWP Table A allocation of 5%. To meet dry year imported demands SCV Water utilized 7,743 AF of carryover supplies, recovered 9,774 AF from banking and exchange programs, withdrew 4,424 AF from Castaic Flexible Storage, and received 445 AF from Yuba County Accord Water. In addition, state mandated conservation program regulations helped drive water demands down reserving 18,048 AF of unused carryover and Table A supplies for 2015 if drought conditions persisted.

2015 was characterized by a fourth year of drought with record high temperatures, record low precipitation and record low snowpack. 2015 was recorded as one of the driest and warmest winters since 1950 resulting in a SWP Table A allocation of 20%. In 2015 SCV Water entered into an agreement with Semitropic to participate in the Stored Water Recovery Unit (SWRU) as an additional source of dry-year water supply. SCV Water utilized Table A supply, carryover supply, BVERRB supply and recovered 2,998 AF from the RRB water banking program to meet imported demands. 4,339 AF of unused Table A supply were backfilled to the flexible storage account utilized in 2014. 2015 total unused carryover and Table A supplies available for 2016 totaled 21,892 AF.

2016 was characterized by average precipitation in northern California, an improvement to the previous four years of drought with enough precipitation to offset some of the large deficits in water storage reservoirs resulting in a SWP Table A allocation of 60%. SCV Water saw demands increase in 2016 from the easing of SWRCB emergency water conservation measures shifting from mandatory to voluntary. Imported demands were met with minimal carryover and Table A supplies. SCV Water exchanged 1,500 AF of Table A water and stored 5060 AF of BVRRB water into the Rosedale banking program. The remaining BVRRB supply was stored in San Luis reservoir and added to 2017 carryover supplies which totaled 51,571 AF at the end of the year.

2017 was characterized by the second largest statewide runoff and the end of the state's 5-year drought. 2017 snow water equivalent came in at 163% of April 1st average resulting in a large SWP Table A allocation of 85%. Of the 51,571 AF of carryover storage available in 2017, 15,490 AF was delivered to SCV Water service area and the rest was reclassified due to the wet hydrology. With surplus Table A SCV Water backfilled the remaining 85 AF to the Castaic flexible storage account and maximized deliveries to banking programs totaling 5,340 AF (storage space only available in Semitropic SWRU, RRBWSD program full). With plenty of Table A and carryover supplies, SCV Water sold BVRRB water supply to Kern County Westside Districts. Remaining Table A supplies totaled 42,788 in carryover for 2018.

2018 was characterized by dry conditions returning statewide with nearly all the state experiencing below-average precipitation and SCV Water receiving less than half its average annual precipitation. This resulted in a lower than average SWP Table A allocation of 35%. Imported demands were met with carryover and Table A supplies, with the remaining supplies being carried over into 2019 totaling 39,211 AF.

2019 was characterized by above average precipitation locally and statewide resulting in somewhat lower demands and an above average SWP Table A allocation of 75%. SCV Water started the year with 39,221 AF of Article 56 Carryover supply which 3,608 AF was delivered, and the remaining 35,603 AF was lost as a result of wet hydrology. The high allocation allowed for SCV Water to reduce local pumping of groundwater to maintain sustainable groundwater resources in dry-year and increase imported Table A deliveries to the service area. In addition, SCV Water executed three different 2:1 water exchanges with other State Water Contractors totaling 19,500 AF and delivered 5,000 AF to Semitropic SWRU banking reserves. Remaining unused Table A water was categorized as 2020 carryover supply totaling 9,013 AF.

2020 was characterized by below average precipitation locally and statewide resulting in higher water demands and a low SWP Table A allocation of 20%. SCV Water also faced an increased demand for imported water supplies due to significant loss of local groundwater wells impacted by updated regulations related to PFAS (Per and Polyfluoroalkyl Substances). Increased imported demands were met utilizing banking, exchanges, and transfer programs. The completion of the Drought Replacement Wells in 2019 at the Rosedale-Rio Bravo Water Banking Program (RRBWBP) increased recovery capacity from 3,000 AFY in 2014 and SCV Water was able to recover 16,501 AF from the RRB Banking and Exchange programs. An additional 5,000 AF was recovered from the Semitropic SWRU and 1,906 AF from exchange programs. SCV Water utilized 3,036 AF of 2020 carryover supplies, conserving unused carryover and Table A supplies for 2021 carryover which totaled 13,466 AF.

2021 was characterized as an extreme water year in terms of precipitation and temperature and ended up as California's second driest year on record based on statewide runoff resulting in a

second lowest SWP Table A allocation of 5%. Santa Clarita experienced its driest water year on record only receiving 3.38 inches of precipitation all year. SCV Water continued to be impacted by loss of local groundwater wells related to PFAS, but successfully completed combined treatment facilities for three major alluvial wells which came online in 2021 adding critically needed water to local supplies to meet demands. In addition to maximizing groundwater production, SCV Water recovered about 25,000 AF of water from imported banking programs, 1,364 AF from dry year transfer programs, and utilized 1,966 AF from the Castaic flexible storage account to meet imported demands. In preparation of continued drought conditions, only 6,523 AF of carryover supplies were used, the Castaic flexible storage account was refilled, and excess banking, transfer water and Table A supplies not needed to meet demands were reserved as carryover for 2022, totaling 13,633 AF.

5.1.2 Average/Normal Year Supplies and Demand Comparison

Table 5-2 summarizes the supplies available to meet demands over the 30-year planning period during an average/normal year. As presented in the table, the water supply is broken down into existing and planned water supply sources, including wholesale (imported) water, local supplies, and banking programs. The demands shown include reductions from projected passive conservation savings, and both with and without active conservation savings. Future demands include that of the Project.

**TABLE 5-2
PROJECTED AVERAGE/NORMAL YEAR SUPPLIES AND DEMANDS (AF)**

	2025	2030	2035	2040	2045	2050
Existing Supplies						
Existing Groundwater ^(e)						
Alluvial Aquifer	8,900	8,180	7,300	7,300	7,300	7,300
Saugus Formation	14,440	7,110	7,110	7,110	7,110	7,110
Total Groundwater	23,340	15,290	14,410	14,410	14,410	14,410
Recycled Water ^(b)						
Total Recycled	450	450	450	450	450	450
Imported Water						
State Water Project ^(c)	52,360	51,410	50,460	49,500	49,500	49,500
Flexible Storage Accounts ^(d)						
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land ^(e)	-	-	1,607	1,607	1,607	1,607
Yuba Accord Water ^(f)	1,000	-	-	-	-	-
Total Imported	64,360	62,410	63,067	62,107	62,107	62,107
Existing Banking and Exchange Programs ^(g)						
Rosedale Rio-Bravo Bank ^(g)	-	-	-	-	-	-
Semitropic Bank ^(g)	-	-	-	-	-	-
Semitropic – Newhall Land Bank ^(g)	-	-	-	-	-	-
Antelope Valley West Kern Water Agency Exchange ^(g)	-	-	-	-	-	-
United Water Conservation District Exchange ^(g)	-	-	-	-	-	-
Total Bank/Exchange	0	0	0	0	0	0
Total Existing Supplies	88,150	78,150	77,927	76,967	76,967	76,967

Planned Supplies

Future and Recovered Groundwater ^(h)						
Alluvial Aquifer ⁽ⁱ⁾	10,340	19,870	23,490	23,490	23,490	23,490
Saugus Formation ⁽ⁱ⁾	3,010	2,790	2,790	2,790	2,790	2,790
Total Groundwater	13,350	22,660	26,280	26,280	26,280	26,280
Recycled Water ^(k)						
Total Recycled	1,849	3,696	5,091	6,498	7,499	8,511
Planned Banking Programs						
Rosedale Rio-Bravo Bank ^{(h)(i)}	-	-	-	-	-	-
Total Banking	0	0	0	0	0	0
Total Planned Supplies	15,199	26,356	31,371	32,778	33,779	34,791
Total Supplies (Existing and Planned)^(m)	103,349	104,506	109,298	109,745	110,746	111,758
Demands⁽ⁿ⁾						
Demands with passive conservation ^(m)	82,100	89,300	97,600	104,300	109,600	115,100
Demands with passive and active conservation ^(m)	76,400	81,700	88,700	93,600	97,500	101,000

Notes:

- (a) Existing groundwater supplies represent the quantity of groundwater available to be pumped with existing wells. Declines from 2025 pumping levels reflect transfer of normal year pumping from existing wells to future and recovered wells.
- (b) Existing Recycled Water is based on current average annual use.
- (c) SWP supplies are based on average deliveries from DWR's 2019 DCR and 2021 draft DCR (56% - 52% at buildout due to climate change).
- (d) Supplies not needed in average years.
- (e) Existing Newhall Land supply committed under approved Newhall Ranch Specific Plan. Water is available from 2021 -2034 to meet supply shortfalls associated with the Newhall Ranch Specific Plan. Assumed to be transferred to SCV Water once Newhall Ranch development is completed around 2035.
- (f) Supply available for purchase every year, however, shown is amount available in dry periods, after delivery losses. This supply would typically be used only during dry years and is available through 2025.
- (g) Supplies not needed in average years.

- (h) Future and Recovered groundwater supplies include recovered impacted wells and new groundwater well capacity that may be required by SCV Water's production objectives in the Alluvial Aquifer and the Saugus Formation. When combined with existing SCV Water and non-SCV Water groundwater supplies, total groundwater production remains within the sustainable ranges identified in Tables 4-10 and 4-11 and is within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis(LSC & GSI 2009).
- (i) Future Category includes all wells restored from PFAS and Perchlorate water quality issues, and other future alluvial wells including those associated with development under the Newhall Ranch Specific Plan. Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 Appendix M. 2025 adjustments based on January 2022 engineering project schedule updates.
- (j) Future and Recovered Saugus wells include perchlorate-impacted Well 205, two replacement wells (Saugus 3 & 4), and up to four new wells (Saugus 5-8) planned to provide additional dry-year supply. New dry-year wells would not typically be operated during average/normal years.
- (k) Planned recycled water is the total projected recycled water use from Table 5-3 less existing use. Projections reflect demands that can be cost-effectively served with projected supplies. Refer to Section 5 for additional details on recycled water demands and supplies.
- (l) Firm withdrawal capacity under existing Rosedale Rio-Bravo Banking Program to be expanded by 10,000 AFY by 2030 (for a combined total of 20,000 AFY).
- (m) For completeness, LAWWD36 sales are included in demands and supplies. Breakdown of LACWWD 36 and SCV Water Demands are shown in Table 2-10. Further, LACWWD 36's Saugus groundwater supplies shown in TABLE 4-8A.
- (n) Total demands with passive and active conservation from Table 2-10.

5.1.3 Single Dry-Year Supplies and Demand

The water supplies and demands for the water suppliers over the 30-year planning period were analyzed in the event that a single-dry year occurs, based on the worst single dry year on record. Table 5-3 summarizes the existing and planned supplies available to meet demands during a single-dry year. The demands shown include reductions from projected passive conservation savings, and both with and without active conservation savings. The demand during dry years was assumed to increase by 6 percent. Future demands include that of the Project.

TABLE 5-3 PROJECTED SINGLE-DRY YEAR SUPPLIES AND DEMANDS (AF)

	2025	2030	2035	2040	2045	2050
Existing Supplies						
Existing Groundwater ^(a)						
Alluvial Aquifer	7,300	6,330	5,590	5,590	5,590	5,590
Saugus Formation	17,880	17,880	17,880	17,880	17,880	17,880
Total Groundwater	25,180	24,210	23,470	23,470	23,470	23,470
Recycled Water ^(b)						
Total Recycled	450	450	450	450	450	450
Imported Water						
State Water Project ^(c)	4,760	4,760	4,760	4,760	4,760	4,760
Flexible Storage Accounts ^(d)	6,060	4,680	4,680	4,680	4,680	4,680
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land ^(e)	-	-	1,607	1,607	1,607	1,607
Yuba Accord Water ^(f)	1,000	-	-	-	-	-
Total Imported	22,820	20,440	22,047	22,047	22,047	22,047
Existing Banking and Exchange Programs						
Rosedale Rio-Bravo Bank ^(g)	10,000	10,000	10,000	10,000	10,000	10,000
Semitropic Bank ^(h)	5,000	5,000	5,000	5,000	5,000	5,000
Semitropic – Newhall Land Bank ^{(h)(i)}	-	-	4,950	4,950	4,950	4,950
Antelope Valley East Kern Water Agency Exchange ^(j)	-	-	-	-	-	-
United Water Conservation District Exchange ^(j)	-	-	-	-	-	-
Total Bank/Exchange	15,000	15,000	19,950	19,950	19,950	19,950
Total Existing Supplies^(p)	63,450	60,100	65,917	65,917	65,917	65,917

Planned Supplies						
Future and Recovered Groundwater ^(l)						
Alluvial Aquifer ^(k)	9,030	17,020	20,500	20,500	20,500	20,500
Saugus Formation ^(l)	9,090	15,920	15,920	15,920	15,920	15,920
Total Groundwater	18,120	32,940	36,420	36,420	36,420	36,420
Recycled Water ^(m)						
Total Recycled	1,849	3,696	5,091	6,498	7,499	8,511
Planned Banking Programs						
Rosedale Rio-Bravo Bank ⁽ⁿ⁾	-	10,000	10,000	10,000	10,000	10,000
Total Banking	0	10,000	10,000	10,000	10,000	10,000
Total Planned Supplies	19,969	46,636	51,511	52,918	53,919	54,931
Total Supplies (Existing and Planned)^(p)	83,419	106,736	117,428	118,835	119,836	120,848
Demands^{(o)(p)(q)}						
Demands with passive conservation	87,000	94,700	103,500	110,600	116,200	122,000
Demands with passive and active conservation	81,000	86,600	94,000	99,200	103,400	107,100

Notes:

- (a) Existing groundwater supplies represent the quantity of groundwater available to be pumped with existing wells. Dry-year production represents anticipated maximum dry year production. Declines from 2025 pumping levels reflect transfer of normal year pumping from existing wells to future and recovered wells.
- (b) Existing recycled water is based on current average annual use.
- (c) SWP supplies are based on driest SWP delivery on record, 5% in 2014. Deliveries from DWR's 2019 DCR state single dry year are (7% -11%).
- (d) Includes both SCV Water and Ventura County entities flexible storage accounts. Extended term of agreement with Ventura County entities expires after 2025.
- (e) Existing Newhall Land supply committed under approved Newhall Ranch Specific Plan. Water is available from 2021 - 2034 to meet supply shortfalls associated with the Newhall Ranch Specific Plan. Assumed to be transferred to SCV Water once Newhall Ranch development is completed around 2035.
- (f) Supply shown is amount available in dry periods, after delivery losses. This supply would typically be used only during dry years and is available through 2025.
- (g) Supplies shown are annual amounts that can be withdrawn using existing firm withdrawal capacity and would typically be used only during dry years.
- (h) Existing Newhall Land supply. Assumed to be transferred to SCV Water during Newhall Ranch development by 2035.
- (i) Supplies shown are totals recoverable under the exchange and would typically be recovered only during dry years with SWP allocation greater than 30%.
- (l) Future and Recovered groundwater supplies include recovered impacted wells and new groundwater well capacity that may be required by SCV Water's production objectives in the Alluvial Aquifer and the Saugus Formation. When combined with existing SCV Water and non-SCV Water groundwater supplies, total groundwater production remains within the sustainable ranges identified in Tables 4-10 and 4-11 and is within the groundwater basin yields per the 2020 SCV-GSA Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).

- (k) Future and Recovered Alluvial groundwater include PFAS, and perchlorate impacted alluvial wells, one replacement well (S 9), and future wells, including those for Newhall Ranch Specific Plan. Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 Appendix M. 2025 adjustments based on January 2022 engineering project schedule updates).
- (l) Future and Recovered Saugus wells include perchlorate impacted Well 205, two replacement wells (Saugus 3 & 4), and up to four new wells (Saugus 5-8) planned to provide additional dry-year supply. New dry-year wells would not typically be operated during average/normal years.
- (m) Planned recycled water is the total projected recycled water use less existing use. Projections reflect demands that can be cost-effectively served with projected supplies. Refer to Section 3 for additional details on recycled water demands and supplies.
- (n) Firm withdrawal capacity under existing Rosedale Rio-Bravo Banking Program to be expanded by 10,000 AFY by 2030 (for a combined total of 20,000 AFY).
- (o) Demands assume a 6% increase above normal demand during dry years.
- (p) For completeness, LAWWD36 sales are included in demands and supplies. Breakdown of LACWWD 36 and SCV Water Demands are shown in Table 2-2. Further, LACWWD36's Saugus groundwater supplies are shown in Table 3-4B.
- (q) Future demands include that of the Entrada South and Valencia Commerce Center Project.

5.1.4 Multiple Dry-Year Supplies and Demand

The water supplies and demands over the 30-year planning period were analyzed in the event that a five-year dry period occurs, similar to the drought that occurred during the years 1988-1992. Table 5-4 summarizes the existing and planned supplies available to meet demands during a five-year dry period. Supply volumes shown represent averages for the consecutive five-year period, assuming each 5-year interval (2025, 2030, etc.) is the midpoint of the five-year period. The demands shown include reductions from projected passive conservation savings, and both with and without active conservation savings. As in the single-dry year scenario, demand during dry years was assumed to increase by 6 percent. Future demands include that of the Project.

TABLE 5-4 PROJECTED FIVE-YEAR DRY YEAR SUPPLIES AND DEMANDS (AF)

Supplies Available	2025	2030	2035	2040	2045	2050
Existing Supplies						
Existing Groundwater ^(a)						
Alluvial Aquifer	7,300	6,720	5,890	5,590	5,590	5,590
Saugus Formation	17,880	17,610	17,610	17,610	17,610	17,610
Total Groundwater	25,180	24,330	23,500	23,200	23,200	23,200
Recycled Water ^(b)						
Total Recycled	450	450	450	450	450	450
Imported Water						
State Water Project ^(c)	24,040	24,090	24,130	24,180	24,180	24,180
Flexible Storage Accounts ^(d)	4,980	4,680	4,680	4,680	4,680	4,560
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land ^(e)	-	-	964	1,607	1,607	1,607
Yuba Accord ^(f)	600	-	-	-	-	-
Total Imported	40,620	39,770	40,774	41,467	41,467	41,347
Banking and Exchange Programs						
Rosedale Rio-Bravo Bank ^(g)	10,000	10,000	10,000	10,000	10,000	10,000
Semitropic Bank ^(h)	5,000	5,000	5,000	5,000	4,929	1,859
Semitropic - Newhall Land Bank ⁽ⁱ⁾	-	-	2,970	4,950	4,950	4,950
AVEK Exchange ^(j)	450	450	-	-	-	-
UWCD Exchange ^(l)	100	100	-	-	-	-
Total Bank/Exchange	15,550	15,550	17,970	19,950	19,879	16,809
Total Existing Supplies^(q)	81,800	80,100	82,694	85,067	84,996	81,806

Planned Supplies					
Future and Recovered Groundwater^(k)					
Alluvial Aquifer ^(l)	11,930	16,310	19,800	20,500	20,500
Saugus Formation ^(m)	5,750	8,020	8,020	8,020	8,020
Total Groundwater	17,680	24,330	27,820	28,520	28,520
Recycled Water⁽ⁿ⁾					
Total Recycled	1,823	3,603	5,045	6,498	7,499
Planned Banking Programs					
Rosedale Rio-Bravo Bank ^(o)	-	6,000	10,000	10,000	10,000
Total Banking	0	6,000	10,000	10,000	10,000
Total Planned Supplies	19,503	33,933	42,865	45,018	46,909
Total Existing and Planned Supplies	101,303	114,033	125,559	130,085	128,715
Demands^(r)					
Demands with Passive Conservation^{(p)/(q)}	83,570	91,380	99,670	106,660	112,100
Demands with Passive and Active Conservation^{(p)/(q)}	77,830	83,620	90,570	95,780	102,870

Notes:

- (a) Existing groundwater supplies represent the quantity of groundwater available to be pumped with existing wells. Dry-year production represents anticipated maximum dry year production. Declines from 2025 pumping levels reflect transfer of normal year pumping from existing wells to future and recovered wells.
- (b) Existing recycled water is based on current average annual use.
- (c) SWP supplies based on 1988-1992 hydrology from 2019 DCR interpolated from 2020-2040 from current to proposed future SWP supplies.
- (d) Includes both SCV Water and Ventura County entities flexible storage accounts through 2025 and only SCV Water portion beyond 2025.
- (e) Existing Newhall Land supply committed under approved Newhall Ranch Specific Plan. Water is available from 2021 -2034 to meet supply shortfalls associated with the Newhall Ranch Specific Plan. Assumed to be transferred to SCV Water once Newhall Ranch development is completed around 2035.
- (f) 1,000 AFY assumed to be available during dry and critically dry years. Lower quantity in table reflects averaging of supply over the five-year period. This supply is only available through 2025.
- (g) SCV Water has an existing firm withdrawal capacity of 10,000 AFY and a storage capacity of 100,000 AF. There is currently 98,800 AF of recoverable Water in storage.
- (h) SCV Water has a maximum firm withdrawal capacity of 5,000 AFY and a storage capacity of 15,000 AF. Additionally, SCV Water has 40,270 AF of recoverable Water stored which may be recovered using this withdrawal capacity.
- (i) Existing Newhall Land supply. Assumed to be transferred to SCV Water during Newhall Ranch development by 2035.
- (j) Exchange recovery was assumed to occur one year during the five-year dry period, for an average annual supply of one-fifth of the total recoverable water available (total recoverable is 2,250 AF from Antelope Valley East Kern Water Agency (AVEK) and 500 AF from United Water Conservation District exchange programs).
- (k) Future and Recovered groundwater supplies include recovered impacted wells and new groundwater well capacity that may be required by SCV Water's production objectives in the Alluvial Aquifer and the Saugus Formation. When combined with existing SCV Water and non-SCV Water groundwater

- supplies, total groundwater production remains within the sustainable ranges identified in Tables 4-9 and 4-10 and is within the groundwater basin yields per the 2020 SCV-GSA Draft Water Budget Development Tech Memo (GSI 2020) and the updated Basin Yield Analysis (LSC & GSI 2009).
- Future Category includes all wells restored from PFAS and Perchlorate water quality issues, and other future alluvial wells including those associated with development under the Newhall Ranch Specific Plan. Schedule for recovered well capacity based on Groundwater Treatment Implementation Plan Technical Memorandum, Kennedy Jenks 2021 Appendix M.
- (l) This includes Saugus perchlorate impacted Well 205, two replacement wells (Saugus 3 & 4), and up to four new wells (Saugus 5-8) planned to provide additional dry-year supply. New dry-year wells would not typically be operated during average/normal years.
 - (m) Planned recycled water is the total projected recycled water use from Table 3-10 less existing use. Projections reflect demands that can be cost-effectively served with projected supplies. Refer to Section 3 for additional details on recycled water demands and supplies.
 - (n) Firm withdrawal capacity under existing Rosedale Rio-Bravo Banking Program to be expanded by 10,000 AFY by 2030 (for a combined total of 20,000 AFY).
 - (o) Demands are weather adjusted for dry 1988-1992 hydrology.
 - (p) For completeness, LAWWD36 sales are included in demands and supplies. Breakdown of LACWWD 36 and SCV Water Demands are shown in Table 2-2. Further, LACWWD 36's Saugus groundwater supplies are shown in Table 3-4B.
 - (q) Future demands include that of the Entrada South and Valencia Commerce Center Project.

5.2 Additional Water Supply Reliability Analysis

As discussed in Section 4.10, SCV Water has undertaken additional analysis of its water supply reliability beyond the Normal, Single Dry-Year and Multiple Dry-Year analysis provided for the 2020 UWMP, and this Water Supply Assessment. This was done with the 2021 update to its Water Supply Reliability Plan (Plan). The Plan uses an analytic spreadsheet model that incorporates the anticipated increase in demand due to growth and climate change (through 2050) and models the variability of hydrology both locally and from imported sources. For each hydrologic sequence, the model steps through each year of the study period, comparing annual supplies to demands and operating SCV Water storage programs as needed, adding to storage in years when supplies exceed demand, and withdrawing from storage when demand exceeds supplies. Results from the multiple hydrologic sequences are then compiled and summarized to provide a statistical assessment of the reliability of SCV Water's supplies and storage programs to meet its projected demands over the study period.

The reliability analysis conducted in the Plan is more rigorous and conservative than that contained in the 2020 UWMP and in Section 5.1 of this WSA. The Plan models the operation of SCV Water's supply portfolio through the full 82-year historical hydrologic period and incorporates projected storage balances when determining the quantity of water available from a banking program to meet water demands during dry periods. Further, while UWMP Section 5.2 incorporated a gradual decline in SWP reliability between 2020 and 2040 due to climate change, the Plan's modeling is based on SWP hydrology adjusted to reflect 2040 climate change, being applied to all years in the study period.

The Plan analyzed various scenarios analyses, which analysis can be used to answer several questions including:

4. How long current facilities could be relied upon to achieve reliability?
5. If the mix of existing and proposed facilities in the UWMP achieved reliability through 2050?
6. If certain future facilities were not constructed, (specifically some or all of the new Saugus Formation wells were either not constructed or otherwise unavailable) would alternative programs that SCV Water is investigating be able to achieve reliability?

With respect to the first question identified above, the analysis shows that current supplies (including recovered groundwater capacity) along with active conservation will be sufficient until 2040.

Regarding the second question, to achieve reliability in subsequent years, additional investments in those programs and facilities identified in the UWMP (Scenarios 1) would be sufficient to achieve reliability through 2050.

As to the third question, Scenarios 2-5 demonstrate that alternative programs to those contained in the UWMP could offer different paths to achieve reliability or if implemented in addition to the UWMP could provide additional supplies in excess of demand.

Supply Reliability

As discussed above, the analysis contained in the Plan represents a more robust and conservative analysis than that contained in Section 5.1. Nevertheless, the conclusions related to the ability of SWC Water to reliably meet water demands (including the Entrada South/VCC Project) are consistent. If SCV Water continues to implement active water conservation measures, conjunctively use its imported water, groundwater, and water banking facilities, and invests in future water supply facilities as identified in the 2020 UWMP it will reliably meet water demands in its service area through 2050. The ability to implement other alternative water supply programs identified in the Plan's analysis demonstrates a robustness to this conclusion as alternatives exist should some of the future water supplies identified in the 2020 UWMP become unattainable.

5.3 Conclusion

As set forth in this WSA, SCV Water has evaluated the long-term water needs (water demand) within its service area and has compared these needs against existing and planned water supplies. Demand projections are based on applicable population projections and county and city land use plans, and account for conservation as well as climate change impacts and other relevant factors. This WSA concludes that the total projected water supplies available to the SCV Water service area over the 30-year projection during normal, single-dry, and multiple-dry year (5-year drought) periods are sufficient to meet the projected demands associated with the proposed Entrada South and Valencia Commerce Center Project, in addition to existing and other planned future uses, including agricultural and industrial uses, throughout the Valley, provided that SCV Water continues to utilize available SWP Table A Amounts, and continues to incorporate conjunctive use (coordinated use of surface water and groundwater), water conservation, water transfers, recycled water, and water banking as part of the total water supply portfolio and management approach to long-term water supply planning and strategy.

Section 6: References Used or Relied Upon in Preparing this WSA

This WSA used or relied on information contained in the documents listed below. Documents may be available online at the links provided or by contacting the SCV Water - Water Resources Department at (661) 297-1600. The documents are part of SCV Water's record for the preparation of this WSA.

California Department of Water Resources, December 2021. 2021 Draft State Water Project Delivery Capability Report, available at: <https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-3/DCR2021>.

California Department of Water Resources, July 2020. 2019 State Water Project Delivery Capability Report, available at: <https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-II/DCR2019>.

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California Department of Water Resources. November 2011. "Climate Change Handbook for Regional Water Planning", available at: https://www.epa.gov/sites/default/files/2021-03/documents/climate_change_handbook_regional_water_planning.pdf

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California Division of Drinking Water, November 1997. Policy Memo 97-005: Policy Guidance for Direct Domestic Use of Extremely Impaired Sources, available at: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/process_memo_97-005-r2020_v7.pdf

- California Ocean Protection Council. 2018. Sea-Level Rise Guidance, available at: https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A OPC SLR Guidance-rd3.pdf
- California Office of Emergency Services (Cal OES). 2018. Northern California Catastrophic Flood Response Plan, available at: <https://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/catastrophic-planning>
- California State Water Resources Control Board, March 2000. Revised Water Right Decision 1641, available at: https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf
- Carollo Engineers, June 2015. Santa Clarita Valley Water Agency Water Resources Reconnaissance Study, available at: <http://yourscvwater.com/water-supply-assessments>
- CH2M Hill, 2004a. Regional Ground water Flow Model for the Santa Clarita Valley, Model Development and Calibration. April, <http://yourscvwater.com/water-supply-assessments>
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APPENDIX A: ENTRADA SOUTH SITE PLAN

PLANNED AREA	LAF	LAF	LAF	RESIDENTIAL		COMMERCIAL		Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
				Area	Units	Area	Units												Area
1	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
2	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
3	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
4	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
5	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
6	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
7	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
8	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
9	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
10	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
11	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
12	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
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14	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
TOTAL	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197

GENERAL NOTES

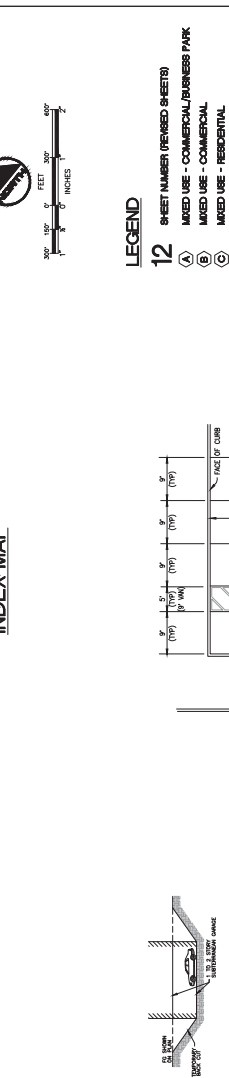
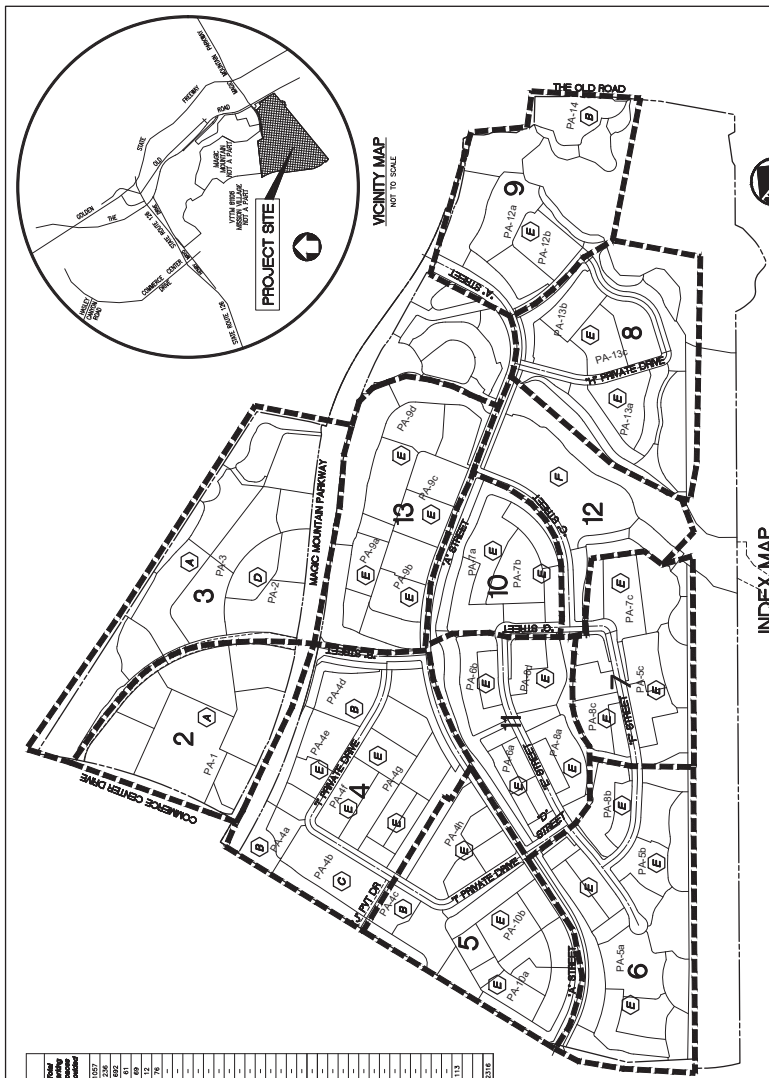
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SPECIAL NOTES

1. WATER QUALITY BASINS AND CATCH BASIN FILTERS SHALL BE PROVIDED FOR ALL STORMWATER RUNOFF FROM THE PLANNED AREA MAP (PAM) AND THE PLANNED AREA MAP (PAM) ARE APPROXIMATE.
2. THE WATER QUALITY BASINS SHALL BE DESIGNED TO TREAT ALL STORMWATER RUNOFF FROM THE PLANNED AREA MAP (PAM) AND THE PLANNED AREA MAP (PAM) ARE APPROXIMATE.
3. PUBLIC STREETS AND TRAILS SHALL BE PROVIDED FOR ALL STORMWATER RUNOFF FROM THE PLANNED AREA MAP (PAM) AND THE PLANNED AREA MAP (PAM) ARE APPROXIMATE.

PROJECT SUMMARY:

TOTAL LOTS: 197
 TOTAL UNITS: 1,274
 EXISTING ZONING: C-1 (1.5 A), C-2 (2.4 A), C-3 (2.4 A), C-4 (1.5 A), C-5 (2.4 A)
 PROPOSED ZONING: C-1 (1.5 A), C-2 (2.4 A), C-3 (2.4 A), C-4 (1.5 A), C-5 (2.4 A)
 EXISTING LAND USE: RESIDENTIAL, COMMERCIAL, INDUSTRIAL
 PROPOSED LAND USE: RESIDENTIAL, COMMERCIAL, INDUSTRIAL
 SCHOOL DISTRICT: SERRA
 UTILITY PROVIDERS:
 SERRA: SERRA WATER DISTRICT, SERRA GROUNDWATER DISTRICT, SERRA SEWER DISTRICT
 ELECTRICAL: SERRA ELECTRICAL DISTRICT
 TELEPHONE: SERRA TELEPHONE DISTRICT
 CABLE TV: THE WARNER CABLE



LEGEND

12 SHEET NUMBER (REVISED SHEETS)
 (A) MIXED USE - COMMERCIAL/BUSINESS PARK
 (B) MIXED USE - COMMERCIAL
 (C) MIXED USE - RESIDENTIAL
 (D) HOTEL
 (E) MULTI-FAMILY CONDOMINIUM
 (F) PRIVATE PARK

90° PARKING SPACE W/ HANDICAP
 SCALE: 1" = 10'

TYP. PARALLEL PARKING SPACE DETAIL
 SCALE: 1" = 30'

SUBTERRANEAN GARAGE EXCAVATION DETAIL

EMERGENCY ACCESS GATE DETAIL

PLANS PREPARED BY:
 JERRY W. FERGUSON
 JERRY W. FERGUSON ARCHITECTS
 10000 WILSON BLVD., SUITE 100
 LOS ANGELES, CA 90024-3248
 TEL: (310) 470-1111
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MAJOR LAND DIVISION
 VESTING TENTATIVE TRACT MAP NO. 53295
 EXHIBIT 'A'

SCALE: AS SHOWN
DATE: 11/04/2011
JOB NO.: 0015-032-148
SHEET: 1
OF 14 SHEETS

LEGAL DESCRIPTION:
 THAT PORTION OF SERRA SAN FRANCISCO, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS SHOWN IN MAP RECORDED IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, COUNTY OF LOS ANGELES, TRACT MAP NO. 53295, EXHIBIT 'A'.

