2022

SANTA CLARITA VALLEY
WATER REPORT

SCV WATER

SCV Water and Los Angeles Water Works District No. 36

December 2023

CONTENTS

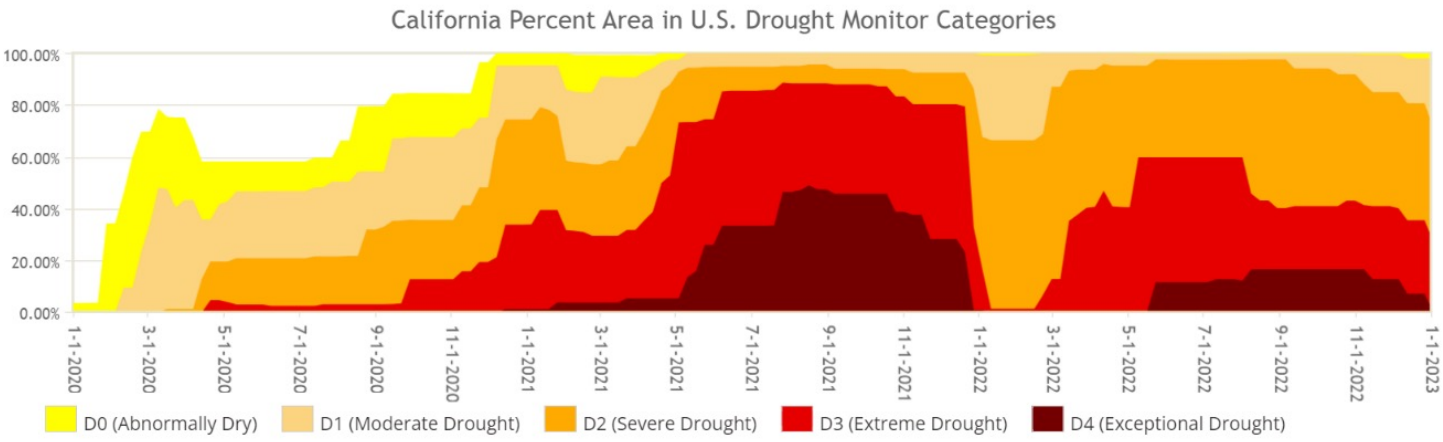
EXECUTIVE SUMMARY

This calendar-year Annual Water Report is the twenty-fifth since reports began in 1998. It provides current information about the water requirements and water supplies of the Santa Clarita Valley (Valley). This report has been prepared by the Santa Clarita Valley Water Agency (SCV Water).

This report provides a summary of local and imported water use in the Valley, water quality updates, water demands and water conservation updates, as well as watershed area information.

This Annual Water Report reviews the sufficiency and reliability of supplies in the context of existing water demand, with focus on actual conditions in calendar year 2022 and a glimpse into beginning 2023 conditions.

2022 was characterized as a third consecutive drought year. SCV Water service area started the year in stage D1 (Moderate Drought), shifted into D3 (Extreme Drought) in August, and ended the year at D2 (Severe Drought). In March 2022, the Governor issued an emergency order mandating the adoption of Stage 2 Water Shortage Contingency Plan (WSCP) which SCV Water executed in April 2022. After record setting precipitation in December 2021, conditions shifted drastically with the driest January through April experienced on record, dating back to 1895. Overall, the state received 76% of average precipitation in 2022. Santa Clarita ended the calendar year with 10.5 inches or 60% of normal precipitation, of which 6 inches came just in the month of December. The final State Water Project (SWP) allocation was 5% marking the third year the Department of Water Resources (DWR) ever issued the lowest allocation and the first consecutive 5% allocation since first issued in 2014. In addition, some SWP Contractors were issued emergency allocations to meet Human Health and Safety (HH&S) demands. SCV Water had adequate reserves available to meet all demands including HH&S and did not require emergency allocations from DWR.



https://droughtmonitor.unl.edu/CurrentMap.aspx

SCV Water customer demands were met by utilizing groundwater supplies as available (ongoing impacts from 2020 water quality Per- and polyfluoroalkyl substances-PFAS regulations) and maximizing imported supplies which included dry year reserves. Increased conservation outreach, program participation and awareness were critical in managing demands in 2022.

The groundwater aquifer underlying the Valley is comprised of a relatively shallow Alluvial aquifer (Alluvium) and the much deeper Saugus Formation (Saugus). **Table ES-1** reports 2022 SCV groundwater production, from each aquifer, was less water than the groundwater pumping parameters in the Groundwater Sustainability Plan (GSP) based on three years of consecutive dry climate conditions (Dry Year 3 column).

Table ES-1 2022 SCV Groundwater Production vs. Pumping Parameters

Aquifer	Groundwater Production (AF)	GSP Groundwater Pumping Parameters (AF)			
	2022 Production	Normal Year	Dry Year 1	Dry Year 2	Dry Year 3 (Year Type 2022)
Alluvium	28,000	30,000 to 40,000	30,000 to 35,000	30,000 to 35,000	30,000 to 35,000
Saugus Formation	10,100	7,500 to 15,000	15,000 to 25,000	21,000 to 25,000	21,000 to 35,000
Total	38,100	37,500 to 55,000	45,000 to 60,000	51,000 to 60,000	51,000 to 70,000

For specific 2022 groundwater levels trends please reference The Santa Clarita Valley Groundwater Sustainability Agency (SCV-GSA) GSP Annual Report published in February 2023 (SCVGSA 2022 GSP Annual Report Feb 2023) or monthly updated SCV Well Water Production & Levels on the SCV Water website (Plans and Reports | Santa Clarita Valley Water (yourscvwater.com)).

