



SCV WATER AGENCY SPECIAL BOARD MEETING

Friday, September 30, 2022 Meeting Begins at 7:30 AM

Members of the public may attend by the following options:

In Person

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

By Phone

Toll Free:
1-(833)-568-8864
Webinar ID: 160 488 2940

Virtually

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

<https://scvwa.zoomgov.com/j/1604882940>

Have a Public Comment?

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 before 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 before the meeting will be made available at the meeting, if practicable, and posted on the SCV Water website the following day. All correspondence with comments, including letters or emails, will be posted in their entirety. (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.

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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NOTICE AND CALL OF A SPECIAL MEETING

Notice is hereby given that I, the Vice President of the Board of Directors of the Santa Clarita Valley Water Agency, hereby call a SPECIAL MEETING of the Agency's Board of Directors.

Said SPECIAL MEETING of the Board to be held on:

FRIDAY, SEPTEMBER 30, 2022 AT 7:30 AM

At

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

And

**Several SCV Water Locations
See Attached Map and Schedule**

Join the meeting from your computer, tablet or smartphone by clicking the link below.

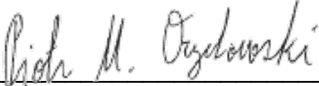
<https://scvwa.zoomgov.com/j/1604882940>

Or

Call-in using your phone

**1-(833)-568-8864
Webinar ID: 160 488 2940**

Enclosed with and as part of this Notice and Call is an Agenda for the meeting.

Signed: 
Vice President

Date: 9/20/22

Posted on September 22, 2022.

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

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

FRIDAY, SEPTEMBER 30, 2022, AT 7:30 AM

IMPORTANT NOTICES

This meeting will be conducted in person at the address listed above, the tour itself will be at several locations (see attached map and schedule). 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: 160 488 2940 or Zoom Webinar by clicking on the <https://scvwa.zoomgov.com/j/1604882940>**. 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.

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- 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.	<u>APPROVAL OF THE AGENDA</u>	
5.	* <u>TREATMENT, DISTRIBUTION, OPERATIONS AND MAINTENANCE SECTION PRE-TOUR PRESENTATION – DIRECTOR OF OPERATIONS AND MAINTENANCE MIKE ALVORD – 1 HOUR</u>	<u>PAGE</u> 7
6.	<u>TOUR OF AGENCY FACILITIES – (IN PERSON ONLY NO ZOOM ACCESS)</u>	
7.	<u>ADJOURNMENT</u>	

- * 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 September 22, 2022.


M65



BOARD MEMORANDUM

DATE: September 20, 2022

TO: Board of Directors

FROM: Mike Alvord 
Director of Operations & Maintenance

SUBJECT: Treatment, Distribution, Operations and Maintenance Section Pre-Tour Presentation

SUMMARY

In 2018, SCV Water was formed, bringing together four different sets of staff and treatment, distribution, operations and maintenance activities. While all separate entities provided high quality and reliable drinking water, the operations and maintenance activities were different. Over the last four plus years, the various teams have been coming together to conduct operations and maintenance activities in a more uniform, consistent, and efficient manner. This presentation provides a glimpse into the vast amount of facilities, the complexities of each section and department and where we need to go as a best in class agency.

DISCUSSION

SCV Water has a service area encompassing approximately 195 square miles, 74,000 services connections with a population of more than 274,000. Within this service area, there are two (2) surface water treatment plants, 58 wells, over 100 storage structures and approximately 930 miles of pipeline. The Treatment, Distribution, Operations and Maintenance Section (TDOMS) has a variety of different departments, Water Systems (Treatment & Distribution), Treatment Plant Operations, Utility Operations, Field Services, Water Quality, Laboratory, Electrical, Instrumentation and Safety. The staff in these departments have unique skills and are tasked with operating and maintaining the various systems in order to provide safe and reliable water service to the community.

The presentation will cover each department with detailed information about the operations and maintenance responsibilities. A field tour of several facilities listed below will immediately follow the presentation.

Tour

- Bouquet Tank
- Booster Stations (Turnouts) N-4 & V-2
- Rockefeller Office (Customer Care, Field Services, Technology and GIS)
- N Wells PFAS Treatment and Ball Field Disinfection Facility
- Upper Galloway Pressure Reducing Station

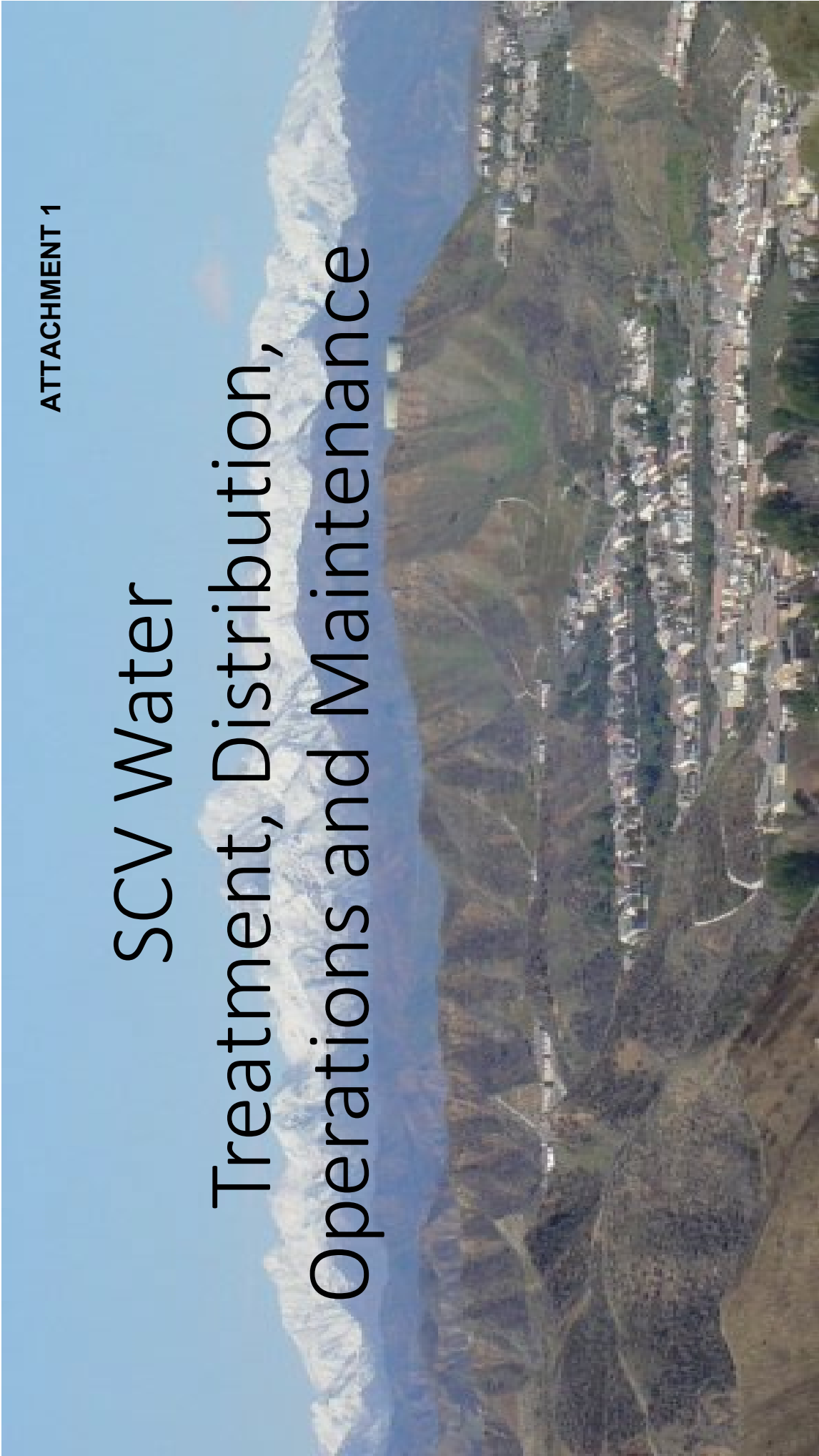
Attachments:

- PowerPoint – Attachment 1
- Board Tour Estimated Times – Attachment 2
- Maps – Attachment 3