CONTRACT NO.: JWF/10/11/11
DATE: 11/04/2011

LEGEND

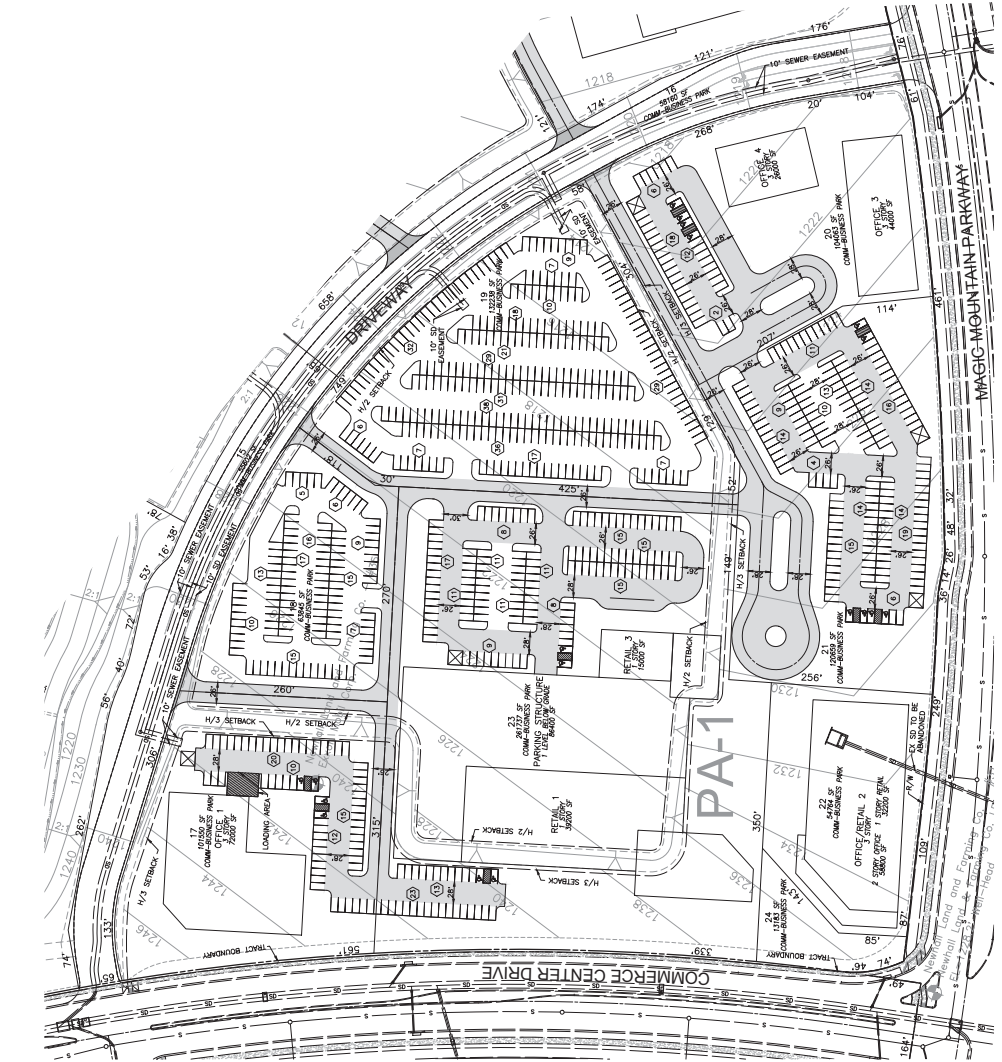
- 100 LOT NO.
- PLANNING AREA NUMBER
- 17M 53295 BOUNDARY
- RIGHT OF WAY
- 225' PROPOSED LOT LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED STORM DRAIN
- PROPOSED CENTER
- 1/2 & 1/3 SETBACK LINE
- PROPOSED CENTER
- PROPOSED DRIVEWAY
- PRIVATE DRIVE AND FIRE LINE
- EXISTING OR WELL
- PARKING COUNT
- FRASH ENCLOSURE
- STORM DRAIN MANHOLE
- CONCRETE PAVING (NUMBER OF SPACES IN BOX)

PA-4a

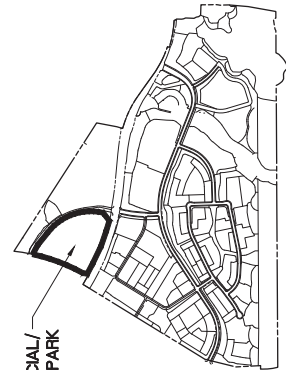
PA-1

LOTS 15, 17-24	COMMERCIAL/OFFICE-RETAIL	MU-COMM
Land Use:	Office	Office
Office Sq. Ft.:	20,000 S.F.	20,000 S.F.
Total Office Sq. Ft.:	20,000 S.F.	20,000 S.F.
Total Sq. Ft.:	287,500 S.F.	287,500 S.F.
Number of Buildings:	6 Buildings	6 Buildings
Area of Buildings:	3,048	3,048
Parking Required:	502	502
Total Parking Provided:	185	185
Handicap Parking**:	18 Spaces	18 Spaces
(Per CBC Table 11B-208.2)		
Handicap Van-Accessibles:	2 Space	2 Space
(1.5 Space / 1 Handicap 307)		

** Note: ADA parking is included in open parking area count.

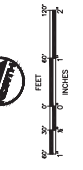


COMMERCIAL / BUSINESS PARK



INDEX MAP
SCALE 1" = 800'

NOTES:
1. ALL PERIMETER WALLS SHALL HAVE SATISFACTION OF THE FIRE DEPARTMENT.
2. ALL DRIVE ANGLES SHALL PROVIDE A MINIMUM OF 32 FOOT CONTINUING TURNING RADIUS.
3. ALL DRIVE ANGLES SHALL BE PROVIDED TO WITHIN 150' OF ALL CORNER WALLS.



LEGAL DESCRIPTION:
THAT PORTION OF PARCELS SAN FRANCISCO, IN CALIFORNIA, AS SHOWN IN MAP RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.



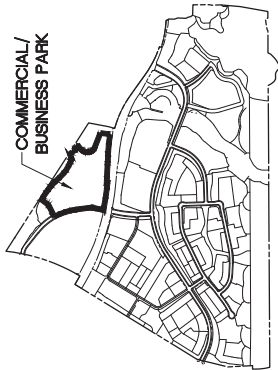
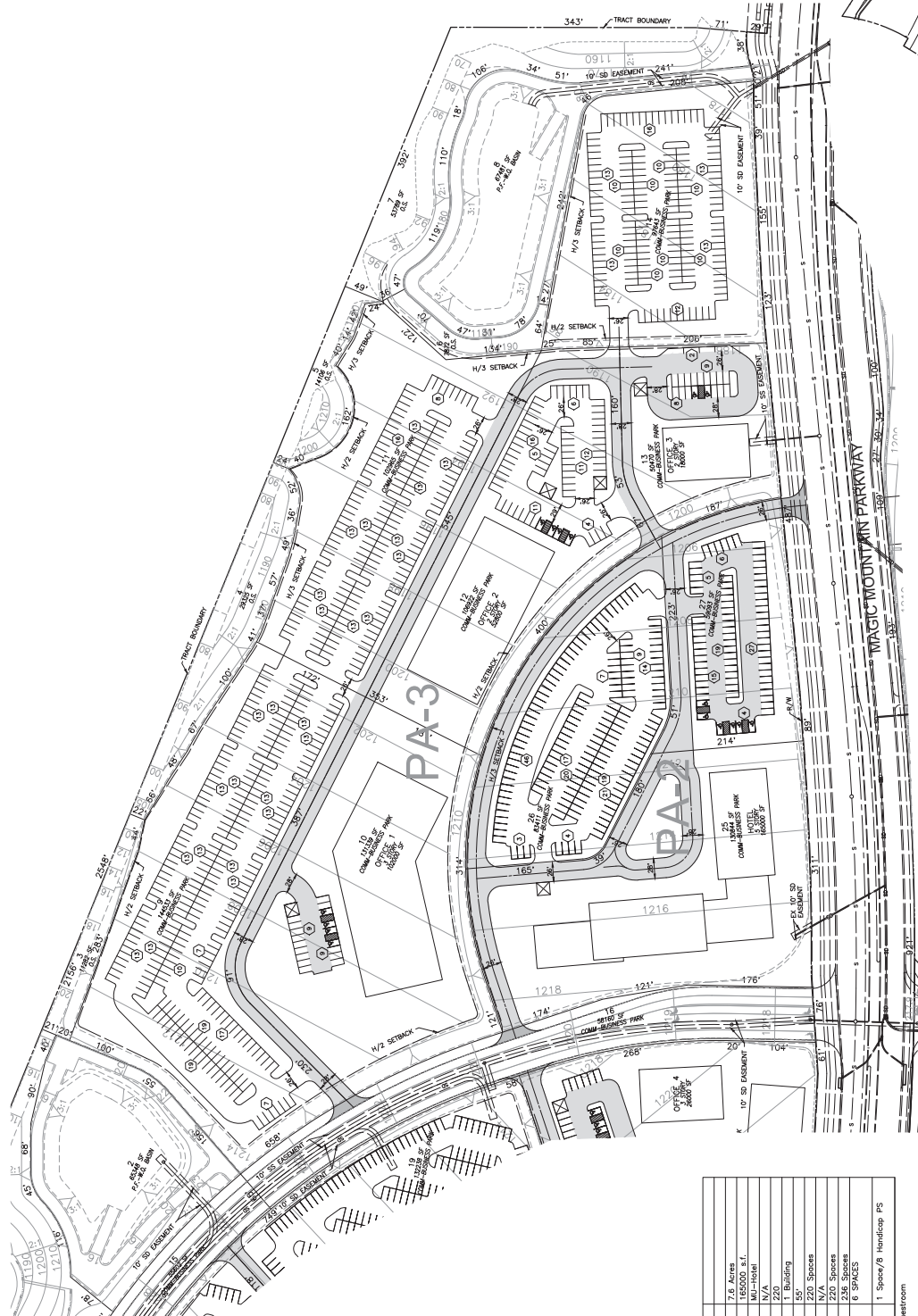
PLANS PREPARED BY:
JOSHI W. P. SURVEYOR

MAJOR LAND DIVISION VESTING TENTATIVE TRACT MAP NO. 53295 EXHIBIT 'A'

SCALE: AS SHOWN
DATE: 11/04/2021
JOB NO.: 2021-035-158
SHEET 2 OF 4 SHEETS

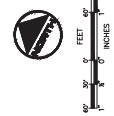
LEGEND

- 100 LOT NO.
- PA-4a PLANNING AREA NUMBER
- 1/4" = 1' VTM 5320P BOUNDARY
- 225' RIGHT OF WAY
- PROPOSED LOT LINE
- PROPOSED EASEMENT
- PROPOSED EASEMENT
- PROPOSED STORM DRAIN
- PROPOSED STORM
- H/2 & H/3 SETBACK LINE
- PROPOSED CONTOUR
- DAYLIGHT LINE
- LINE OF SHOT EASEMENT
- LINE OF SHOT EASEMENT
- PROPOSED EASEMENT
- PROPOSED LOT LINE AND
- PROPOSED LOT LINE AND
- EXISTING OIL WELL
- PARKING COUNT
- TRACK ENCLOSURE
- STORM DRAIN MANHOLE
- COVERED PARKING (NUMBER OF SPACES IN RAY)



NOTES:

1. ALL PERIMETER WALLS SHALL HAVE SATISFACTION OF THE FIRE DEPARTMENT.
2. ALL DRIVE ANGLES SHALL PROVIDE A MINIMUM OF 32 FOOT CONTINUING TURNING RADIUS.
3. ALL DRIVE ANGLES SHALL BE ROUNDED TO WITHIN 15% OF ALL LOT CORNER WALLS.



PA-2

LOTS 16, 25-27	
Total Site Area:	7.6 Acres
Total Site Area:	165000 s.f.
Land Use:	MU-Office
Total Retail Sq. Ft.:	N/A
Number of Buildings:	1 Building
Max. Height:	55'
Parking Req. Guest Rooms:	220 Spaces
Parking Required Ratio:	N/A Spaces
Total Parking Provided:	236 Spaces
Handicap Parking:	6 SPACES
(2% of Parking Provided)	
(1 Space/8 Handicap SF)	
(1 Space/8 Handicap SF)	
Assumption: 1 space per guestroom	

PA-3

LOTS 9-14	
COMMERCIAL/OFFICE-RETAIL	MU-COMM
Land Use:	MU-COMM
Total Site Area:	12.8 Acres
Total Retail Sq. Ft.:	172800 s.f.
Total Office Sq. Ft.:	172800 s.f.
Number of Buildings:	3
Total Required Parking:	432 Spaces
(1 Space/400 SF Building)	
Total Parking Provided:	587 Spaces
Handicap Parking:	10 Spaces
(Per CGC Table 11B-208.2)	
(1 Space/6 Handicap SF)	

PLANS PREPARED BY: **JOHN W. FERGUSON**

DATE: 11/04/2021

SCALE: AS SHOWN

JOB NO.: 2021-032-138

SHEET 3

OF 4 SHEETS

MAJOR LAND DIVISION: **VESTING TENTATIVE TRACT MAP NO. 53285**

EXHIBIT 'A'

IN THE UNINCORPORATED AREA OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

OWNER/DEVELOPER: **FIREFIGHT NEWHALL LAND**

LEGAL DESCRIPTION: **THAT PORTION OF RANCHO SAN FRANCISCO, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS SHOWN IN MAP RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.**

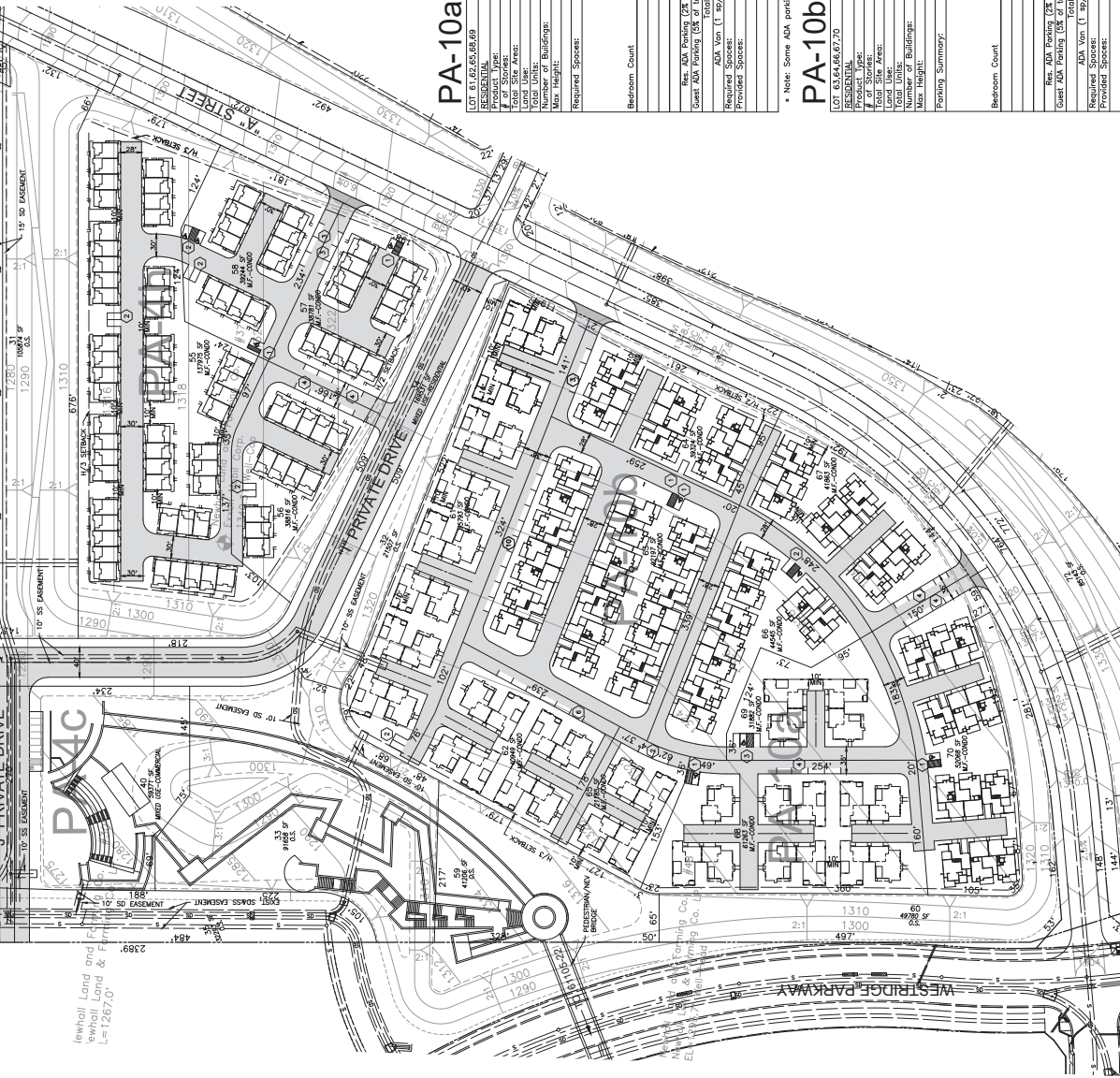
DATE: _____

LEGEND

- 100 LOT NO.
- PLANNING AREA NUMBER
- FTM 53285 BOUNDARY
- RIGHT OF WAY
- PROPOSED LOT LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED STORM DRAIN
- 1/2" & 1/4" SETBACK LINE
- PROPOSED CONTOUR
- PROPOSED DRIVEWAY
- PROPOSED DRIVEWAY
- PRIVATE DRIVE AND FIRE LINE
- EXISTING OR WELL
- PARKING COUNT
- FRESH ENCLOSURE
- STORM DRAIN MANHOLE
- CONCRETE PAVING (NUMBER OF SPACES IN BOX)

PA-4C

USE / ZONE	COMMERCIAL
Land Use:	MU-COMM
Total Site Acres:	1.4 Acres
Total Parcel Sq. Ft.:	2,000 S.F. (66x23)
Total Office Sq. Ft.:	
Number of Buildings:	1 Building
Parking Required Commercial:	8 Spaces
Total Parking Provided:	8 Spaces
Handicap Parking:	1 Space/6 Handicap PS
Handicap Van-Accessible:	1 Space/6 Handicap PS



PA-4h

LOT 54, 56, 57, 58	MU-Residential
Product Type:	Residential
Total Site Area:	5.9 Acres
Land Use:	Residential
Number of Buildings:	22
Max Height:	55'

Required Spaces:	Units	Covered spaces/unit	Guest spaces/unit	Total
Bedroom Count	2 bed	45	67	112
	4 bed	44	66	110
	Total	89	133	222
Guest ADA Parking (5% of total guest ab.)				6
Guest ADA Parking (5% of total ADA Parking)				4
ADA Van (1 sq/8 ADA Stalls)				1
Required Spaces:				201
Provided Spaces:				201

Parking Summary: Garage: 178, Open: 24, Total: 202

PA-10a

LOT 61, 62, 63, 64, 65	MU-Residential
Product Type:	Residential
Total Site Area:	5.2 Acres
Land Use:	Residential
Number of Buildings:	22
Max Height:	55'

Required Spaces:	Units	Covered spaces/unit	Guest spaces/unit	Total
Bedroom Count	3 bed	21	32	53
	4 bed	22	33	55
	Total	43	65	108
Guest ADA Parking (5% of total guest ab.)				5
Guest ADA Parking (5% of total ADA Parking)				1
ADA Van (1 sq/8 ADA Stalls)				1
Required Spaces:				115
Provided Spaces:				115

Parking Summary: Garage: 95, Open: 15, Total: 110

PA-10b

LOT 63, 64, 65, 67, 70	MU-Residential
Product Type:	Residential
Total Site Area:	2.8 Acres
Land Use:	Residential
Number of Buildings:	5
Max Height:	55'

Required Spaces:	Units	Covered spaces/unit	Guest spaces/unit	Total
Bedroom Count	2 bed	35	57	92
	3 bed	22	33	55
	Total	57	90	147
Guest ADA Parking (5% of total guest ab.)				2
Guest ADA Parking (5% of total ADA Parking)				1
ADA Van (1 sq/8 ADA Stalls)				1
Required Spaces:				151
Provided Spaces:				151

Parking Summary: Garage: 120, Open: 28, Total: 148

COMMERCIAL
MULTI FAMILY
CONDOMINIUM



INDEX MAP

SCALE: 1" = 800'

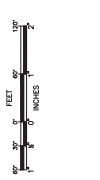
MAJOR LAND DIVISION
VESTING TENTATIVE TRACT MAP NO. 53285
EXHIBIT 'A'

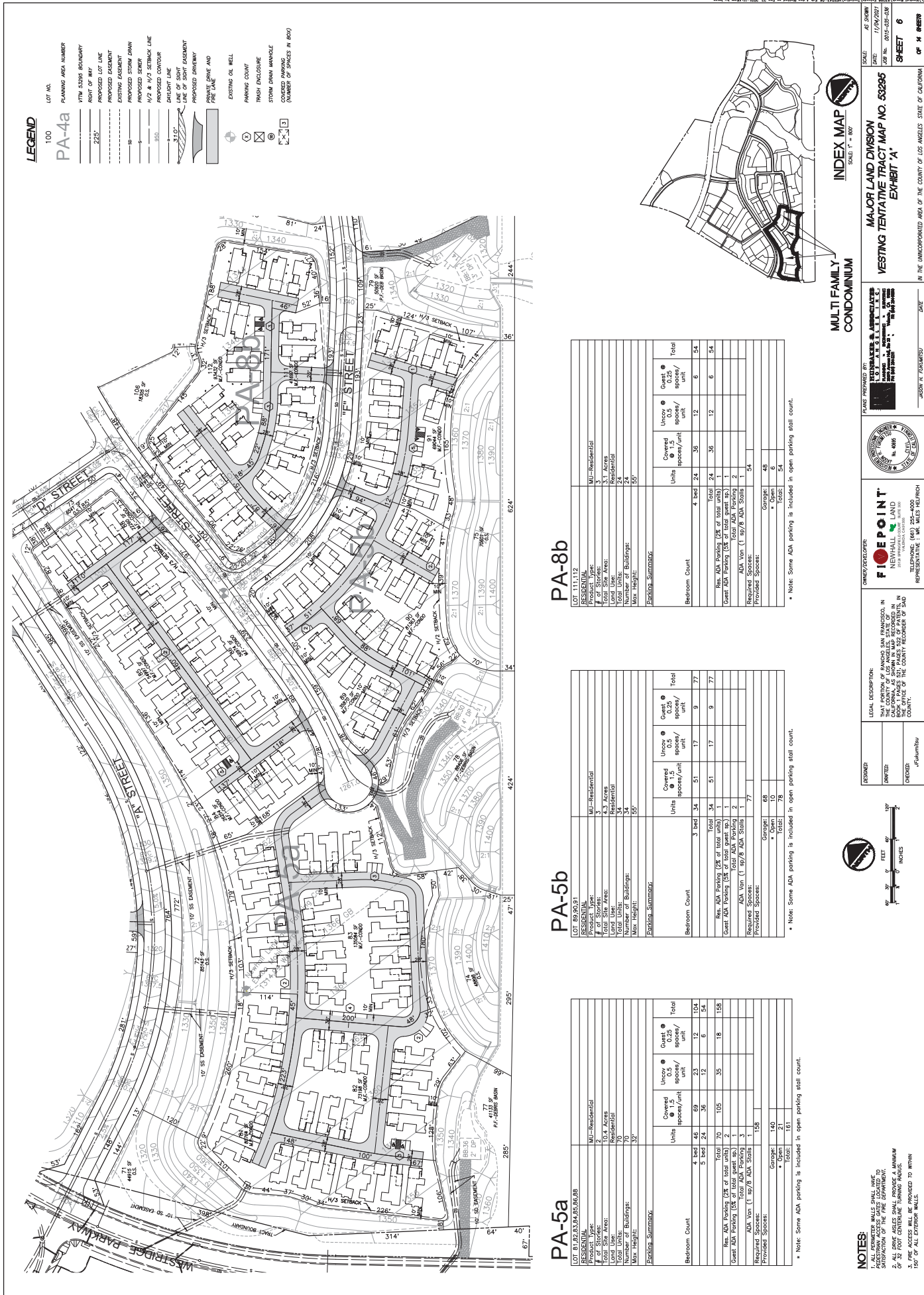
PLANS PREPARED BY:
 JERRY W. FERGUSON
 CIVIL ENGINEER
 LICENSE NO. 4488
 STATE OF CALIFORNIA



LEGAL DESCRIPTION:
 THAT PORTION OF PARCEL SAN FRANCISCO, IN
 THE COUNTY OF SAN FRANCISCO, IN
 CALIFORNIA, AS SHOWN IN MAP RECORDED IN
 THE OFFICE OF THE COUNTY RECORDER OF SAID
 COUNTY.

NOTES:
 1. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
 2. ALL DIMENSIONS SHALL BE TO THE CENTERLINE OF THE ROADWAY UNLESS NOTED OTHERWISE.
 3. FIRE ACCESS SHALL BE PROVIDED TO WITHIN 150' OF ALL EXTERIOR WALLS.





LEGEND

- 100 LOT NO.
- PLANNING AREA NUMBER
- 17M 53295 BOUNDARY
- RIGHT OF WAY
- 225' PROPOSED LOT LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED STORM DRAIN
- PROPOSED CENTER
- 1/2" & 1/3" SETBACK LINE
- PROPOSED CONTOUR
- PROPOSED DRIVEWAY
- PROPOSED DRIVEWAY
- PRIVATE DRIVE AND FIRE LINE
- EXISTING OR WELL
- PARKING COURT
- FRESH ENCLOSURE
- STORM DRAIN MANHOLE
- COVERED PARKING (NUMBER OF SPACES IN BOX)

PA-4a

PA-5a

LOT 61, 62, 63, 64, 65, 66, 68

RESIDENTIAL

of Stories: 2

Total Site Area: 10.7 Acres

Total Units: 70

Number of Buildings: 2

Max Height: 32'

Parking Summary:	
Bedroom Count	Guest
4 bed	69
5 bed	24
Total	93
Req. ADA Parking (2% of total units)	10
Guest ADA Parking (5% of total guest sp.)	2
Total ADA Parking	12
ADA Van (1/87.8 ADA Units)	1
Required Spaces:	135
Provided Spaces:	155
Garage:	105
Open:	21
Total:	126

* Note: Some ADA parking is included in open parking stall count.

PA-5b

LOT 69, 70, 31

RESIDENTIAL

of Stories: 3

Total Site Area: 4.3 Acres

Total Units: 34

Number of Buildings: 1

Max Height: 35'

Parking Summary:	
Bedroom Count	Guest
3 bed	34
Total	34
Req. ADA Parking (2% of total units)	1
Guest ADA Parking (5% of total guest sp.)	1
Total ADA Parking	2
ADA Van (1/87.8 ADA Units)	1
Required Spaces:	3
Provided Spaces:	17
Garage:	65
Open:	18
Total:	83

* Note: Some ADA parking is included in open parking stall count.

PA-8b

LOT 111, 112

RESIDENTIAL

of Stories: 3

Total Site Area: 3.1 Acres

Total Units: 24

Number of Buildings: 2

Max Height: 35'

Parking Summary:	
Bedroom Count	Guest
4 bed	24
Total	24
Req. ADA Parking (2% of total units)	1
Guest ADA Parking (5% of total guest sp.)	1
Total ADA Parking	2
ADA Van (1/87.8 ADA Units)	1
Required Spaces:	4
Provided Spaces:	54
Garage:	45
Open:	54
Total:	99

* Note: Some ADA parking is included in open parking stall count.

INDEX MAP
SCALE: 1" = 800'



MULTI-FAMILY CONDOMINIUM

MAJOR LAND DIVISION
VESTING TENTATIVE TRACT MAP NO. 53295
EXHIBIT 'A'

SCALE: AS SHOWN
DATE: 11/04/2021
JOB NO.: 2015-035-138
SHEET 6 OF 14 SHEETS

PLANS PREPARED BY:
JULIA WALKER & ASSOCIATES
ARCHITECTS & PLANNERS
10000 WILSON BLVD., SUITE 100
DUBLIN, CA 94568
TEL: (925) 835-1100
WWW.JWA-ARCHITECTS.COM

DESIGNED BY:
FIREPOINT
NEWHALL LAND
10000 WILSON BLVD., SUITE 100
DUBLIN, CA 94568
TEL: (925) 835-1100
WWW.FIREPOINTLAND.COM

LEGAL DESCRIPTION:
THAT PORTION OF RANCHO SAN FRANCISCO, IN THE COUNTY OF SAN FRANCISCO, IN CALIFORNIA, AS SHOWN IN MAP RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

DESIGNED BY:
FIREPOINT
NEWHALL LAND
10000 WILSON BLVD., SUITE 100
DUBLIN, CA 94568
TEL: (925) 835-1100
WWW.FIREPOINTLAND.COM

SCALE: 1" = 800'

IN THE UNINCORPORATED AREA OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

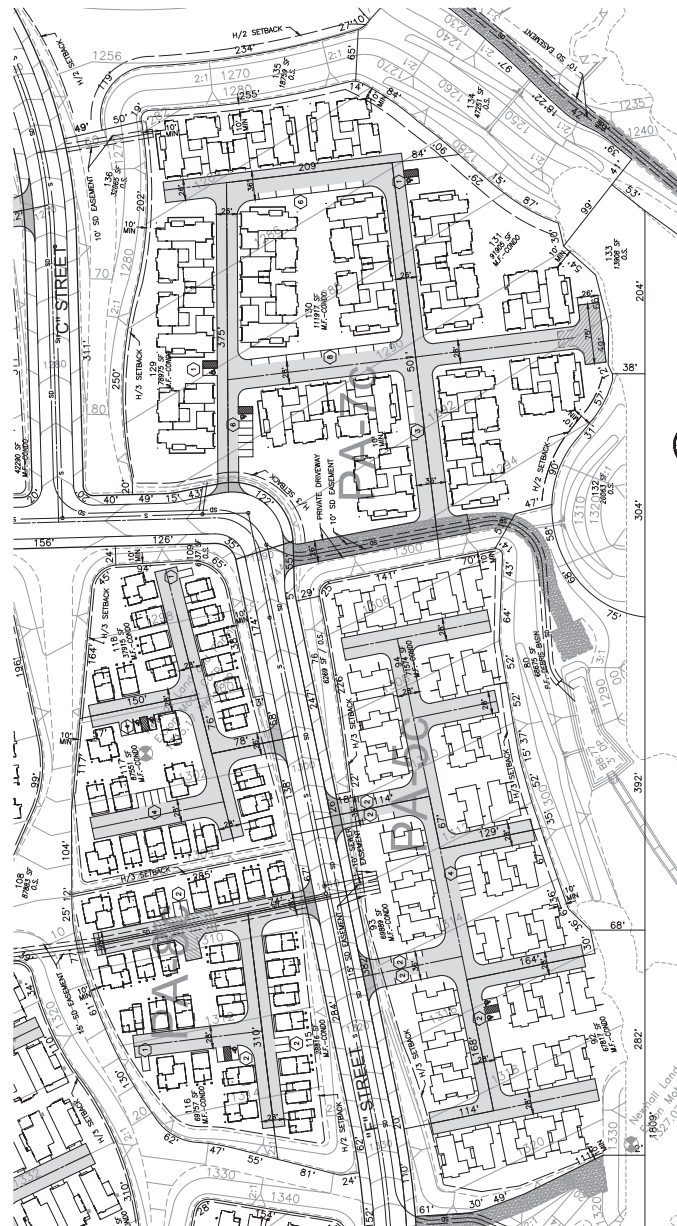
DATE: _____

BY: _____

- NOTES:**
- ALL PERIMETER WALLS SHALL HAVE TO SATISFACTION OF THE FIRE DEPARTMENT.
 - ALL DRIVE ASSES SHALL PROVIDE A MINIMUM OF 32" FOOT GENERATE TURNING RADIUS.
 - ALL DRIVE ASSES SHALL BE CONCRETE TO WITHIN 150" OF ALL EXTERIOR WALLS.

LEGEND

- 100 LOT NO.
- PLANNING AREA NUMBER
- 17M 53295 BOUNDARY
- RIGHT OF WAY
- 225' PROPOSED LOT LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED STORM DRAIN
- PROPOSED SETBACK LINE
- 1/2 & 1/3 SETBACK LINE
- 1/2 SETBACK LINE
- 1/3 SETBACK LINE
- 1/4 SETBACK LINE
- 1/5 SETBACK LINE
- 1/6 SETBACK LINE
- 1/7 SETBACK LINE
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- 1/95 SETBACK LINE
- 1/96 SETBACK LINE
- 1/97 SETBACK LINE
- 1/98 SETBACK LINE
- 1/99 SETBACK LINE
- 1/100 SETBACK LINE



PA-5C

LOT 92,93,94	ML-Residential	4.8 Acres	Residential	12	55'
Bedroom Count					
3 Bed	15	21	6	3	20
4 Bed	13	20	7	4	31
Total					
Res. ADA Parking (2% of total units)	59	58	20	11	89
Guest ADA Parking (0.5% of total guest sp.)	1	1	1	1	4
ADA Van (1 sp/8 ADA Stalls)	2	2	1	1	6
Required Spaces:	62	61	22	13	108
Provided Spaces:	62	61	22	13	108
* Note: Some ADA parking is included in open parking stall count.					

PA-7C

LOT 128,130,131	ML-Residential	6.5 Acres	Residential	12	55'
Bedroom Count					
3 Bed	57	85	29	14	126
4 Bed	57	85	29	14	126
Total					
Res. ADA Parking (2% of total units)	2	2	2	2	8
Guest ADA Parking (0.5% of total guest sp.)	3	3	3	3	12
ADA Van (1 sp/8 ADA Stalls)	128	128	128	128	512
Required Spaces:	133	133	133	133	532
Provided Spaces:	133	133	133	133	532
* Note: Some ADA parking is included in open parking stall count.					

PA-8C

LOT 115,116,117,118	ML-Residential	4.3 Acres	Residential	12	55'
Bedroom Count					
3 Bed	52	78	26	13	117
4 Bed	52	78	26	13	117
Total					
Res. ADA Parking (2% of total units)	1	1	1	1	4
Guest ADA Parking (0.5% of total guest sp.)	2	2	2	2	8
ADA Van (1 sp/8 ADA Stalls)	117	117	117	117	468
Required Spaces:	120	120	120	120	480
Provided Spaces:	120	120	120	120	480
* Note: Some ADA parking is included in open parking stall count.					

NOTES:

- ALL PERIMETER WALLS SHALL HAVE SATISFACTION OF THE FIRE DEPARTMENT.
- ALL DRIVE ASSESS SHALL PROVIDE A MINIMUM OF 32 FOOT CENTERLINE TURNING RADIUS.
- ALL DRIVE ASSESS SHALL BE IMPROVED TO WITHIN 15% OF ALL EXTERIOR WALLS.