Towards the end of 2022 record breaking storms hit California early in the winter and continued into 2023 setting new snowpack records throughout the state. The final SWP allocation in 2023 was established in April at 100%, which hasn't occurred since 2006. Early demands in 2023 were very low considering above average precipitation locally, cooler temperatures, and mandatory conservation regulations. In July 2023, the SCV Water Board of Directors moved from a Stage 2 WSCP and Ordinance to No Shortage conditions. 2023 operations shifted drastically from importing dry year reserves to meet local demands in 2022 to storing surplus imported supplies for future use in dry year reserve programs in 2023. SCV Water operations shifted to maximize SWP Table A imported water use locally to allow recovery in local groundwater aquifers. Additional surplus SWP Table A water is anticipated to be managed in order to preserve reliability within the Valley.

CHAPTER 1 INTRODUCTION

1.1 Purpose, and Potential Change to Future Reports

Annual Water Reports were instituted in 1998 at the request of the Los Angeles County Board of Supervisors. Since then, these Annual Water Reports and/or report details have been incorporated by reference and/or made parts of the Newhall Ranch Specific Plan, and Memorandums of Understanding (MOU) between the upper Santa Clara River Valley Groundwater basin (basin) water purveyors and the United Water Conservation District (UWCD). The first MOU between the upper basin water purveyors and UWCD was in 2001 and it was later updated in 2018. The MOUs describe coordination, data management, and preparation of Annual Water Reports by SCV Water. This report's purpose includes summarizing Calendar Year 2022 water related information regarding water supplies, trends, water quality, and basin conditions to provide information to stakeholders, water planners and local agencies.

Much has changed in terms of information accessibility about planning and basin conditions since the first Annual Water Report's production in 1998. This Annual Water Report is now just one of several reports and planning documents prepared by SCV Water and/or in partnerships with others since 1998. One result of providing more information about basin management in different formats over the years is report-overlap. Given multiple reports with overlapping information and the desire to be efficient with communication, the GSP Annual Report can serve the purpose of providing the most up to date basin groundwater conditions. The SCV Annual Water Report will now be focused on imported supply

updates, groundwater quality updates, water use demands and water conservation. In addition, SCV Water has provided references to other detailed planning documents which can be used as background information for many of the topics covered in the SCV Annual Report.

1. **2020 Urban Water Management Plan (UWMP)** – Urban Water Management Plan | Santa Clarita Valley Water (yourscvwater.com)
2. **Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan (GSP)** – https://scvgsa.org/gsp/
3. **2022 GSP Annual Report** – SCVGSA_2022_GSP_Annual Report_Feb 2023
4. **2022 SCV Water Consumer Confidence Report (CCR)** – Understanding Water Quality | Santa Clarita Valley Water (yourscvwater.com)
5. **Salt and Nutrient Management Plan Santa Clara River Valley East Subbasin (SNMP)** – Salt and Nutrient Management Plan Santa Clara River Valley East Subbasin – California Water Library (cawaterlibrary.net)
6. **Upper Santa Clara River 2014 Integrated Regional Water Management Plan (IRWMP) Amendments 2018** – Integrated Regional Water Managment Plan - Feb 2014 with 2018 Amendments (yourscvwater.com)