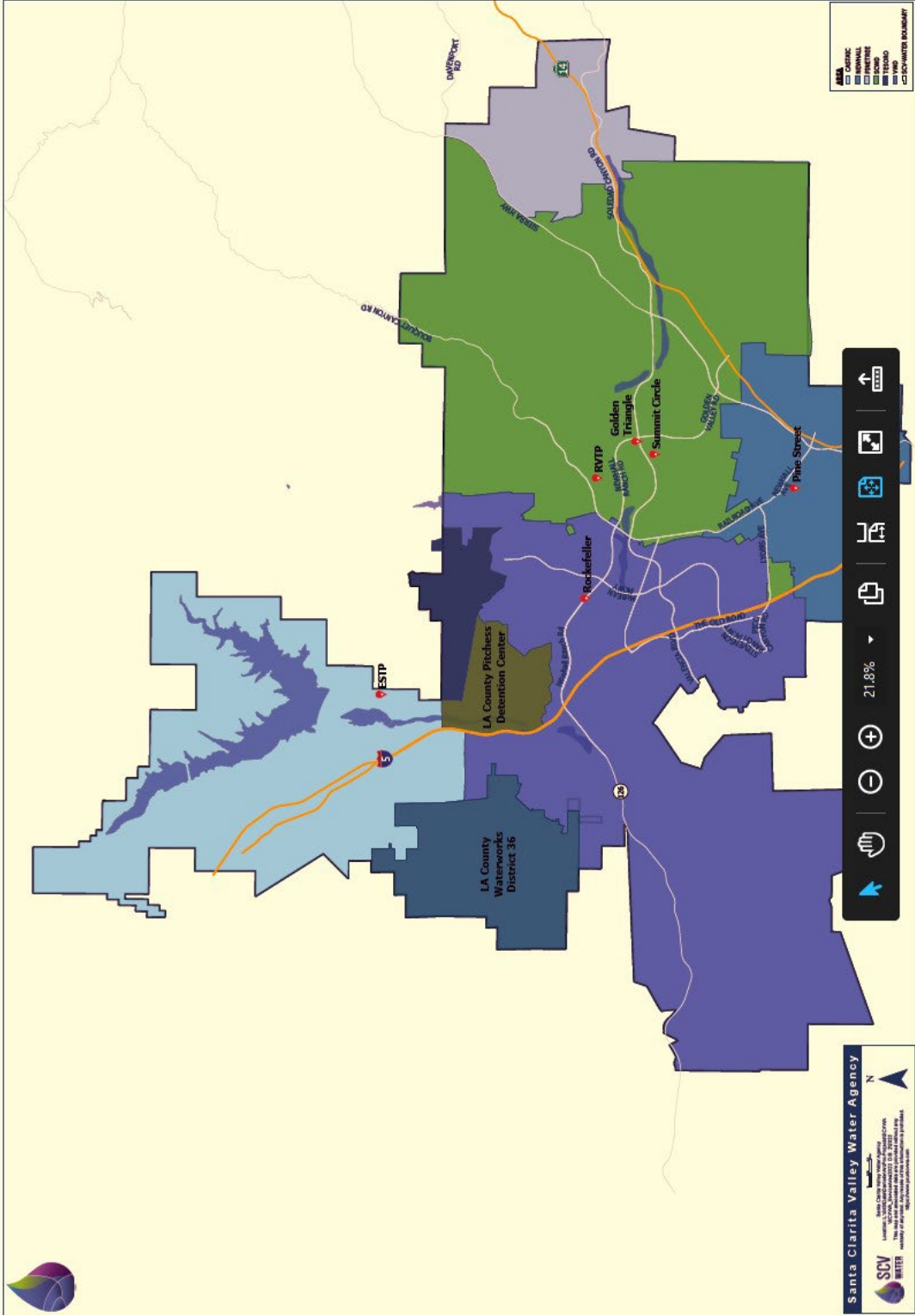
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ATTACHMENT 1

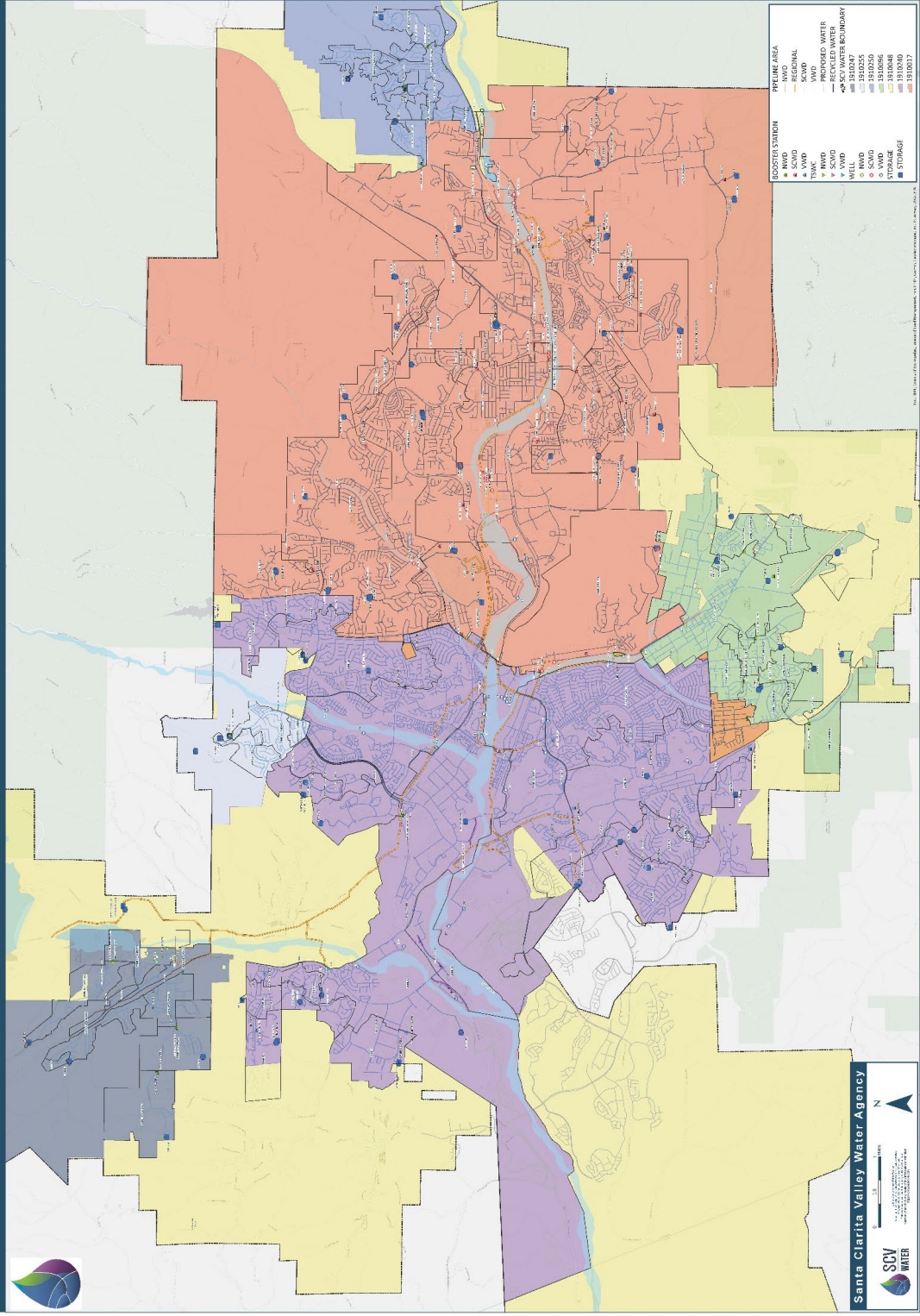
SCV Water Treatments, Distribution, Operations and Maintenance



Santa Clarita Valley Water Agency Service Area



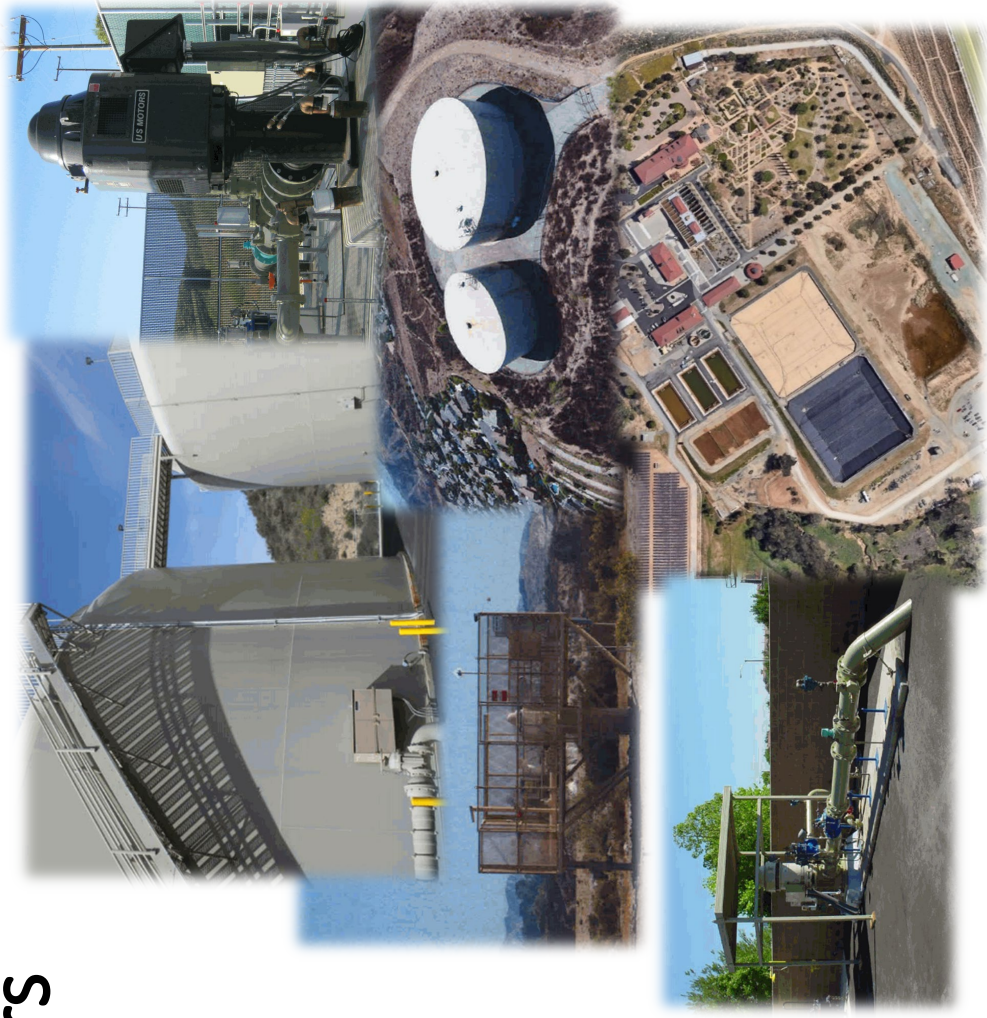
PWS Code System Boundary and Facilities Map