LEGAL DESCRIPTION:
 THAT PORTION OF PARCELS SAN FRANCISCO, IN THE COUNTY OF SAN FRANCISCO, IN THE STATE OF CALIFORNIA, AS SHOWN IN MAP RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PREPARED BY:
 JASON W. FERGUSON

DATE:
 11/04/2021

SCALE:
 AS SHOWN

JOB NO.:
 2021-035-038

SHEET 7

OF 4 SHEETS

INDEX MAP
 SCALE: 1" = 800'

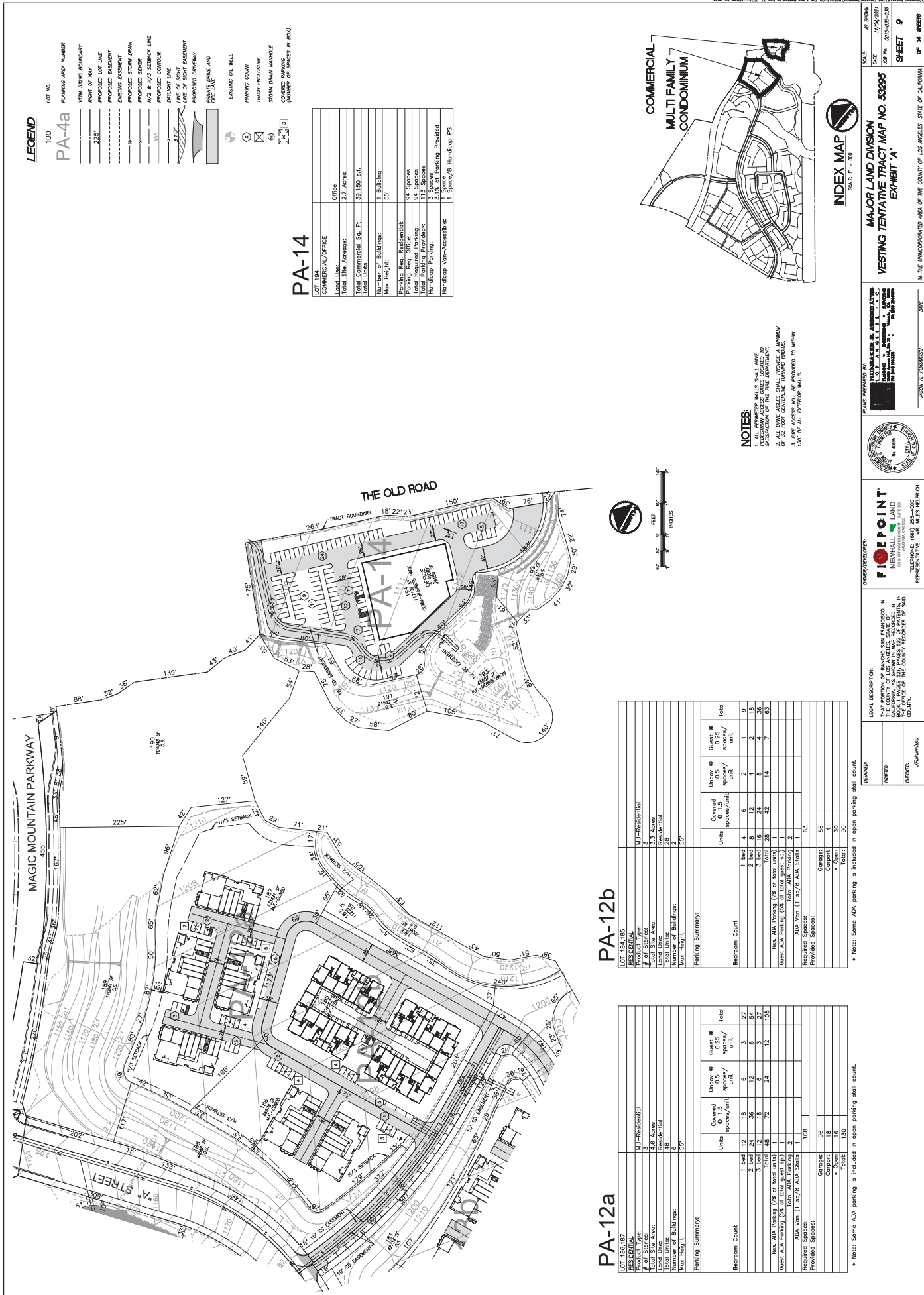
MAJOR LAND DIVISION
 VESTING TENTATIVE TRACT MAP NO. 53295

EXHIBIT 'A'

MULTI FAMILY CONDOMINIUM

IN THE UNINCORPORATED AREA OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA



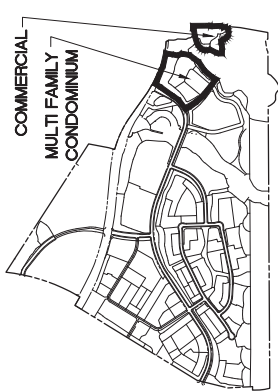


LEGEND
100
PA-4a

- PLANNING AREA NUMBER
- 17M 53295 BOUNDARY
- RIGHT OF WAY
- PROPOSED LOT LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED STORM DRAIN
- PROPOSED CENTER
- 1/2" & 1/3" SETBACK LINE
- PROPOSED CONTOUR
- PROPOSED DRIVEWAY
- PROPOSED DRIVEWAY
- PRIVATE DRIVE AND
- PRE-LINE
- EXISTING OR WELL
- PARKING COUNT
- FRESH ENCLOSURE
- STORM DRAIN MANHOLE
- CONCRETE PAVING
- (NUMBER OF SPACES IN BOX)

PA-14

Lot Area	Office
Commercial/Garage	2.7 Acres
Total Site Area	30,150 s.f.
Total Commercial Sq. Ft.	94,000
Total Units	1 Building
Max. Height	55'
Number of Buildings	94 Spaces
Bedroom Count	94 Spaces
Total Required Parking	3,300 Spaces
Existing Parking	3,300 Spaces
Handicap Parking	3.1% of Parking Provided
Handicap Van-Accessible	1 Space/9 Handicap PS



INDEX MAP
SCALE 1" = 800'

SCALE: AS SHOWN
DATE: 11/04/2021
JOB NO.: 2021-032-148
SHEET 9
OF 14 SHEETS

MAJOR LAND DIVISION
VESTING TENTATIVE TRACT MAP NO. 53295
EXHIBIT 'A'



LEGAL DESCRIPTION:
THAT PORTION OF RANCHO SAN FRANCISCO, IN
NEWHALL, CALIFORNIA, AS SHOWN IN MAP RECORDED IN
THE OFFICE OF THE COUNTY RECORDER OF SAID
COUNTY.

OWNER/DEVELOPER:
NEWHALL LAND
REPRESENTATIVE: [Name]

PLANS PREPARED BY:
[Firm Name]

NOTES:
1. ALL FURNITURE SHALL HAVE
SATISFACTION OF THE FIRE DEPARTMENT.
2. ALL DRIVE ANGLES SHALL PROVIDE A MINIMUM
OF 35 FOOT EXTERIOR TURNING RADIUS.
3. ALL DRIVE ANGLES SHALL BE ROUNDED TO WITHIN
150' OF ALL OUTSIDE WALLS.

PA-12b

LOT 184,185	MU-Residential				
Product Type	3.3 Acres				
Total Site Area	Residential				
Land Use	28				
Number of Buildings	55'				
Max. Height	55'				
Parking Summary:					
Bedroom Count	Units	Covered spaces/unit	Uncovered spaces/unit	Guest spaces/unit	Total
1 bed	4	6	2	1	9
2 bed	4	6	2	1	9
3 bed	4	6	2	1	9
Total	28	42	14	7	63
Min. ADA Parking (2% of total units)	1				
Guest ADA Parking (10% ADA Stalls)	2				
ADA Van (1 30'/8 ADA Stalls)	1				
Included Spaces:					
Garage:	55				
Carport:	4				
Total:	59				

* Note: Some ADA parking is included in open parking stall count.

PA-12a

LOT 184,187	MU-Residential				
Product Type	4.7 Acres				
Total Site Area	Residential				
Land Use	28				
Number of Buildings	55'				
Max. Height	55'				
Parking Summary:					
Bedroom Count	Units	Covered spaces/unit	Uncovered spaces/unit	Guest spaces/unit	Total
1 bed	12	18	6	3	27
2 bed	12	18	6	3	27
3 bed	12	18	6	3	27
Total	48	72	24	12	118
Min. ADA Parking (2% of total units)	1				
Guest ADA Parking (10% ADA Stalls)	2				
ADA Van (1 30'/8 ADA Stalls)	1				
Included Spaces:					
Garage:	96				
Carport:	18				
Total:	114				

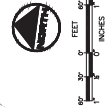
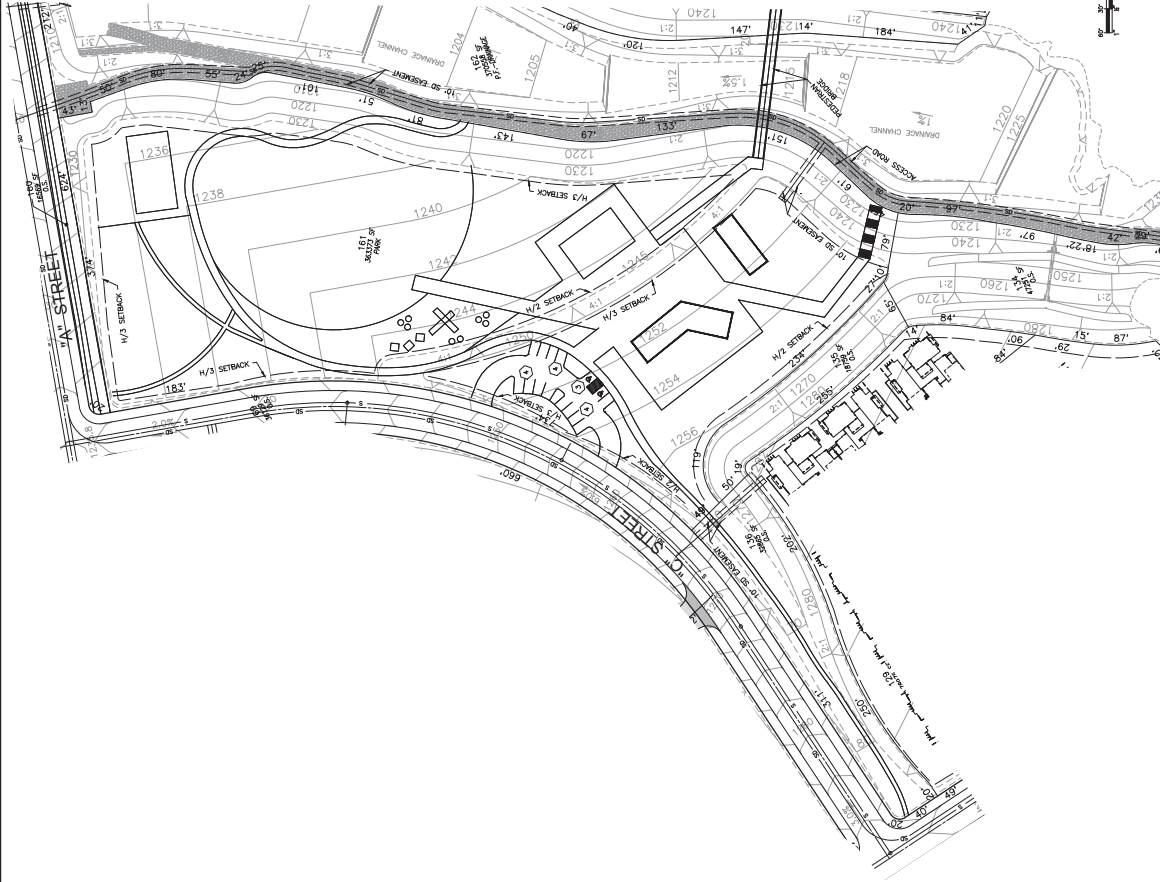
* Note: Some ADA parking is included in open parking stall count.

LEGEND

- LOT NO. 100
- PLANNING AREA NUMBER PA-4a
- VTM 5326 BOUNDARY
- RIGHT OF WAY
- PROPOSED LOT LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED STORM DRAIN
- PROPOSED SANITARY
- PROPOSED CONTOUR
- DAYLIGHT LINE
- LINE OF SHOT EXHAUST
- LINE OF SHOT EXHAUST
- PROPOSED STREET
- PROPOSED DRIVE AND
- EXISTING OIL WELL
- PARKING COUNT
- TRUCK ENCLOSURE
- STORM DRAIN MANHOLE
- COVERED PARKING (NUMBER OF SPACES IN 800)

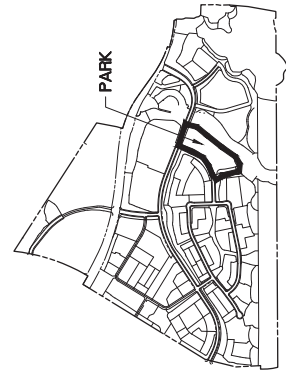
PRIVATE PARK

LOT 161	
PARK	PARK
Land Area	85.3 Acres
Total Site Area	1,868.36
Total Buildings	1
Max. Height	32'
Total Required Parking	4 Spaces
Total Handicap Parking	15 Spaces
Handicap Parking	2 Spaces
(1 Space/25 PS)	
Handicap Parking	1 Space
(1 Space/8 Handicap PS)	



NOTES:

1. ALL EXTERIOR WALLS SHALL HAVE PROVISION FOR WATER DRAINAGE TO THE STREET OR TO A DRAINAGE CHANNELED TO THE STREET.
2. ALL DRIVE AXLES SHALL PROVIDE A MINIMUM OF 32 FOOT OVERHANG TURNING RADIUS.
3. FIRE ACCESS SHALL BE PROVIDED TO WITHIN 100' OF ALL EXTERIOR WALLS.



INDEX MAP
SCALE 1" = 800'

MAJOR LAND DIVISION
VESTING TENTATIVE TRACT MAP NO. 53295
EXHIBIT 'A'

PLANS PREPARED BY:
NEWELL & ASSOCIATES
10000 WILSON AVENUE, SUITE 100
DUBLIN, CA 94568
TEL: (925) 835-1100
WWW.NEWELLAND.COM



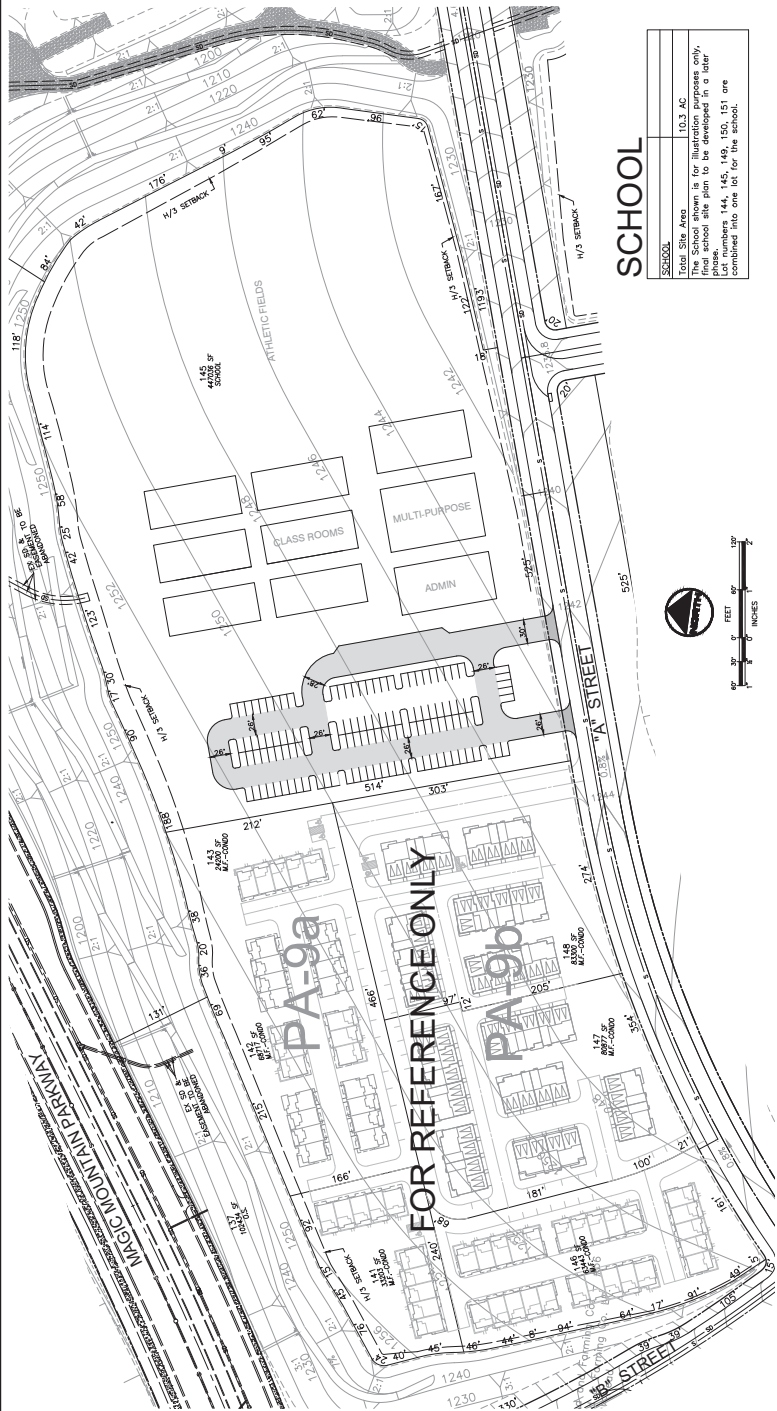
FIREFIGHT
NEWELL & ASSOCIATES
10000 WILSON AVENUE, SUITE 100
DUBLIN, CA 94568
TEL: (925) 835-1100
WWW.NEWELLAND.COM

LEGAL DESCRIPTION:
THAT PORTION OF PARCELS SAN FRANCISCO, IN CALIFORNIA, AS SHOWN IN MAP RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

DRAWN BY: J. Williams
CHECKED BY: J. Williams

DATE: 11/04/2011
JOB NO.: 001-035-138
SHEET 12 OF 14 SHEETS

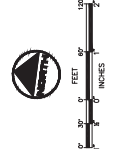
IN THE UNINCORPORATED AREA OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA



FOR REFERENCE ONLY

SCHOOL

Total Site Area	1.013 AC
The site plan is for the school building only. The final school site plan to be developed in a later phase numbers 144, 145, 149, 150, 151 are combined into one lot for the school.	

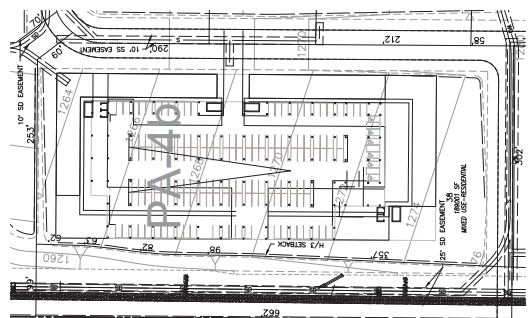


PA-4b ALTERNATE

LOT 41	Commercial
Condominium in Market-Use Zone	MU-Residential
Lot Use	MU-Residential
Lot Area	3.9 Acres
Total Site Area	3.9 Acres
Total Site Setback	30'
Number of Buildings	1 Building
Max. Height	25'
Parking Required Residential	697 Spaces
Total Parking Provided	697 Spaces (0 assigned, 1 unassigned)
Handicap Parking	2% of Total Assigned (12.5)
Handicap Van-Accessible	2 Spaces (1 assigned, 1 unassigned)
Handicap	2 Spaces (1 assigned, 1 unassigned)
* 110 dwelling units are PA-9a and PA-9b relocated to PA-4b with the addition of the school site in this location.	

PA-4b ALTERNATE

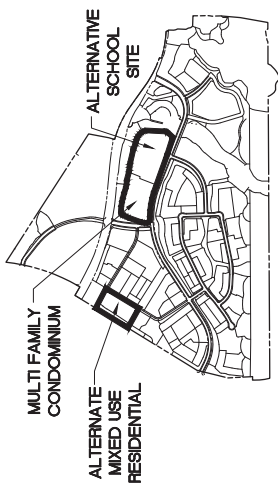
LOT 41	Commercial
Condominium in Market-Use Zone	MU-Residential
Lot Use	MU-Residential
Lot Area	3.9 Acres
Total Site Area	3.9 Acres
Total Site Setback	30'
Total Office Sq. Ft.	17,025 sq. ft.
Total Office Units	17,025 sq. ft.
Number of Buildings	1 Building
Parking Required Commercial	69 Spaces
Total Parking Provided	69 Spaces
Handicap Parking	2 Spaces (1 assigned, 1 unassigned)
Handicap Van-Accessible	1 Space (1 assigned, 0 unassigned)



LEGEND

- 100 LOT NO.
- PA-4a PLANNING AREA NUMBER
- SOLID LINE WITH DASHES VTM SZOP BOUNDARY
- DASHED LINE RIGHT OF WAY
- DASHED LINE WITH DOTS PROPOSED LOT LINE
- DASHED LINE WITH DOTS COSTING BOUNDARY
- SOLID LINE WITH DOTS PROPOSED STORM DRAIN
- SOLID LINE WITH DOTS PROPOSED SANITARY
- SOLID LINE WITH DOTS 1/2 & 1/4 STRACK LINE
- SOLID LINE WITH DOTS DAYLIGHT LINE
- SOLID LINE WITH DOTS LINE OF SHOT ELEVATION
- SOLID LINE WITH DOTS PROPOSED DRAINAGE
- SOLID LINE WITH DOTS PROPOSED CURB AND GUTTER
- SOLID LINE WITH DOTS EXISTING OIL WELL
- SOLID LINE WITH DOTS EXISTING CULVERT
- SOLID LINE WITH DOTS TRASH ENCLOSURE
- SOLID LINE WITH DOTS STORM DRAIN MANHOLE
- SOLID LINE WITH DOTS COVERED MANHOLE (NUMBER OF SPACES IN ROW)

NOTES:
 1. ALL EXISTING UTILITIES SHALL BE MAINTAINED UNLESS OTHERWISE INDICATED.
 2. FIRE ACCESS SHALL BE PROVIDED TO WITHIN 150' OF ALL EXISTING WALLS.
 3. FIRE ACCESS SHALL BE PROVIDED TO WITHIN 150' OF ALL EXISTING WALLS.



INDEX MAP

SCALE: AS SHOWN
 DATE: 11/04/2017
 JOB NO.: 2017-035-138
 SHEET 14
 OF 14 SHEETS

MAJOR LAND DIVISION
 VESTING TENTATIVE TRACT MAP NO. 53295
 EXHIBIT 'A'



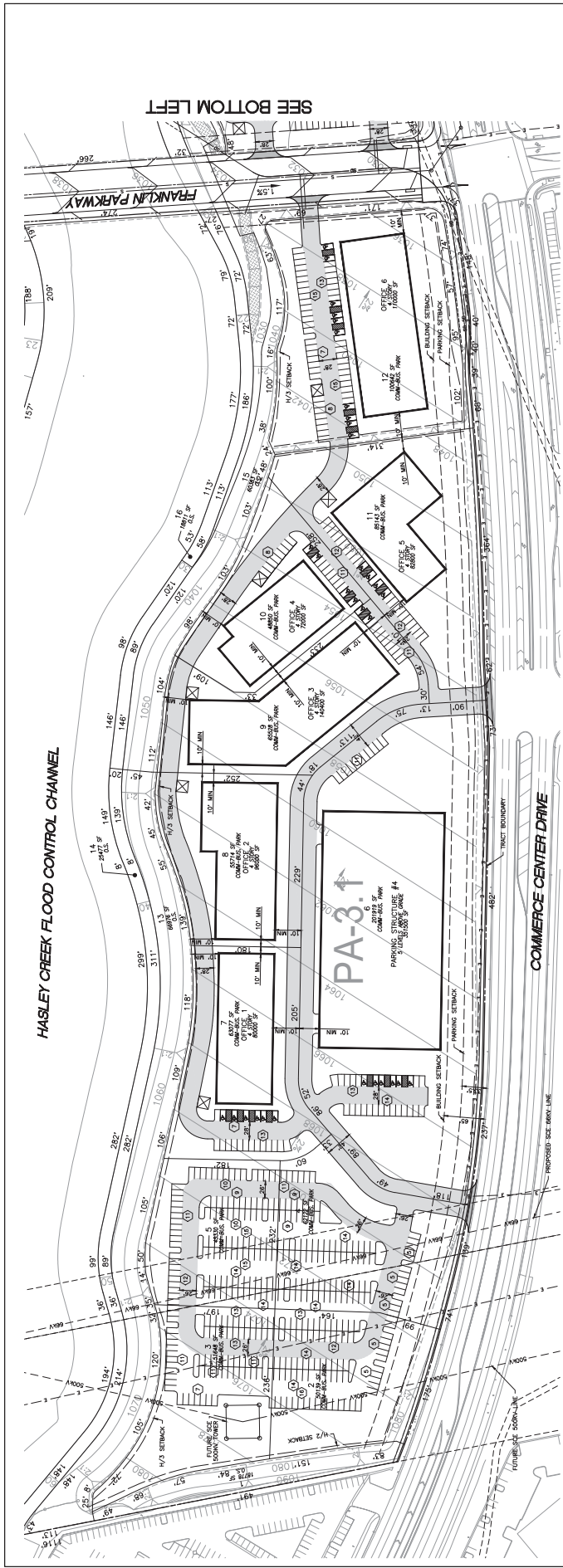
OWNERS/DEVELOPERS:
FIREFIGHTER
 NEWHALL LAND
 10000 S. CENTRAL
 SUITE 100
 WESTLAND, CA 94790

LEGAL DESCRIPTION:
 THAT PORTION OF PARCEL SAN FRANCISCO, IN THE CITY AND COUNTY OF SAN FRANCISCO, CALIFORNIA, AS SHOWN IN MAP RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PREPARED BY:
 JASON W. FERGUSON

IN THE UNINCORPORATED AREA OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

APPENDIX B: VALENCIA COMMERCE CENTER SITE PLAN



PA-3.1

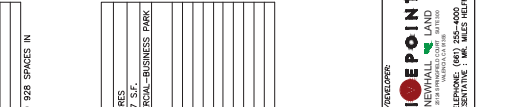
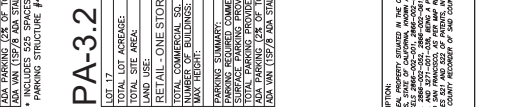
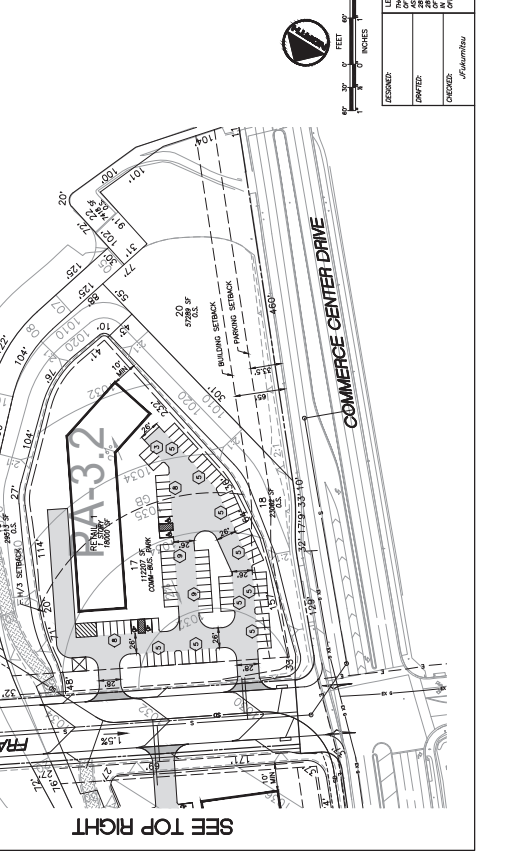
LOT #	6
TOTAL LOT ACRES	4.6 ACRES
TOTAL SITE AREA	20119 S.F.
TOTAL BUILDING SQ. FT.	351500
LAND USE	COMMERCIAL-BUSINESS PARK
PARKING STRUCTURE #4	1
NUMBER OF BUILDINGS IN LOT	1
MAX. HEIGHT	50'
PARKING PROVIDED	928

PA-3.2

LOT #	17
TOTAL LOT ACRES	2.6 ACRES
TOTAL SITE AREA	112207 S.F.
TOTAL BUILDING SQ. FT.	1,122,070
LAND USE	COMMERCIAL-BUSINESS PARK
PARKING STRUCTURE #4	1
NUMBER OF BUILDINGS IN LOT	1
MAX. HEIGHT	35'
PARKING PROVIDED	82

PA-3.3

LOT #	10, 11, 12, 13, 14
TOTAL LOT ACRES	14.4 ACRES
TOTAL SITE AREA	628193 S.F.
TOTAL BUILDING SQ. FT.	6,281,930
LAND USE	COMMERCIAL-BUSINESS PARK
PARKING STRUCTURE #4	1
NUMBER OF BUILDINGS IN LOT	4
MAX. HEIGHT	50'
PARKING PROVIDED	1453



LEGEND

LOT NO. 100
 PLANNING AREA NUMBER PA-2.1
 1/4" 19108 BOUNDARY
 222 PROPOSED LOT LINE
 222 PROPOSED EXISTENT
 222 EXISTING EXISTENT
 1/2 & 1/4 SETBACK LINE
 BUILDING/PARKING SETBACK LINE
 PROPOSED CONTOUR
 DASHED LINE
 PROPOSED DRIVEWAY
 PRIVATE DRIVE AND FIRE LINE
 FIRE LINE ONLY
 PROPOSED STORM DRAIN
 EXISTING SIZE POWER LINE
 PROPOSED 6AWY SIZE POWER LINE
 FUTURE 5000V SIZE POWER LINE
 EXISTING SIZE POLE
 PROPOSED SIZE POLE
 EXISTING WELL
 PARKING COUNTER
 TRASH ENCLOSURE
 STORM DRAIN MANHOLE
 EXISTING WATER WELL

KEY MAP
 SCALE 1" = 800'

MAJOR LAND DIVISION
 VESTING TENTATIVE PARCEL MAP NO. 18108
 EXHIBIT 'A'

SCALE: AS SHOWN
 DATE: 11/09/2021
 JOB NO.: 0975-041-100

DESIGNED BY: J. J. JENSEN ARCHITECTS
 1000 S. GARDEN STREET, SUITE 200, LOS ANGELES, CA 90007
 TEL: 213-483-1111 FAX: 213-483-1112
 WWW.JJJA.COM

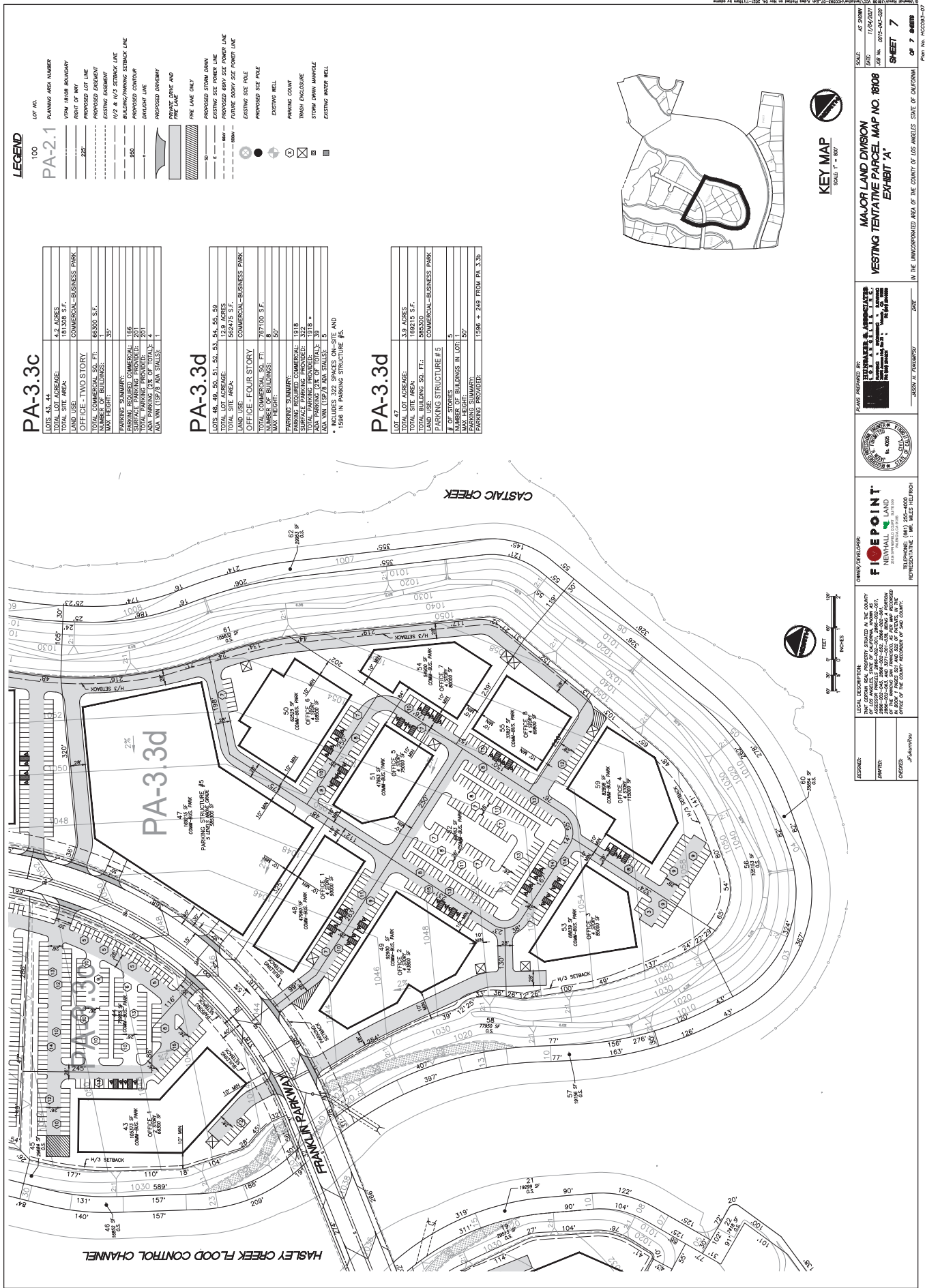
OWNER/DEVELOPER:
FIREFIGHTER LAND
 1000 S. GARDEN STREET, SUITE 200, LOS ANGELES, CA 90007
 TELEPHONE: (626) 252-4000
 REPRESENTATIVE: MR. MILES HELLMUTH

DATE: _____

IN THE UNINCORPORATED AREA OF THE COUNTY OF LOS ANGELES STATE OF CALIFORNIA

Plan No. H40203-05

PAGE 5 OF 7



PA-3.3c

LOT NO.	100
PLANNING AREA NUMBER	PA-2.1
TOTAL LOT ACRES	4.2 ACRES
TOTAL SITE AREA	181,508 S.F.
LAND USE	COMMERCIAL-BUSINESS PARK
OFFICE-TWO STORY	
TOTAL COMMERCIAL SQ. FT.	66,000 S.F.
MAX HEIGHT	35'
PARKING SUMMARY:	
PARKING REQUIRED COMMERCIAL	166
PARKING PROVIDED COMMERCIAL	201
TOTAL PARKING PROVIDED	201
ADA PARKING (2% OF TOTAL)	4
ADA VAN (15% ADA STALLS)	1

PA-3.3d

LOT NO.	43, 49, 50, 51, 52, 53, 54, 55, 56, 59
PLANNING AREA NUMBER	PA-2.1
TOTAL LOT ACRES	5.62475 ACRES
LAND USE	COMMERCIAL-BUSINESS PARK
OFFICE-FOUR STORY	
TOTAL COMMERCIAL SQ. FT.	76,700 S.F.
MAX HEIGHT	35'
PARKING SUMMARY:	
PARKING REQUIRED COMMERCIAL	1918
PARKING PROVIDED COMMERCIAL	322
TOTAL PARKING PROVIDED	322
ADA PARKING (2% OF TOTAL)	39
ADA VAN (15% ADA STALLS)	5

* INCLUDES 322 SPACES ON-SITE AND 1506 IN PARKING STRUCTURE #3.