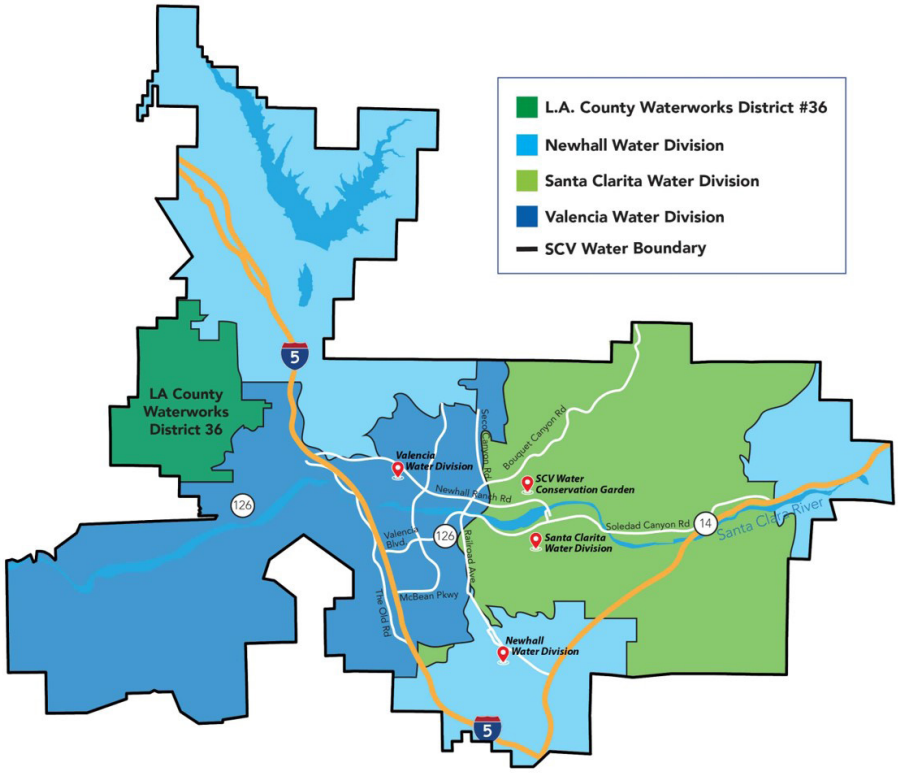
1.2 Service Area Information

Domestic water service is provided to approximately 75,550 service connections by SCV Water and Los Angeles County Waterworks District No. 36.

Figure 1-1 shows the SCV Agency Boundary. It includes the majority of the City of Santa Clarita and unincorporated portions of Los Angeles County.

Not all water users in SCV Water's service area are municipal water users. Local non-municipal wells include agricultural and domestic supply wells. SCV Water also procures recycled water from the Santa Clarita Valley Sanitation District (SCVSD) for distribution.

Figure 1-1 SCV Water Boundaries and Divisions



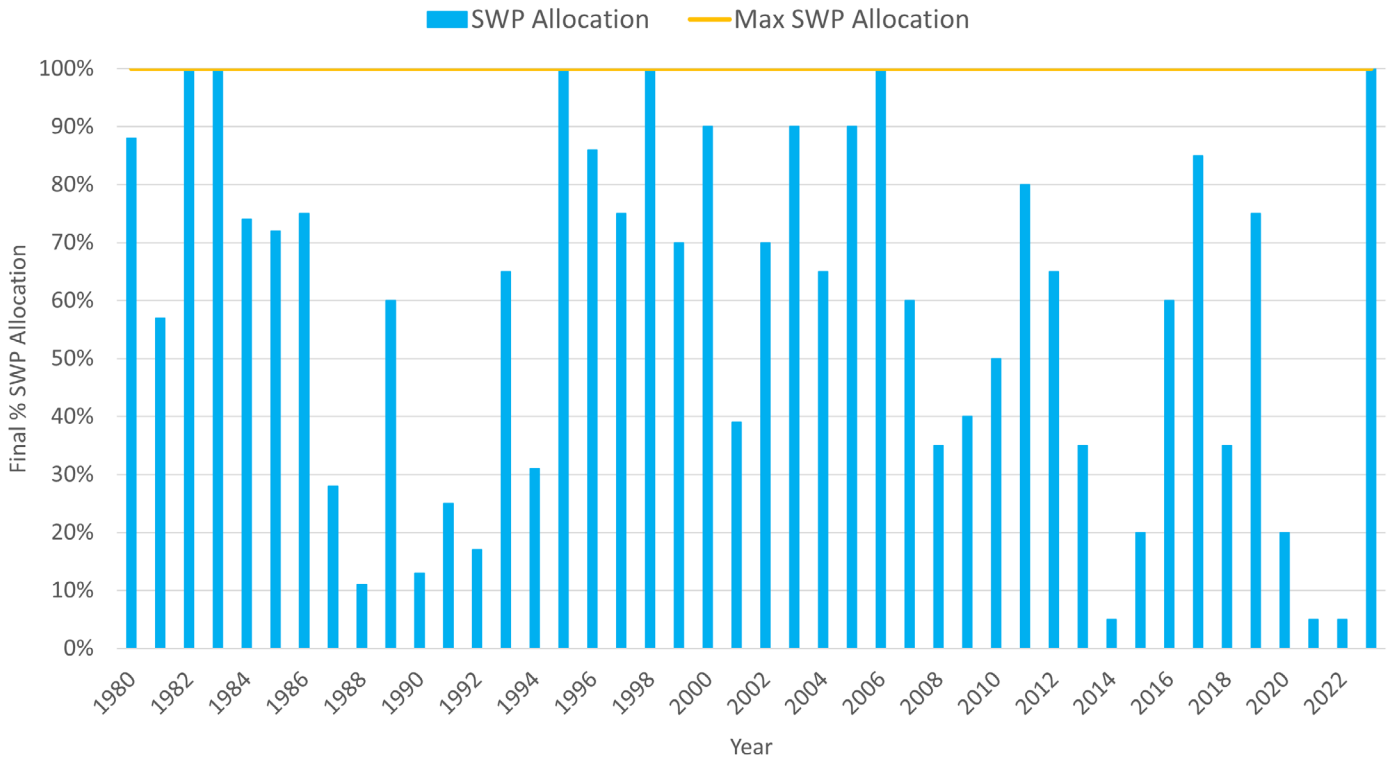
CHAPTER 2 IMPORTED AND RECYCLED WATER SUPPLIES

This section provides details for 2022 SWP and other imported water supplies, as well as the recycled water program. Historical information can be found in the 2020 UWMP and previous SCV Annual Water Reports https://yourscvwater.com/your-water/plans-and-reports/scv-water-report.