Facilities by the Numbers

- 2 Surface Water Treatment Plants
- 107* – Storage Structures
- 93 – Pumping Stations
- 58 – Wells
- 332 – Hydraulic Control Valves
- 928 Miles of Pipe
- 74,534 Service Connections
- ...and more

*1 Recycled Water tank



Surface Water Treatment

- 2 Intake Pumping Stations
 - 13 Pumps
 - Capacity ~167 MGD
- 2 Surface Water Treatment Plants
 - Capacity ~122 MGD



Surface Water Treatment Chemicals

- 8 different types of treatment chemicals
 - Chlorine (gas)
 - Sodium hypochlorite
 - Oxygen (liquid)
 - Aqueous ammonia
 - Caustic soda
 - Ferric chloride
 - Cationic polymer
 - Non-ionic polymer
- 35 chemical metering pumps



Surface Water Treatment Process

- Ozonation
- Coagulation (rapid mixing)
- 22 Clarifiers (flocculation)
- 22 Filters
- 4 Clearwells
- Disinfection
- Sludge/Wash Water Return





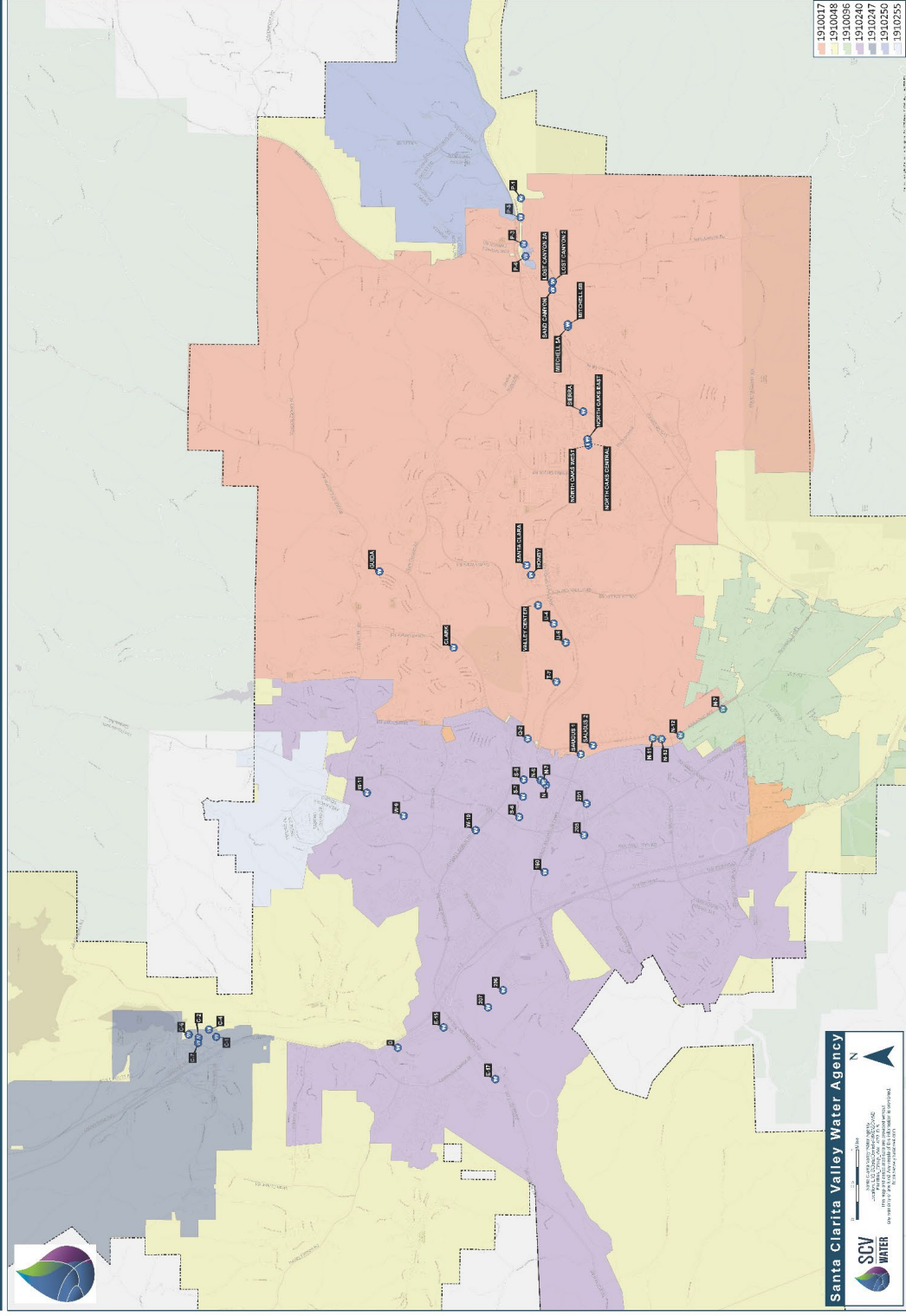
- Surface Water Treatment

- Eight (8) different types of chemical storage and usage (chlorine, ammonia, caustic, ferric, etc)
- More than 60 water quality analyzers and meters (chlorine, turbidity, ozone, pH, etc)
- More than 60 in-plant pumps (chemical injection, wash return, mixing, etc)

Groundwater Wells

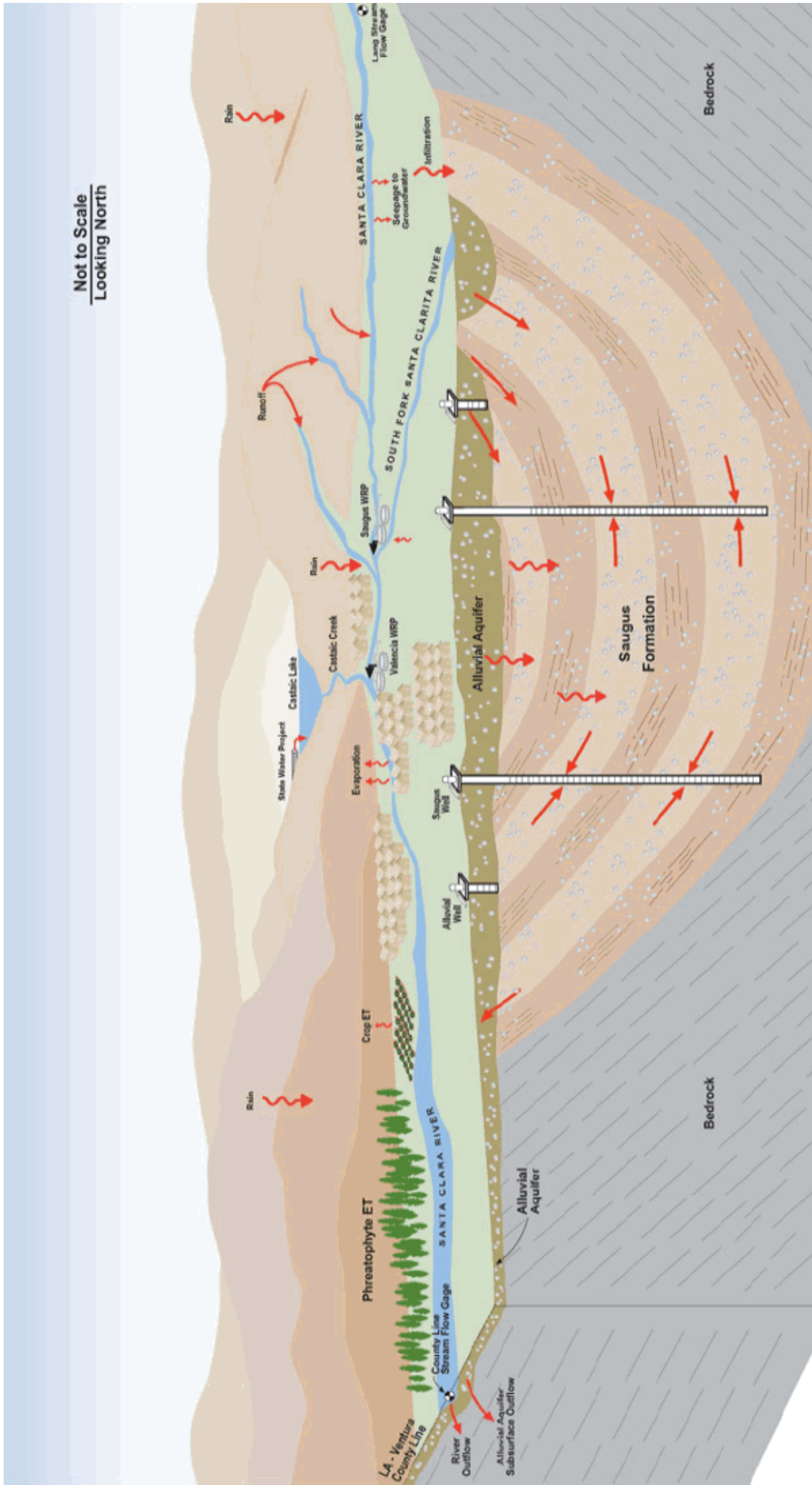
- 56 Wells
- 43 Alluvial
- 13 Saugus
- Total (potable) capacity ~62,000 gpm