PA-3.3d

LOT NO.	47
PLANNING AREA NUMBER	PA-2.1
TOTAL LOT ACRES	3.9 ACRES
TOTAL SITE AREA	169,215 S.F.
LAND USE	COMMERCIAL-BUSINESS PARK
OFFICE-TWO STORY	
TOTAL COMMERCIAL SQ. FT.	58,500 S.F.
MAX HEIGHT	35'
PARKING SUMMARY:	
PARKING REQUIRED COMMERCIAL	1,818
PARKING PROVIDED COMMERCIAL	150
TOTAL PARKING PROVIDED	150
ADA PARKING (2% OF TOTAL)	36
ADA VAN (15% ADA STALLS)	5

* INCLUDES 1506 IN PARKING STRUCTURE #3.

LEGEND

100 LOT NO.

PA-2.1 PLANNING AREA NUMBER

--- VTM 18'00" BOUNDARY

--- RIGHT OF WAY

--- PROPOSED LOT LINE

--- EXISTING EASEMENT

--- 1/2 & 1/2 SETBACK LINE

--- 1/4 & 1/4 SETBACK LINE

--- PROPOSED DRIVEWAY

--- PROPOSED DRIVE AND DRIVEWAY

--- FIRE LINE ONLY

--- PROPOSED STORM DRAIN

--- EXISTING SIDE POWER LINE

--- PROPOSED SIDE POWER LINE

--- FUTURE SIDE POWER LINE

--- EXISTING SIDE POLE

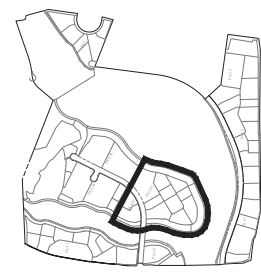
--- EXISTING WELL

--- PARKING COURT

--- TRASH ENCLOSURE

--- STORM DRAIN MANHOLE

--- EXISTING WATER WELL



KEY MAP
SCALE 1" = 800'

OWNER/DEVELOPER:
FIREFORM LAND
NEWHALL LAND
2018 INTERNATIONAL DRIVE, SUITE 100
COSTA MESA, CA 92626
TELEPHONE: (661) 252-4000
REPRESENTATIVE: MR. MILES HELFRICH

DESIGNER:
JULIANI & ASSOCIATES
10000 WILSON AVENUE, SUITE 100
COSTA MESA, CA 92626
TELEPHONE: (714) 440-1111

PLANNING AREA: PA-2.1
SUBDIVISION: 1506 IN PARKING STRUCTURE #3

MAJOR LAND DIVISION
VESTING TENTATIVE PARCEL MAP NO. 18108
EXHIBIT 'A'

IN THE UNINCORPORATED AREA OF THE COUNTY OF LOS ANGELES STATE OF CALIFORNIA

SCALE: AS SHOWN
DATE: 11/04/2021
JOB NO.: 0975-M4-100

SHEET 7 OF 7

Plan No. H4003-07



Entrada South-Valencia Commerce Center Water Supply Assessment



Board of Directors Meeting
June 7, 2022
Item 7.1
Rick Vasilopoulos

Presentation Outline

-  **Water Supply Planning Legal Overview**
-  **SB 610 WSA Process and Requirements**
-  **Project Description & Water Demands**
-  **Available and Anticipated Water Supplies**
-  **Review and Management of Demand and Water Supply Risks**
-  **Review of SCV Water's Historical Operations**
-  **Supply and Demand Comparisons**
-  **Conclusions and Recommendations**



Water Supply Planning Legal Overview

- Duty to Serve
- UWMP
- Water Supply Assessments
- Water Verifications
- Will Serve Letters



Duty to Serve

- SCV Water was created by a special act to provide water to Santa Clarita Valley at a reasonable cost and in a sustainable manner.
- If SCV Water has water available, it is obligated to provide water service upon request (subject to reasonable rules and regulations).
- New service moratorium can be implemented during water supply emergency situations, subject to the agency's discretion.



Development of Additional Supplies

- SCV Water is obligated to develop new and/or augment existing supplies to keep up with increasing demand. But it has considerable discretion in the development of those new supplies.
- Efforts to develop new supplies must be reasonable and within the scope of SCV Water's mandate to provide affordable and sustainable water.
- A potential water user does not possess any absolute right to water service. Potential water use is not a right without a firm commitment from the water supplier.



Urban Water Management Plan (UWMP)

- Foundational document for water supply planning (every 5 years).
- Purpose is to support long-term (20-25+ years) resource planning, to ensure adequate water supplies are available to meet existing and future demands, and to demonstrate reliability in normal, single dry, and multiple dry years, supported by substantial evidence that involves expectations, not certainties.
- Provides staff, the public, and elected officials with an understanding of past, current, and future water conditions and management. Incorporates projections of SWP water supply provided by DWR.
- Adopted UWMPs can be directly challenged by a petition for writ of mandate.



Water Supply Assessments (SB 610)

- The WSA statute (along with SB 221) is intended to better link land use decision-making and water supply availability and to increase communication and coordination between a water supplier and land use agency in connection with the approval of sizable developments.
- Unlike UWMPs, WSAs are project-specific analyses that are required when a city or county lead agency determines that a SB 610 project (containing 500 dwelling units or a similar-sized commercial project) is subject to CEQA.



Water Supply Assessments cont...

- WSAs answer the following question: whether the projected supplies available during normal, single-dry, and multiple dry years will meet the demand of the proposed project over at 20-year planning horizon, in addition to existing and planned future uses.
- The answer must be supported by substantial evidence, including but not limited to UWMPs (based on plans and estimates).
- Water suppliers are required to adopt a WSA (within 90 days of request). Failure to prepare a WSA subjects the Agency to a challenge by writ of mandamus.



Water Supply Assessments cont...

- If the water supplier concludes that water supplies are, or will be, insufficient, the water supplier “... shall provide to the city or county its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies.” (Wat. Code § 10911.)
- An adopted WSA is not subject to direct legal challenge and can only be challenged as part of a CEQA action against the lead agency.



Water Verifications (SB 221)

- Triggered by approval of a development agreement or tentative map that includes a subdivision (residential development of 500+ units). WVs are project specific.
- Such approvals may not be granted unless a sufficient water supply will be available to serve the project over a 20-year planning projection including normal, single-dry and multiple-dry years, based on a WV supported by substantial evidence, including (not limited to) UWMP and WSA.



Water Verifications cont...

- Key difference between WSAs and WVs is that the “plans and estimates” developed under the WSA statute must be replaced with “firm assurances” of supply.
- WVs are not part of CEQA, and their sufficiency is subject to direct legal challenge.

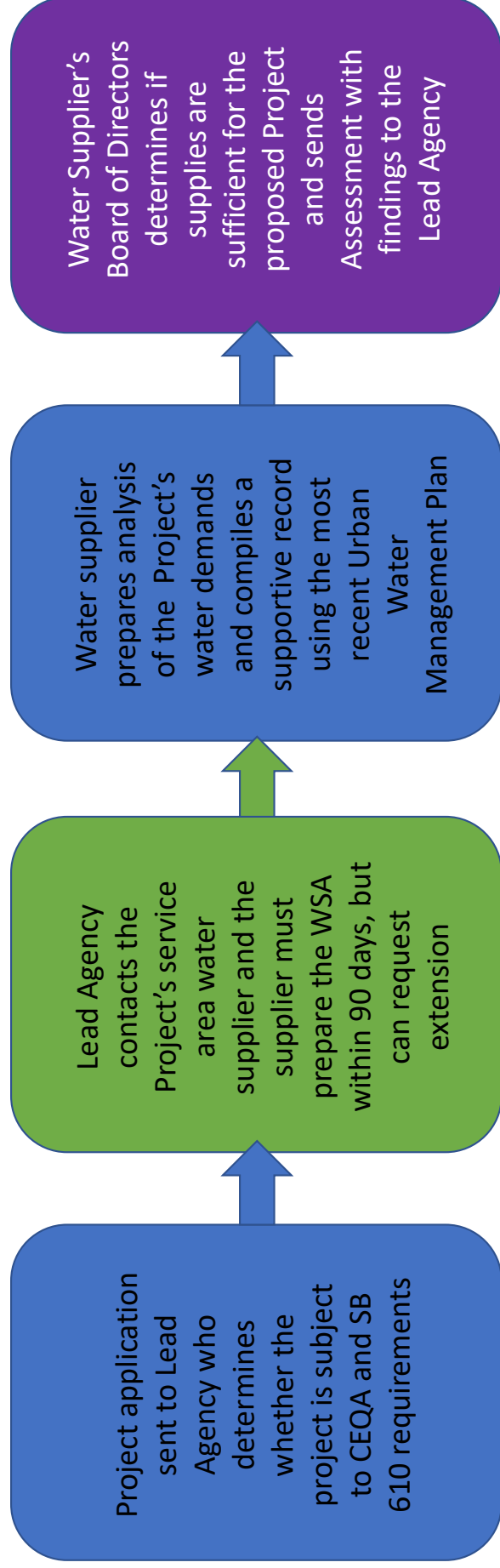


Will Serve Letters

- Before a land use authority will approve development or certain permits, it will usually require developers to obtain a will serve letter from the supplier to show there is water for the project (usually smaller than WSA and WV thresholds).
- Usually includes a representation by the supplier that a proposed development is within their service area, and, if the developer meets certain conditions, water service will be available.
- A will serve letter is usually not a contract, but can be, if it clearly manifests an intent to be bound, e.g., the parties to the contract and the subject matter must be specified, and a specific price and terms must be set.



SB 610 Water Supply Assessment Process



The SB 610 Water Supply Assessment

- Analyze the Project's water demand.
- Quantity of water received by Water Supplier in prior years from:
 - Water Supply Entitlements
 - Water Service Contracts
 - Groundwater
- WSA to show 20-year projected supply will meet demands
 - For normal, single dry and multiple dry years for the Project + existing and planned future uses.
 - Future planned supplies can be considered in projections
- Board of Directors is required to approve a WSA under Water Code



Entrada South Project Description

- The Project is within SCV Water's service area.
- The Project consists of:
 - 371 Multi-family detached residential units
 - 894 Multi-family attached residential units
 - 309 Mixed-use attached residential units
 - 582,000 sf of mixed-use commercial
 - 100 room hotel
 - Elementary school
 - 312.4 acres of recreational, arterial and open spaces

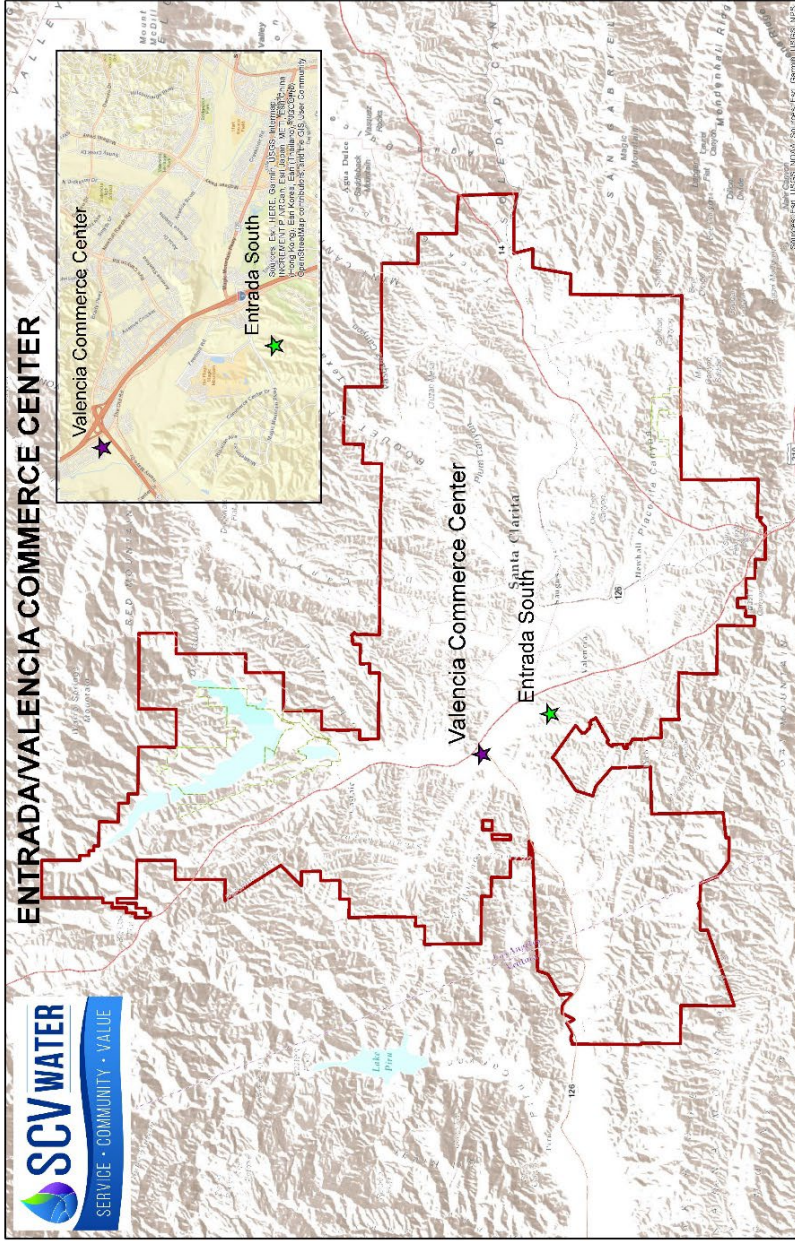


Valencia Commerce Center Project Description

- The Project is within SCV Water's service area.
- The Project consists of:
 - 2,909,700 sf mixed-use office development
 - 490,300 sf of commercial retail and business park
 - 41.8 acres of irrigated slopes
 - 168 acres of open space



Project Location



Entrada South is located on the west side of The Old Road between Valencia Blvd. and Magic Mountain Parkway.

Valencia Commerce Center is located on the West side of The Old Road between Hwy 126 and Commerce Center Drive.



SB 610 Requirement: Entrada South/VCC Demand Assessment Analysis

Note: Totals reflect additional overwatering factor of 26.5% for residential and 25.6% for commercial uses and 3.77% climate change factor

WATER DEMAND ESTIMATES - ENTRADA SOUTH AND VCC PROJECTS						
Project	Land Use	# of Units	Unit	Potable Demand (AFY)	Non-Potable Demand (AFY)	Total Demand (AFY)
Entrada	Low-Medium Density/ Multi-Family Detached	371	Dwelling Units	83	26	108
Entrada	Medium Density/ Multi- Family Attached	894	Dwelling Units	199	42	242
Entrada	High Density Mixed Use/ Multi-Family	309	Dwelling Units	69	4	73
Entrada	Mixed Use Retail	1.5	acres	1	1	2
Entrada	Mixed Use Office	52.5	acres	26	33	59
Entrada	Business Park Office	0	acres	1	0	1
Entrada	Hotel	5.6	acres	33	5	38
Entrada	Schools	10.3	acres	17	13	29
Entrada	Parks	8.3	acres	1	27	28
Entrada	Landscape Areas	4.1	acres	0	10	10
Entrada	Irrigated Slopes	53.7	acres	0	134	134
Entrada	Irrigated Open Space	15.5	acres	0	35	35
VCC	Mixed Use Office	101.3	acres	147	63	210
VCC	Commercial Retail	0.6	acres	4	0	4
VCC	Business Park Industrial	16.5	acres	100	10	111
VCC	Landscape Areas	0.5	acres	0	1	1
VCC	Irrigated Slopes	41.8	acres	0	105	105
				Total Average Year Demands (AFY)		1411
				Projected Single Dry Year Demands (AFY)		1496
				Projected Multiple-Dry Year Demands (AFY)		1439



Projected Recycled Water

RECYCLED WATER BALANCE CALCULATIONS						
Project	Indoor Potable Demand (AFY)	Outdoor Potable Demand (AFY)	Non-Potable Demand (AFY)	Total Demand (AFY)	Makeup Demand (AFY)	Total Potable Demand (AFY)
Entrada South	297	187	430	914	133	617
Valencia Commerce Center	255	7	234	496	-21	241
Totals	552	194	664	1411	112	858

Total potable water needed for Entrada South and VCC will be reduced by approximately 552 by recycling indoor potable supplies.



Water Supply Approach

- Project's WSA relies on current and future SCVWA water supply portfolio
- The WSA references the supply portfolio as described in the 2020 UWMP with modifications due to:
 - DWR's December 2021 Draft Delivery Capability Report
 - Modified schedules for the recovery of impacted well capacity due to PFAS, VOC and Perchlorate contamination



2021 SWP Delivery Capability Report

- Draft Report Issued December 31, 2021
- Uses Updated Model (CALSIM3) with longer hydrologic record
- Draft Report indicated reduction of average reliability from 58% to 56% and single dry-year from 7% to 5%
- Analysis was updated using currently available data
- *Resulted in minor modifications to reliability tables*



Modified Schedule Well Restoration

- Saugus Well 201
 - On-line date deferred from 2022 to 2024
 - Accommodated installation and permitting for additional VOC treatment
- Saugus Well 205
 - On-line date deferred from 2022 to 2024
 - Currently in design for Perchlorate & VOC treatments
- PFAS impacted Alluvial Wells
 - Well supply of 15,270 AFY to return by 2025
 - Additional Well supply of 6,420 AFY to return by 2030
- *Resulted in minor modifications to reliability tables*



Current Supply Portfolio

Current Supply		Amount (AFY)
SWP Table A Amount (single dry - normal)		4,760-53,300
Groundwater		
	Alluvium	15,000-16,000
	Saugus	7,500-15,000
Groundwater Banking Programs		
	Semitropic	5,000
	Rosedale-Rio Bravo	10,000
Transfers & Exchanges		
	AVEK - 2 for 1 Exchange	2,350
	UWCD - 2 for 1 Exchange	500
BV-RRB Transfer Agreement		11,000
Yuba Accord Water		1,000
Recycled Water		450



Future & Proposed Supplies

Planned Supplies	Amount (AFY)	Proposed On-Line Date
Future and Recovered Groundwater		
Saugus Wells 201 & 205	5,210	2025
Saugus Wells 3 & 4	8,060	2025
Saugus Wells 5 & 6	6,460	2027
Saugus Wells 7 & 8	6,460	2030
Recovered Alluvial Wells	21,690	2030
Recycled Water		
Phase 2 Projects	2,440	2023
FivePoint Westside Communities	5,174	2021-2043
Banking Programs		
Rosedale-RB Additional Extraction	10,000	2030
Semitropic - NLF	4,950	2035
Nickel Water - NLF	1,607	2035



Groundwater Quality

- Groundwater Quality Issues
 - Restoration of PFAS impacted wells
 - Restoration of perchlorate impacted wells
 - Permitting of additional Saugus wells
- Approach consistent with 2020 UWMP
 - Historical and Current Conditions Assessed
 - Treatment methods and scheduling identified
 - Permitting path documented



Climate Change

- Restructured UWMP Information to provide additional text in main report.
- Water Demand anticipated to increase by 3.77% by 2050 consistent with DWR's SGMA approach.
- Groundwater supplies are based on modeling that incorporated the DWR's same SGMA approach
- SWP Reliability 2019 Delivery Capability Report (DCR)
 - Incorporates a sea level rise of 45 cm

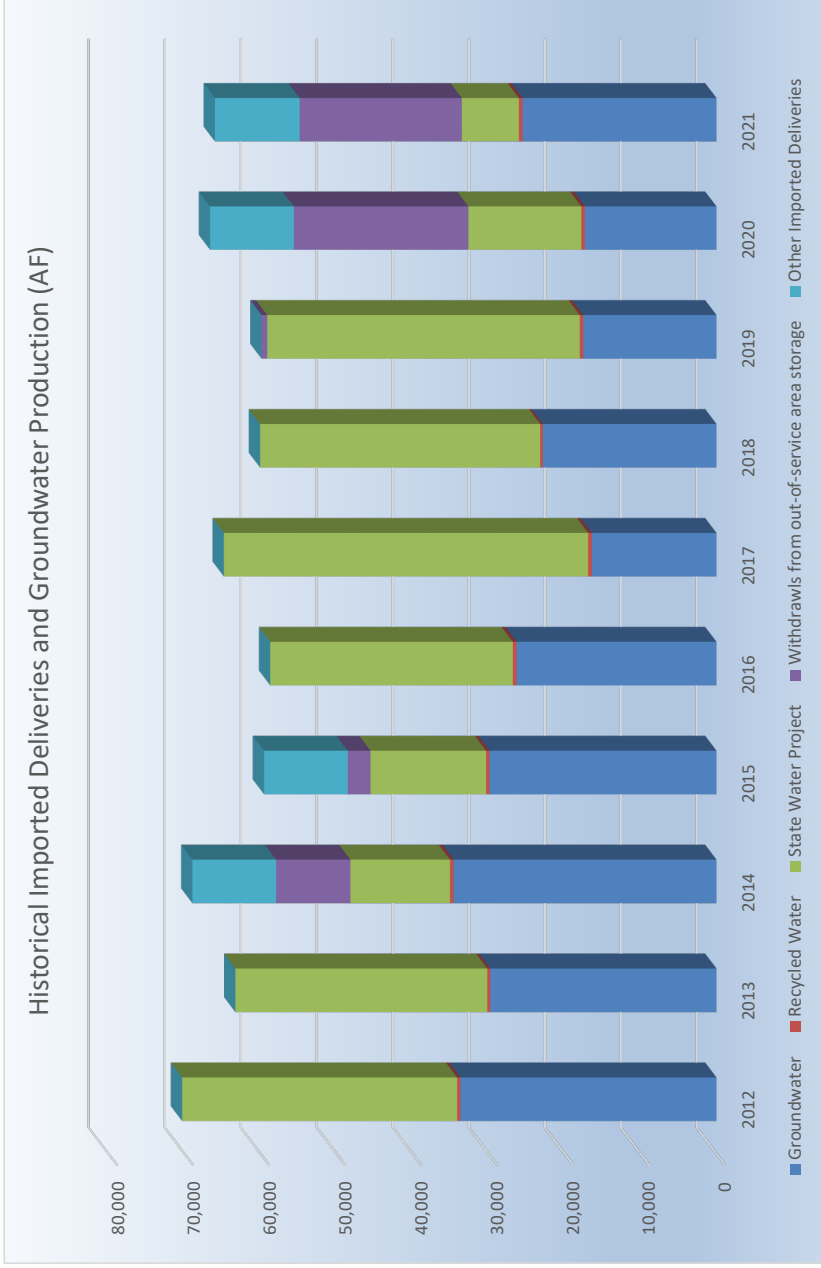


Pending Water Conservation Regulations

- Potential reduction of Indoor water use to 42 gpcd
- Potential regulation to mandate irrigation water efficiency
- *Irrigation efficiencies gains would offset reduced recycled water availability*



SB 610 Requirement: Assessment of Recent Operations



Conclusion: SCV Water demonstrated an ability to conjunctively use its imported surface water and groundwater along with recycled water and conservation to meet water demands facing the dual challenges of severe drought and restricted groundwater supplies.



SB 610 Requirement

Water Balance Analysis Performed for:

- Normal
- Single Dry-Year
- Multiple Dry-Years

Projected Normal Year Supplies and Demands (AF)						
	2025	2030	2035	2040	2045	2050
Existing Supplies						
Existing Groundwater ^(a)						
Alluvial Aquifer	8,900	8,180	7,300	7,300	7,300	7,300
Saugus Formation	14,440	7,110	7,110	7,110	7,110	7,110
Total Groundwater	23,340	15,290	14,410	14,410	14,410	14,410
Recycled Water ^(b)						
Total Recycled	450	450	450	450	450	450
Imported Water						
State Water Project ^(c)	52,360	51,410	50,460	49,500	49,500	49,500
Flexible Storage Accounts ^(d)						
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land ^(e)	-	-	1,607	1,607	1,607	1,607
Yuba Accord Water ^(f)	1,000	-	-	-	-	-
Total Imported	64,360	62,410	63,067	62,107	62,107	62,107
Existing Banking and Exchange Programs ^(g)						
Rosedale Rio-Bravo Bank ^(g)	-	-	-	-	-	-
Semitropic Bank ^(g)	-	-	-	-	-	-
Semitropic - Newhall Land Bank ^(g)	-	-	-	-	-	-
Antelope Valley West Kern Water Agency Exchange ^(g)	-	-	-	-	-	-
United Water Conservation District Exchange ^(g)	-	-	-	-	-	-
Total Bank/Exchange	0	0	0	0	0	0
Total Existing Supplies	88,150	78,150	77,927	76,967	76,967	76,967
Planned Supplies						
Future and Recovered Groundwater ^(h)						
Alluvial Aquifer ⁽ⁱ⁾	10,340	19,870	23,490	23,490	23,490	23,490
Saugus Formation ^(j)	3,010	2,790	2,790	2,790	2,790	2,790
Total Groundwater	13,350	22,660	26,280	26,280	26,280	26,280
Recycled Water ^(k)						
Total Recycled	1,849	3,686	5,091	6,488	7,499	8,511
Planned Banking Programs						
Rosedale Rio-Bravo Bank ^(m)	-	-	-	-	-	-
Total Banking	0	0	0	0	0	0
Total Planned Supplies	15,199	26,356	31,371	32,778	33,779	34,791
Total Supplies (Existing and Planned)⁽ⁿ⁾	103,349	104,506	109,298	109,745	110,746	111,758
Demands⁽ⁿ⁾						
Demands with passive conservation ⁽ⁿ⁾	82,100	89,300	97,600	104,300	109,600	115,100
Demands with passive and active conservation ⁽ⁿ⁾	76,400	81,700	88,700	93,600	97,500	101,000



SB 610 Requirement: Supply exceeds Demand

SUPPLY AND DEMAND COMPARISON with the Entrada South/Valencia Commerce Center Project									
Year	Normal Year Supply (AF)	Normal Year Demand (AF) with Project	Remaining Balance (AF)	Single-Dry Year Supply (AF)	Single-Dry Year Demand (AF) with Project	Remaining Balance (AF)	5-Year Dry Period Supply (AF)	5-Year Dry Period Demand (AF) with Project	Remaining Balance (AF)
2025	103,349	76,400	26,949	83,419	81,000	2,419	101,303	77,830	23,473
2030	104,506	81,700	22,806	106,736	86,600	20,136	114,033	83,620	30,413
2035	109,298	88,700	20,598	117,428	94,000	23,428	125,559	90,570	34,989
2040	109,745	93,600	16,145	118,835	99,200	19,635	130,085	95,780	34,305
2045	110,746	97,500	13,246	119,836	103,400	16,436	131,015	99,670	31,345
2050	111,758	101,000	10,758	120,848	107,100	13,748	128,715	102,870	25,845

Conclusion: Water Supply is sufficient to meet projected demands in normal, multi dry-years and single dry-years throughout the study period



Conclusion:

- Staff has evaluated the long-term water demands and has compared these needs against existing and planned water supplies.
- Demand projections were based on:
 - Population projections
 - County and City land use plans
 - Both active and passive conservation
 - Climate change impacts
- The WSA concluded that the total projected water supplies over the 30-year projection period will be sufficient to meet the projected demands associated with the proposed Entrada South/Valencia Commerce Center Project as well as existing and planned future uses.



Recommendation

Staff recommends that the Water Resources and Watershed Committee recommend that the Board of Directors of the Santa Clarita Valley Water Agency adopt a resolution approving the SB 610 Water Supply Assessment for the Entrada South/Valencia Commerce Center Project and direct staff to submit the WSA to the County of Los Angeles.





Questions?



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BOARD MEMORANDUM

DATE: May 31, 2022
TO: Board of Directors
FROM: Rochelle Patterson *RP*
Director of Finance and Administration
SUBJECT: Approve Employee Manual Policy 41 - Fleet Management Policy

SUMMARY

Staff recommends approval of Employee Manual Policy 41 - Fleet Management Policy that provides guidelines for the collection and use of asset performance and location data from electronic devices.

DISCUSSION

When it comes to asset management, the use of technologies and electronic devices such as fleet information systems and telematics devices are widely held as a best practice for private and public fleets. In order to improve the management of the Agency fleet of 250+ vehicles and equipment, Staff is recommending the use of electronic devices to collect, analyze, and store asset data.

The use of these technologies and electronic devices will allow the Agency to:

- Make data-driven decisions for vehicle replacement, utilization, right-sizing; and
- Automate emissions reporting and facilitate compliance with new regulatory mandates; and
- Improve vehicle performance through remote diagnostics; and
- Enhance operator safety and may protect the Agency from potential lawsuits; and
- Reduce costs associated with fueling, idling, and repairs; and
- Increase access to grants and special programs.

Timing Considerations

These technologies are being recommended now because:

- The regulatory environment has made them a necessity for regulatory compliance; and
- The technologies are so widely used in the industry that they are cost effective; and
- The Agency now has the staff necessary to implement and oversee these technologies.

The State of California has set ambitious goals to reduce emissions from the transportation sector and accelerate the transition to zero emission vehicles and equipment. These goals are to reach:

- 100 percent of in-state sales of new passenger cars and trucks to be zero-emission vehicles by 2035; and
- 100 percent zero emissions from medium- and heavy-duty vehicles by 2045.

In order to comply with proposed regulations, the Agency will need to collect and report vast amounts of data, which will be extremely difficult without the use of electronic devices. Additionally, the data collected from these electronic devices will help drive our compliance strategies for new purchasing mandates for zero emission vehicles and equipment. Meanwhile, the use of these devices is so widespread in the industry that vehicle manufacturers are now installing them on all new fleet vehicles. In February 2021, the Board approved a new Fleet and Warehousing Supervisor position to implement best practices for asset management and guide the Agency's compliance with new regulatory mandates.

Technology Considerations and Experiences from Other Agencies

Why do public and private fleets across the nation use these technologies and electronic devices? Simply put because you can't manage what you can't measure. When it comes to public agencies, the most notable example is the State of California, which has required its agencies to implement telematics devices in all their vehicles and equipment by February 2022. Other examples of agencies using these technologies include but are not limited to: the City of Santa Clarita, LA County, Coachella Valley Water District, Santa Clara Valley Water District, Palmdale Water District, Rancho California Water District, etc.

Staff reached out to various agencies and collected the following findings:

- Most agencies have been using telematics devices for 5+ years; and
- Most agencies are not using dash cameras but are considering using them in the near future; and
- Almost all agencies believe the benefits of these technologies outweigh any potential downsides; and
- Most agencies have experienced some operator pushback that fades away after operators become familiar with the technologies; and
- Some agencies have examples of how telematics have protected them from false claims or expensive lawsuits; and
- Most agencies have experienced significant savings from fuel (over 10%), utilization, replacement, and maintenance costs after implementing these technologies; and
- Most agencies recommend complete transparency with operators on why the technology is being deployed and how the data will be used.

Overview of Policy

The Fleet Management Policy is designed to provide guidelines on how the Agency will collect and use the asset performance and location data from electronic devices. The policy focuses on broad technologies and electronic devices instead of specific devices in order to allow for the use of new technologies as they become available. Access to the data collected will be based on Agency roles and the data collected will be kept in accordance with the Agency's retention policies. The policy also outlines that these electronic devices are not meant to monitor individual employees, however, the data collected may be used to address unsafe or unauthorized vehicle usage, which could lead to disciplinary actions.

On May 16, 2022, the Finance and Administration (F&A) Committee considered staff's recommendation to approve Employee Manual Policy 41 – Fleet Management Policy.

There were two questions raised by the Committee. The first was to add a clarifying statement to the Policy that excluded supervisors from requesting data without authorization. The following has been added to Section 41.9, "Any requests for data by a supervisor must be approved by

the Chief Operating Officer or designated employee.” This addition to the policy since the F&A Committee meeting is indicated in red type on the attached draft policy.

The second question was in regard to the telematics and GPS device and if the data collected from the device would need to be disclosed if a Public Records Act request was received. The answer is ordinarily yes. The use, location or operation of any Agency vehicle, including the data collected from the telematics or GPS device (during the course of business) is generally subject to a PRA request.

FINANCIAL CONSIDERATIONS

Costs for these technologies and devices is approximately \$60,000 annually and is included in the Agency’s vehicle operating budget.

RECOMMENDATION

The Finance and Administration Committee recommends that the Board of Directors approve Employee Manual Policy 41 - Fleet Management Policy.

RP

Attachment

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EMPLOYEE MANUAL	
Title: FLEET MANAGEMENT POLICY	
Policy No.: 41.0	Section Nos.: 41.0 – 41.13
Approval Date: June 2022	Effective Date: June 2022
Approved By: Board of Directors	

Use of Electronic Devices in Agency Vehicles

SCV Water (“Agency”) is committed to protecting its property, assets and safety of employees. The purpose of the Fleet Management (“FM”) policy is to outline the collection and use of asset performance and location data from electronic devices, including but not limited to Global Positioning System (“GPS”) devices on Agency vehicles. The Agency will use electronic devices for both employee safety and business reasons. Using electronic devices to manage Agency vehicles is an effort to maximize the value of the Agency’s assets while reducing the cost of maintaining the vehicle fleet and providing a mechanism to monitor driving activities to help ensure safe fleet operation and asset performance.

This policy establishes the program for the use of electronic devices in Agency vehicles as part of its Fleet Management System and provides guidance to Agency employees regarding the Agency’s use of those devices in Agency vehicles. Fleet Management Systems that include GPS have been shown to improve vehicle maintenance diagnostics, reduce vehicle operating expenses, improve efficient use of fuel, increase the personal safety of staff, provide regulatory required data, and provide assistance in time-critical scenarios.

41.0 Definitions

Fleet Management System - The Agency’s Fleet Management System includes, but not limited to, sensing and diagnostic modules, and electronic devices with GPS tracking described in this policy as well as other vehicle maintenance management programs designed to track vehicle repairs, maintenance, and performance data.

GPS or GPS unit - GPS unit is defined as a global positioning system, electronic wireless device, electronic tracking technology, location-based technologies, or other method or system used to track, observe, monitor and/or collect diagnostics, functions, and/or information about Agency vehicles. Information gathered by GPS systems includes but is not limited to performance, location, speed, idle time, and routes of Agency vehicles.

Vehicle - Vehicle includes all vehicles and/or equipment owned, leased, or used by the Agency.

41.1 Electronic Devices Purpose

The Agency’s Fleet Management System allows the Agency to monitor asset performance, including but not limited to vehicle speed, vehicle gas mileage, vehicle idling, engine performance, and vehicle location. The system will allow the Agency to dispatch vehicles based on location to maximize the efficiency of the fleet. The Fleet Management System may be used to confirm or disprove allegations of rule violations, misconduct, abuse, traffic violations and damage claims. The Fleet Management System is not intended to be punitive, although unsafe and/or unauthorized vehicle usage may lead to disciplinary action.