2.1 State Water Project Table A and Other Imported Water Supplies

SCV Water holds the rights to 95,200 acre-feet (af) of Table A water as a State Water Contractor. Each year an allocation of that water supply is determined based on hydrologic conditions for that water year. In 2022, the SWP Table A allocation was 5% giving SCV Water a significantly reduced total of 4,760 af of water from this imported supply. This was the third occurrence for the 5%, lowest allocation, that had been issued since the first time in 2014, and the first consecutive 5% allocation year. See **Figure 2.1** which demonstrates the year-to-year variability in the SWP imported supply since 1980.

Figure 2.1 Historical SWP Table A Allocations



In addition to Table A supplies, SCV Water utilized imported supplies from SWP Article 56 Carryover, San Luis Reservoir backup storage, firm supplies from the Buena Vista/Rosedale-Rio Bravo water acquisition (2007), mitigation water from the SWP pumpback program, flexible storage in Castaic Lake, and Yuba Accord Water all detailed in **Table 4-2** 2022 SCV Water Imported Water Supply and Utilization.

2.2 Water Banking and Exchange Supplies

SCV Water maintains dry year reserves within two long term water banking programs, and two short term exchange programs located outside of the service area. These programs are utilized to store surplus water in wet years and draw on these reserves in dry years to augment water shortages. **Table 2.1** below depicts program activity in 2022 and end of year balances available for future use if needed.

Table 2.1 Banking and Exchange Program Activity in 2022

Active Programs	Puts[1] (AF)	Takes[2] (AF)	End of Year Balance (AF)
RRB Banking Program[3]	0	20,000	58,820
SWSD Banking Program[4]	0	5,000	30,278
2019 AVEK/SCVWA Water Exchange[5]	0		2,344
2019 UWCD/SCVWA Water Exchange[6]	0		500

Footnotes
1. Puts represent water being added into the program balance
2. Takes represent water being removed from the program balance for use to meet service area demands.
3. Rosedale-Rio Bravo Water Storage District Water Banking & Exchange Program
4. Stored Water Recovery Unit of the Semitropic Water Banking & Exchange Program
5. Antelope Valley East Kern Water Agency and SCVWA 2019 Water Exchange Agreement
6. United Water Conservation District Ventura County Watershed Protection District and SCVWA 2019 Water Exchange Agreement

Overall, due to critically dry conditions in 2022, banking program storage was drawn down and utilized as a dry year supplemental water supply to help meet local demands. Details for this water use can be found in **Table 4-2**.

2.3 Recycled Water

Recycled water use from existing accounts has remained low, yet relatively constant over the last 20 years (approximately 400 af per year (afy)), and in 2022 recycled water deliveries were approximately 340 af.

Recycled water is currently produced at two water reclamation plants (WRPs) operated by SCVSD: the Valencia WRP and the Saugus WRP, with average annual production of 15,500 afy and 6,100 afy, respectively. Most of the treated effluent from these two plants is discharged to the Santa Clara River.

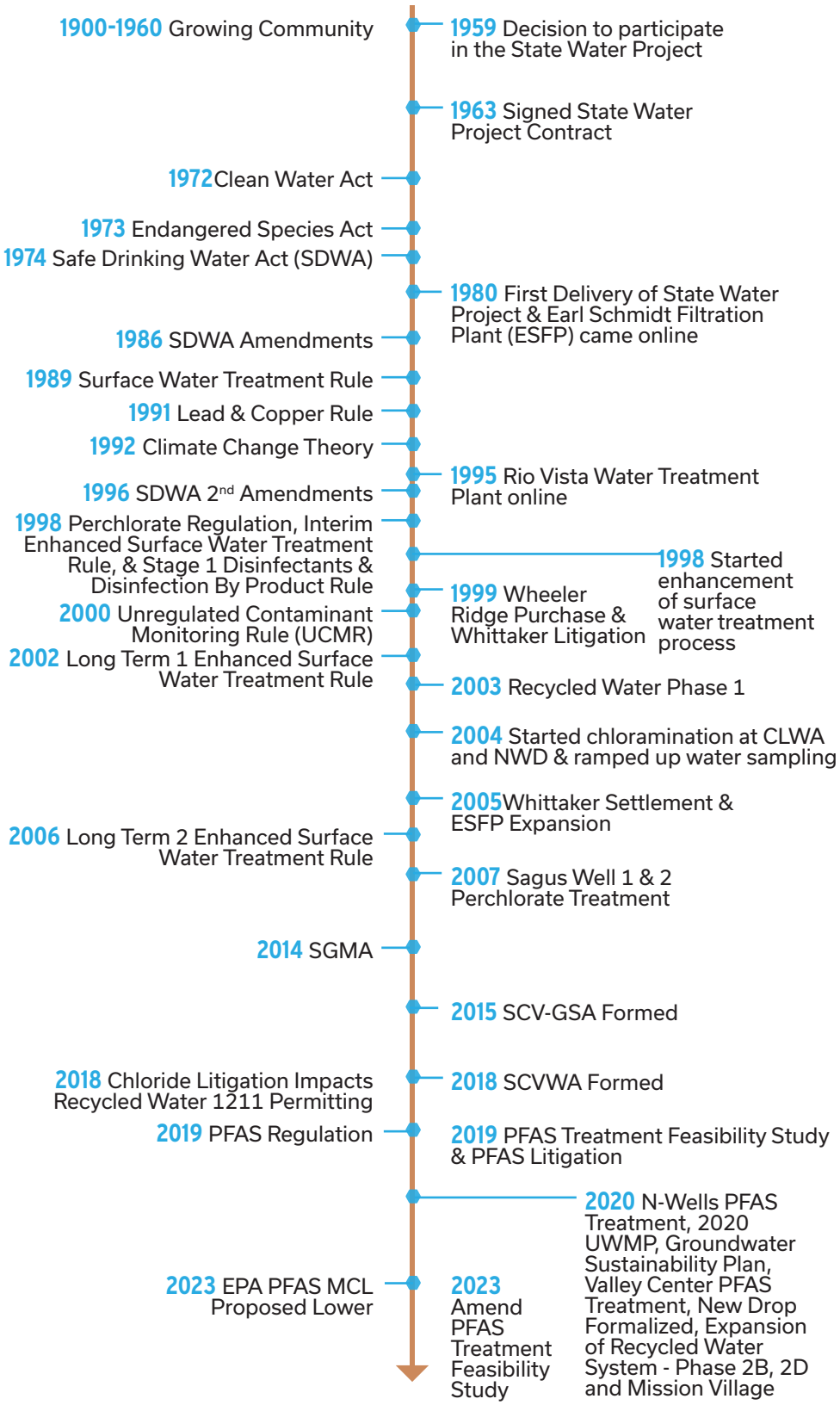
Additional wastewater supplies produced by newly constructed homes and businesses, known as New Drop supply, totaled approximately 358 af in 2022 and averaged approximately 29.9 af per month. These supplies are currently being accounted for through Monitoring and Reporting Program Order No WQ. 2016-0068-DDW. Expanded use of New Drop supplies are anticipated to occur in late 2023 once the Title 22 Engineering reports have been approved by the regulatory agencies, operating agreements are in place with respective agencies and customer conversions are completed.