PWS CODE SYSTEM BOUNDARY AND WELL MAP





Not to Scale
Looking North



Groundwater Wells



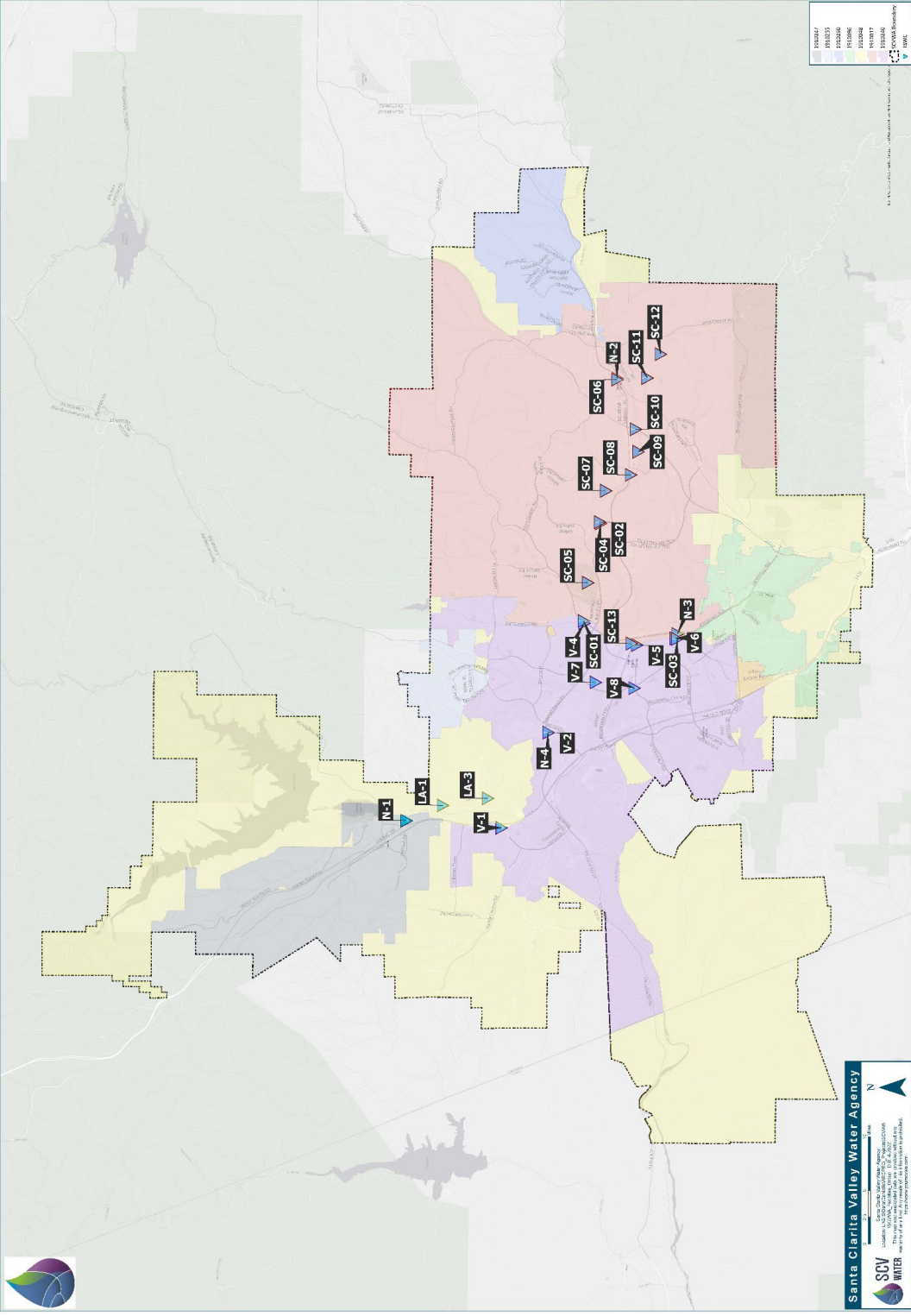


- Wells
 - Sampled various times throughout the year
 - Disinfected with either chlorine or chloramine
 - Data collected from wells include pressure, flow, volume, water levels, disinfectant residuals

Source Water Pump Stations

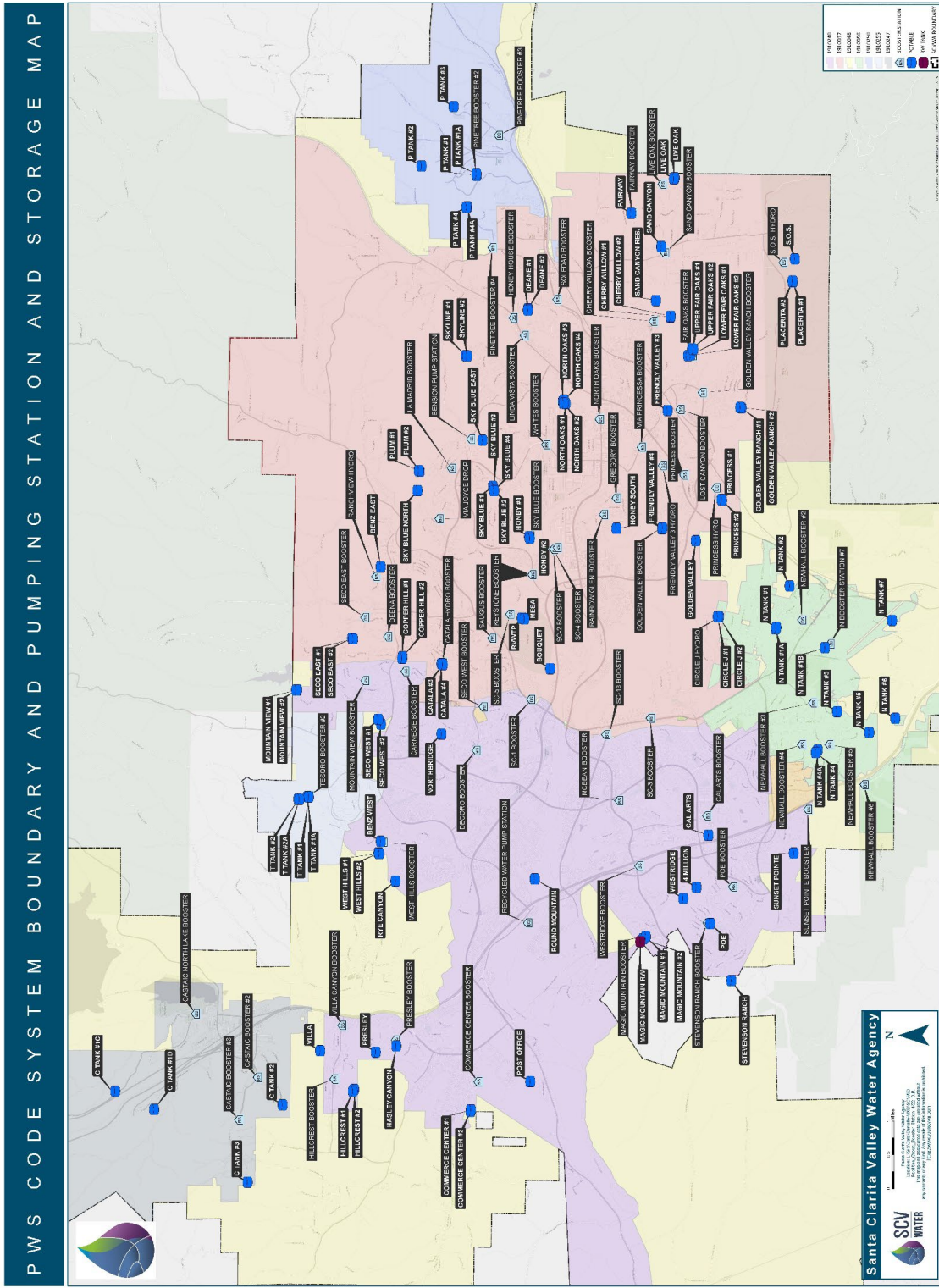
- 14 Pumped
- 10 Gravity
- Capacity ~109,600 gpm

PWS Code System Boundary and Treated Surface Water Connection Map



Pumping Stations

- 67 Pumping Stations
- 58 Booster
- 7 Hydro
- 1 RW
- 1 Sewer
- 170 Pumps
- Total capacity ~130,000 gpm



Booster Stations





- Source Water Pump Stations (previously known as Turnouts)
 - Supplies water from both the surface water treatment plants and the Saugus Perchlorate Treatment Plant through a transmission pipeline into the distribution system
 - Are maintained and sampled on a routine basis
 - Data collected include pressure, flow, volume, disinfectant residuals
 - LA36 two wholesale Turnouts