EMPLOYEE MANUAL	
Title: FLEET MANAGEMENT POLICY	
Policy No.: 41.0	Section Nos.: 41.0 – 41.13
Approval Date: June 2022	Effective Date: June 2022
Approved By: Board of Directors	

41.2 Installation, Activation, and Use

The Agency may install, activate, and use electronic devices in any Agency vehicle, at the sole discretion of the Agency Manager or his or her designee, and in furtherance of Agency business. The GPS or GPS unit shall be mounted on Vehicles in accordance with Vehicle Code section 26708(b)(12). Mounting device requirements and location is described as a seven inch square in the lower corner of the windshield furthest removed from the driver, or in a five inch square in the lower corner of the windshield nearest to the driver and outside of an airbag deployment zone.

41.3 Employee Notification

Agency employees will be notified that they may be required to operate and/or ride in a Agency vehicle equipped with electronic devices including but not limited to a GPS unit.

41.4 Asset Data Uses

The Fleet Management System and electronic devices such as GPS units may be used in furtherance of Agency business, including but not limited to the following:

- Identifying, diagnosing, or monitoring functions related to the potential need to repair, service, or perform maintenance on an Agency vehicle
- Capturing safety-related data
- Managing Agency resources effectively
- Increasing employee safety
- Providing timely vehicle maintenance information
- Providing aid to vehicles that break down
- Measuring productivity
- Locating stolen vehicles
- Minimizing Agency risk
- Complying with regulatory requirements
- Monitoring employee routes and assignments
- Monitoring employee adherence to Agency policies and rules
- Investigations

41.5 Electronic Device Disclosure

All vehicles equipped with electronic devices such as GPS units shall prominently display a notice to alert the driver and passengers that electronic devices may be in use.



EMPLOYEE MANUAL	
Title: FLEET MANAGEMENT POLICY	
Policy No.: 41.0	Section Nos.: 41.0 – 41.13
Approval Date: June 2022	Effective Date: June 2022
Approved By: Board of Directors	

41.6 Vehicle Privacy

Employees have no reasonable expectation of privacy in the use, location, or operation of any Agency vehicle. The Agency may use data collected by the Fleet Management Systems and/or GPS units to investigate employee misconduct and/or as a basis for discipline.

41.7 Driving Conduct

Employees are required to exhibit safe driving habits in accordance with Agency policies and rules, and comply with all applicable federal, state and/or local laws.

41.8 Electronic Device Tampering

Unless otherwise authorized by the General Manager, employees are prohibited from tampering with, modifying, damaging, manipulating, or disabling the electronic units, the Fleet Management System, and any GPS unit installed on any Agency vehicle.

41.9 Asset Data

Access to the Fleet Management System and GPS unit information will be limited by each manager's responsibilities and used for Agency-related business only. **Any requests for data by a supervisor must be approved by the Chief Operating Officer or designated employee.**

41.10 Asset Data Reports

The Fleet and Warehousing Supervisor, or designated employee, is responsible for generating monthly use reports on all Agency vehicles and distributing the reports to management for review. Management is responsible for reviewing the reports and ensuring any potential policy violations are investigated.

41.11 Asset Records

Fleet Management System records will be kept in accordance with the Agency's Records Retention program.

41.12 Disciplinary Protocol

The goal of this policy is not to take a punitive approach, however, in the event the Fleet Management System and/or GPS unit provides information that demonstrates an employee's unsafe driving practice or another violation of law or Agency policies or rules, the Agency may investigate and address any potential violations through the Agency's disciplinary process.

41.13 Penalty for Violation

Employees found in violation of this policy may be subject to disciplinary action, up to and including termination of employment.

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BOARD MEMORANDUM

DATE: May 12, 2022
TO: Board of Directors
FROM: Steve Cole *SC*
Assistant General Manager
SUBJECT: May 11, 2022 Water Resources and Watershed Committee Meeting Report

The Water Resources and Watershed Committee met at 5:30 PM on Wednesday, May 11, 2022, at the Rio Vista Water Treatment Plant Boardroom, located at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350. In attendance were Committee Chair Jeff Ford, Directors Ed Colley, William Cooper, and Piotr Orzechowski. Staff members present were Assistant General Manager Steve Cole, Sustainability Manager Matt Dickens, Management Analyst II Cheryl Fowler, Interim Director of Water Resources Dirk Marks, General Manager Matt Stone, Water Resources Planner Rick Vasilopoulos, General Counsel Joseph Byrne, additional SCV Water Agency staff and members of the public. A copy of the Agenda is attached.

Item 2: Public Comment – There was public comment on Item Nos. 2 and 3.

Item 3: Recommend Adoption of a Resolution Approving the SB 610 Water Supply Assessment for the Entrada South / Valencia Commerce Center Project – Staff provided a presentation discussing water demand and long-term availability of water for Entrada South/Valencia Commerce Center and legal counsel discussed the Agency’s mandated role in the Water Supply Assessment process. Recommended actions for this item are included in a separate report being submitted at the June 7, 2022 Board meeting. Staff’s presentation is available at: <https://yourscvwater.com/wp-content/uploads/2022/05/Item-3-WRW-051122-Entrada-South-VCC-Water-Supply-Assessment.pdf>

Item 4: Water Resources Director’s Report

- 4.1 Staff Activities** – Staff received notification that the Department of Water Resources (DWR) has deemed the 2020 Urban Water Management Plan compliance with the Urban Water Management Act and has requested minor clarifications. Staff will address these clarifications with an errata which will be posted to the Agency website. Staff also noted that the Agency’s Salt and Nutrient Management Plan is complete and will be submitted to the Regional Water Quality Control Board. Staff discussed the Bouquet Canyon Creek work group’s efforts to secure grant funding from the California Wildlife Conservation Board solicitation along with federal funding for creek restoration.

Item 5: Sustainability Manager’s Report

- 5.1 Update on Conservation Activities and Performance** – Staff provided an update on Conservation Activities and Performance, including state conservation policy updates and metrics on 2022 customer engagement with Agency conservation

programs. Staff's presentation is available at: <https://yourscvwater.com/wp-content/uploads/2022/05/Item-5.1-WRW-051122-PowerPoint-Update-on-Conservation-Activites-and-Performance.pdf>

- 5.2 Status of Drought Response and Performance** – Staff's update on the Status of Drought Response and Performance included discussion on upcoming state emergency regulations, factors driving current water demand, and drought response performance of SCV Water's service area. Staff's presentation is available at: <https://yourscvwater.com/wp-content/uploads/2022/05/Item-5.2-WRW-051122-PowerPoint-Status-of-Drought-Response-and-Performance.pdf>

Item 6: Committee Planning Calendar – The Committee considered the Planning Calendar.

Item 7: Adjournment – The meeting adjourned at 8:01 PM.

M65



Date: May 4, 2022

To: **Water Resources and Watershed Committee**
Jeff Ford, Chair
B.J. Atkins
Ed Colley
Bill Cooper
Piotr Orzechowski

From: Steve Cole, Assistant General Manager 

The **Water Resources and Watershed Committee** is scheduled to meet on **Wednesday, May 11, 2022 at 5:30 PM** at **27234 Bouquet Canyon Road, Santa Clarita, CA 91350 in the Boardroom**. Members of the public may attend in person or virtually. To attend this meeting virtually, please see below.

IMPORTANT NOTICES

This meeting will be conducted in person at the address listed above. As a convenience to the public, members of the public may also participate virtually by using the **Agency's Call-In Number 1-(833)-568-8864, Webinar ID: 160 941 8679 or Zoom Webinar by clicking on the link <https://scvwa.zoomgov.com/j/1609418679>**. Any member of the public may listen to the meeting or make comments to the Committee using the call-in number or Zoom Webinar link above. However, in the event there is a disruption of service which prevents the Agency from broadcasting the meeting to members of the public using either the call-in option or internet-based service, this meeting will not be postponed or rescheduled but will continue without remote participation. The remote participation option is being provided as a convenience to the public and is not required. Members of the public are welcome to attend the meeting in person.

Attendees should be aware that while the Agency is following all applicable requirements and guidelines regarding COVID-19, the Agency cannot ensure the health of anyone attending a Committee meeting. Attendees should therefore use their own judgment with respect to protecting themselves from exposure to COVID-19.

Members of the public unable to attend this meeting may submit comments either in writing to cflower@scvwa.org or by mail to Cheryl Fowler, Management Analyst II, Santa Clarita Valley Water Agency, 26501 Summit Circle, Santa Clarita, CA 91350. All written comments received before 4:00 PM the day of the meeting will be distributed to the Committee members and posted on the Santa Clarita Valley Water Agency website prior to the start of the meeting. Anything received after 4:00 PM the day of the meeting will be made available at the meeting and posted on the SCV Water website the following day.

MEETING AGENDA

<u>ITEM</u>	<u>PAGE</u>
1. <u>PLEDGE OF ALLEGIANCE</u>	
2. <u>PUBLIC COMMENTS</u> – Members of the public may comment as to items within the subject matter jurisdiction of the Agency that are not on the Agenda at this time. Members of the public wishing to comment on items covered in this Agenda may do so at the time each item is considered. (Comments may, at the discretion of the Committee Chair, be limited to three minutes for each speaker.)	
3. * Recommend Adoption of a Resolution Approving the SB 610 Water Supply Assessment for the Entrada South / Valencia Commerce Center Project	5
4. Water Resources Director's Report	
4.1 Staff Activities	
5. Sustainability Manager's Report	
5.1 Update on Conservation Activities & Performance	
5.2 Status of Drought Response and Performance	
6. * Committee Planning Calendar	195
7. Adjournment	
* Indicates Attachment	
• Indicates Handout	

NOTICES:

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Cheryl Fowler, Management Analyst II, at (661) 297-1600, or in writing to cfowler@scvwa.org or by mail to Cheryl Fowler, Management Analyst II, Santa Clarita Valley Water Agency, 26501 Summit Circle, Santa Clarita, CA 91350. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that Agency staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the Agency to provide the requested accommodation.

May 4, 2022
Page 3 of 3

Pursuant to Government Code Section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Committee less than seventy-two (72) hours prior to the meeting will be available for public inspection at the Santa Clarita Valley Water Agency, located at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350, during regular business hours. When practical, these public records will also be made available on the Agency's Internet Website, accessible at <http://www.yourscvwater.com>.

Posted on May 4, 2022.

MGS

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BOARD MEMORANDUM

DATE: May 13, 2022
TO: Board of Directors
FROM: Courtney Mael, P.E., Chief Engineer *CM*
Keith Abercrombie, Chief Operating Officer *KA*
SUBJECT: May 12, 2022 Rescheduled Engineering and Operations Committee Meeting Report

The rescheduled Engineering and Operations Committee met at 5:30 PM on Thursday, May 12, 2022 in the Rio Vista Water Treatment Plant Boardroom located at 27234 Bouquet Canyon Road. In attendance were Committee Chair William Cooper and Directors Jeff Ford, Gary Martin, Piotr Orzechowski and Lynne Plambeck. Staff members present were Chief Engineer Courtney Mael; Chief Operating Officer Keith Abercrombie; Director of Operations and Maintenance Mike Alvord; Emergency Preparedness & Safety Coordinator Joe Diaz; Executive Assistant Elizabeth Adler; Safety Specialist I Aaron Southard; Principal Engineer Brent Payne and additional SCV Water Agency staff. Two members of the public were present on the call. A copy of the agenda is attached.

Item 1: Pledge of Allegiance – Chairman Cooper led the Committee in the Pledge of Allegiance.

Item 2: Public Comments – There was no public comment.

Item 3: Quarterly Safety Presentation – Joe Diaz and Aaron Southard reviewed the Agency's Safety Program for the third quarter of FY 2021/22.

Item 4: Recommend Approval of a Purchase Order to Cannon Corporation for Change Order No. 1 for Final Design Services for New Deane Zone Tank at Skyline Ranch – Design Prestressed Concrete Tank Instead of Welded Steel Tank – The Committee and staff discussed the type of tank that the Agency is seeking to use for the project. The Committee recommended placement of the item on the Board consent calendar at the June 7, 2022 regular Board meeting.

Item 5: Monthly Operations and Production Report – Staff and the Committee reviewed the Operations and Production Report.

Item 6: Capital Improvement Projects Construction Status Report – Staff and the Committee reviewed the Capital Improvement Projects Construction Status Report.

Item 7: Third Party Funded Agreements Quarterly Report – Staff and the Committee reviewed the Third Party Funded Agreements Quarterly Report.

Item 8: Committee Planning Calendar – Staff and the Committee reviewed the FY 2021/22 and FY 2022/2023 Committee Planning Calendars.

Item 9: General Report on Treatment, Distribution, Operations and Maintenance Services Section Activities – Keith Abercrombie shared with the Committee various repairs Operations

has been performing throughout the Agency, the laboratory's increase in sampling, and how staff is addressing the long lead times for piping.

Item 10: General Report on Engineering Services Section Activities – Courtney Mael and staff shared with the Committee a PowerPoint on the Agency's current bidding process and showcased a recent hydraulic modeling that staff was able to produce to address a pressure concern.

Item 11: Adjournment – The meeting adjourned at 7:09 PM.

CM/KA

Attachment

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Date: May 3, 2022

To: **Engineering and Operations Committee**
William Cooper, Chair
Jeff Ford
Gary Martin
Piotr Orzechowski
Lynne Plambeck

From: Courtney Mael, Chief Engineer *CM*
Keith Abercrombie, Chief Operating Officer *KA*

A rescheduled meeting of the **Engineering and Operations Committee** meeting is scheduled on **Thursday, May 12, 2022 at 5:30 PM at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350 in the Boardroom**. Members of the public may attend in person or virtually. To attend this meeting virtually, please see below.

IMPORTANT NOTICES

This meeting will be conducted in person at the address listed above. As a convenience to the public, members of the public may also participate virtually by using the **Agency's Call-In Number 1-(833)-568-8864, Webinar ID: 160 044 3533 or Zoom Webinar by clicking on the link <https://scvwa.zoomgov.com/j/1600443533>**. Any member of the public may listen to the meeting or make comments to the Committee using the call-in number or Zoom Webinar link above. However, in the event there is a disruption of service which prevents the Agency from broadcasting the meeting to members of the public using either the call-in option or internet-based service, this meeting will not be postponed or rescheduled but will continue without remote participation. The remote participation option is being provided as a convenience to the public and is not required. Members of the public are welcome to attend the meeting in person.

Attendees should be aware that while the Agency is following all applicable requirements and guidelines regarding COVID-19, the Agency cannot ensure the health of anyone attending a Committee meeting. Attendees should therefore use their own judgment with respect to protecting themselves from exposure to COVID-19.

Members of the public unable to attend this meeting may submit comments either in writing to eadler@scvwa.org or by mail to Elizabeth Adler, Executive Assistant, Santa Clarita Valley Water Agency, 26515 Summit Circle, Santa Clarita, CA 91350. All written comments received before 4:00 PM the day of the meeting will be distributed to the Committee members and posted on the Santa Clarita Valley Water Agency website prior to the start of the meeting. Anything received after 4:00 PM the day of the meeting will be made available at the meeting and posted on the SCV Water website the following day.

RESCHEDULED MEETING AGENDA

<u>ITEM</u>		<u>PAGE</u>
1.	<u>PLEDGE OF ALLEGIANCE</u>	
2.	<u>PUBLIC COMMENTS</u> – Members of the public may comment as to items within the subject matter jurisdiction of the Agency that are not on the Agenda at this time. Members of the public wishing to comment on items covered in this Agenda may do so at the time each item is considered. (Comments may, at the discretion of the Committee Chair, be limited to three minutes for each speaker.)	
3.	* Quarterly Safety Presentation	1
4.	* Recommend Approval of a Purchase Order to Cannon Corporation for Change Order No. 1 for Final Design Services for New Deane Zone Tank at Skyline Ranch – Design Prestressed Concrete Tank Instead of Welded Steel Tank	11
5.	* Monthly Operations and Production Report	23
6.	* Capital Improvement Projects Construction Status Report	125
7.	* Third Party Funded Agreements Quarterly Report	127
8.	* Committee Planning Calendar	135
9.	General Report on Treatment, Distribution, Operations and Maintenance Services Section Activities	
10.	* General Report on Engineering Services Section Activities	141
11.	Adjournment	
	* Indicates Attachment	
	• Indicates Handout	

NOTICES:

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Elizabeth Adler, Executive Assistant, at (661) 297-1600, or in writing to Santa Clarita Valley Water Agency at 26515 Summit Circle, Santa Clarita, CA 91350. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that Agency staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the Agency to provide the requested accommodation.

May 3, 2022
Page 3 of 3

Pursuant to Government Code Section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Committee less than seventy-two (72) hours prior to the meeting will be available for public inspection at the Santa Clarita Valley Water Agency, located at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350, during regular business hours. When practical, these public records will also be made available on the Agency's Internet Website, accessible at <http://www.yourscvwater.com>.

Posted on May 5, 2022.

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BOARD MEMORANDUM

DATE: May 17, 2022
TO: Board of Directors
FROM: Eric Campbell *EC*
Chief Financial and Administrative Officer
SUBJECT: May 16, 2022 Finance and Administration Committee Meeting Report

The Finance and Administration Committee met at 5:30 PM on Monday, May 16, 2022 in the Board Room of the Rio Vista Water Treatment Plant. In attendance were Chair R. J. Kelly, Directors Ed Colley and Gary R. Martin. Staff members in attendance included Controller Amy Aguer, Accounting Technician II Kyle Arnold, Assistant General Manager Steve Cole, Management Analyst II Erika Dill, Sr. Management Analyst Kim Grass, GIS Manager Jose Huerta, Executive Assistant Eunie Kang, Chief Engineer Courtney Mael, Human Resources Manager Ari Mantis, Director of Water Resources (interim) Dirk Marks, Director of Finance and Administration Rochelle Patterson, Director of Tech Services Cris Perez, Fleet and Warehousing Supervisor Jesus Martinez Ramirez, General Manager Matt Stone, Customer Service Manager Kathleen Willson and myself. Members of the public were present. A copy of the agenda is attached.

Item 1: Pledge of Allegiance

Item 2: Public Comment – There was public comment.

Item 3: Recommend Approval of a Resolution Adopting the Appropriation of All As-Yet Unappropriated Funds for FY 2021/22 – Staff and the Committee discussed this item and unanimously agreed to recommend the item be placed on the consent calendar for the June 7, 2022 regular Board meeting.

Item 4: Recommend Approval of a Resolution Adopting the Appropriation Limit for FY 2022/23 – Staff and the Committee discussed this item and unanimously agreed to recommend the item be placed on the consent calendar for the June 7, 2022 regular Board meeting.

Item 5: Recommend Approval of Employee Manual 41 – Fleet Management Policy – Staff discussed this item and the Committee requested there be some clarifications on the policy which will be addressed when presented at the June 7, 2022 regular Board meeting.

There were two concerns raised by the Committee. The first was to add a clarifying statement to the Policy that excluded supervisors from requesting data without authorization. The following has been added to Section 41.9, “Any requests for data by a supervisor must be approved by the Chief Operating Officer or designated employee.”

The second question was in regard to the telematics and GPS device and if the data collected from the device would need to be disclosed if a Public Records Act request was received. The answer is ordinarily yes. The use, location or operation of any Agency vehicle, including the data collected from the telematics or GPS device (during the course of business) is generally subject to a PRA request.

Item 6: Discuss Upcoming Capacity Fee Study – Staff debriefed the Committee on plans for the upcoming Valencia Division capacity fee study. Committee discussion of this item included questions about whether there was any legal alternative to put an interim retail capacity fee in place for the Valencia Division sooner, and whether there were alternatives to expedite getting to an Agency-wide retail capacity fee. Staff will discuss these with legal counsel, and further details will be presented in future F&A Committee meetings.

Item 7: Recommend Receiving and Filing of FY 2021/22 Third Quarter Financial Report – Staff presented this item and the Committee unanimously agreed that it be placed on the consent calendar for the June 7, 2022 regular Board meeting.

Item 8: Recommend Receiving and Filing of March 2022 Financial Report – Staff presented this item and the Committee unanimously agreed that it be placed on the consent calendar for the June 7, 2022 regular Board meeting.

Item 9: Committee Planning Calendar – Staff briefly discussed the remaining FY 2021/22 and upcoming FY 2022/23 planning calendar.

Item 8: General Report on Finance and Administration Activities – Staff advised the Committee that the upcoming upgraded CIS billing program EnQuesta will be going live at the end of this month.

Item 9: Adjournment – The meeting was adjourned at 6:49 PM.

EC/ed


Attachment

M65



Date: May 9, 2022

To: **Finance and Administration Committee**
R.J. Kelly, Chair
Beth Braunstein
Ed Colley
Jerry Gladbach
Gary R. Martin

From: Eric Campbell 
Chief Financial and Administrative Officer

The **Finance and Administration Committee** is scheduled on **Monday, May 16, 2022** at **5:30 PM** at **27234 Bouquet Canyon Road, Santa Clarita, CA 91350 in the Board Room.** Members of the public may attend in person or virtually. To attend this meeting virtually, please see below.

IMPORTANT NOTICES

This meeting will be conducted in person at the address listed above. As a convenience to the public, members of the public may also participate virtually by using the **Agency's Call-In Number 1-(833)-568-8864, Webinar ID: 161 440 8781 or Zoom Webinar by clicking on the link <https://scvwa.zoomgov.com/j/1614408781>**. Any member of the public may listen to the meeting or make comments to the Committee using the call-in number or Zoom Webinar link above. However, in the event there is a disruption of service which prevents the Agency from broadcasting the meeting to members of the public using either the call-in option or internet-based service, this meeting will not be postponed or rescheduled but will continue without remote participation. The remote participation option is being provided as a convenience to the public and is not required. Members of the public are welcome to attend the meeting in person.

Attendees should be aware that while the Agency is following all applicable requirements and guidelines regarding COVID-19, the Agency cannot ensure the health of anyone attending a Committee meeting. Attendees should therefore use their own judgment with respect to protecting themselves from exposure to COVID-19.

Members of the public unable to attend this meeting may submit comments either in writing to edill@scvwa.org or by mail to Erika Dill, Management Analyst II, SCV Water, 27234 Bouquet Canyon Road, Santa Clarita, CA 91350. All written comments received before 4:00 PM the day of the meeting will be distributed to the Committee members and posted on the SCV Water website prior to the start of the meeting. Anything received after 4:00 PM the day of the meeting will be made available at the meeting and posted on the SCV Water website the following day.

MEETING AGENDA

<u>ITEM</u>		<u>PAGE</u>
1.	<u>PLEDGE OF ALLEGIANCE</u>	
2.	<u>PUBLIC COMMENTS</u> – Members of the public may comment as to items within the subject matter jurisdiction of the Agency that are not on the Agenda at this time. Members of the public wishing to comment on items covered in this Agenda may do so at the time each item is considered. (Comments may, at the discretion of the Committee Chair, be limited to three minutes for each speaker.)	
3. *	Recommend Approval of a Resolution Adopting the Appropriation of All As-Yet Unappropriated Funds for FY 2021/22	7
4. *	Recommend Approval of a Resolution Adopting the Appropriation Limit for FY 2022/23	11
5. *	Recommend Approval of Employee Manual 41 - Fleet Management Policy	17
6.	Discuss Upcoming Capacity Fee Study	25
7. *	Recommend Receiving and Filing of FY 2021/22 Third Quarter Financial Report	33
8. *	Recommend Receiving and Filing of March 2022 Financial Report March 2022 Check Registers Link: https://yourscvwater.com/wp-content/uploads/2022/05/Check-Register-March-2022.pdf	43
9. *	Committee Planning Calendar	93
10.	General Report on Finance and Administration Activities	
11.	Adjournment	
*	Indicates attachments	
◆	To be distributed	

NOTICES:

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning **Erika Dill, Management Analyst II** at (661) 297-1600, or writing to SCV Water at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that Agency staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the Agency to provide the requested accommodation.

Pursuant to Government Code Section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Committee less than seventy-two (72) hours prior to the meeting will be available for public inspection at SCV Water, located at 27234 Bouquet Canyon Road, Santa Clarita, California 91350, during regular business hours. When practical, these public records will also be made available on the Agency's Internet Website, accessible at <http://www.yourscvwater.com>.

Posted on May 10, 2022.

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ITEM NO.
10.1

BOARD MEMORANDUM

DATE: May 17, 2022
TO: Board of Directors
FROM: Courtney Mael *CM*
 Chief Engineer
SUBJECT: Engineering Services Section Report

CAPITAL IMPROVEMENT PROJECTS (CIP) CONSTRUCTION

Project	Contractor	Contract Amount	Scheduled Completion	Notes
ESFP Standby Generator	NoHo Constructors, Inc.	\$464,030.91	6/01/2022	Construction close-out is in progress.
Vista Canyon Recycled Water Tank (Phase 2B)	Pacific Tank and Construction, Inc.	\$3,906,870	7/15/2022	Construction is 85% complete.
Commerce Center Pipeline	FivePoint/Blois Construction, Inc.	\$891,139.70	6/30/2022	Construction is 99% complete.
Magic Mountain Pipeline Phase 4	FivePoint/Toro Enterprises	\$3,281,775.38	6/30/2022	Construction is 94% complete.
Magic Mountain Pipeline Phase 5	FivePoint/Toro Enterprises	\$3,269,978.85	6/30/2022	Construction is 90% complete.
Magic Mountain Pipeline Phase 6A	FivePoint/Toro Enterprises	\$7,168,844.85	6/30/2022	Construction is 70% complete.
Magic Mountain Pipeline Phase 6B	FivePoint/Leatherwood Construction	\$4,568,687.07	6/30/2022	Construction is 88% complete.
Valley Center Well Material Purchase	Evoqua Water Technologies, LLC	\$512,802	9/01/2022	Material delivery complete. Start-up services on-hold pending site construction work to be completed.

Valley Center Well Site Construction	GSE Construction Company, Inc.	\$3,248,800	9/01/2022	Construction is 82% complete.
Vista Canyon Recycled Water Main Extension (Phase 2B)	Ferreira Construction Co., Inc.	\$2,584,110	9/1/2022	Construction is 80% complete. Construction is on hold due to Owl's nest in Utility Opening underneath bridge. Staff are working with on-call biologist to evaluate options and provide notification to California Department of Fish and Wildlife.
Santa Clara & Honby Wells Material Purchase	Aqueous Vets	\$814,050	11/03/2022	Material submittals are in progress.
Saugus #3 & #4 Wells Construction (Replacement Wells)	Zim Industries, Inc.	\$12,751,494	07/06/2023	Material submittals are in progress.
ESFP Washwater Return Improvements	Pacific Hydrotech Corporation	\$17,526,700	TBD	Construction Contract Agreement, Bonds, and Insurance documents are being processed.
Pitchess Pipeline Modifications	LA County Metropolitan Transportation Authority	\$159,000	4/01/2024	Pipeline work is scheduled to occur in February 2024.

CAPITAL IMPROVEMENT PROJECTS (CIP) PLANNING AND DESIGN

1. Castaic Conduit Bypass Pipeline – Design is 90% complete. Staff is in the process of acquiring a pipeline easement from the City of Santa Clarita and finalizing design for the Santa Clara River crossing portion of the Project.
2. Deane Tank @ Sand Canyon Plaza (CIP is SCV Water Fair Share) – Consultant preparing 30% Plans for new 1.57 MG prestressed concrete tank.
3. Deane Pump Station @ Sand Canyon Plaza - 90% plans complete.
4. Deane Tank and Pump Station at Skyline Ranch (CIP is SCV Water Fair Share) – Consultant submitted 90% plans for pump station and for 2.08 MG prestressed concrete tank; staff review is in progress.
5. ESFP Two 5 MG Tank Improvements – Final design is in progress.
6. E Wells (E-14, E-15, E-16, and E-17) PFAS Groundwater Treatment Improvements – Planning is in progress.
7. Honby Parallel Pipeline Phase 2 – The Board of Directors adopted the Addendum to the EIR on June 1, 2021. Design is in progress. Staff is securing permits from the California Department of Fish and Wildlife and the Los Angeles Regional Water Quality Control Board.
8. Honby Tank Pipeline Bottleneck – Planning is in progress.
9. Magic Mountain Reservoir and Pump Station – Staff is preparing the California Environmental Quality Act (CEQA) documents and the Request for Proposal document for final design services.
10. Master Plan – Staff is reviewing and evaluating the consultant’s proposals.
11. Newhall Tanks 1 and 1A Stairs and Catwalks Improvements – The CEQA Notice of Exemption form has been submitted to the County. Final design is in progress.
12. Pipeline Inspection: Castaic Conduit Pipeline Reaches 3 & 4 – Planning is in progress.
13. Pipeline Inspection: Magic Mountain Pipeline Phases 1, 2, & 3 – Planning is in progress.
14. Pipeline Replacement: Abdale St, Maplebay Ct, & Beachgrove Ct Pipelines – Final design is in progress.
15. Pipeline Replacement: Dickason Drive Pipeline – Final design is in progress.
16. Pipeline Replacement: RVWTP Sewerline – Planning is in progress.
17. Pipeline Replacement: Sand Canyon Sewerline – Planning is in progress.
18. Pipeline Replacement: Smyth Drive Pipeline – Final design is in progress.
19. Pipeline Replacement: Valencia Marketplace Pipeline – Final design is in progress.

20. Recycled Water Central Park (Phase 2A) – The project's Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) was adopted by the CLWA Board of Directors on December 13, 2017. Design is on-hold pending resolution of recycled water permitting and regulatory issues.
21. Recycled Water Fill Station – The CEQA Notice of Exemption form was submitted to the County. Final design is in progress.
22. Recycled Water South End (Phase 2C) – Newhall County Water District, as the CEQA Lead Agency, certified the recirculated MND on August 10, 2017. The project MND/IS was adopted by the CLWA Board of Directors on August 23, 2017. Grant application for a Proposition 1 Grant was submitted the week of December 2, 2019. The Board of Directors adopted the Addendum to the MND on June 1, 2021 and authorized additional final design services on August 3, 2021. Final design is in progress.
23. Replacement Wells (Saugus Wells 3 and 4: Site and Equipment Design) – The Board of Directors authorized final design services on August 4, 2020 and final design is in progress.
24. RVWTP Diesel Underground Storage Tank (UST) Replacement – Final design is in progress.
25. Sierra Highway Bridge Expansion Water Pipelines Protection – Final design is in progress. The City of Santa Clarita plans to advertise the SCV Water Pipelines Protection work under a separate bid item for the Sierra Highway Bridge Widening Project.
26. Santa Clara and Honby Wells PFAS Groundwater Treatment Improvements Site Improvements – The site improvements are being advertised on PlanetBids for construction bids. Bid opening is on May 18, 2022.
27. Saugus Formation Dry Year Reliability Wells (Saugus Wells 5 and 6) – Staff is preparing a Planning and Feasibility Study Request for Proposal document.
28. S Wells PFAS Groundwater Treatment and Disinfection Facility – Preliminary Design and landscape concept has been completed. Environmental Consultant has initiated CEQA Initial Study. Discussions with the City of Santa Clarita are ongoing related to purchase of property. Public Engagement Firm selected and initiated.
29. T7, U4, and U6 Wells PFAS Groundwater Treatment Improvements, New RVIPS Disinfection Facility, and Saugus 1 and 2 VOC Improvements – The Preliminary Design Report has been completed. Biological and Cultural Resources Assessment completed. 75% final engineering design in progress.
30. V-9 Turnout Facility – Planning is in progress.
31. Well 201 VOC Treatment Improvements – Final design is in progress.
32. Well 205 Perchlorate Treatment Improvements – Staff has responded to questions and comments raised at the meeting with Woodlands HOA. CEQA documents are available for public comment.

DEVELOPMENT PROJECTS – DESIGN, CONSTRUCTION, AND INSPECTION

Project Developer	Development Size	Infrastructure (Estimated at Build-out)	Schedule	Status
Aidlin Hills (Tract 52796) Lennar	102 Dwelling Units	2 tanks, 1 pump station, ±7670' of potable pipelines, and 9 public fire hydrants.	TBD	Final Water Tech Memo in review. Completed agency review of 30% water pipeline plans.
Castaic High School Rasmussen	250,000 Square Feet	2 miles of pipelines, 1 tank, and 1 pump station.	Facilities were constructed to meet scheduled school opening in fall 2019.	Construction is complete and pending punch list items. Easement documents are being prepared.
College of the Canyons (COC)	New Parking Structure for Valencia Campus	Relocation of 16" water line (approximately 1,015').	Construction is complete and pipeline is in operation.	Staff are working with COC on preparing easement.
Dockweiler	93 Single Family Units	1,400' of offsite pipeline, 3,600 feet of onsite pipeline.	Construction completed meters to be set by May 2022.	Construction is complete. Closeout and NOC in process.
Landmark Village (Tract 53108) FivePoint	1444 Dwelling Units	3.5 miles of piping pressure reducing station, 2MG Zone IA Tank, and 2 Hwy 126 crossings.	TBD	Design is on hold.

Project Developer	Development Size	Infrastructure (Estimated at Build-out)	Schedule	Status
Mission Village (FivePoint)	4055 Dwelling Units	11.5 miles of new pipeline, 1 pressure reducing station (Telemark (formerly Petersen), 2 booster stations (Telemark (formerly Petersen) potable & recycled). 1 booster station upgrade (Magic Mtn.), and 3 tanks (Telemark (formerly Petersen) potable & recycled tanks and Magic Mtn. Tank No. 2 potable).	Telemark (formerly Petersen) Tanks and Booster Stations design to be complete by September 2022.	Design: To date, a total of 44 potable/recycled distribution pipeline designs have been approved for construction. Telemark (formerly Petersen) potable and recycled water tanks and booster stations are near 75% design completion. Phase 3B water distribution pipeline plan sets are under review. Construction: Retaining wall work on the Magic Mountain Tank No. 2 site is in progress. 1A, 1B, 1C, 1D, and in-tract potable water pipelines construction is completed, and recycled water pipelines construction is at 90% completion. Well 206/207 pipe relocation project in construction. Magic Mountain Booster Station Upgrade is in construction. Notices of Completion are being executed for completed construction projects.
Needham Ranch Trammell Crow Co.	2,550,000 Square Feet Industrial and Commercial	4 miles of pipelines, 1 pump station, 2 tanks, and 2 pressure reducing stations.	Phase 1 construction is substantially complete. Phase 2 contract agreement was signed May 4, 2020. Tank 3 Complete. Tank 3A completion by September 2022. Phase 2 pipeline completion by October 2022.	Phase 2 water pipelines in construction. Tank 7A in construction. Pine Street plans are approved, and DDW waiver approvals received. Temporary bypass water line is complete. Pump Station modification plans are approved. Chemical Building 60% plans in progress.

Project Developer	Development Size	Infrastructure (Estimated at Build-out)	Schedule	Status
Sand Canyon Plaza	129 Single Family Units, 451 Multi-Family Units, 140 Bed Senior Living, Commercial	1 tank, 1 pump station, 1,700' of offsite pipeline, and 8,500' of onsite pipeline.	TBD	Offsite pipeline plans are approved. 95% pump station plan review is complete. Final Design Authorization and MND & MMRP adoption was approved by Board of Directors on July 6, 2021 for new tank.
Sheriff Station City of Santa Clarita	44,300 Square Feet	1 mile of pipeline.	Construction of main pipeline was completed in November 2019, with temporary bypass crossing over LADWP aqueduct. The permanent undercrossing will be scheduled for bidding based on LADWP's recent approval of undercrossing design.	Staff are working with consultant to finalize design plans/specs and prepare bid documents for LADWP aqueduct undercrossing. Staff are working with City to confirm traffic control requirements.
Spring Canyon (Tract 48086)	492 Dwelling Units	1 tank, 1 pump station, and 1 pressure reducing valve, Mammoth Lane upgrades and lift station upgrades.	Mammoth Lane upgrades must be complete prior to commencement of development.	Design plans for in-tract pipelines, tanks and pump station were approved and issued in July 2020. Staff is working with developer and consultant to address County standards for sewer lift station upgrades in order to transfer ownership to the City of Santa Clarita. Sewer Area Study in review by agency.