CHAPTER 3 WATER QUALITY

Water quality constituent influences in local water supplies have major implications to operations as new regulations are defined to protect the end user. This chapter briefly describes major constituents impacting SCV Water well operations and specifies updates in well monitoring or treatment plant additions needed to meet drinking water quality requirements. **Appendix B** was created to reference historical and up to date information for each impacted well facility, the correlating water quality constituent influences, well operation and treatment updates.

The State Water Resources Control Board—Division of Drinking Water (DDW) requires community water systems to publish and make available an annual Consumer Confidence Report to provide background on the quality of potable treated water and to show compliance with federal and state drinking water standards. This Annual Consumer Confidence Report (reference link Section 1.1) is a snapshot of the quality of local water supplies in the Valley each year. Included are details about where your water comes from, what it contains and how it compares to strict federal and state standards. **Figure 3.1** demonstrates the evolution of water quality in the Valley with a timeline of significant water quality events and responses made by SCV Water to continually meet all water quality requirements.

Figure 3.1 Evolution of Water Quality in the SCV



3.1 Perchlorate & VOCs

Perchlorate is both naturally occurring and a man-made contaminant that is increasingly found in groundwater, surface water and soil. Most perchlorate manufactured in the U.S. is used as an inorganic chemical used in solid rocket propellant, fireworks, explosives, and a variety of industries. Perchlorate has been shown to interfere with update of iodide by the thyroid gland, and thereby reduce the production of thyroid hormones leading to adverse effects associated with inadequate hormone levels.

Volatile organic compounds (VOCs) are man-made chemicals that are used and produced in the manufacture of paints, pharmaceuticals, and refrigerants. VOCs are often components of petroleum fuels, hydraulic fluids, paint thinners, solvents, and dry-cleaning agents and are common groundwater contaminants. VOCs include a group of organic compounds that would prefer to volatilize into the atmosphere than to stay dissolved in the water. The primary concern with VOCs is that they can be carcinogenic at relatively low concentrations, which can cause damage to the circulatory system and nervous system.

Perchlorate and VOCs impact the Alluvial aquifer and Saugus Formation, including in municipal supply wells in the vicinity of the Whittaker-Bermite site, an extremely impaired source. Based on the documented onsite chemical use history, onsite soil and groundwater characterization data, subsequent legal settlement, and subsequent assessments for VOC's, source identification noted the former Whittaker-Bermite site has been identified as the primary source of perchlorate and VOC's present in onsite and offsite groundwater. Since detected onsite well treatment for both Perchlorate and VOC's have been necessary for all wells impacted so that produced groundwater meets all water quality regulations. In addition, ongoing management activities, monitoring, contaminant remediation and removal activities are performed to help reduce the impact of plume migration.

A construction project is underway to include VOC treatment for Well 201. This is in addition to the already present perchlorate treatment which is onsite. SCV Water is in the process of permitting both perchlorate and VOC treatment at Well 201. Well 201 is anticipated to be online in late 2024. VOC treatment is also in design at the Saugus Perchlorate Treatment Facility to remove VOCs from wells Saugus 1 and Saugus 2. Planning is also underway for treatment of perchlorate and VOCs at Well 205.