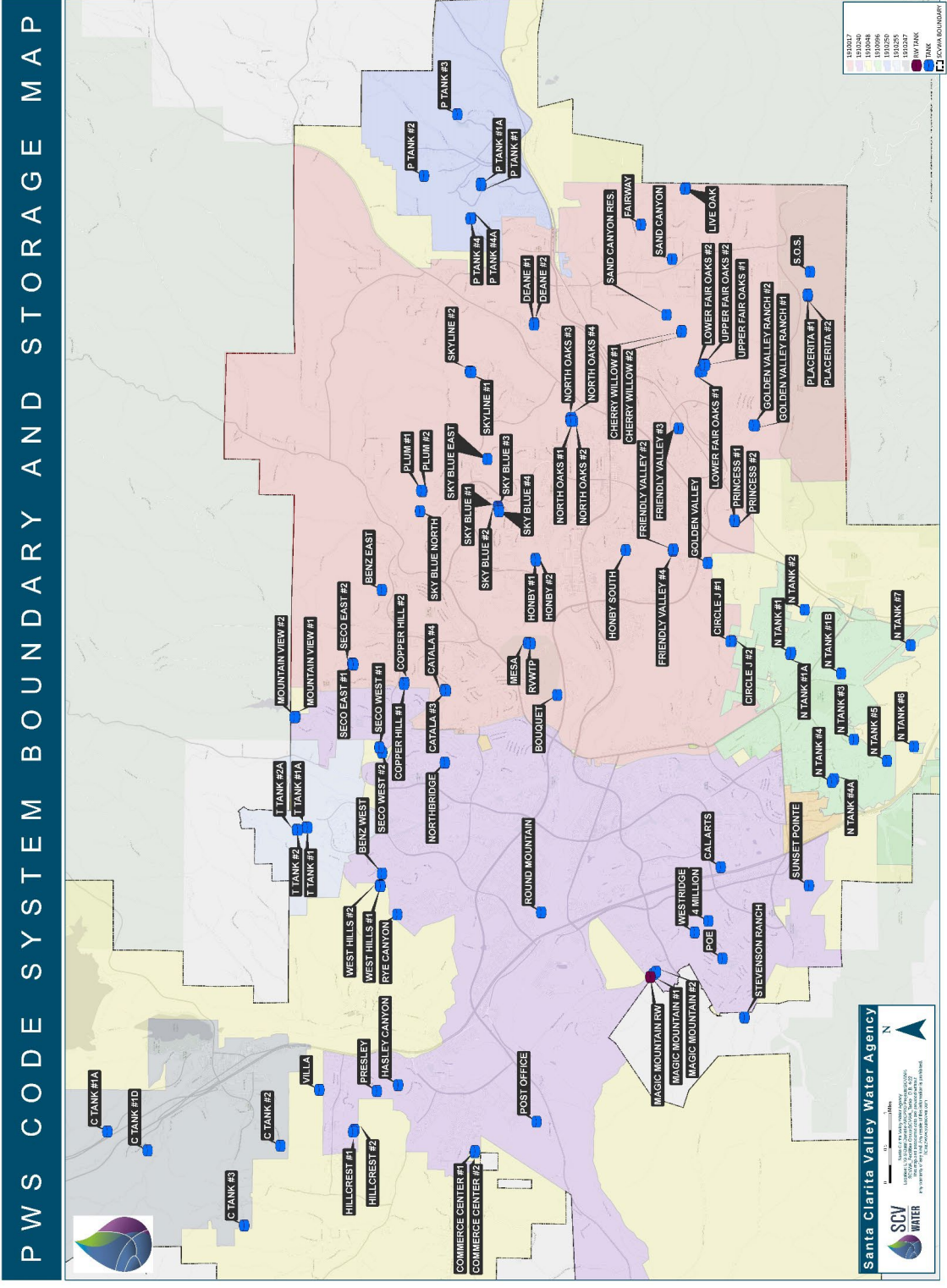


- **Booster Stations**

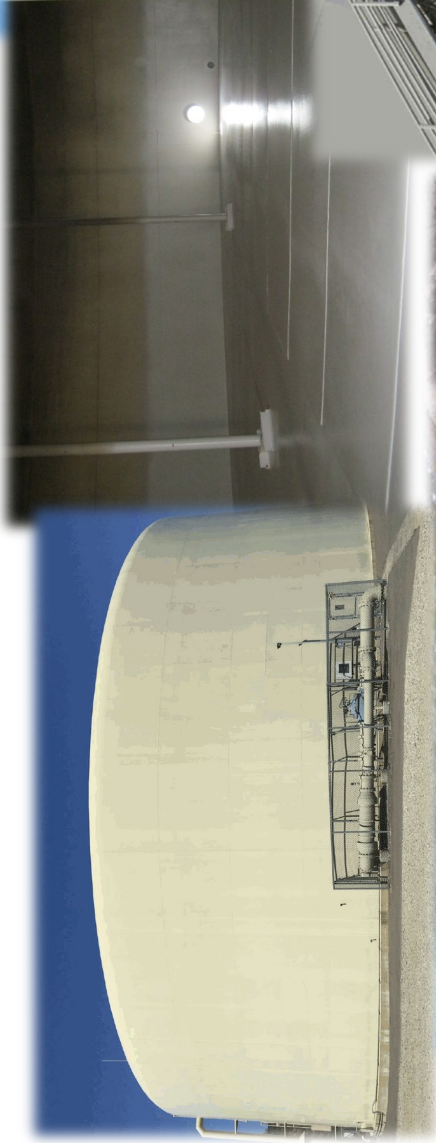
- Pump water from lower elevations to higher elevations or to meet a desired pressure
- Are maintained on a routine basis
- Data collected from booster stations include pressure, meter reads, chlorine residuals

Storage Structures

- 104 Tanks
- 4 Clear Wells
- 1 Reservoir
- 1 RW Tank
- 213 MG of potable water storage
- 1.5 MG of RW storage



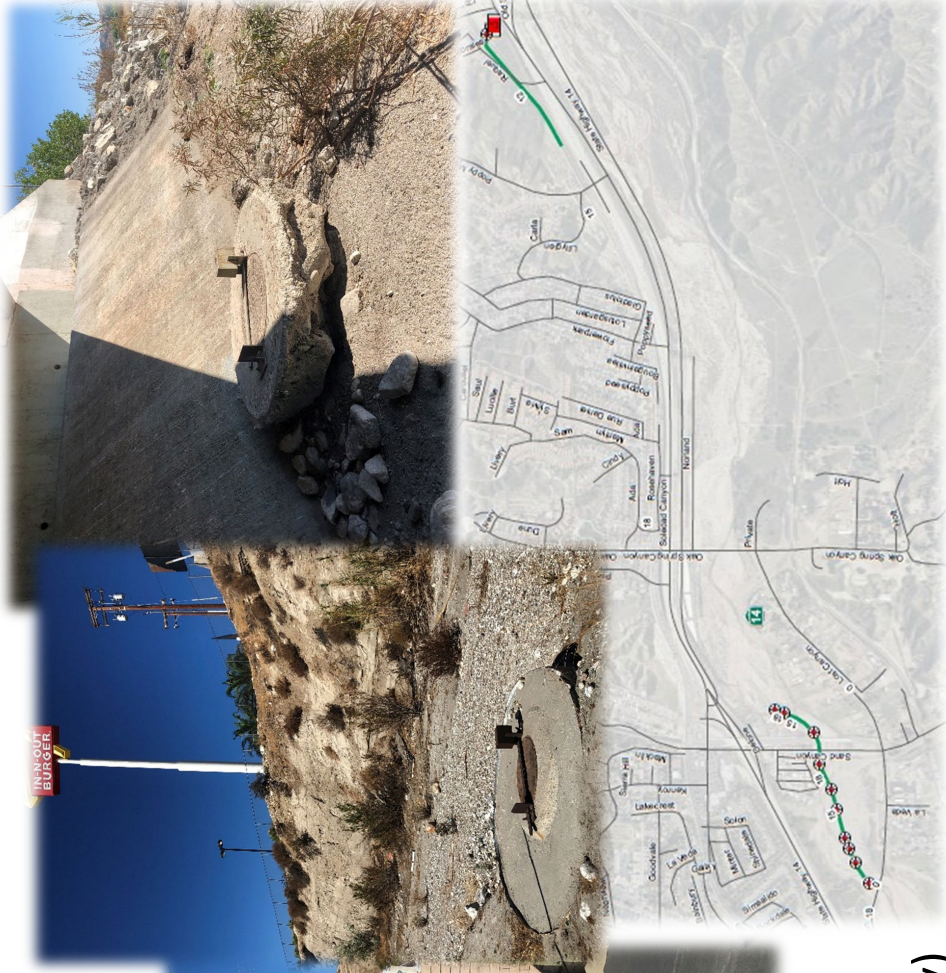
Storage Structures





- Tanks
 - Sampled weekly for nitrification constituents
 - Internally inspected and cleaned every 3 – 5 years
 - Recoated as needed
 - Data collected from storage structures includes water levels, status of altitude valves, status of EQ valves, status of tank mixers

Sanitary Sewer System



- Maintenance
 - Lift Station inspection/cleaning (annually)
 - CCTV and clean gravity trunk pipeline (2 – 3 years)

Transmission/Distribution Facilities

- Pipeline— 928 miles
- System Valves – 25,198
- Fire Hydrants – 7,573
- Blow Offs – 2,167
- Air and Vacuum Valves – 1,844
- Hydraulic Control Valves – 332