Project Developer	Development Size	Infrastructure (Estimated at Build-out)	Schedule	Status
Skyline Ranch Pardee (Tract 60922)	1220 Dwelling Units	17 miles of pipelines, 3 pump stations, and 4 tanks.	Phase 1 pipelines, pump station and tanks are online. Phase 2 pipelines, pump stations and tank are to be constructed by Spring 2023.	Consultant submitted 90% plans for Phase 2 Deane Zone tank and pump station. Staff review of 90% plans are in progress.
Tesoro Highlands	696 Single Family Units, 9 Multi-Family Units, 2 acres of Commercial	2 tanks, 1 pump station, 1 pressure reducing station, and 64,000' of pipeline.	Phase 1 Pipeline completion by May 2022. Tesoro 3 Tanks completion by December 2022. Phase 2 Pipeline completion by December 2022.	Phase 1 backbone pipeline construction is 90% complete. Tank 3/3A in construction. Phase 2 under construction. Phase 3 & 4 water plans approved. Pump station plans are 95% complete. 60% of plans for Phase 5 and 6 have been reviewed. 60% of plans are in review for Phase 7.
Vista Canyon (Tract 69164) JSB Development	1100 Dwelling Units	5 miles of potable and recycled pipelines.	Construction of Phase 1 Potable and Recycled Water Systems are complete. Construction of Phase 2 systems are complete except final tie-ins.	Developer to submit schedule to construct final tie-ins.

RIGHT OF WAY – CELL SITES

1. Bouquet Tank Site – T-Mobile has constructed fences around sector antennas. Carrier is also working on plans to install an emergency generator at this location. Agency has received deposit of \$10,000 and is reviewing plans for emergency generator.
2. Catala Tank Site – DISH Wireless has identified this location as a potential new cell site. Agency has received deposit of \$10,000 and is reviewing plans. AT&T has also identified this location as a potential new site. Agency is working with carrier on deposit letter. T-Mobile has identified this existing site for upgrades. Agency has received deposit of \$10,000 and is reviewing plans.
3. Commerce Center Tank Site – AT&T has identified this location as a potential new cell site. Agency is working with carrier on a deposit letter.
4. Honby Tank Site – T-Mobile has identified this existing site for upgrades. Agency is working with carrier on deposit letter and review of plans.
5. Live Oaks Tank Site – AT&T has identified this location as a potential new cell site. Agency is working with carrier on a deposit letter.
6. Newhall Tank 2 Site – Agency is waiting on T-Mobile carrier plans to relocate decommissioned Sprint equipment off the tank due to T-Mobile's acquisition of Sprint. Agency is waiting on carrier plans from AT&T and Verizon to install emergency generators.
7. Princess Tank Site – Agency previously issued a breach of contract to Crown Castle (site manager) and AT&T. BB&K is working with Crown Castle legal team to resolve the issue. Verizon has identified this site for emergency generator installation. Agency is working with carrier on a deposit letter
8. Pinetree 3 Site – The current Master Lease between the Agency and adjacent property owner allows the Agency not to renew the Master Lease. The Agency will mutually terminate the lease and will transfer the Agency's interest with Crown Castle to the adjacent property owner.
9. Skyblue Tank Site – Verizon has requested an access easement for this site to resolve access issues. Agency is working with carrier on easement agreement.

CAPITAL IMPROVEMENT PROJECTS (CIP) MISCELLANEOUS

- Fire Flow Tests – In April 2022, staff processed 16 fire flow requests.

FACILITY CAPACITY FEES (FCFs) AND CONNECTION FEES

Month	Regional	Distribution	Total
July 2021	\$220,561	\$2,395	\$222,956
August 2021	\$910,782	\$0	\$910,782
September 2021	\$100,195	\$12,771	\$112,966
October 2021	\$1,944,990	\$47,900	\$1,992,890
November 2021	\$1,004,416	\$0	\$1,004,416
December 2021	\$357,621	\$66,586	\$424,207
January 2022	\$322,024	\$25,490	\$347,514
February 2022	\$236,438	\$17,843	\$254,281
March 2022	\$699,748	\$108,675	\$808,423
April 2022	\$540,824	\$95,697	\$636,521
FY 2021/22 to Date	\$6,337,579	\$377,357	\$6,714,956
FY 2021/22 Budget	\$5,500,000	\$1,000,000	\$6,500,000

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BOARD MEMORANDUM

DATE: May 16, 2022
TO: Board of Directors
FROM: Eric Campbell *EC*
Chief Financial and Administrative Officer
SUBJECT: Finance, Administration and Information Technology Section Report

FINANCE & ADMINISTRATION

Key Accomplishments/Activities:

Staff continues to work with Emtec, and their ClearCare group, to complete much-needed reports and approval workflows. These reports include the Pre-Close Budget vs. Actuals that will allow Agency staff to drill-down and do their own research. Other approvals and workflows include Projects, General Ledger, Accounts Receivable, Contracts, Purchase Orders, Inventory, the Amazon punchout, etc.

Staff attended the California Municipal Treasurer's Association (CMTA) 2022 Conference in May 2022. This event included specialized training on Internal Controls and Fraud Protection, Debt Issuance & Management, Infrastructure Funding, Investment Policies, Strategies to Optimize Payable Automation, California State Code Update, and Investment Strategies for Managing Longer-Term Liabilities such as Pension and Other Post-Employment Benefits ("OPEB" – Retiree Health Care). Several investment advisor contacts were made. We were able to incorporate those contacts in the Investment Advisory Services Request For Proposal (RFP).

Staff posted the RFP for Investment Advisory Services on May 10, 2022. The anticipated start date of the contract is August 1, 2022.

Significant Upcoming Items:

Accounting staff is preparing for the interim financial audit with the Agency's auditing firm LSL. The interim audit focuses on reviews of internal controls and an initial look at the first nine months of FY2021/22 data.

Staff has begun work on the upcoming fiscal year-end close process. This will be our first year-end close as one consolidated Agency. This will include staff across multiple departments to ensure that teams have the information they need to effectively close out FY 2021/22.

The contract with Aramark Uniform Services expired on February 28, 2022 (currently a month-to-month contract), and staff will be working on a Request for Proposal for the uniform rental services.

Ongoing: Staff continues to work with Engineering, Operations, and Water Resources to refine the Project Financial Management module. Steady progress is being made in bringing the Oracle modules and reports up to the appropriate levels.

Ongoing: Staff continues to review and approve Certificates of Insurance, ensuring that the insurance limits conform with the Agency's insurance requirements.

Ongoing: Staff continues to assist with training in Oracle's procurement module with applications such as requisitions, purchase orders, and contract agreements.

CUSTOMER SERVICE

Key Accomplishments/Activities:

Ongoing: Work related to the expansion of the Santa Clarita Division's (SCWD) Advanced Metering Infrastructure (AMI) continues.

Staff participated in the SCV Home and Garden show in Central Park the weekend of April 30, 2022. Key messaging focused on customer-facing improvements related to the enQuesta billing system conversion and upgrade project (enCUP) such as increased payment methods, a new bill format for the Newhall (NWD) and Santa Clarita Divisions (SCWD) and a new online customer portal for all customers. Utilizing several visual aids, the booth also included a "Meet Your Meter" station. Staff discussed the various methods of meter reading and introduced the groundwork for the AMI meter changeout project set to begin in July 2022. Staff enjoyed engaging with customers, SCV Water Directors and peers, and members of the general public.

A series of bill inserts regarding enCUP impacts have been executed for all customers: 1) Introducing the new online customer portal (all divisions), 2) Introducing the new bill format (Newhall and Santa Clarita customers only) and 3) Addressing the new billing system, payment methods, pay-by-phone number and new SCV Water account number (Santa Clarita customers only.)

Significant Upcoming Items:

Work related to the enQuesta Conversion and Upgrade Project (enCUP) continues. We are in the home stretch. Testing and final programming refinements are underway. End-user training has commenced and will continue through the week of May 23, 2022. Field Service staff is scheduled to participate in several enQuestaLink (mobile work order solution) training sessions prior to go-live. Billing and online customer systems are scheduled to go offline at end-of-day May 25, 2022 to begin the conversion and upgrade process. Staff will work through the Memorial Day weekend to ensure a successful data migration and go-live of Tuesday, May 31, 2022. Because online and phone payment systems will be disabled for the duration of the enCUP conversion, shutoffs that were scheduled for May 26 and June 2, 2022 have been rescheduled. A general outage/maintenance message will post to the Agency's public website on Tuesday, May 17, 2022, with details regarding the rescheduling of shutoffs to be added to that message on May 24, 2022.

As expected, the resumption of late fees and shutoffs has significantly increased call volume, lobby traffic, and related office, field and On-Call activities. Staff is working diligently with all customers to avoid disconnection for nonpayment, and if unable to pay, resolve their overdue balances through amortization agreements. Despite the multiple verbal and written outreach events (over the past 24 months), a vast number of customers were not taking action to connect with Customer Care upon receipt of the Overdue Notice and were disconnected for nonpayment. After observing this trend for the first two weeks of shutoffs, staff determined that an additional courtesy call may facilitate a call to action and implemented robo calls for accounts that were subject to disconnection for nonpayment. This additional outreach has proven to be

an effective strategy in helping to mitigate the number of shutoffs. The number of shutoffs compared to those eligible for shutoff dropped from an average of 38% in the first two weeks to 22% in the third week. Staff is hopeful that this trend will continue. As of the time that this report was prepared, the Agency has 378 active Amortization Agreements in place compared to 99 that were in place on March 28, 2022 when the Agency generated its first Overdue Notice and resumed late fees.

In collaboration with the Water Quality and Communications departments, staff will execute the Consumer Confidence Report (CCR) customer Notice as a bill insert to all customers May 16 – June 15, 2022. Customers who opt to receive their bill paperless will receive the CCR Notice via email on June 15, 2022. Customers who wish to receive a paper copy of the CCR may request one by completing the stub on the Notice, or by calling or emailing the Customer Care Department.

Staff is preparing for annual performance reviews.

HUMAN RESOURCES

Key Accomplishments/Activities:

Staff is currently working with an executive firm to recruit for the position of Director of Water Resources.

Staff is currently recruiting for the position of Environmental Health, Safety and Emergency Supervisor, Treatment Plant Operator, as well as 3 Water Systems Technicians.

Staff is preparing to recruit for the position of Engineer, Electrical/Instrumentation Technician, Senior Instrumentation Technician, and 2 Utility Workers.

Staff has executed an HR Ticketing System to provide more efficient and timely service to Agency employees. This is similar to the ticketing systems other departments have implemented. Staff can now track the kind of requests received and the time it takes to respond. Employees started using the system in early May 2022, and has been successful so far.

Staff has met with the consultant to discuss the Finance Organizational Study consultant. Staff is meeting again the week of May 9, 2022 to hear preliminary results on this study. The consultant may still need to survey other benchmark agencies and those who have implemented Oracle to gather best practices.

Staff prepared and submitted the IGOE Flexible Spending Account (FSA) and Dependent Care Assistance (DCA) plan data for implementation of the annual Nondiscrimination Testing (NDT) process. This process is conducted every year to ensure the plan design and participants meet compliance standards. Test results were released April 21, 2022 and the plans successfully passed all components of the NDT test, indicating that the plans do not discriminate in favor of highly compensated and/or key employees.

Staff continues to attend and support the monthly Safety Committee meetings conducted in Microsoft TEAMS (remotely).

Staff is continuing to participate in the weekly Covid-19 Emergency Team meetings with management. Staff manages all the positive Covid-19 cases. In addition, staff process all of the Emergency Administration Leave (EAL) hours and policy as approved by the Board as well as the new AB 114 State Bill passed on February 16, 2022.

Significant Upcoming Items:

Implement Performance Review salary adjustments and COLA wage adjustments.

Establish an Internship Program.

Implement an HR SharePoint page where employees can access answers to most asked HR questions and policies.

TECHNOLOGY SERVICES

Key Accomplishments/Activities:

The IT team successfully serviced 186 tickets and fielded 32 hotline calls for the month of April 2022.

GIS completed coordinating cross-departmental drone training. Training will take place in the Fall of 2022.

The GIS team has completed the annual pipeline cathodic testing. This data feeds into our pipeline assessment program.

The IT team has developed and published an RFP for an upgraded microwave communication link between Rio Vista Treatment Plant and Earl Schmidt Filtration Plant.

Significant Upcoming Items:

The GIS team is working with Operations to conduct a preliminary data analysis related to the updated Lead and Copper Rule change.

The GIS team is working with Water Resources for the deployment of a cloud server environment.

Ongoing: The GIS team continues to GPS survey all of SCV Water's well facilities.

Ongoing: IT team is moving imaging and update server from on-premise to cloud. This would streamline management of remote devices.

Ongoing: The IT team is currently assisting Customer Care with the enQuesta Conversion and Upgrade Project.

Ongoing: The IT team is evaluating technology upgrades for the Emergency Operation Center (EOC) at Rockefeller.

BUILDINGS AND GROUNDS

Key Accomplishments/Activities:

- Received quotes to remodel the lobby at Rockefeller location
- Received quotes to repair roof at the Golden Triangle location
- Complete weed abatement at several B&G locations through out Santa Clarita

- Completed LED lighting project at the Pine location

Significant Upcoming Items:

- Planning to execute approved painting proposal at Rockefeller location
- Moving forward with roofing project at Golden Triangle
- Working on contracts with fire alarm and systems to make a list of contacts for the safety department

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BOARD MEMORANDUM

DATE: May 23, 2022

TO: Board of Directors

FROM: Keith Abercrombie
Chief Operating Officer *KA*

SUBJECT: Treatment, Distribution, Operations and Maintenance Section Report

The Treatment, Distribution, Operations and Maintenance Section (TDOMS) provides reliable and high-quality water through rigorous preventative maintenance programs and timely response to corrective action maintenance. Routine inspections and maintenance of each facility is part of the overarching goal of TDOMS. Below is a discussion on these activities for the month of April 2022.

TREATMENT OPERATIONS AND MAINTENANCE

Monthly corrective and preventative maintenance work orders were completed at the following locations:

- Rio Vista Water Treatment Plant (RVWTP)
- Rio Vista Intake Pump Station (RVIPS)
- Earl Schmidt Filtration Plant (ESFP)
- Earl Schmidt Intake Pump Station (ESIPS)
- Saugus Perchlorate Treatment Facility (SPTF)
- Castaic and Pitchess Pipelines
- Recycled Water Pump Station
- Rio Vista Valve Vault No. 1
- Saugus Well 1
- Sand Canyon Reservoir
- Sand Canyon Pump Station (SCPS)

Preventative and Corrective Maintenance Work Order Summary

Work Orders	April 2022	FYTD 2021/22
Corrective Maintenance	31	286
Preventative Maintenance	99	690
Key Action Items Completed:		
<ul style="list-style-type: none"> - Installing new drain valves on RVWTP clarifiers - Replacing corroded electrical conduits and installing sump pump to prevent water accumulation in pull boxes 		

Work in Progress – Treatment

- Installing new screens on RVWTP Clarifiers
- SPTF – Replacing aqueous ammonia tank. Awaiting delivery of tank.
- SPTF – Replacing VFD at Saugus Well 2
- RVWTP – Automating Sludge Tank Valves. Awaiting components from supplier.
- ESFP – Installing new automatic gate to limit unauthorized access. PO has been issued for gate installation

Completed Work

- Installing new drain valves on RVWTP clarifiers
- RVWTP - Reconfigured feed lines and drawdown tubes on ferric system.
- SCPS – Repair hydraulic actuators on pumps No. 5
- SCPS – Quad-annual breaker testing and maintenance
- ESIP – Repairing Failed Drive at ESIP

FLEET AND WAREHOUSING

The goal of the Fleet and Warehousing Department is to support all other departments by providing essential services, materials, and supplies, as well as safe and reliable vehicles and equipment.

Work in Progress

- Developing action plans for proposed and adopted regulations
- Exploring a partnership with College of the Canyons' Automotive Internship Program
- Partnering with a Ford dealership to launch a mobile repair service program for vehicles
- Conducting a pilot to reduce fuel consumption by recalibrating vehicle engines
- Updating the agency's registration with the U.S. Department of Transportation

Completed Work

- Performing on-going maintenance and repairs on vehicles and equipment
- Completed the annual AQMD tests for the Golden Triangle and Pine fuel tanks
- Updating the agency's registration with the California Highway Patrol
- Completed installation of catalytic converter anti-theft devices on vehicles at Rockefeller

DISTRIBUTION OPERATIONS AND MAINTENANCE

General operational and maintenance activities include:

- Valve exercising
- Fire hydrant maintenance
- Air and vacuum valve maintenance
- Blow off maintenance
- Meter reading
- Meter change-outs
- Control valve maintenance

Work in Progress

- SC-2 Gravity – Completing above ground construction. Scheduling SC-2 suction line abandonment
- Dickason Drive Pipeline Replacement – Plans complete January 10, 2022, and given to ESS
- Smyth Drive Pipeline Replacement – Water and traffic plan completed, now working on paving plan
- Newhall Ranch Road Pipeline Replacement – ESS Job
- Vasquez Pipeline – Researching easement
- Mammoth Booster Station 3 Suction and Discharge Pipeline Replacement – Estimated completion date – May 17, 2022

Completed Work

- Interconnection between the NWD and SCWD Systems on Old Wiley Cyn Rd
- Decoro Drive Pipeline Replacement
- West Newhall Interconnection (VWD and NWD) on Vista Ridge/Wiley Cyn
- Ridge Route Road Phase 2 Pavement Repair
- The Old Road Pavement Repair

In addition to routine operational and maintenance activities, there are a variety of other projects.

Meter Change-out Summary

NWD

Meter Size	April 2022	Quantity FYTD 2021/22
3/4"	6	263
1"	1	22
1 1/2"		2
2"	1	28

SCWD

Meter Size	April 2022	Quantity FYTD 2021/22
3/4"	17	549
1"	31	206
1 1/2"		18
2"	1	16

VWD

Meter Size	April 2022	Quantity FYTD 2021/22
3/4"		522
1"		50
1 1/2"		29
2"		28

Distribution System Leak Summary

NWD – Approx. 9,679 Service Connections

Leak Type	April 2022	FYTD 2021/22
Service Leaks	2	33
Main Leaks		1

SCWD – Approx. 31,218 Service Connections

Leak Type	April 2022	FYTD 2021/22
Service Leaks	7	106
Main Leaks		5

VWD – Approx. 29,974 Service Connections

Leak Type	April 2022	FYTD 2021/22
Service Leaks	1	55
Main Leaks		7

PRODUCTION OPERATIONS AND WATER SYSTEMS

In addition to the general operation and maintenance of the production facilities, there are a variety of other projects within the Production and Water Systems.

Work in Progress

- Carnegie Booster Station – Meter, pump and motor replacement completed, pump 19 – Replacing broken suction valve, valve is on back order
- Fairway Water Storage Tank Coating Project – Reline interior, spot repair exterior. Associated Tank Constructors, Inc. awarded project, work commenced February 22, 2022 – work underway
- Commerce Center Tanks No. 1 and No. 2 Exterior Recoat Project – Project awarded to Tony Painting, work began on April 5, 2022
- Seismic Valve installations at Newhall 1/1A and Sunset Pointe tanks – work underway
- Actuator Valve installations at N Wells Treatment Facility – work underway
- Cal Arts Booster Station, B64 motor failure – requesting quotes

- Well160 pump failure – New pump and motor on order

Completed Work

- N Wells Treatment Facility (BFDF) – Air conditioning for treatment building installed in September 2021, commissioned in October 2021
- Castaic HS Tank – In service, interior tank coating repairs completed
- Sand Canyon Reservoir – Tank Road asphalt repair completed November 2021
- North Oaks Booster – Pump repair, installation completed December 2021
- Sand Canyon and Wiley Canyon Boosters – Electrical equipment replacement work completed in December, re-energized and back online in January
- Honby Tank – Tank Road asphalt repairs completed in February
- SC-2 gravity – SCE energized in October, Cla-Val, station slab completed in December. SCADA programming and fencing completed in February; completed and in operation
- Princess Booster – Electrical equipment replacement work completed, station operational in February
- SC-12 – Facility construction and upgrades for efficiency are complete, station is online
- Saugus Well 2 Rehab – Motor replacement completed, well video and casing integrity study completed in January, well back in service April 5, 2022. Rehab options being evaluated and will be scheduled for next winter

WATER QUALITY

Water Quality Complaints

NWD

Type of Complaint	April 2022	# of Complaints FYTD 2021/22
Hardness	1	2
Odor		
Taste		
Color		2
Air		1
Suspended Solids		2
Totals	1	7

SCWD

Type of Complaint	April 2022	# of Complaints FYTD 2021/22
Hardness		
Odor	1	3
Taste		2
Color		4
Air		1
Suspended Solids	1	4
Totals	2	14

VWD

Type of Complaint	April 2022	# of Complaints FYTD 2021/22
Hardness		1
Odor		
Taste		1
Color	1	3
Air		
Suspended Solids		1
Totals	1	6

Heterotrophic Plate Count Samples

NWD

Total # of HPCs Collected April 2022	# of HPCs Collected FYTD 2021/22
1	7

SCWD

Total # of HPCs Collected April 2022	# of HPCs Collected FYTD 2021/22
	19

VWD

Total # of HPCs Collected April 2022	# of HPCs Collected FYTD 2021/22
4	12

PERCHLORATE CONTAMINATION PROGRAM MANAGEMENT

As a result of the detection of perchlorate at Well V-201, modifications are being made to the Department of Toxic Substances Control (DTSC) Remedial Action Plan (RAP) and the perchlorate project DDW 97-005 Engineering Report. A perchlorate removal facility has been constructed and resumption of Well V-201 service will occur following receipt of permit from State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW).

In late December 2017, perchlorate was detected at Well V-205 just above the maximum contaminant level for drinking water of 6 ppb. A confirmation sample taken in March 2018 indicated a level of 8.1 ppb. The well was previously taken out of service in 2012. Staff is determining the course of action to pursue to return the well to service and potential cost recovery under the terms of the Settlement Agreement.

In May 2019, for the first time since 2005, perchlorate was detected in Alluvial Aquifer Well Q-2 at the maximum contaminant level of 6 µg/L. No drinking water quality standards were violated, but the well was removed immediately from service. Design has been completed. Bids to supply new treatment vessels were received on December 9, 2019 and a contract was awarded to Evoqua Water Technologies, LLC on December 12, 2019. Six bids for the site work were received on February 7, 2020 and a contract was awarded to Pacific Hydrotech Corp. on February 9, 2020. Construction at Q2 complete. The well will return to service upon permit approval by DDW.

PFAS

In May 2019, initial sampling for PFAS substances occurred and results were received. One well (Valley Center) exceeded Division of Drinking Water Interim Response Level of 70 ng/L and was shut off. Other wells exceeded the Interim Notification Levels for PFOS and PFOA. This information was presented to the SCV Water Board on June 4, 2019. PFAS sampling for the second quarter was done in August 2019 with results received in September and October 2019. In February 2020, the State Water Resources Control Board Division of Drinking Water issued new response levels; 10 parts per trillion (ppt) for perfluorooctanoic acid (PFOA) and 40 ppt for perfluorooctanesulfonic acid (PFOS.)

SCV Water has taken 20 wells out of service due to PFAS. Three (3) were returned to service in late 2020 (N, N7, N8) with the completion of the first PFAS Treatment System.

WATER QUALITY LABORATORY

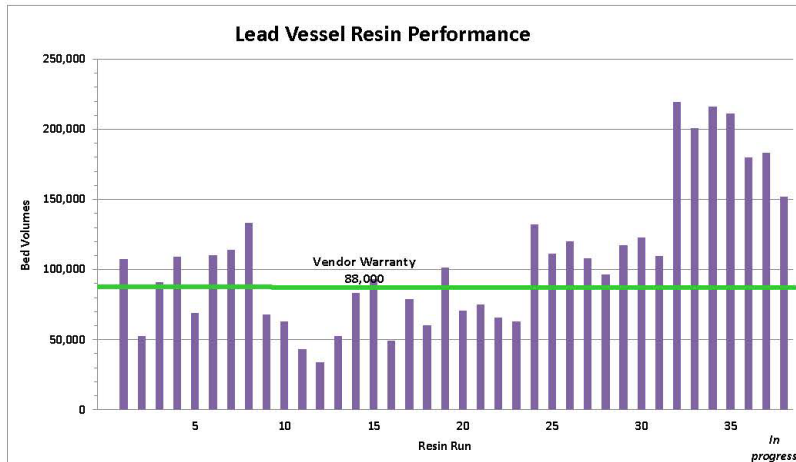
The laboratory continues to analyze compliance PFAS samples. Work is continuing on the new laboratory regulation requirements that were adopted in 2021.

**Saugus Perchlorate Treatment Facility
Resin Usage Summary
Based on Time to Breakthrough**

Resin Run Number	Fill Date	Breakthrough Date*	Days	Volume Treated (Million Gallons)	Volume Treated (Acre-Feet)	Bed Volumes Treated	Replacement Costs	\$/BV	\$/AF	Combined (Lead and Lest)		
										MG	AF	BVs
1	5/3/10	8/25/10	115	253	776	107,310	*	*	*			
2	9/8/10	11/8/10	62	120	368	52,289	\$ 105,728	\$ 2.02	\$ 287	373	1,144	159,599
3	12/10/10	3/26/11	107	239	735	90,841	\$ 115,458	\$ 1.27	\$ 157	359	1,103	143,130
4	5/5/11	8/9/11	97	288	883	108,745	\$ 112,255	\$ 1.03	\$ 127	527	1,618	199,586
5	8/17/11	10/14/11	59	180	554	68,941	\$ 112,255	\$ 1.63	\$ 203	468	1,437	177,686
6	11/6/11	4/10/12	157	288	883	109,850	\$ 112,048	\$ 1.02	\$ 127	468	1,437	178,790
7	4/20/12	7/16/12	88	280	860	113,905	\$ 112,048	\$ 0.98	\$ 130	568	1,743	223,754
8	7/11/12	11/5/12	118	349	1,070	133,044	\$ 112,048	\$ 0.84	\$ 105	629	1,930	246,949
9	11/16/12	1/10/13	56	177	544	67,744	\$ 112,258	\$ 1.66	\$ 208	526	1,614	200,788
10	1/10/13	3/10/13	60	165	505	62,836	\$ 43,567	\$ 0.69	\$ 86	342	1,049	130,579
11	3/19/13	5/4/13	47	112	344	42,769	\$ 118,213	\$ 2.76	\$ 344	276	849	105,605
12	5/8/13	6/15/13	39	95	293	33,577	\$ 141,989	\$ 4.23	\$ 485	207	637	76,346
13	6/10/13	8/20/13	72	179	551	52,099	\$ 118,212	\$ 2.27	\$ 215	275	844	85,676
14	9/12/13	11/30/13	80	217	667	83,031	\$ 118,212	\$ 1.42	\$ 177	397	1,218	135,130
15	11/21/13	2/9/14	81	246	755	92,790	\$ 118,212	\$ 1.27	\$ 157	463	1,422	175,821
16	2/24/14	3/31/14	36	128	393	48,854	\$ 105,494	\$ 2.16	\$ 269	374	1,148	141,644
17	4/28/14	8/6/14	103	205	629	78,423	\$ 105,494	\$ 1.35	\$ 168	333	1,022	127,277
18	8/21/14	12/3/14	105	158	485	60,237	\$ 105,494	\$ 1.75	\$ 218	363	1,114	138,660
19	12/4/14	3/16/15	103	266	816	101,458	\$ 105,494	\$ 1.04	\$ 129	424	1,301	161,895
20	3/17/15	5/28/15	73	184	565	70,380	\$ 105,494	\$ 1.50	\$ 187	450	1,381	171,838
21	5/29/15	8/3/15	67	195	598	74,610	\$ 105,494	\$ 1.41	\$ 176	379	1,163	144,990
22	8/4/15	10/15/15	73	171	525	65,484	\$ 105,494	\$ 1.61	\$ 201	366	1,123	140,094
23	10/16/15	12/8/15	54	165	506	62,988	\$ 105,494	\$ 1.67	\$ 208	336	1,031	128,472
24	12/9/15	3/31/16	114	346	1,062	131,983	\$ 105,494	\$ 0.80	\$ 99	511	1,568	194,971
25	4/1/16	7/7/16	98	291	893	111,167	\$ 105,494	\$ 0.95	\$ 118	637	1,955	243,150
26	7/8/16	10/17/16	102	314	964	119,919	\$ 105,494	\$ 0.88	\$ 109	605	1,857	231,086
27	10/21/16	1/25/17	97	283	869	107,984	\$ 105,494	\$ 0.98	\$ 121	597	1,832	227,903
28	1/26/17	4/18/17	83	252	773	96,192	\$ 105,494	\$ 1.10	\$ 136	535	1,642	204,176
29	4/25/17	8/5/17	103	306	939	116,938	\$ 105,494	\$ 0.90	\$ 112	558	1,713	213,130
30	8/11/17	1/3/18	146	322	988	122,845	\$ 105,494	\$ 0.86	\$ 107	628	1,927	239,783
31	1/16/18	6/9/18	145	289	887	109,395	\$ 105,494	\$ 0.96	\$ 119	611	1,875	232,240
32	6/18/18	12/24/18	190	574	1,762	219,207	\$ 105,494	\$ 0.48	\$ 60	863	2,649	328,602
33	12/13/18	6/10/19	180	525	1,611	200,536	\$ 105,494	\$ 0.53	\$ 65	1,099	3,373	419,743
34	6/11/19	12/30/19	203	566	1,737	216,073	\$ 108,162	\$ 0.50	\$ 62	1,091	3,348	416,609
35	12/18/19	7/8/20	204	552	1,694	211,010	\$ 108,162	\$ 0.51	\$ 64	1,118	3,431	427,083
36	7/9/20	2/6/21	213	471	1,446	179,890	\$ 128,334	\$ 0.71	\$ 89	1,023	3,140	390,900
37	2/16/21	8/30/21	196	477	1,464	182,727	\$ 142,690	\$ 0.78	\$ 97	948	2,910	362,617
38	9/14/21	5/4/22	233	397	1,218	151,726	\$ -	\$ -	\$ -	874	2,682	334,453
Total			4,159	10,626	32,613	4,059,794	\$ 3,938,743	NA	NA	20,602	63,231	7,860,553
Average			103	265	814	101,299	\$107,874	\$ 1.15	\$ 142.15	507	1,557	193,502

+ Breakthrough defined as Lead Vessel effluent reaching 6 µg/L.
* Initial resin delivery was included in construction contract

Runs 1-2 had 315 cubic feet of resin
Runs 3-11 had 350 cubic feet of resin + 180 cubic feet of anthracite
Run 12 has 434 cubic feet of resin + 180 cubic feet of anthracite
Runs 13-present had 350 cubic feet of resin + 180 cubic feet of anthracite



**V-201 Perchlorate Treatment Facility
Resin Usage Summary
Based on Time to Breakthrough**

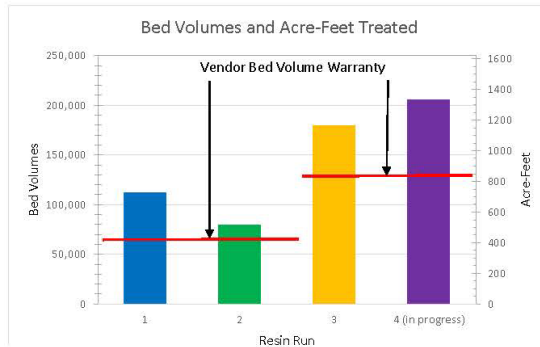
Resin Run Number	Fill Date	Breakthrough		Volume Treated (Million Gallons)	Volume Treated (Acre-Feet)	Bed Volumes Treated	Replacement Costs	\$/BV	\$/AF	Combined (Lead and Lag)		
		Date	Days							MG	AF	BVs
1	11/3/2017	4/19/2018	168	297	912	112,498	\$188,355	\$1.67	\$207			
2	5/7/2018	9/17/2018	134	210	644	79,476	\$105,494	\$1.33	\$164	507	1,556	191,973
3	9/24/2018	11/4/2019	407	474	1,454	179,465	\$105,494	\$0.59	\$73	684	2,098	258,941
4 (in progress)	11/12/2019	4/21/2021	527	544	1,670	206,045	\$108,162	-	-	1,018	3,124	385,510
Total			1236	1,525	4,679	577,483	\$507,505			2,209	6,778	836,424
Average			309	381	1,170	144,371	\$126,876	\$1.20	\$147.66	736	2,259	278,808

+ Breakthrough defined as Lead Vessel effluent reaching 6 ug/L

Runs 1 & 2 had 353 cubic feet of resin (PRS-2) + 180 cubic feet of anthracite

Runs 3 - present had 353 cubic feet of resin (PRS2 Plus) + 180 cubic feet of anthracite

The well was turned off at 1:30 pm April 26, 2021.



SAFETY/EMERGENCY/RISK MANAGEMENT

A safe and healthful work environment is a critical component to the mission and values of SCV Water. Throughout the reporting month, several routine safety related training, inspections, and various other items were completed. The Safety Department continues to integrate health and safety programs for SCV Water. Some of the items completed and currently in progress are as follows:

Work in Progress

- Development of First Aid/CPR training through American Heart Association. Both online and hands on training will be conducted this fall and winter
- Implementing mass notification software to more effectively communicate with staff

Completed Work

Inspections

Monthly Inspections

- Underground storage tank (UST) designated operator
- Aboveground storage tank (AST) inspection
- Fire extinguishers
- Emergency eye-wash/shower stations
- Self-Contained Breathing Apparatus (SCBA) units
- Automated External Defibrillator (AED) units
- Life Safety Inspections

Incident Data

- There was one recordable injury in April 2022
- There were no lost workdays in April 2022
- There were 2 security breaches at Pine Street location in April 2022 (fuel and copper wire)
- There was 1 pump failure / electrical malfunction incident at RVIPS resulting in burnt equipment in April 2022
- There was 1 vehicle incident at SCPS resulting in minor property damage in April 2022

Safety Training

- Tailgate meetings took place at each location in April 2022
- No new hire safety orientation took place in April 2022
- First Aid/CPR training took place at several locations in April 2022
- Confined space operations took place at GT, Rio Vista, and Pine Street locations in April 2022
- Hands on fire extinguisher skills took place at Pine, Rio Vista in April 2022
- Respirator FIT testing took place at GT in April 2022

Safety Compliance

- Continue to meet Cal-OSHA and Los Angeles County Public Health requirements regarding COVID-19

Safety Awards / Grants

- ACWA JPIA Risk Control Grant was awarded \$10,000 to the safety department to purchase emergency mobile radio communication equipment.