3.2 Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS) are a group of chemicals that are resistant to heat, water, and oil. PFAS have been classified by the United States Environmental Protection Agency (USEPA) as an emerging contaminant on the national landscape.

The USEPA has not yet established enforceable drinking water standards, called maximum contaminant levels (MCL), for these substances, but they have issued a Health Advisory Level of 70 nanograms per liter (ng/L) for a combined level of two of the more prevalent PFAS substances, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). In addition, DDW has set notification and response levels for PFOA and PFOS. An adverse side effect of PFOA is higher cholesterol, changes to liver function, reduced immune response, thyroid disease and increased kidney and testicular cancer. In PFOS, side effects include higher cholesterol, changes in thyroid hormone levels and reduced immune suppression. Cancer is a health effect when testing PFOA and PFOS in laboratory animals. A notification level (NL) is a health based advisory level for constituents lacking an MCL and requires public notification for constituents exceeding these values. A response level (RL) is a non-regulatory, precautionary, health-based measure, where DDW recommends removing a water source from service, blending, or treating if that option is available.

In June 2018, DDW set initial NLs for PFOA (14 ng/L) and PFOS (13 ng/L) and a combined response level for PFOA and PFOS of 70 ng/L. In March 2019, DDW issued a series of orders related to the sampling for PFAS chemicals. After an initial round of monitoring, SCV Water voluntarily removed one well from service, which exceeded the combined RL. Then in February 2020, DDW revised the NLs and adopted individual RLs for PFOA (10 ng/L) and PFOS (40 ng/L) based on a running annual average (RAA). SCV Water responded by voluntarily removing 13 additional wells from service.

Since February 2020, additional wells were voluntarily removed from service as ongoing monitoring revealed PFOA concentrations approaching the RL. In December 2020 SCV Water brought the first ion exchange treatment for PFAS online, bringing three wells back into service. In January 2021, the Office of Environmental Health Hazard Assessment (OEHHA) set a NL for Perfluorobutane sulfonic acid (PFBS) at 500 ng/L. PFBS exposure in laboratory testing has shown decreased thyroid hormones in pregnant female mice. In October 2022, a second ion exchange groundwater treatment plant for PFAS was placed back online, bringing one well back into service.

On October 31, 2022, DDW rescinded previous PFAS monitoring orders. A new order was released that included an updated method for analyzing compounds (EPA Method 533) and included the NL and RL for an additional PFAS compound—PFHxS. The NL for PFHxS is 3 ng/L and the RL is 20 ng/L.

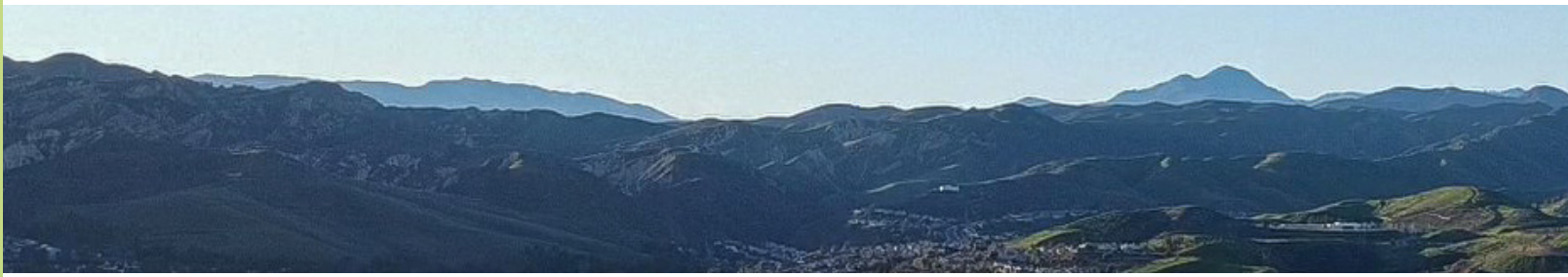
On March 14, 2023, the EPA issued draft MCL's for PFOA and PFOS and Hazard Index for group standard for PFNA, PFBS, PFHxS and HFPO_DA (GenX). The updated MCL's are anticipated to be approved in 2024 and could result in further impacts to the SCV Water groundwater well operations. In anticipation of the EPA updates, in 2023 SCV Water retained Kennedy Jenks Consultants to amend the Groundwater Treatment Implementation Plan Technical Memorandum from April 2021 in preparation for updated regulation impacts from EPA to be released in 2024.

With the increased PFAS monitoring requirements, SCV Water purchased laboratory instrumentation to analyze for PFAS and became one of the first three water agencies in California to be certified for PFAS analysis. Currently, SCV Water is in various stages of planning, design, and construction for PFAS treatment plants to return more of these wells back to service.

3.3 Manganese

Manganese can occur naturally in both surface and groundwater. Currently manganese is regulated with a Secondary Maximum Contaminant Level (SMCL) of 50 ug/L. SMCLs are based on aesthetic properties of water and, unlike MCLs, are not health related. The primary complaint of manganese is discoloration of the water causing staining of laundry and plumbing fixtures. SCV Water currently has a permitted manganese blending plan for one active well and is consistently meeting those operational goals.