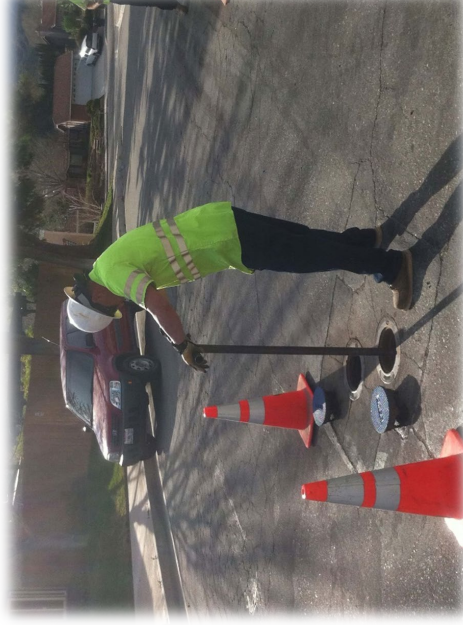
Transmission/Distribution System Statistics

- Pipeline Maintenance and Replacements
 - Approximately 1.3 leak repairs per workday
 - Approximately 2,000 – 3,000 feet of pipeline replacement per year



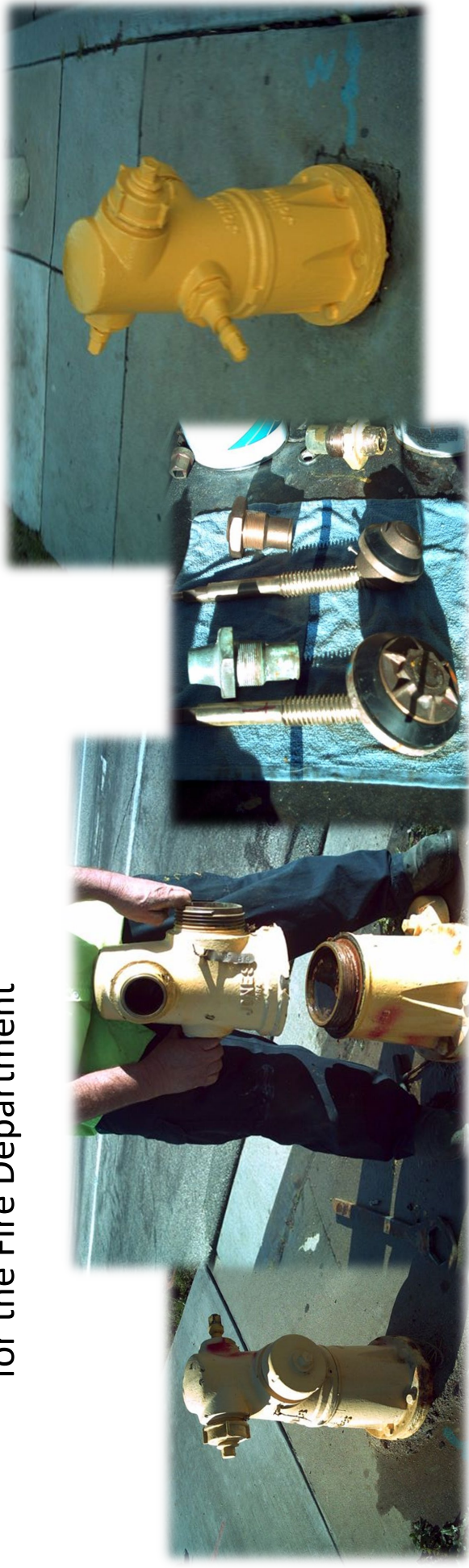
Transmission/Distribution System Statistics

- Valve Maintenance
 - Goal is exercising 20% or 5,040 valves per year
 - Working valves are important to minimize damage from a water main break and reduce the number of service outages during a repair



Transmission/Distribution System Statistics

- Fire Hydrant Maintenance
 - Goal is maintaining 20% or 1,515 fire hydrants per year
 - Working and painted fire hydrants provide quick identification and operation for the Fire Department



Transmission/Distribution System Statistics

- Air/Vacuum & Blow Off Maintenance
 - Goal is maintaining 20% or 802 AV & BO
 - Properly maintained AV & BO allow for efficient flow of water and helps reduce stagnant water in dead ends



Customer Meters

- 72,931 meters
- Sizes: 5/8" – 10"
- Read types: Manual, AMR, AMI
- Meters should be flow tested and replaced 10 – 20 years



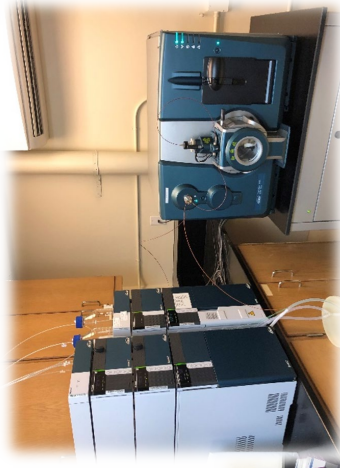
Customer Meters Read Style

- Manual Read = ~5,000
- Automated Meter Reading = ~43,000
- Automated Metering Infrastructure = ~25,000



Water Quality & Laboratory

- 2021 Samples Collected and Analyzed
 - Microbiological – 9,025
 - Includes TC, fecal, E. coli and HPC
 - Metals – 2,068
 - Includes things as calcium, magnesium, iron, cadmium, etc (alkali, alkaline, transitional metals)
 - Anions – 3,614
 - Includes things as chloride, sulfate, fluoride, etc and specifically perchlorate (1,697)
 - Volatile Organic Compounds – 675
 - Includes things as TCE, PCE and TTHM
 - PFAS - 893



Groundwater Disinfection

- On-site 0.8% chlorine generation
- Aqueous Ammonia or Liquid Ammonium Sulfate
- Calcium hypochlorite systems
- As groundwater treatment systems are being constructed, disinfection systems are being upgraded with onsite chloramination



Water Quality Disinfection



Maintenance

- Tablet chlorinators require cleaning every 6 months and pump rebuilds as needed
- Onsite generators for chloramination systems need maintenance and cleaning of the generation cells annually
- Routine maintenance of the regulators, injection quills and valving

Where we are and where we want to go...



More secure facilities that are in remote locations and more routine preventative maintenance



Safer access to facilities in compliance with ever changing safety regulations

Where we are and where we want to go...

More proactive
preventative
maintenance and
system improvements,
which will improve
reliability, efficiency
and customer
confidence



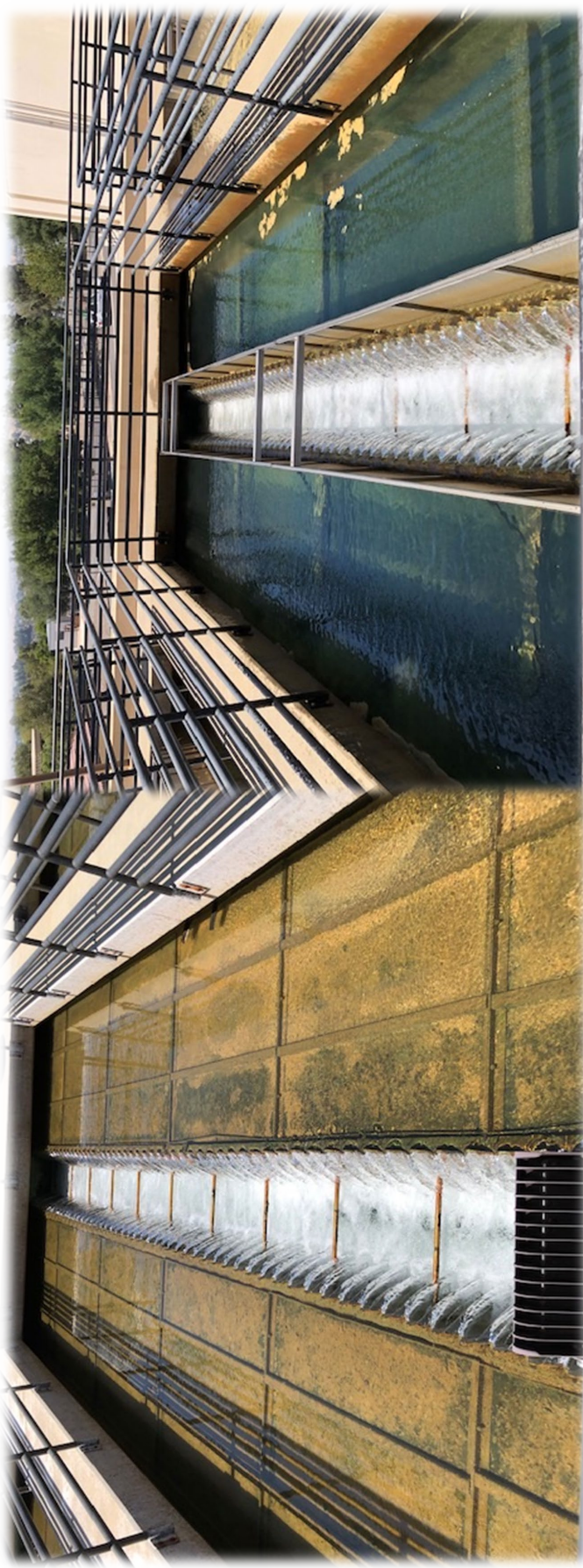
Where we are and where we want to go...

Increased infrastructure replacement programs



Where we are and where we want to go...