Safety Committee

- The next Safety Committee meeting will be held on May 25, 2022

M65



BOARD MEMORANDUM

DATE: May 16, 2022
TO: Board of Directors
FROM: Steve Cole 
Assistant General Manager
SUBJECT: Water Resources and Outreach Section Report

Key Accomplishments

Water Resources

- DWR has completed the review of SCV Water's 2020 Urban Water Management Plan, finding only a few minor items that will require clarification or correction that will be addressed with the submittal of an errata and/or corrections in DWR's UWMP portal (WUEdata). These corrections do not require a public hearing, nor approval/adoption from the Board of Directors. Staff will be working with Kennedy Jenks Consultants to finalize.
- Staff participation continues in several Los Angeles County Water Planning Workshops to provide input to the County about concepts for better coordination (e.g., streamlined permitting and data sharing) and regional targets and facilitating a regional approach to water reliability and resiliency.
- Staff participated in the April 28, 2022 Bouquet Canyon Restoration Project Workgroup meeting. Los Angeles County Public Works (LACPW) and California Department of Fish and Wildlife (CDFW) reported that they had met with the Wildlife Conservation Board (WCB) Staff on April 26, 2022. WCB staff sought additional information on the projected costs. While somewhat surprised by the magnitude of the costs, it is thought that staff is still supportive. WCB staff stated it will take the project to their management for further discussion. On the federal side, United States Forest Service (USFS) suggested that the project might be covered under a new "restoration" categorical exclusion. Nevertheless, the United States Fish and Wildlife Service (USFWS) indicated that a Biological Assessment would need to be performed by the USFS. LACPW indicated a preference that it draft such a document for the USFS. SCV Water, SCV-GSA and the SCV Integrated Water Management Group have sent letters of support to federal elected officials making a "community project funding request" of two million dollars to supplement the potential Conservation Board grant. SCV Water staff will share the letter so others may use it as a template. Representative Mike Garcia's office has sent a project support letter to the CDFW.
- The Sites Reservoir Authority has submitted a water rights application to the State Water Resources Control Board. The application avoids injury to existing water rights holders. Water would only be diverted when "Excess" conditions exist in the Delta. The project includes several measures to avoid unreasonable harm to the environment and protect public trust resources. These include diversion criteria consistent with the California Department of Fish and Wildlife's comments on the Project's Revised Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement.

Further, the environmental storage component of the Sites project will support public trust values and exchanges with the CVP and SWP will enhance temperature conditions in support of salmon rearing.

- Staff completed and submitted the recycled water annual report under Monitoring and Reporting Program Order No. WQ 2016-0068-DDW (CI-10081) on April 1, 2022.
- Staff has completed Water Supply Assessments for both the Castaic Mountainview Apartments and Trails at Lyons Canyon developments and has submitted to Los Angeles County.
- Staff completed and submitted to the Department of Water Resources the first annual report on the SCV-GSAs Groundwater Sustainability Plan.
- Staff received a completed copy of the Salt and Nutrient Management Plan report update on April 18, 2022 from Luhdorff and Scalmanini Consulting Engineers.

Sustainability & Conservation

- Staff completed and submitted the Request for Proposals (RFP) for long-term Operations/Preventative Maintenance of the Agency's 4.5 MW Photovoltaic Arrays.
- Staff met several local Homeowner Association management firms to promote the Lawn Replacement Program and to provide opportunities for future engagement including, but not limited to, participation in the advisory task forces.
- Sustainability/Conservation staff coordinated and facilitated the monthly Sustainable Water Action Taskforce meeting.
- Staff, with consultant support, submitted applications to the Southern California Gas Company to reserve incentive funding for the Self-Generation Incentive Program. The application is under review, which is expected to be completed in May 2022.
- Staff presented drought updates and Agency conservation activities at the College of Canyon's Sustainability in Community Conference. The virtual series discusses a wide range of sustainability activities and during the previous presentation in March 2022, more than 300 participants viewed the presentation.
- Staff presented drought updates during SCV Water's Virtual Drought Forum.

Outreach, Legislation and Grants

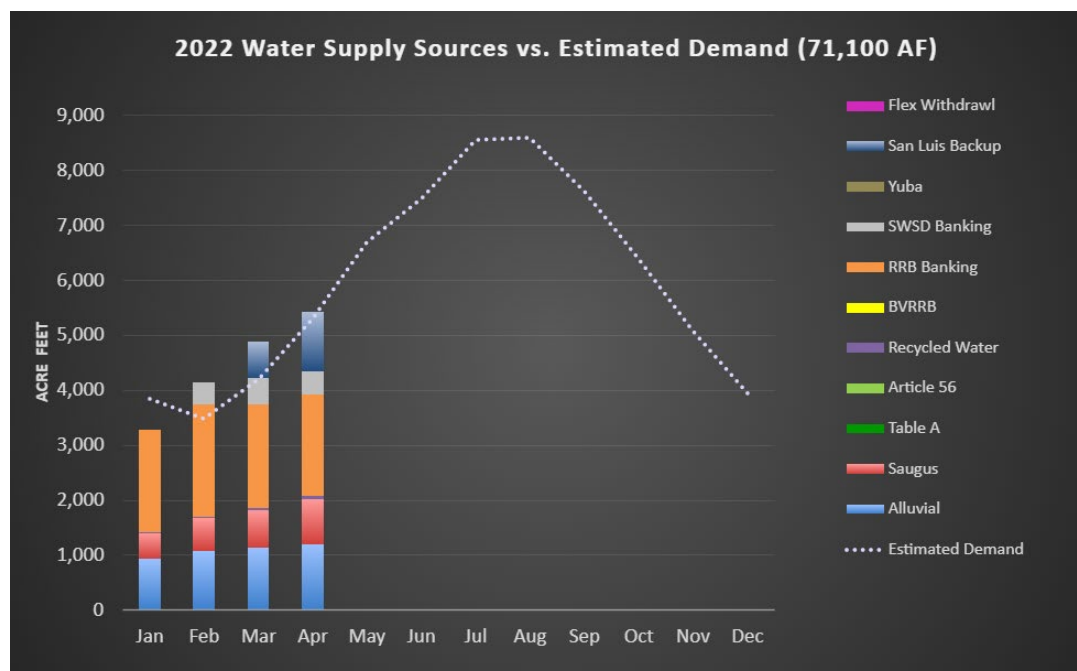
- SCV Water partnered with KHTS to offer a "mini water expo" as part of the annual SCV Home and Garden Show and Emergency Expo on April 30 and May 1, 2022. Customer Care, Sustainability/Conservation, Water Quality, Education and Outreach provided information on drought and other topics. Approximately 2,000 people visited our booth.
- Staff held the first in-person all-staff meeting in more than two years on Tuesday, April 19, 2022 on the Rio Vista patio. Staff from various work groups gave a brief update on completed, current and upcoming projects. The General Manager distributed milestone awards.

- Streaming audio and video drought messages have begun on multiple digital outlets and websites, reaching customers across the SCV.
- Staff is coordinating with the federal Bureau of Reclamation (BOR) to expedite the final award and financial assistance agreement for the Rosedale Phase 2 Wells Project. The grant would fund approximately \$1,458,987 of project costs under BOR’s WaterSmart Drought Response Program.
- On April 28, 2022, the BOR notified SCV Water that its Title XVI Feasibility Study on the Recycled Water Phase 2A and 2C Projects was approved. This approval allows the grant application for the Recycled Water Phase 2C Project (submitted on March 15, 2022) to be considered for funding under the WaterSmart: Title XVI WIIN Act Water Reclamation and Reuse Project Grant FY2022 program.
- On May 16, 2022, the BOR provided preliminary notification of a \$2,000,000 award under its 2022 WaterSmart Water and Energy Efficiency Grant program for SCV Water’s Automated Infrastructure Project (Phase 1).
- The Proposition 84 Round 1 IRWM Implementation grant expired, with no term extension available from DWR. One project (Recycled Water Phase 2B) remains open with completion anticipated in June 2022. All Phase 2B project funding, with the exception of retention amounts, has been received. Retention amounts will be released upon submission of satisfactory Project Completion Reports to DWR.

WATER RESOURCES

Water Demand and Supply

A summary of monthly 2022 water deliveries are shown below:



Note: To date, SCV precipitation for water year 2022 is currently below average. Record setting precipitation in December 2021 helped reduce demands and get us ahead for the year, but February and March were

dry and hot which resulted in higher than anticipated demands. Precipitation for water year 2021 in Santa Clarita was recorded as the driest year on record. In January 2021, SCV Water began utilizing dry-year water supplies, which will continue through 2022. The graph above shows monthly water supply use vs. estimated demands.

Status of Water Supplies Update – January through April 2022 precipitation in the state was the lowest on record dating to 1895 measuring at 25% of average. To date, the 2022 water year precipitation (Oct 2021-Sept 2022) is at 87% of average for the year (LA County Newhall Fire Station 32C gauge).

2022 Operation Details

- The initial 2022 State Water Project allocation was set at meeting minimum Human Health and Safety requirements for contractors, calculated at 55 gallons per person per day. On January 20, 2022, the allocation was increased to 15%. On March 18, 2022, DWR reduced the allocation back to 5% with a potential for further reductions, if statewide hydrological conditions do not improve.
- 2022 demands, without mandated conservation, are estimated at 71,100 AF. Recovery from Rosedale and Semitropic banking programs will continue throughout 2022.
- Staff requested as much Yuba accord water as possible for 2022. Initial estimates for SCV Water totaled 1,915 AF which includes 725 AF of Component 1 water (C1), 363 AF of Component 2 water (C2), 73 AF of Component 3 water (C3), and 754 of Component 4 Water (C4). Recently DWR reduced initial allocations for C1 water to zero based on the latest Bulletin 120 forecasts. This will reduce SCV Water's allocation from 1,915 AF to 1,190 AF. This water is subject to carriage losses which are estimated to range between 20-30% in 2022. The current allocations are subject to additional changes based on updated hydrological assessments for the water year.

Groundwater Sustainability Plan Implementation – The first annual report on Groundwater Sustainability Plan Implementation for the Department of Water Resources was completed and uploaded to the Department of Water Resources. It found that groundwater elevations are above the minimum groundwater elevation thresholds and no undesirable results related to groundwater elevations took place in 2021. The report also found a data gap regarding water quality, which we anticipate will be filled this month. The SCV-GSA will consider its FY 2022/23 budget at a special June 2022 meeting. Implementation will include technical support and outreach in FY 2022/23.

Significant Upcoming Items

- At the December 8, 2021, Water Resources and Watershed Committee meeting, staff presented two transfer/exchange programs available to SCV Water in partnership with Irvine Ranch Water District. Staff was directed to negotiate terms for both a Short-term Drought Relief transfer program and a Long-term unbalanced exchange program. The Short-term agreement will be considered by the Board at its May 17, 2022 meeting, and staff anticipates the Long-term agreement will be presented to the Board in or before July 2022.
- Staff continues to work with Woodard and Curran to refine the Online New Drop database. Reporting features, QA/QC, and dashboards will be improved as the tool is used by Water Resources and Customer Service staff. Customized reports continue to be developed to assist staff in completing quarterly reports to the Regional Board for the Agency's recycled water permit. Staff is also continuing to work with the Sanitation District to determine average wastewater flows from new development as part of an ongoing process to perfect New Drop flow estimates. Additionally, improvements continue to be made to the online database with the help of Customer Care Department feedback. Lastly, a QA/QC process is being conducted on the New Drop database to

ensure that every drop is captured in the quarterly reports. This task will be completed before the end of FY 2022/23. Staff also plans to integrate the New Drop database into the Customer Service database once all customer accounts have been moved into a single accounting system to improve efficiencies and reduce data input errors.

- The Upper Santa Clara River Regional Water Management Group (USCR RWMG) and Stakeholders continue preparing for the Round 2 grant solicitation under Proposition 1. Project ideas are being collected and regular communication with Stakeholders continues. The State's draft proposal solicitation package includes certain incentives for traditionally competing funding areas to pre-negotiate award values among competing regions. The USCR IRWM historically competes for IRWM funding against two other regions, the Watersheds Coalition of Ventura County, and the Los Angeles IRWM. These three competing regions have initiated discussions to determine if a negotiated agreement on awards can be reached. Without reaching an agreement, the grant applications will be competitive consistent with past years.
- Staff is working on Water Supply Assessments for the Entrada South and Commerce Center Expansion projects and the Wiley Canyon Mixed Use Development. Staff anticipates a request from the county for a Water Supply Verification for the Tesoro Development. Staff has also received a request from Los Angeles County for another Water Supply Assessment for the Blackhall Studio project.
- Staff is working to transition SCV Water's Excel based MBK Water Supply Reliability Model to the GoldSim platform, which will allow for a more dynamic reliability analysis of our near term and long-term water resource supplies. A draft version of the model is now running and staff is currently conducting quality checks to test accuracy and performance.
- As part of GSP implementation, two adjacent groundwater recharge sites have been selected on the east end of the Santa Clara River Basin for inclusion in the recharge feasibility study being conducted with the help of GSI technical consultants. Staff worked with City personnel to obtain an access agreement to conduct data collection activities for the Pinetree portion of the study. The geophysical portion of the fieldwork was completed in mid-January 2022 and a summary report was received on March 30, 2022. The results of the geophysical study fieldwork will help inform the locations for the infiltration tests and borehole samples, but first specific areas of interest need to be identified using the data presented in the summary report so that a delineation and biological assessment can be completed. This work is anticipated to begin in early May 2022, once GSI provides an area of interest map defining the locations for the survey and assessment. Lastly, groundwater monitoring data from the Castaic School site monitoring well will continue to be collected by staff for the Castaic portion of the recharge study.
- Staff has initiated a data management effort to determine the feasibility of a centralized data repository for all SCV Water departments. Data collection efforts are underway to help determine the extent of information collected by the various departments, the reports that each department generates, and existing methods/tools used for data organization within the Agency. A kickoff meeting with the Water Quality Department took place on May 11, 2022 and additional meetings with other departments are expected to take place before the end of the month.
- Staff continues to evaluate potential agreements with solar generation companies for projects at the Devil's Den Water District as well as other offers to lease or purchase portions of the SCV Water's Devil's Den property.

- Staff is working with Provost and Pritchard to analyze alternative land uses for the Devil's Den property to maximize the property's value to the Agency.
- Staff is coordinating with the City of Santa Clarita on development of a multi-purpose project near the existing Via Princess Metrolink site. The site will include a park along with subterranean infiltration basins to capture storm water flows. SCV Water will determine the feasibility of utilizing these planned infiltration basins to recharge water during periods when the facilities are not in use. The project description is anticipated to be completed before the end of May 2022 and provided to the City for inclusion in the RFP they are developing. A wrap-up meeting will take place by the end of the month to review and finalize the project description.
- As part of the 2020 Urban Water Management Plan under Water Code Section 10632.1, urban water suppliers are required to submit, by July 1 of each year, an annual water shortage assessment report to DWR. Staff is working to compile necessary information for this assessment which documents potential anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan.
- Staff is working with Luhdorff and Scalmanini to compile information for the 2021 SCV Water Report with intention to begin the transition of workload for the report preparation from consultants to SCV Water staff this year.

LEGISLATIVE/GOVERNMENT AFFAIRS

Staff and our legislative advocates are actively working on funding requests and letters of support for the Bouquet Creek Restoration Project.

Upcoming Sponsorships and Event Participation

- Urban Water Institute Fall Conference – August 24-26, 2022
- SCV Economic Development Corporation 2022 Economic Outlook – September 9, 2022

OUTREACH – Social/Digital Media & Education

Staff continues to share water news, conservation tips, featured plants and job openings on our social media and e-news channels.

Outlet	Description	Notable Activity	Audience
Facebook	Social media		1,000 no change
Instagram			1,443
Twitter			1,204
Website	yourSCVwater.com	Total users in April 2022	22,735
Water Currents	Customer e-newsletter	Open rate for April – 51%; May - 62% (Average industry open rate: 21.64%)	17,094

Public Education - 2022

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2022	2021
Education (virtual)**														
Students	647	433	740	476									2,296	7,090
Teachers	24	16	27	20									87	265
Garden Classes (virtual)	85	27	84	84									280	443

* Data not yet available

Significant Ongoing or Upcoming Items

- Drought messaging in the works include a 4-page spread in a Signal special edition; direct mail “Drought Bulletin” to all customers and a Special Edition Water Currents e-newsletter.
- The AMI Outreach kick-off meeting was held May 12, 2022, and collateral materials are in development, including door hangers, fact sheet, video and more.
- Staff is assisting Customer Care with messaging and outreach as it prepares to roll out a new online customer portal on May 31, 2022.
- Design work is wrapping up on the annual Consumer Confidence Report, and distribution will begin in mid-May 2022.
- Outreach staff is collaborating with Engineering on community engagement around a potential “pocket park” and other interpretive materials at the planned S-Wells PFAS treatment facility.
- The Bureau of Reclamation (BOR) and the Agency are negotiating final contract language for Rosedale Phase 2 Wells Project funding under BOR’s Drought Resiliency Projects Program (\$1,458,987).
- Staff is evaluating projects for possible funding under the BOR FY 2023 Drought Resiliency Projects program. Applications for the FY2023 funding round are due June 15, 2022.
- Staff is evaluating projects for possible funding under the BOR FY2023 Water and Energy Efficiency Grants program. Applications for the FY 2023 funding round are due July 28, 2022.

SUSTAINABILITY & WATER CONSERVATION

Significant Upcoming Items - Sustainability

- Staff submitted funding applications for the Self-Generating Incentive Program projects including new solar and battery storage at the Earl Schmidt Filtration Plant and battery storage at the Rio Vista Treatment Plant. If approved, SCV Water will provide 5% of the SGIP value as a reservation deposit and proceed to Phase 2 of the project which includes, but is not limited to, site design and construction document development, photovoltaic and battery design documents.

- In May 2022, staff will receive proposal submittals for long-term operations and maintenance of the Agency's 4.5 MW solar array. Staff will review the submitted proposals and provide recommendations to the Water Resources and Watershed Committee and the Board of Directors.
- On May 24, 2022, staff, with consultant support, will conduct a SCV Water Board of Directors workshop to provide information and to elicit feedback pertinent to SCV Water's Sustainability Plan.

Status of SCV Water Drought Response

This section includes a condensed version of the monthly drought updates presented to the Water Resources and Watershed Committee at its May 11, 2022 meeting and includes an overview of current regulatory status, State Water Resource Control Board monthly conservation reports, SCV Water monthly conservation performance relative to 2020's consumption and the Governor's 15% of 2020 voluntary conservation request, and monthly and cumulative conservation trends compared to the same metrics.

Regulatory Overview

Entity/Agency	Regulatory Status	Notes
Governor Newsom	<ul style="list-style-type: none"> • Voluntary 15% v. 2020 Call (July 8, 2021) • Statewide Drought Emergency Declaration (October 19, 2021) • EO N-7-22 directs the SWRCB to require Stage/Level 2 Water Shortage Response implementation and for the Water Board consider defining and prohibiting the watering of non-functional turf. (March 28, 2022) 	<ul style="list-style-type: none"> • April 1, 2021 (2 Counties) • May 10, 2021 (Extended to 41 Counties) • July 8, 2021 (Extended to 50 Counties) • October 19, 2021 (Extended to Statewide)
State Water Resources Control Board	<ul style="list-style-type: none"> • Monthly Conservation Performance Reporting (July 2021) • Adopted Emergency Regulations (January 4, 2022) • SWRCB to require implementation of Stage 2 water shortage response measures and work with stakeholders to define non-functional turf. 	<ul style="list-style-type: none"> • Emergency regulations include water waste restrictions and provisions specific to HOA CCR implementation.
SCV Water	<ul style="list-style-type: none"> • Stage 2 – WSCP (4/26/2022) • Stage 1 – WSCP (11/16/2021) • Stage 1 – Water Conservation and Water Supply Shortage Ordinance (Ordinance)(11/16/2021) 	<ul style="list-style-type: none"> • WSCP includes strategies which prioritize education and incentive to achieve up to 20% conservation. • Stage 2 of Ordinance includes water waste restrictions. • Stage 2 of Ordinance also included watering restrictions to 3 days per week, two 5-minute cycles, and morning and evening watering.

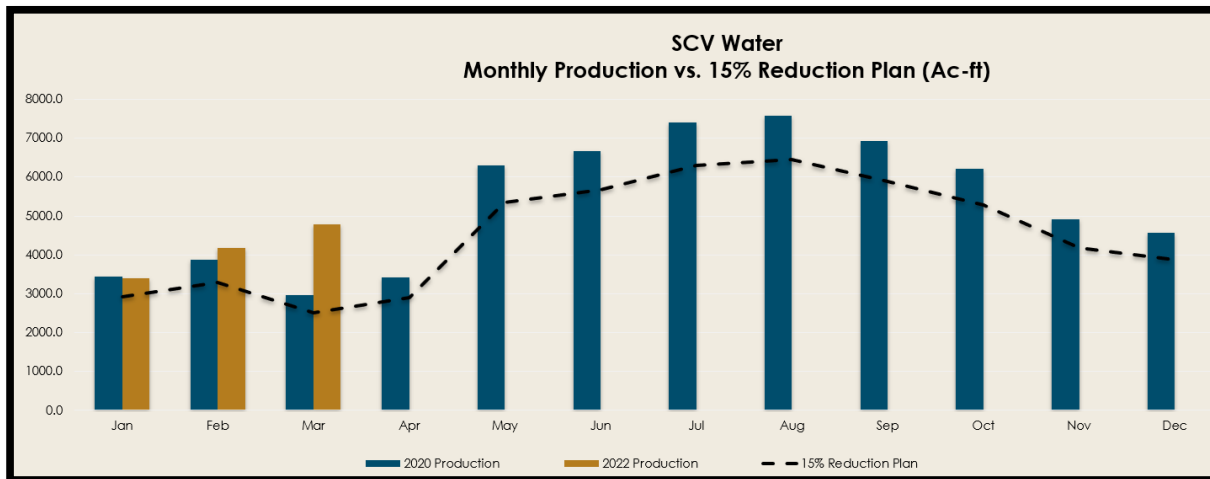
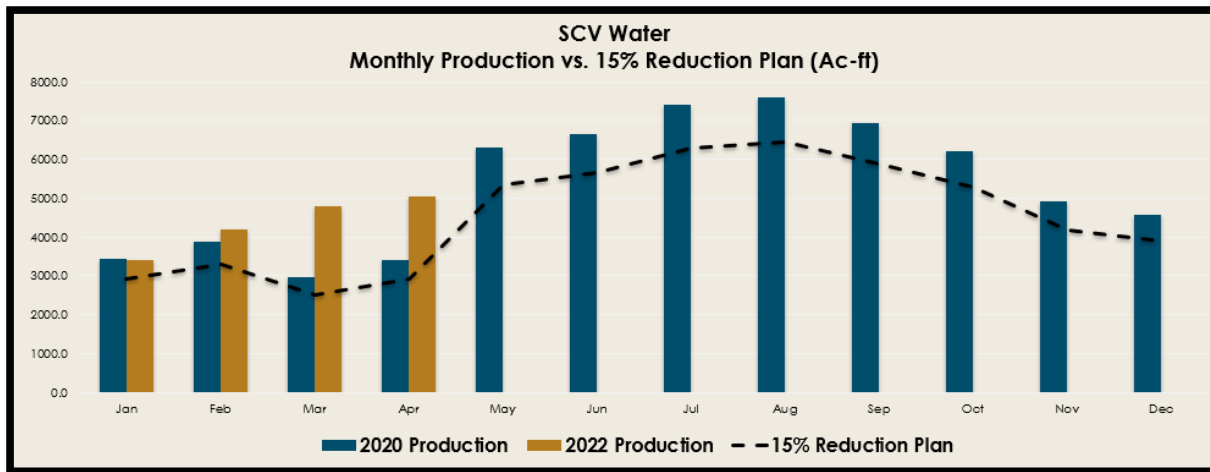
State Water Resources Control Board (Monthly Conservation Reporting)

Month	Year	Statewide	South Coast	SCV Water
July	2021	-1.8%	-0.2%	+5.6%
August	2021	-4.9%	-3.1%	+3.1%
September	2021	-3.9%	-4.2%	+1.1%
October	2021	-13.2%	-12.2%	-11.3%
November	2021	-7.1%	+0.7%	+3.1%
December	2021	-15.7%	-18.4%	-29.0%
January	2022	+2.6%	+1.7%	-1.1%
February	2022	-0.5%	-0.2%	+7.8%
March	2022	+18.9%	+26.9%	+61.8%
April	2022			+47.4%
Cumulative Savings		--3.7%	-2.0%	+5.0%

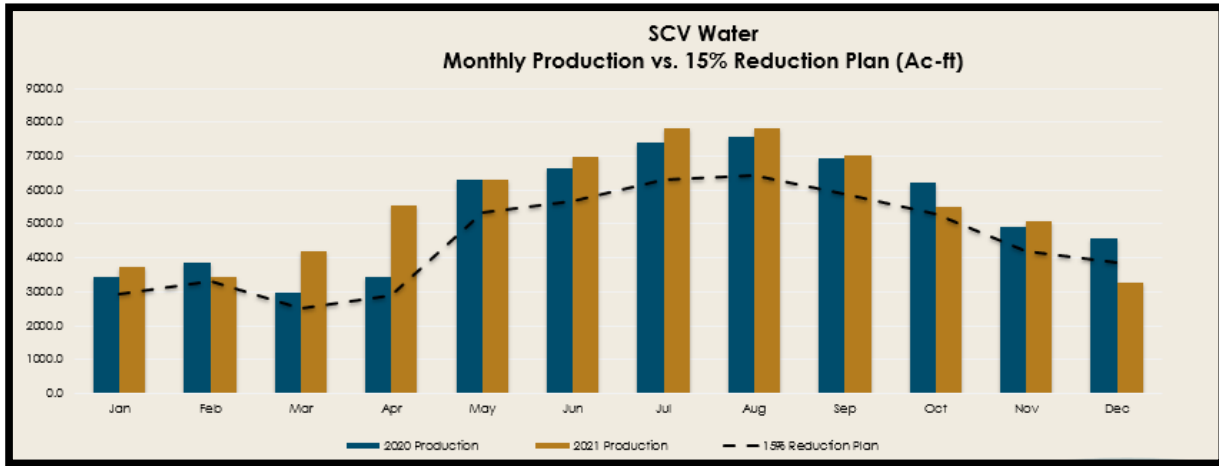
Note: The State Water Resources Control Board conservation reporting data has a one-month lag. This table includes most recent data as reported on the Board's website.

SCV Water – Monthly Conservation Performance (Current Production v. 2020 and 15% of 2020 Target in Acre Feet)

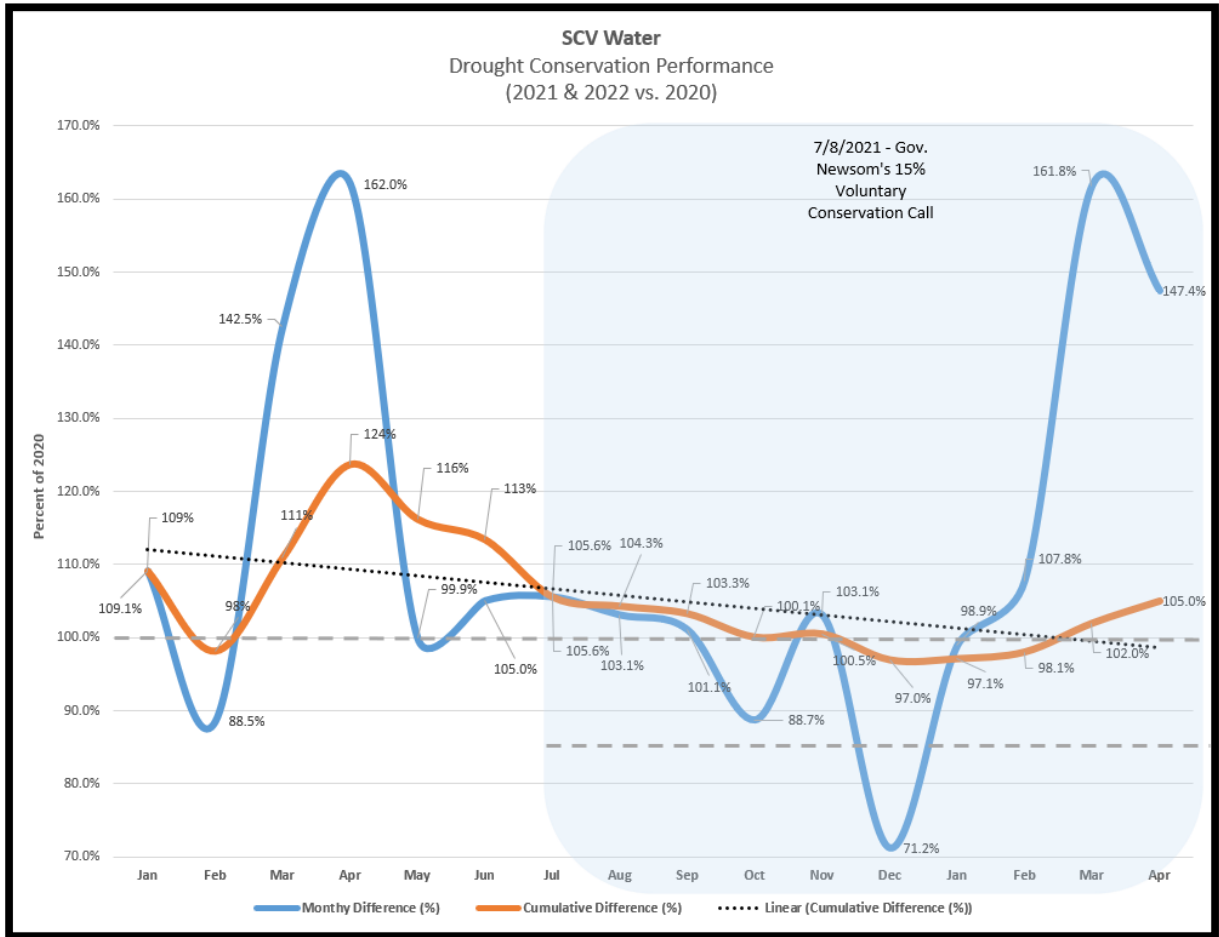
SCV Water - Drought Performance v. 2020 (2022)



SCV Water - Drought Performance v. 2020 (2021)



SCV Water – Monthly and Cumulative Conservation Performance Trends (In Percent)

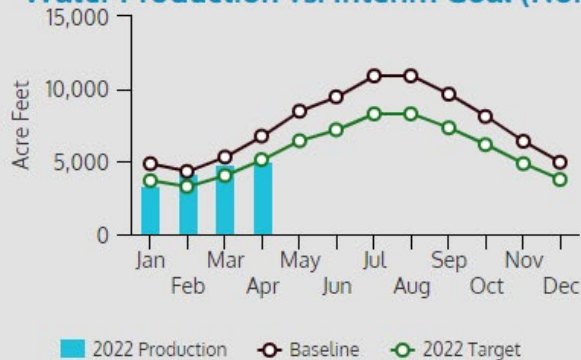




Water Conservation

Water Resources Monthly Section Report - April 2022

Water Production vs. Interim Goal (Non-Drought)



Key Data Points (AF)

Monthly Variance: (97.28)
 YTD Variance: +1,248.99
 Well 201 Adj.: 0
 Economic Activity Adj.: 48.00

Conservation Program Participation (Current Month/Fiscal Year)



	Check-Ups	Workshops	Rebates	Engagement	Other
Residential	25/592	5/261	26/142	335/24,801	0/2
Commercial	0/196	0/953	0/5	3/18	
Landscape	0/10	0/5		3/12	0/0

Significant Upcoming Items

- Drought** - Conservation staff, with support from Communications, to disseminate the Stage 2 Drought Bulletin to all SCV Water customers. The bulletin is scheduled for release during the week of May 24, 2022.
- Sustainability** - Staff, with consultant support will conduct a workshop focusing on Sustainability with the SCV Water Board of Directors on Tuesday, May 24, 2022 from 6-8PM.
- Sustainability** - Staff to select proposal for long-term Operation/Asset Management support for the Agency's 4.5 MW Photovoltaic Array.
- Industry Leadership** - Staff have been invited to provide 2 talks during CalWEP's June 2022 Peer 2 Peer event and a presentation on the Agency's Multi-family Apartment Programs at AWWA's ACE 2022.