On February 16, 2023, DDW proposed revised NL and RL for manganese. These are based on toxicological endpoints and health related levels, which are different from the historic secondary aesthetic regulations. Currently, SCV Water has a DDW permitted blending plan for manganese.



3.4 General Groundwater Quality – Alluvium

Water quality in the Alluvium exhibits natural variability. A deep-dive into water quality trends has been presented in the SNMP, and more recent updates to that document were added in 2022. Total dissolved solids (TDS) concentrations in 2022 are within historical ranges and can be referenced in the 2022 CCR. Historically, there have been periodic fluctuations in some parts of the basin, where groundwater quality has varied with precipitation and streamflow. These fluctuations often occur during dry periods when decreased recharge results in increased TDS and during wet periods when increased recharge results in decreased TDS. In 2022, of the 33 sampled alluvial wells throughout the Valley, none were found to be in exceedance of the Secondary MCL upper level for TDS. Testing by SCV Water (in accordance with DDW requirements) demonstrates that groundwater meets drinking water standards. However, there are historical instances of minor variances in TDS above the recommended secondary MCL.

3.5 General Groundwater Quality – Saugus Formation

As discussed above for the Alluvium, groundwater quality is also a key factor in assessing the Saugus Formation as a source for municipal and agricultural water supply. 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 recharge-related fluctuations seen in the Alluvium. Based on available data over the last 50 years, groundwater quality in the Saugus Formation has exhibited stable to slightly increasing trends in TDS concentrations. In 2022 TDS concentrations in the Saugus Formation remain within the range of historic concentrations and below the Secondary MCL upper level. Groundwater quality within the Saugus Formation will continue to be monitored to ensure long-term viability of the Saugus Formation as a component of overall water supply.

3.6 Imported Water Quality

SCV Water operates two surface water treatment plants, the Earl Schmidt Filtration Plant (ESFP) located near Castaic Lake and the Rio Vista Water Treatment Plant (RVWTP) located in the Saugus area. SCV Water produces water that meets drinking water standards set by the United States Environmental Protection Agency (USEPA) and DDW. SWP water has different aesthetic characteristics than groundwater with lower TDS concentrations of approximately 250 to 400 mg/L.

SWP delivered supplies include surface water from northern California through the Sacramento-San Joaquin River Delta and banked water supplies pumped from groundwater basins in the Central Valley. During the dry-year 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.

In September 2022, the two surface water treatment plants (ESFP and RVWTP) experienced unusually and significantly high turbidity levels in the raw water supply from Castaic Lake. The lake was at historic low levels, demands were relatively high, and a late summer rain event caused significant debris flows into the lake. Typical raw water influent turbidity levels range between 0.2 - 5.0 NTU. During this particular event, raw water influent turbidity levels reached levels up to 90 NTU. SCV Water treatment plant operations staff were able to address these high turbidity levels, keep the treated effluent water supply in compliance with drinking water quality standards and continue to provide a safe potable drinking water supply to the community.

CHAPTER 4 WATER USE AND DEMANDS

Total Calendar Year 2022 water use and demands in the Valley, including municipal use, agricultural, domestic, and other uses including environmental uses, can be found in **Table 4-1**, **Figure 4-1** and **Figure 4-2**.