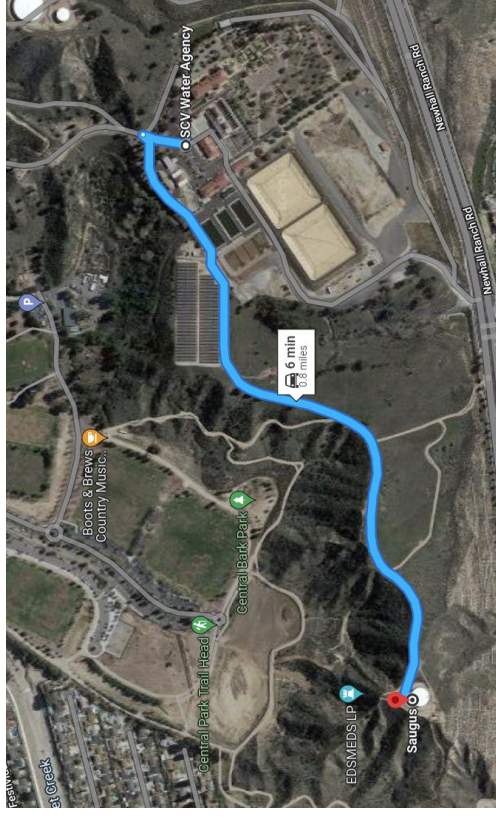
Identify and improve upon system inefficiencies, design flaws and operational constraints



Questions?

Now for the tour...

- Bouquet Tank
- N-4 & V-2 Turnout/Booster Stations
- Rockefeller Office
- N Wells PFAS Treatment & Ball Field Disinfection Facility
- Upper Galloway Pressure Reducing Station



ATTACHMENT 2

Board Tour

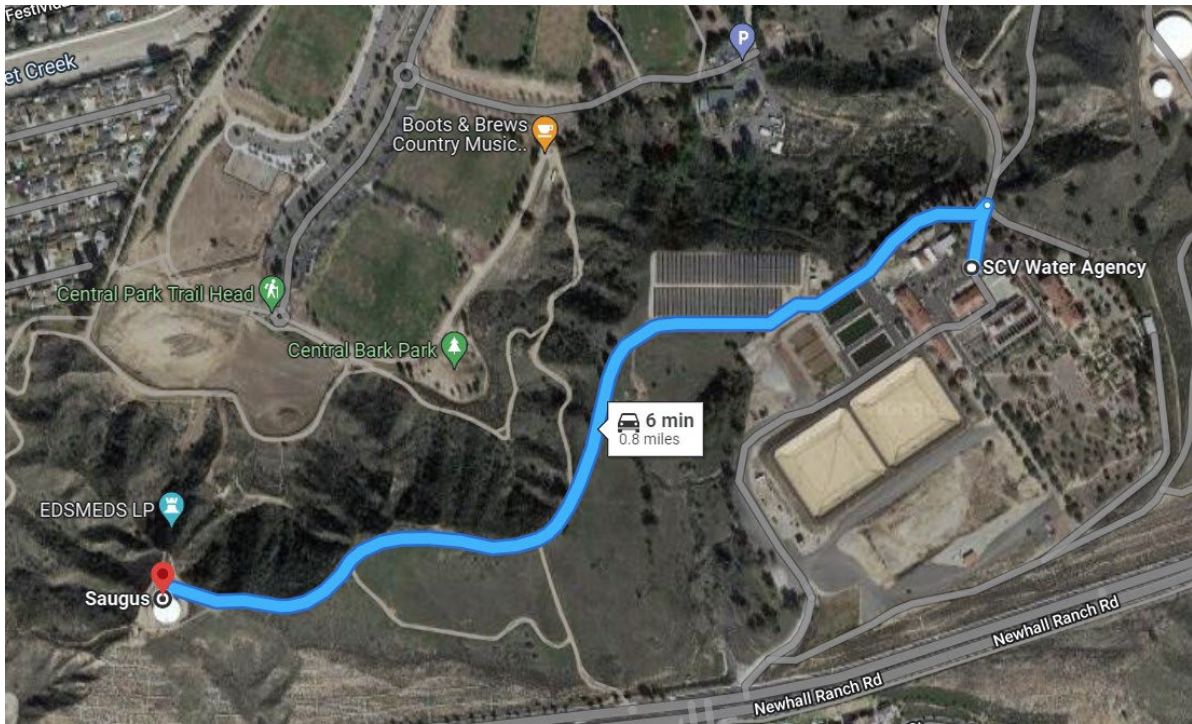
Estimated Times

<u>Start Time</u>	<u>End Time</u>	<u>Location</u>	<u>Description</u>
7:30 am	8:30 am	Board Room	Power Point Presentation
8:30 am	9:00 am	Parking Lot	Load in vans
9:00 am	9:45 am	Bouquet Cyn Tank	RVWTP Property
9:45 am	10:00 am	Drive Time	
10:00 am	10:30 am	N-4 & V-2 Turnout/Boosters	25193 Aurora Drive
10:30 am	10:45 am	Drive Time	
10:45 am	11:15 am	Rockefeller Office	24631 Ave Rockefeller
11:15 am	11:30 am	Drive Time	
11:30 am	12:15 pm	N Wells PFAS/BFDF	23780 Auto Center Drive
12:15 pm	1:00 pm	Drive Time	
1:00 pm	1:30 pm	Upper Galloway PRS	20532 Arden Place
1:30 pm	1:45 pm	Drive Time	RVWTP

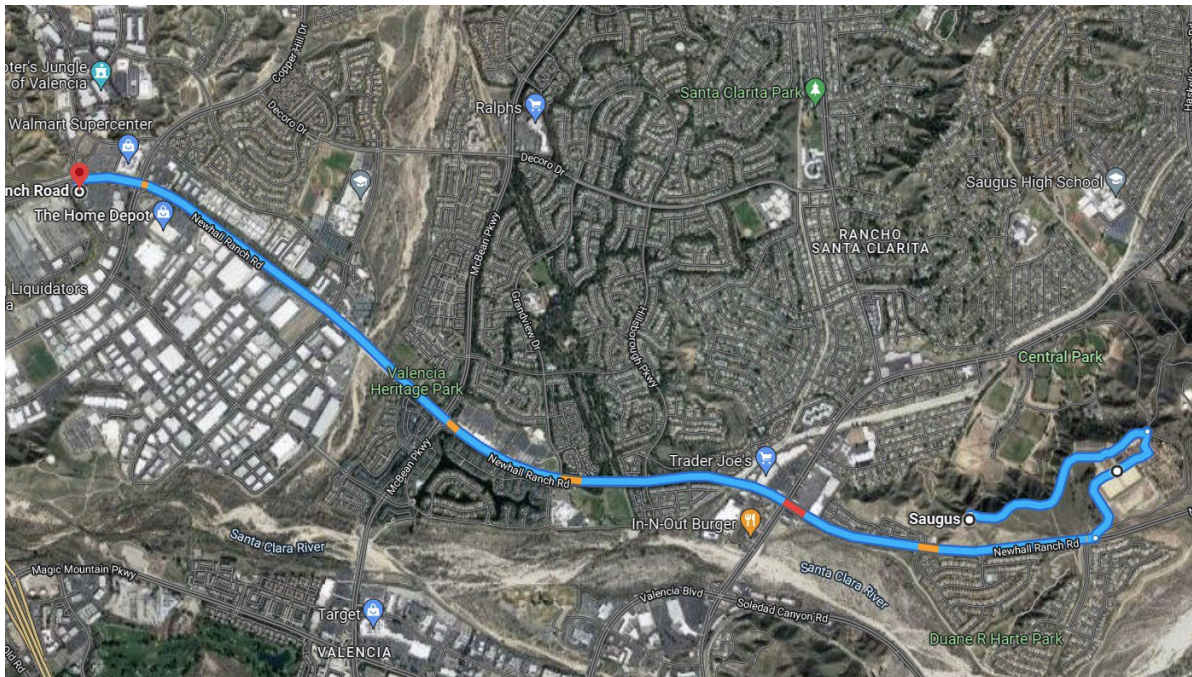
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ATTACHMENT 3