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**ITEM NO.
10.5**

**Engineering and Operations Committee
Planning Calendar
FY 2021/22**

Item	Jul 1 Comm	Aug 3 Board	Aug 5 Comm	Aug 17 Board	Sep 2 Comm	Sep 7 Board	Oct 5 Board	Oct 7 Comm	Oct 19 Board	Nov 2 Board	Nov 4 Comm	Nov 16 Board	Dec 7 Board	Dec 9 Comm	Dec 21 Board	Jan 4 Board	Jan 6 Comm	Jan 15 Board	Feb 1 Board	Feb 3 Comm	Feb 15 Board	Mar 1 Board	Mar 3 Comm	Mar 15 Board	Apr 7 Comm	Apr 19 Board	Apr 26 Board	May 12 Comm	May 17 Board	Jun 2 Comm	Jun 7 Board	Jun 21 Board	Jul 5 Board	
1 Monthly Committee Planning Calendar																																		
2 CIP Construction Status Report																																		
3 Monthly Operations and Production Report																																		
4 Third Party Funded Agreements Quarterly Report																																		
5 Quarterly Safety Program Presentation																																		
6 Annual Safety Program Update (F.Y. 2021)																																		
7 Fleet Regulatory Updates																																		
8 2021/22 Major Capital Projects																																		
9 Recommend Approval to Authorize General Manager to Execute Reimbursement Agreement with City of Santa Clara for Eligible Portions of Golden Valley Pipeline to New Sheriff Station		C																																
10 Recommend Approval of a Resolution Awarding a Purchase Order for Additional Final Design Services for Phase 2C South End Recycled Water Main Extension		C																																
11 Approve a Resolution Authorizing Santa Clara Valley Water Board to Purchase and Install Additional Testing Services to the State of California Department of Water Resources.		C																																
12 Recommend Approval of Decoro Drive Pavement Repair			C	C																														
13 Recommend Approval of Purchase of IX Resin for the N Wells PFAS Treatment System			C	C																														
14 Recommend Approval of a Three-Year Annual Service Contract for the Liquid Chromatography Tandem Mass Spectrometry Instrument					C																													
15 Recommend Approval of a Resolution for a Construction Contract with Noto Constructors for the Earl Schmidt Filtration Plant (ESFP) Standby Generator Project								C																										
16 Recommend Adopting a Resolution Authorizing SCV Water to Apply for Funding from the Drinking Water State Revolving Fund (DWSRF) and to Execute a Financing Agreement for Groundwater Contamination Remediation Projects with the State Water Resources Control Board								C																										
17 Recommend Approval of a Resolution Authorizing the General Manager to Apply for Grant Funding Under the Energy Efficiency Grant Program (EEEG) for an Automated Metering Infrastructure Project											C	C																						
18 Recommend Approval to Purchase Approximately 5,000 AMC Combination Meters												C																						
19 Recommend Adopting a Resolution Authorizing SCV Water to Execute a Financing Agreement with the State Water Resources Control Board for the Los Angeles Residential Community Pipeline Project													C																					
20 Recommend Approval of a Resolution Authorizing a Purchase Order to Lee & Ro, Inc. for Final Design Services for Rio Vista Water Treatment Plant (RVWTP) Underground Storage Tank (UST) Replacement Project																																		
21 Recommend Approval of a Resolution Awarding a Contract for Fairway Water Storage Tank Coating Project														C																				
22 Recommend Adopting a Resolution Authorizing the General Manager to Apply for Grant Funding Under the 2021 Urban and Multibenefit Drought Relief Program for the State of California Department of Water Resources for the Sanguis Wells 3 & 4 (Replacement Wells) Well Equipment and Site Improvement Project																	C																	
23 Recommend Approval of a Resolution Awarding a Materials Purchase Contract for the Santa Clara and Honey Wells PFAS Groundwater Treatment Project with Aqueous Vets																																		
24 Recommend Adopting a Resolution Authorizing the General Manager to Apply for Grant Funding Under the 2021 Urban and Multibenefit Drought Relief Program for the State of California Department of Water Resources for the Santa Clara and Honey Wells PFAS Groundwater Treatment Site Construction Project																																		

Engineering and Operations Committee
Planning Calendar
FY 2021/22

Item	Jul 1 Comm	Aug 3 Board	Aug 5 Comm	Aug 17 Board	Sep 2 Comm	Sep 7 Board	Oct 5 Board	Oct 7 Comm	Oct 19 Board	Nov 2 Board	Nov 4 Comm	Nov 16 Board	Dec 7 Board	Dec 9 Comm	Dec 21 Board	Jan 4 Board	Jan 6 Comm	Jan 18 Board	Feb 1 Board	Feb 3 Comm	Feb 15 Board	Mar 1 Board	Mar 3 Comm	Mar 15 Board	Apr 5 Board	Apr 7 Comm	Apr 19 Board	Apr 26 Board	May 12 Comm	May 17 Board	Jun 2 Comm	Jun 7 Board	Jun 21 Board	Jul 5 Board				
25	Recommend Approval of a Resolution to Execute a License Agreement with UNAVCO for Geodetic Monitoring Station Site License Agreement on SCV Water Property and Designating SCV Water Authorized Representative																																					
26	Recommend Approval of a Resolution Authorizing a Purchase Order for Final Design Services for the Well 201 Volatile Organic Compounds Groundwater Treatment Improvements Project																																					
27	Recommend Approval of Resolution Awarding Construction Contract for Commerce Center Tanks 1 and 2 Exterior Recast																																					
28	Recommend Approval of Pipeline Improvements Associated with Pinetree Booster Station #3																																					
29	Recommend Approval of a Purchase Order for the Final Design of the 17, 04 and 05 PFAS Treatment System and Sigsbee and Sigsbee 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 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797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000																																					
30	Recommend Adopting a Resolution Approving Funding for the Purchase Order for the Final Design Services for the Well 201 Volatile Organic Compounds Groundwater Treatment Improvements Project to the Los Angeles County Metropolitan Transportation Authority																																					
31	Recommend Approval of Resolutions to the Board of Directors Regarding Procedures to Update the Section Regarding General Manager Authority to Accept and Convey Interests in Real and Personal Property																																					
32	Recommend Approval of a Resolution for a Construction Contract to Zim Industries, Inc., a Purchase Order to Richard C. Slade & Associates LLC for Inspection and Engineering Services during Construction and a Purchase Order to Black & Veatch Corporation for Construction Management Services for the Sludge #4 and #5 Wells Construction (Replacement Wells) Project																																					
33	Recommend Approval of (1) a Resolution for Construction Contract with Pacific Hydrotech Corporation, and (2) a Purchase Order to Woodard & Looney Ricks Kiss, Inc. for Engineering Services, Inspection Services, and (3) a Purchase Order to Lee & Ro, Inc. for Engineering Services during Construction for the Earl Schmidt Filtration Plant (ESFP) Washwater Return and Sludge Systems Project																																					
34	Recommend Approval of the Replacement of 5,000 meters as part of the AMI Meter Replacement Program																																					
35	Recommend Approval of a Change Order for the Fairway Water Storage Tank Coating Project																																					
36	Authorize the General Manager to Execute Construction Change Orders up to \$371,872 for the Valley Center Well PFAS Groundwater Treatment Improvements Project																																					
37	Recommend Adopting a Resolution Authorizing the General Manager to Apply for Grant Funding Under the Bureau of Reclamation Watersmith Title XVI WIN Act Water Treatment Program for the Projects for the Recycled Water Expansion Project																																					
38	Approve a Purchase Order to Cannon Corporation for Change Order No. 1 for Final Design Services for New Deane Zone Tank at Skyline Ranch - Design Prestressed Concrete Tank Instead of Welded Steel Tank																																					
39	Local Hazard Mitigation Plan																																					
40	Recommend the Purchase of a Portable Booster Pump																																					
41	Recommend Approval of Resolution Awarding Construction Contract for Final Design Services and Engineering Services during Construction for Santa Clara and Honey Wells PFAS Groundwater Treatment Improvements																																					

Engineering and Operations Committee
Planning Calendar
FY 2021/22

Item	Jul 1 Comm	Aug 3 Board	Aug 5 Comm	Aug 17 Board	Sep 2 Comm	Sep 7 Board	Oct 5 Board	Oct 7 Comm	Oct 19 Board	Nov 2 Board	Nov 4 Comm	Nov 16 Board	Dec 7 Board	Dec 9 Comm	Dec 21 Board	Jan 4 Board	Jan 6 Comm	Jan 18 Board	Feb 1 Board	Feb 3 Comm	Feb 15 Board	Mar 1 Board	Mar 3 Comm	Mar 15 Board	Apr 5 Board	Apr 7 Comm	Apr 19 Board	Apr 26 Board	May 12 Comm	May 17 Board	Jun 2 Comm	Jun 7 Board	Jun 21 Board	Jul 5 Board	
42																																			Moved to FY 2022/23
																																			Moved to FY 2022/23
43																																			Moved to FY 2022/23
44																																			Moved to FY 2022/23
45																																			Moved to FY 2022/23
46																																			Moved to FY 2022/23

Engineering and Operations Committee
Planning Calendar
FY 2022/23

Item	July 7 Comm	Aug 2 Board	Aug 4 Comm	Aug 16 Comm	Sept 1 Comm	Sept 6 Board	Sept 20 Board	Oct 4 Board	Oct 6 Comm	Oct 18 Board	Nov 1 Board	Nov 3 Comm	Nov 15 Board	Nov 21 Comm	Dec 1 Comm	Dec 6 Board	Dec 20 Board	Jan 3 Board	Jan 5 Comm	Jan 17 Board	Feb 2 Comm	Feb 7 Board	Feb 21 Board	March 2 Comm	March 7 Board	March 21 Board	April 4 Board	April 6 Comm	April 18 Board	May 2 Board	May 4 Comm	May 16 Board	Jun 1 Comm	June 6 Board	June 20 Board	July 4 Board				
1	Monthly Committee Planning Calendar																																							
2	CIP Construction Status Report																																							
3	Monthly Operations and Production Report																																							
4	Third Party Funded Agreements Quarterly Report																																							
5	Quarterly Safety Program Presentation																																							
6	Annual Safety Program Update (FY 21-22)																																							
7	General Report of Easements Report																																							
8	Review Proposed FY 2023/24 Major Capital Projects																																							
9	Cell Sites Program Presentation																																							
10	Recommend Approval to Fund Contractor Change Orders Excess of Approved 10% Contingency, for the Phase 2B Recycled Water Tanks	P																																						
11	Approve a Purchase Order to Civitex, Inc. for Change Order No. 1 for Final Design Services for New Deane Zone Tank at Sand Canyon Plaza – Design Prestressed Concrete Tank Instead of Welded Steel Tank		P																																					
12	Recommend Adopting a Resolution Authorizing the General Manager to Execute a Reimbursable Agreement with the City of Santa Clarita for the Sierra Highway Bridge Expansion Water Pipelines Protection Project																																							
13	Recommend Approval of Resolution Adopting an Addendum to the EIR and Awarding a Purchase Order for Final Design Services for Magic Mountain Pump Station																																							
14	Recommend Approval of Resolution Adopting an Addendum to the EIR and Awarding a Purchase Order for Final Design Services for Magic Mountain Reservoir																																							
15	Recommend Approval of Resolution Awarding Construction Contract and Purchase Order for Construction Management and Inspection Services for Dickason Drive 14" PVC Replacement																																							
16	Recommend Approval of Construction of Castaic Well 1 Drain Line																																							
17	Recommend Approval of Resolution Awarding Construction Contract and Purchase Orders for Construction Management and Inspection Services and Engineering Services During Construction for the Well 201 Groundwater Treatment Project																																							
18	Recommend Approval of Resolution Authorizing SCV Water to Execute Water Service Agreements with the Los Angeles Residential Community and Lily of the Valley Mobile Village																																							
19	Recommend Approval of Resolution Awarding Construction Contract for Pipeline to Los Angeles Residential Community																																							
20	Recommend Approval of Construction of a New Deane Zone Z1 MG Tank at Skyline Ranch and Cost Sharing Agreement with Developer																																							
21	Recommend Approval of Construction of a New Deane Zone Pump Station at Skyline Ranch and Cost Sharing Agreement with Developer																																							
22	Recommend Approval of Construction of New Sand Canyon Plaza (Deane Zone) Pump Station and Cost Sharing Agreement with Developer																																							
23	Recommend Approval of Resolution Awarding Construction Contract and Purchase Orders for Construction Management and Inspection Services and Engineering Services During Construction for Valencia Market Place Pipeline Improvements																																							
24	Recommend Approval of Resolution Awarding Construction Contract and Purchase Order for Construction Management and Inspection Services for Newhall Tanks 1 and 1A Stair Retrofit																																							
25	Recommend Approval of Resolution Awarding a Purchase Order for Final Design Services for Well 205 Groundwater Treatment Improvements																																							

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**Finance and Administration Committee
Planning Calendar
FY 2021/22**

	Item	July 6 Board	July 19 Comm	Aug 3 Board	Aug 16 Comm	Sept 7 Board	Sept 20 Comm	Oct 5 Board	Oct 18 Comm	Nov 2 Board	Nov 15 Comm	Dec 7 Board	Dec 13 RESCHEDULED Comm	Dec 21 Board	Jan 24 RESCHEDULED Comm	Feb 1 Board	Feb 15 Board	Feb 28 RESCHEDULED Comm	Mar 15 Board	Mar 21 Comm	April 5 Board	April 18 Comm	April 26 Board	May 16 Comm	May 17 Board	June 7 Board	June 20 Comm	June 21 Board
1	Approve a Resolution Allowing for PFAS Financing	C																										
2	Recommend Approval of Revised Customer Service Policy	C																										
3	Recommend Approval of a Contract Amendment with Equation Technologies for Project Management Services	C																										
4	Recommend Approval of Resolutions Setting Santa Clarita Valley Water Agency Tax Rate for FY 2021/22 and Requesting Levy of Tax by Los Angeles County and Ventura County (consent)	C																										
5	Recommend Approval of Resolution Authorizing July 2021 Water Supply Contract Payment (consent)	C																										
6	Recommend Receiving and Filing of April 2021 Monthly Financial Report (consent)	C																										
7	Recommend Approval of a Resolution Revising the Appropriations Limits for FY 2020/21 and FY 2021/22		C	C																								
8	Recommend Approval of a Resolution Authorizing FY 2021/22 Water Supply Contract Payments (consent)		C	C																								
9	Recommend Receiving and Filing of May 2021 Monthly Financial Report (consent)		C	C																								

**Finance and Administration Committee
Planning Calendar
FY 2021/22**

Item	July 6 Board	July 19 Comm	Aug 3 Board	Aug 16 Comm	Sept 7 Board	Sept 20 Comm	Oct 5 Board	Oct 18 Comm	Nov 2 Board	Nov 15 Comm	Dec 7 Board	Dec 13 RESCHEDULED Comm	Dec 21 Board	Jan 24 RESCHEDULED Comm	Feb 1 Board	Feb 15 Board	Feb 28 RESCHEDULED Comm	Mar 15 Board	Mar 21 Comm	April 5 Board	April 18 Comm	April 26 Board	May 16 Comm	May 17 Board	June 7 Board	June 20 Comm	June 21 Board
10				C																							
11				C	C																						
12				C	C																						
13				C	C																						
14				C	C																						
15				P																							
16				C	C																						
17						C																					
18						C	C																				
19						C																					
20								C																			
21								C																			
22								C																			
23								P																			

**Finance and Administration Committee
Planning Calendar
FY 2021/22**

Item	July 6 Board	July 19 Comm	Aug 3 Board	Aug 16 Comm	Sept 7 Board	Sept 20 Comm	Oct 5 Board	Oct 18 Comm	Nov 2 Board	Nov 15 Comm	Dec 7 Board	Dec 13 RESCHEDULED Comm	Dec 21 Board	Jan 24 RESCHEDULED Comm	Feb 1 Board	Feb 15 Board	Feb 28 RESCHEDULED Comm	Mar 15 Board	Mar 21 Comm	April 5 Board	April 18 Comm	April 26 Board	May 16 Comm	May 17 Board	June 7 Board	June 20 Comm	June 21 Board
24 Discuss Financing Policy - Financial Advisor																											
25 Recommend Approval of a Revised Purchasing Policy										C	C																
26 Technology Update										C	C																
27 Recommend Receiving and Filing of July 2021 Monthly Financial Report (consent)										C	C																
28 Recommend Approval of a Revised Community Facilities District (CFD) Policy											C																
29 Discuss California Water and Wastewater Arrearage Payment Program											C																
30 Annual Comprehensive Financial Report (ACFR) ended June 30, 2021 (consent)												C	C														
31 Recommend Approval of a Resolution Appointing Dirk S. Marks as Interim Director of Water Resources and Approving Employment Agreement												C	C														
32 Update to the Recommendation for Approval of a Resolution Revising Wholesale Water Rates												C															
33 Recommend Receiving and Filing of August 2021 Monthly Financial Report (consent)												C	C														
34 Recommend Approval of a Professional Services Agreement with Emtec Consulting Services LLC for Oracle Managed Services														C	C												
35 Discuss Ratepayer Assistance Program														P													
36 Recommend Approval of a Resolution Adopting a Revised Investment Policy - (Annually adopted via reso). (consent)														C	C												
37 Recommend Receiving and Filing of FY 2021/22 First Quarter Financial Report														C	C												
38 Approve a Resolution Revising Wholesale Water Rates																P											

C = Completed Item
P = Planned Item

**Finance and Administration Committee
Planning Calendar
FY 2021/22**

Item	July 6 Board	July 19 Comm	Aug 3 Board	Aug 16 Comm	Sept 7 Board	Sept 20 Comm	Oct 5 Board	Oct 18 Comm	Nov 2 Board	Nov 15 Comm	Dec 7 Board	Dec 13 RESCHEDULED Comm	Dec 21 Board	Jan 24 RESCHEDULED Comm	Feb 1 Board	Feb 15 Board	Feb 28 RESCHEDULED Comm	Mar 15 Board	Mar 21 Comm	April 5 Board	April 18 Comm	April 26 Board	May 16 Comm	May 17 Board	June 7 Board	June 20 Comm	June 21 Board
39	Recommend Adoption of a Resolution Approving Volunteer Workers' Compensation Insurance																										
40	Informational Report on Examples of Ratepayer Assistance Programs																										
41	Recommend Receiving and Filing of October 2021 Monthly Financial Report (consent)																										
42	Recommend Receiving and Filing of November 2021 Monthly Financial Report (consent)																										
43	Approve a Resolution Revising Wholesale Water Rates																										
44	Review Budget Calendar																										
45	Recommend Approval of a Proposed Employee Salary Adjustment for FY 2022/23																										
46	Recommend Receiving and Filing of FY 2021/22 Second Quarter Financial Report																										
47	Recommend Receiving and Filing of December 2021 Monthly Financial Report (consent)																										
48	Recommend Approval of Revised Position Control for FY 2022/23																										
49	Recommend Approval of a Resolution Revising the FY 2022/23 Budget																										
50	Recommend Receiving and Filing Annual List of Professional Services Contracts (consent)																										
51	Technology Update																										
52	Recommend Receiving and Filing of January 2022 Monthly Financial Report (consent)																										
53	Recommend Receiving and Filing of February 2022 Monthly Financial Report (consent)																										

**Finance and Administration Committee
Planning Calendar
FY 2021/22**

Item	July 6 Board	July 19 Comm	Aug 3 Board	Aug 16 Comm	Sept 7 Board	Sept 20 Comm	Oct 5 Board	Oct 18 Comm	Nov 2 Board	Nov 15 Comm	Dec 7 Board	Dec 13 RESCHEDULED Comm	Dec 21 Board	Jan 24 RESCHEDULED Comm	Feb 1 Board	Feb 15 Board	Feb 28 RESCHEDULED Comm	Mar 15 Board	Mar 21 Comm	April 5 Board	April 18 Comm	April 26 Board	May 16 Comm	May 17 Board	June 7 Board	June 20 Comm	June 21 Board
54	Recommend Approval of a Resolution Revising the FY 2022/23 Budget																										
55	Recommend Approval of a Resolution Adopting the Appropriation of All As-Yet Unappropriated Funds for FY 2021/22 (consent)																								P		
56	Recommend Approval of a Resolution Adopting the Appropriation Limit for FY 2022/23 (consent)																								P		
57	Recommend Approval of Employee Manual 41 - Fleet Management Policy																								P		
58	Discuss Upcoming Capacity Fee Study																										
59	Recommend Receiving and Filing of FY 2021/22 Third Quarter Financial Report																								P		
60	Recommend Receiving and Filing of March 2022 Monthly Financial Report (consent)																								P		
61	Review and Recommend Approval of Budget for FY 2022/23 Water Supply Contract Payments (consent)																									P	
62	Recommend Approval of Resolutions Setting Santa Clarita Valley Water Agency Tax Rate for FY 2022/23 and Requesting Levy of Tax by Los Angeles County and Ventura County (consent)																									P	
63	Recommend Approval of Revised Agency Classification Plan and Job Descriptions																									P	
64	Discuss Project Timelines and Assumptions for Rates and Fees - PPT																									P	
65	Review Status of Finance and Administration Department's Strategic Goals - PPT																									P	
66	Recommend Receiving and Filing of April 2022 Monthly Financial Report (consent)																									P	

**Finance and Administration Committee
Planning Calendar
FY 2022/23**

	Item	July 5 Board	July 18 Comm	Aug 2 Board	Aug 15 Comm (Q4)	Sept 5 Board	Sept 19 Comm	Oct 4 Board	Oct 17 Comm	Nov 1 Board	Nov 21 Comm (Q1)	Dec 5 Board	Dec 19 Comm	Jan 3 Board	Jan 23 RESCHED Comm	Feb 7 Board	Feb 21 Board	Feb 27 RESCHED Comm (Q2)	Mar 7 Board	Mar 20 Comm	April 4 Board	April 17 Comm	May 2 Board	May 15 Comm (Q3)	June 6 Board	June 19 Comm
1	Review and Recommend Approval of Budget for FY 2022/23 Water Supply Contract Payment (consent)	P																								
2	Recommend Approval of Resolutions Setting Santa Clarita Valley Water Agency Tax Rate for FY 2022/23 and Requesting Levy of Tax by Los Angeles County and Ventura County (consent)	P																								
3	Recommend Receiving and Filing of April 2022 Monthly Financial Report (consent)	P																								
4	Recommend Approval of a Contract with "XYZ Company" for As-Needed Investment Advisory Services		P	P																						
5	Recommend Approval of a Contract with "XYZ Company" for Valencia Water Division Retail Capacity Fee Study		P	P																						
6	Discuss Long-Term Financing for Capital Projects		P																							
7	Recommend Receiving and Filing of May 2022 Monthly Financial Report (consent)		P	P																						
8	Technology Update				P																					
9	Recommend Receiving and Filing of June 2022 Monthly and FY 2021/22 Fourth Quarter Financial Report				P	P																				
10	Recommend Receiving and Filing of July 2022 Monthly Financial Report (consent)						P	P																		
11	Recommend Receiving and Filing of August 2022 Monthly Financial Report (consent)								P	P																
12	Technology Update																									
13	Recommend Receiving and Filing of September 2022 Monthly and FY 2022/23 First Quarter Financial Report																									

**Finance and Administration Committee
Planning Calendar
FY 2022/23**

Item	July 5 Board	July 18 Comm	Aug 2 Board	Aug 15 Comm (Q4)	Sept 6 Board	Sept 19 Comm	Oct 4 Board	Oct 17 Comm	Nov 1 Board	Nov 21 Comm (Q1)	Dec 6 Board	Dec 19 Comm	Jan 3 Board	Jan 23 RESCHED Comm	Feb 7 Board	Feb 21 Board	Feb 27 RESCHED Comm (Q2)	Mar 7 Board	Mar 20 Comm	April 4 Board	April 17 Comm	May 2 Board	May 15 Comm (Q3)	June 6 Board	June 19 Comm
14	Recommend Receiving and Filing of SCV Water Annual Comprehensive Financial Report (ACFR) ended June 30, 2022 (consent)											P	P												
15	Recommend Receiving and Filing of October 2022 Monthly Financial Report (consent)											P													
16	Recommend Approval of a Resolution Adopting a Revised Investment Policy - (Annually adopted via reso) (consent)											P													
17	Recommend Receiving and Filing of November 2022 Monthly Financial Report (consent)												P												
18	Technology Update																P								
19	Recommend Receiving and Filing of December 2022 and FY 2022/23 Second Quarter Financial Report																P								
20	Review Budget Calendar																			P					
21	Review Status of Operating FY 2022/23 Budget																			P					
22	Recommend Approval of a Proposed Employee Salary Adjustment (COLA) for FY 2023/24																			P					
23	Review Annual List of Professional Services Contracts (consent)																			P					
24	Technology Update																			P					
25	Recommend Receiving and Filing of January 2023 Monthly Financial Report (consent)																			P					
26	Recommend Approval of a Resolution Adopting the FY 2023/24 and FY 2024/25 Biennial Budget																								
27	Recommend Receiving and Filing of February 2023 Monthly Financial Report (consent)																								

C = Completed Item
P = Planned Item

**Finance and Administration Committee
Planning Calendar
FY 2022/23**

Item	July 5 Board	July 18 Comm	Aug 2 Board	Aug 15 Comm (Q4)	Sept 6 Board	Sept 19 Comm	Oct 4 Board	Oct 17 Comm	Nov 1 Board	Nov 21 Comm (Q1)	Dec 6 Board	Dec 19 Comm	Jan 3 Board	Jan 23 RESCHED Comm	Feb 7 Board	Feb 21 Board	Feb 27 RESCHED Comm (Q2)	Mar 7 Board	Mar 20 Comm	April 4 Board	April 17 Comm	May 2 Board	May 15 Comm (Q3)	June 6 Board	June 19 Comm
28	Approve a Resolution Adopting the Appropriation of All As-Yet Unappropriated Funds for FY 2022/23 (consent)																								
29	Approve a Resolution Adopting the Appropriation Limit for FY 2023/24 (consent)																								
30	Technology Update																								
31	Recommend Receiving and Filing of March 2022 and FY 2022/23 Third Quarter Financial Report																								
32	Review and Recommend Approval of Budget for FY 2023/24 Water Supply Contract Payment (consent)																								
33	Recommend Receiving and Filing of April 2022 Monthly Financial Report (consent)																								



**PUBLIC OUTREACH AND LEGISLATION COMMITTEE
AGENDA PLANNING CALENDAR FY 2021-2022**

July 15, 2021 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Recommendation to Serve on the ACWA Legislative Committee
3. Equitable and Inclusive Engagement
4. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

August 19, 2021 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Social Media Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

September 16, 2021 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Discussion on Community Event Participation
3. Equitable and Inclusive Engagement
4. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

October 21, 2021 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Review of Outreach on Rent and Utility Relief Program
3. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

November 18, 2021 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Update on Communication and Engagement Gap Analysis Efforts
3. Communications Manager Activities:
 - Social Media Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

December 16, 2021 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Outreach Year in Review
3. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

January 20, 2022 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Discussion of the 2022 Legislative Platform and Advocacy Process
3. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

February 15, 2022 Regular Board Meeting

1. Adoption of the 2022 Legislative Platform

February 17, 2022 Committee - VIRTUAL MEETING

1. Legislative Consultant Reports
2. Status Update on Communication and Engagement Gap Analysis Efforts
3. Communications Manager Activities:
 - Quarterly Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

March 17, 2022 Committee – VIRTUAL MEETING

1. Legislative Consultant Reports
2. Discussion of Water Academy Program
3. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

March 24, 2022 at 2:30 PM Special Committee – VIRTUAL MEETING

1. California Legislative Bill Workshop

April 21, 2022 Committee - HYBRID MEETING

1. Legislative Consultant Reports
2. Discussion of Draft Board Resolution and Initial Implementation Action from the Engagement Gap Analysis
3. Presentation: Public Outreach, Education and Legislative Advocacy Budget FY 2022/23
4. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2021/22

May 19, 2022 Committee – CANCELED

June 16, 2022 Committee - HYBRID MEETING

1. Legislative Consultant Reports
2. Discussion of Legislative Advocacy Contract Renewal
3. Presentation: Overview of Educational Curriculum Activities
4. Communications Manager Activities:
 - Quarterly Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2021/22
 - Committee Planning Calendar FY 2022/23



PUBLIC OUTREACH AND LEGISLATION COMMITTEE AGENDA PLANNING CALENDAR FY 2022-2023

July 21, 2022 Committee

1. Legislative Consultant Reports
2. Discussion of Draft Board Resolution and Initial Implementation Action from the Engagement Gap Analysis
3. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

August 18, 2022 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Social Media Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

September 15, 2022 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

October 20, 2022 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

November 17, 2022 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Social Media Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

December 15, 2022 Committee

1. Legislative Consultant Reports
2. Outreach Year in Review
3. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report

- Sponsorship Tracking FY 2022/23
- Committee Planning Calendar FY 2022/23

January 19, 2023 Committee

1. Legislative Consultant Reports
2. Discussion of the 2023 Legislative Platform and Advocacy Process
3. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

February 7, 2023 Regular Board Meeting

1. Adoption of the 2023 Legislative Platform

February 16, 2023 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Quarterly Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

March 16, 2023 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

April 20, 2023 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

May 18, 2023 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Quarterly Report from Consultant Tripepi Smith
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2022/23
 - Committee Planning Calendar FY 2022/23

June 22, 2023 Committee

1. Legislative Consultant Reports
2. Communications Manager Activities:
 - Legislative Tracking
 - Grant Status Report
 - Sponsorship Tracking FY 2023/24
 - Committee Planning Calendar FY 2023/24

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**Santa Clarita Valley Water Agency
Water Resources & Watershed Committee and Board Calendar**

FY 2021/22

Item	Jul 6 Board	Jul 14 Comm	Aug 3 Board	Aug 11 Comm	Sep 7 Board	Sep 8 Comm	Oct 5 Board	Oct 13 Comm	Nov 2 Board	Nov 10 Comm	Nov 16 Board	Dec 7 Board	Dec 8 Comm	Jan 4 Board	Jan 12 Comm	Feb 1 Board	Feb 9 Comm	Feb 15 Board	Mar 9 Comm	Apr 5 Board	Apr 13 Comm	Apr 26 Board	May 11 Comm	May 17 Board	May 24 Board	Jun 7 Board	Jun 8 Comm
1 Sustainability Plan Workshop																											
2 Recommend Adoption of a Resolution Approving the SB 610 Water Supply Assessment for the Entrada South / Valencia Commerce Center Project																									P		
3 Update on Conservation Activities & Performance		C		C		C		C		C			C				C						C				P
4 Status of Drought Response and Performance				C		C				C			C				C						C				P
5 Recommend Adoption of a Resolution Approving the SB 610 Water Supply Assessment for the Wiley Canyon Mixed-Use Development																											P
6 Status of Sites Reservoir Project, Rosedale-Rio Bravo Water Banking Program and AVEK High Desert Banking Program		C											C														
7 Status of Sustainable Groundwater Management Act Implementation				C									C														
8 Review of Lawn Replacement Program Evaluation				C																							
9 Status of Efforts Relating to Groundwater Spreading Pilot Program				C																							
10 Devil's Den Semi-Annual Report							C	C									C										
11 Recommend Authorizing the General Manager to Enter into a Contract with Kris Helm Consulting for Water Resources Strategic Planning Services							C	C																			
12 Recommend Approval of Modification to Lawn Replacement Program							C	C																			
13 Status of Water Supply and Water Banking Programs							C																				
14 CLOSED SESSION: Devil's Den Real Property Negotiation and Ongoing Litigation								C																			
15 Status of Devil's Den Solar Generation Facilities							C																				
16 Approve a Resolution Authorizing the General Manager to Apply for Grant Funding Under the Federal Bureau of Reclamation WaterSmart Drought Relief Program for the Rosedale Phase 2 Wells Project								C	C																		
17 CLOSED SESSION: Property Negotiation - Water Transfers								C																			
18 Status of Upper Santa Clara River Salt and Nutrient Management Plan									C																		
19 Update on Water Operating Plan and Water Conservation Response Actions								C																			
20 Discuss and Consider Potential Amendment to the Deposit and Funding Agreement between Santa Clarita Valley Water Agency and DACA-Castatic, LLC for Tapia Ranch										C																	
21 CLOSED SESSION: Anticipated Litigation																											

**Santa Clarita Valley Water Agency
Water Resources & Watershed Committee and Board Calendar**

FY 2021/22

Item	Jul 6 Board	Jul 14 Comm	Aug 3 Board	Aug 11 Comm	Sep 7 Board	Sep 8 Comm	Oct 5 Board	Oct 13 Comm	Nov 2 Board	Nov 10 Comm	Nov 16 Board	Dec 7 Board	Dec 8 Comm	Jan 4 Board	Jan 12 Comm	Feb 1 Board	Feb 9 Comm	Feb 15 Board	Mar 9 Comm	Apr 5 Board	Apr 13 Comm	Apr 26 Board	May 11 Comm	May 17 Board	May 24 Board	Jun 7 Board	Jun 8 Comm
22 Consider Adoption of a Resolution to Enact Stage 1 of the Water Shortage Contingency Plan and Water Conservation and Water Supply Shortage Ordinance											C																
23 Authorize the General Manager to Enter into a Lease Agreement with Rolling Hills Farms for the Devil's Den Property												C															
24 Status of Water Supplies													C														
25 Recommend that the Board Authorize the General Manager to Enter into a Short Term Water Exchange Agreement with Irvine Ranch Water District													C									CNL		C			
26 Status of Integrated Regional Water Management Plan Update													C														
27 Recommend Approval of Amendment to Sites Reservoir Planning Costs Agreement															C	C											
28 TerraVerde Energy for Application Preparation and Project Management for Self Generating Incentive Program Projects (Photovoltaic and Battery Storage) Funding																C											
29 Status of Sustainability and Climate Action Plan																C											
30 Recommend Adoption of a Resolution Approving the SB 610 Water Supply Assessment for the Castaic Mountainview Apartment Project																				C	C						
31 Recommend Adoption of a Resolution Approving the SB 610 Water Supply Assessment for the Lyons Canyon Development																				C	C						
32 Water Conservation Garden and Education Experience - Design Update																				C							
33 Recommend Authorizing the General Manager to Enter into a Contract with ESA Consultants to Prepare a California Environmental Flow Framework Study for Portions of the Santa Clara River																						C	C				
34 Water Shortage Contingency Plan and Water Conservation and Water Supply Shortage Ordinance																							C	C			
35 Update on Water Resiliency Plan Initiative Activities																											
36 Review and Discussion of FY 2021/22 and FY 2022/23 Water Resources Operating Budget and Minor and Major Capital Projects Budgets																											
37 Recommend Authorizing the General Manager to Execute an Construction Contract for Bridgeport Pocket Park - TBD																											

P = Planned

C = Completed

CNL = Cancelled

CNT = Continued Item

**Santa Clarita Valley Water Agency
Water Resources & Watershed Committee and Board Calendar**

FY 2022/23

Item	Jul 5 Board	Jul 13 Comm	Aug 2 Board	Aug 10 Comm	Sep 6 Board	Sep 14 Comm	Oct 4 Board	Oct 12 Comm	Nov 1 Board	Nov 9 Comm	Dec 6 Board	Dec 14 Comm	Jan 3 Board	Jan 11 Comm	Feb 7 Board	Feb 8 Comm	Mar 7 Board	Mar 8 Comm	Apr 4 Board	Apr 12 Comm	May 2 Board	May 10 Comm	Jun 6 Board	Jun 7 Comm
1	P																							
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**Santa Clarita Valley Water Agency
Water Resources & Watershed Committee and Board Calendar**

FY 2022/23

Item	Jul 5 Board	Jul 13 Comm	Aug 2 Board	Aug 10 Comm	Sep 6 Board	Sep 14 Comm	Oct 4 Board	Oct 12 Comm	Nov 1 Board	Nov 9 Comm	Dec 6 Board	Dec 14 Comm	Jan 3 Board	Jan 11 Comm	Feb 7 Board	Feb 8 Comm	Mar 7 Board	Mar 8 Comm	Apr 4 Board	Apr 12 Comm	May 2 Board	May 10 Comm	Jun 6 Board	Jun 7 Comm
15 Status of Water Supply and Water Banking Programs						P													P					
16 Update on Water Resiliency Plan Initiative Activities						P																		
17 Status of Recycled Water Program								P																
18 Status of Urban Water Management Plan Review Updates								P																
19 Status of Water Supplies												P										P		
20 Status of Sustainable Groundwater Management Act Implementation																								
21 Review and Discussion of FY 2023/24 and FY 2024/25 Water Resources Operating Budget and Minor and Major Capital Projects Budgets																								
22 Water Conservation Garden and Education Experience - Design Update																								
23 Update on Water Operating Plan and Water Conservation Response Actions																								
24 Status of Recycled Water Program - TBD																								

P = Planned
 C = Completed
 CNL = Cancelled
 CNT = Continued Item

Lynne Plambeck
AB1234
Southern CA Water Dialogue
5-25-22 12-1:30PM
Virtual Meeting

ITEM NO. 12.1

“One Water – Actions to Take Today to Ensure Water Reliability Tomorrow” - a discussion with U.S. Water Alliance CEO Mami Hara and Metropolitan GM Adel Hagekhalil to learn what urgent actions are needed today and how this innovative approach to sustainable water management can deliver water reliability for Southern California’s future.

The western U.S. is in the grip of a megadrought. Snowpack is shrinking. Reservoir levels are dropping. The Metropolitan Water District of Southern California just declared its first ever “Water Shortage Emergency” for parts of its service area. With climate scientists predicting increasing weather volatility as temperatures rise, it’s not just a matter of getting through the drought but adapting our infrastructure and resource management to a 21st Century climate.

Mami Hara, Chief Executive Officer, US Water Alliance - U.S. Water Alliance CEO Mami Hara, leader of the national ‘One Water’ movement. US Water Alliance has put together a cross section of groups that work on water issues, i.e., cities, water agencies, NGOs, framers, other stakeholders.

98% of climate stress is felt as water stress. The water landscape is changing fast, we are at tipping points because of drought and water pollution are focusing attention on water like never before. New workforce of water workers, are conservation minded. One water breaks down silos. To achieve multiple benefits. All stakeholders should have a seat at the table. Water infrastructure and water affordability can also address societal inequities. Solve problems Integration invention, Inclusion. Need transformational leaders.

Adel Hagekhalil, General Manager, Metropolitan Water District of Southern California, is a proponent of the One Water concept.

We are in the driest three years on record. First storage shortage in Lake Mead. What worked for us in the last hundred years is not going to work for the next hundred years. Hotter weather is driving increased demand for water while supplies are reduced from reduced snowpack. Met declared emergency because of state water reductions. First ever. Called for 35% reduction. Member agencies must submit a plan that includes enforcement. Severe fines for exceedances. This is only a temporary fix. We need new strategies for the future.

We can no longer depend on the Sierra snow pack so must adapt to new water. We cannot act with yesterday’s logic. Must have multiple sources of water. Discussed the Met water recycling project. Water storage within the basin. Stormwater capture. Conservation, turf removal.

Example – Met is partnering with Edison. When they do energy audits, they will now do water audits also. Things that can be fixed immediately will be fixed immediately right then by the auditor. Looking at doing in house lawn replacement to avoid all the paper work. Met does not allow artificial turf replacement over concerns with heat and PFAs pollution.

The next Water Dialogue meeting will be on Wednesday, June 22..

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