Rio Vista Board Room to Bouquet Tank

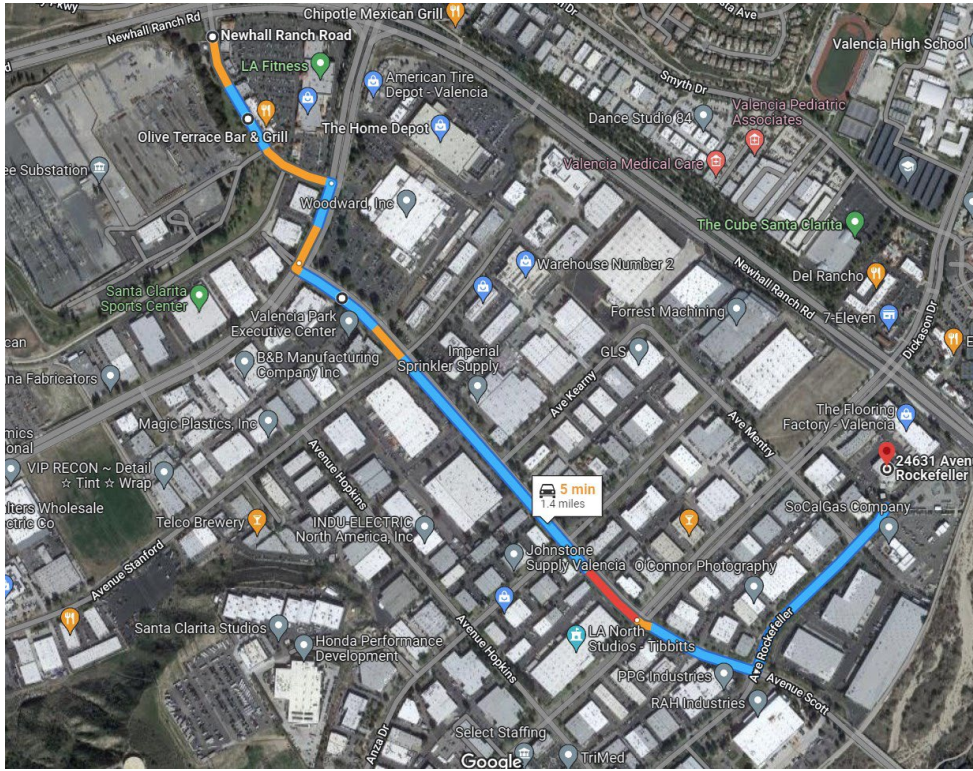


Bouquet Tank to N-4 & V-2 Turnout/Booster Stations

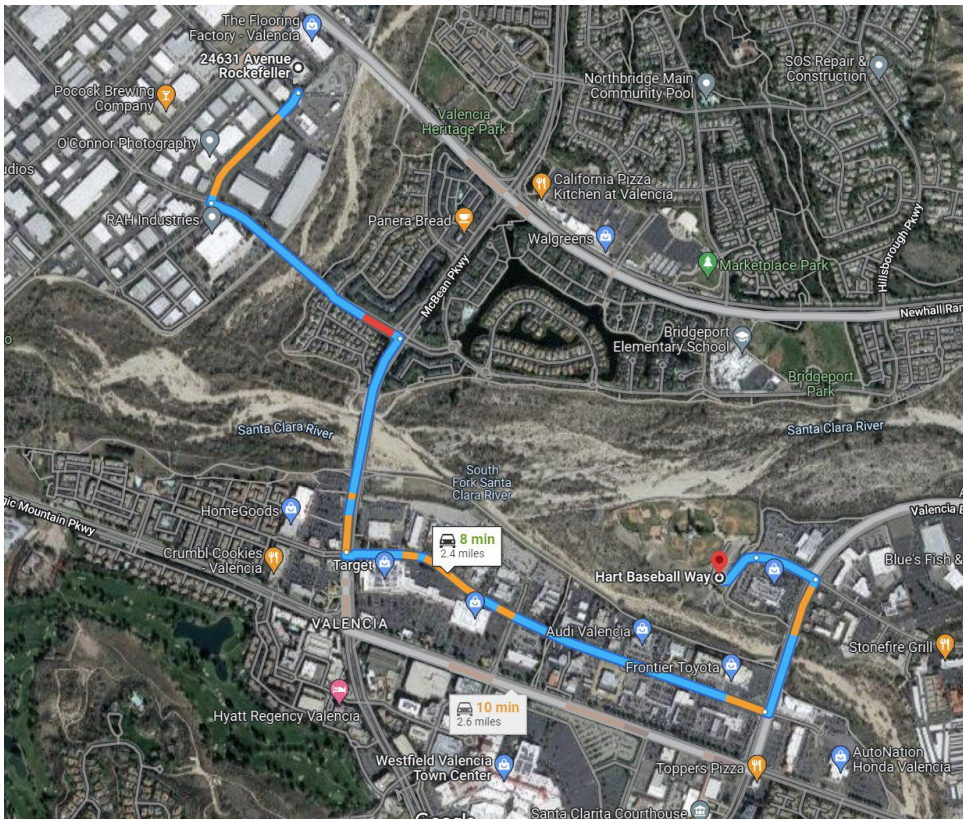


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N-4 & V-2 Turnout/Booster Stations to Rockefeller

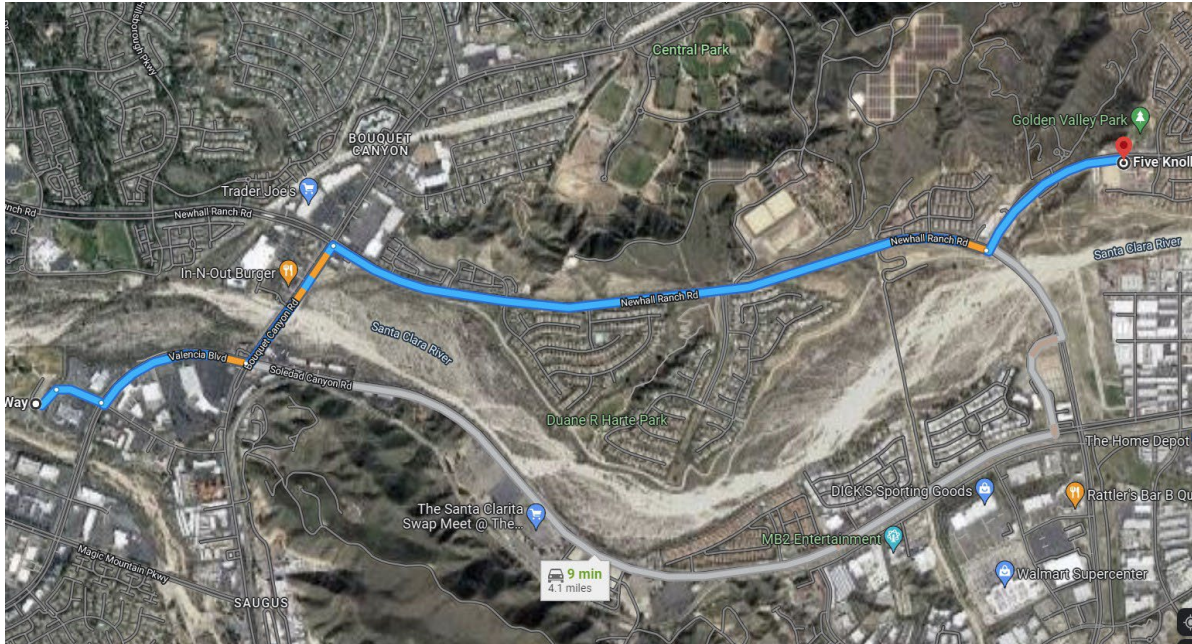


Rockefeller to N Wells PFAS/BDF

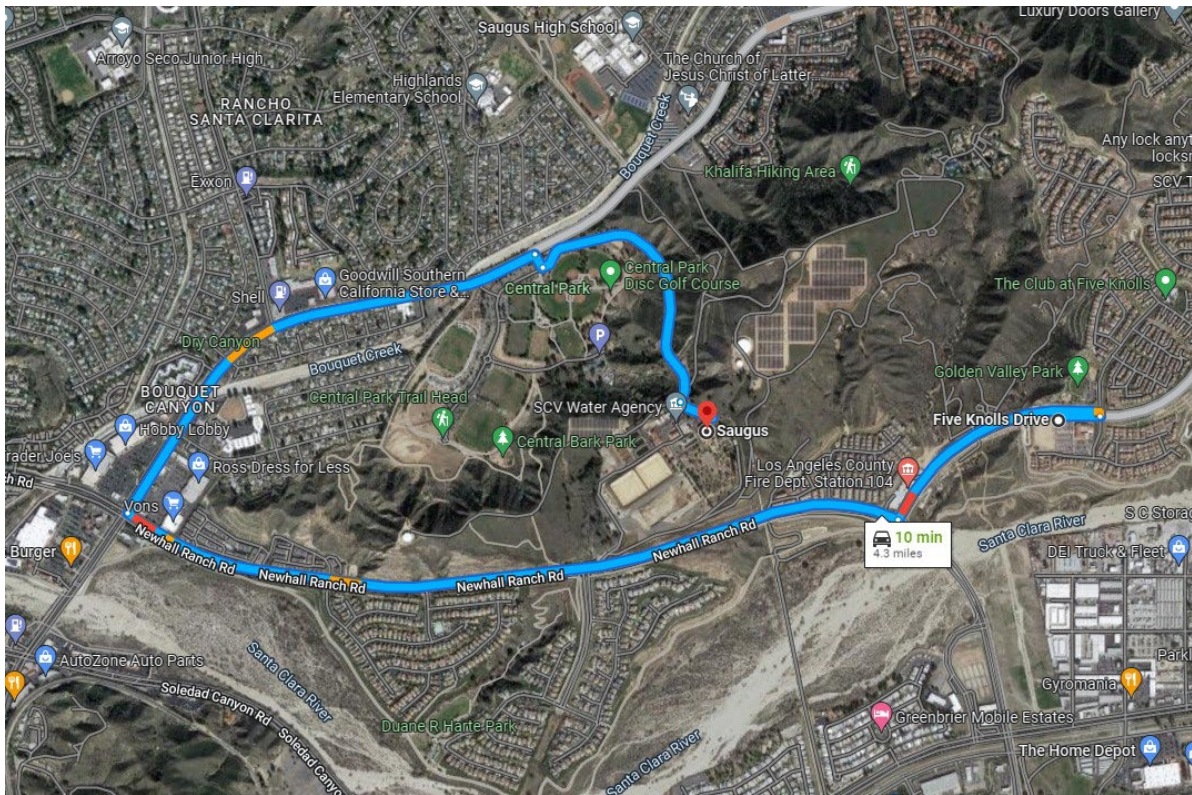


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N Wells PFAS/BDFD to Upper Galloway PRS



Upper Galloway PRS back to RVWTP



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