Figure 4-1 Water Use by Sector

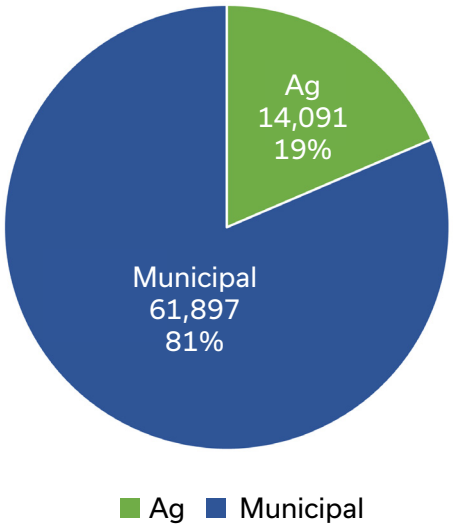


Figure 4-2 Water Use by Source

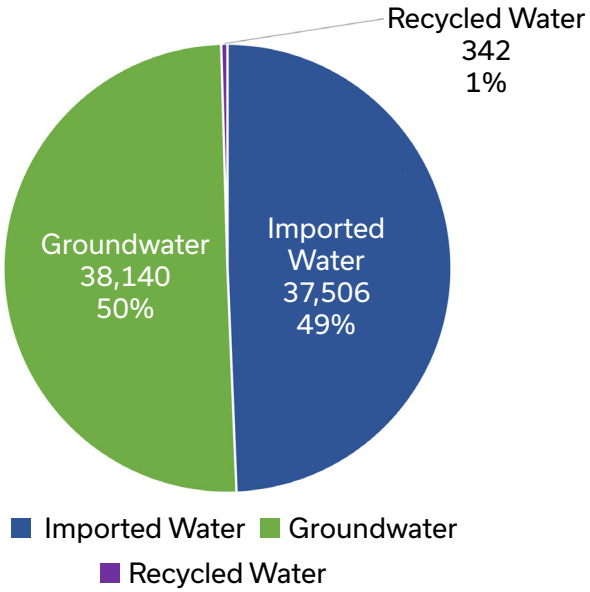


Table 4-1 Summary of 2022 Water Supplies and Uses

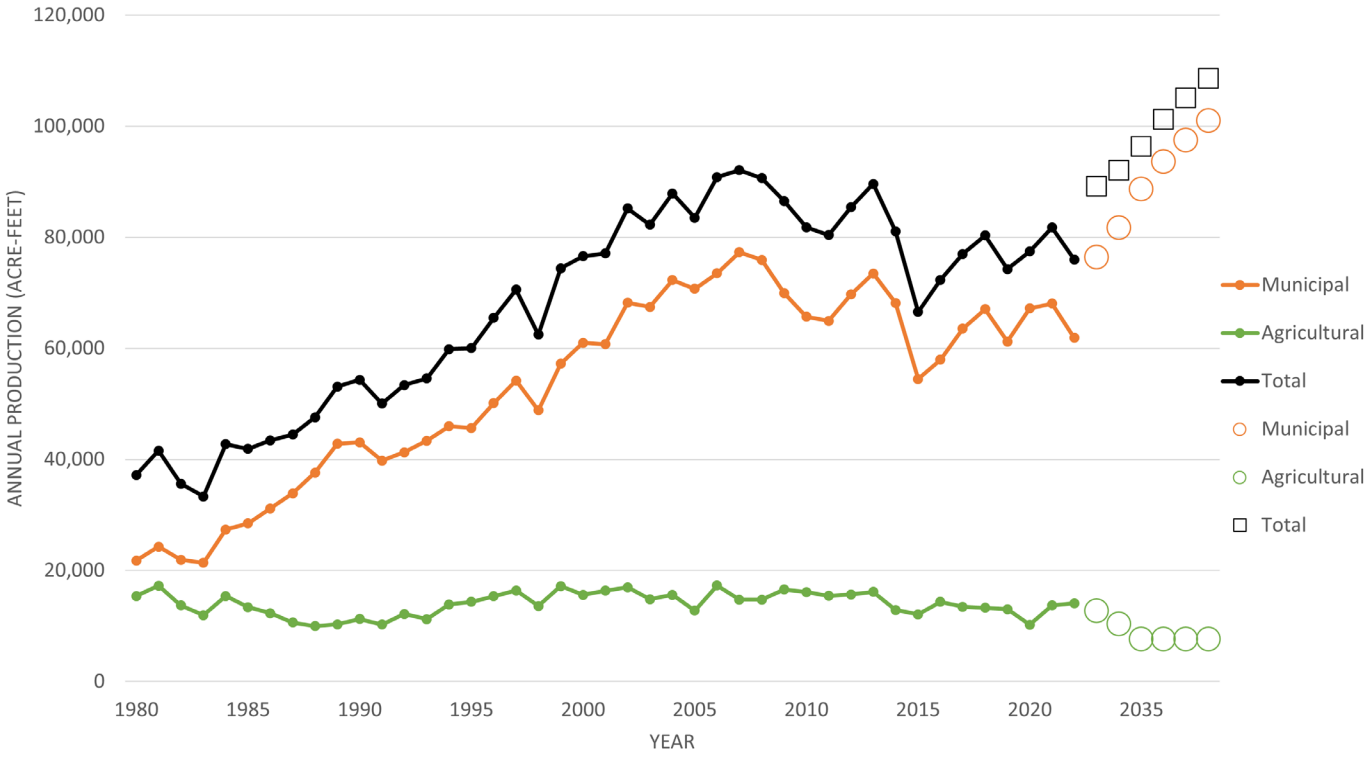
Municipal	
Imported Water	37,506
Groundwater	24,049
Recycled Water	342
Subtotal	61,897
Agriculture and Miscellaneous	
Groundwater	14,091
Subtotal	14,091
TOTAL	**75,988**

4.1 2022 Water Demand

2022 was characterized as a third consecutive drought year. Continued drought conditions and low reservoirs lead the Governor to issue an emergency statewide order mandating the adoption of Stage 2 WSCP in March 2022. The SCV Water Board of Directors took action to move from Stage 1 (enacted in November 2021) to Stage 2 WSCP in April 2022. Demands slowly shifted downwards as conservation outreach and program participation increased throughout the year. Dry conditions early in the year resulted in very high water demand but drastically shifted downwards in December when the Valley received double the average monthly precipitation. Santa Clarita ended the calendar year with 10.5 inches of precipitation, of which 6 inches came in the month of December. **Figure 4-3** illustrates long term demand, historical water use from 1980

through 2022 and currently projected municipal and agricultural water demands in the 2020 UWMP through 2050. Historically, the primary factors causing year-to-year fluctuations in water demands have been weather, implementation of conservation efforts, economic conditions, and variations in the number of service connections. In the short term, wet years have typically resulted in decreased water demand, and dry years have typically resulted in higher water demand. Extended dry periods, however, have resulted in decreases in overall demand due to increased conservation program participation, water shortage awareness related to outreach by the water suppliers, and increased state mandates. In 2022, as drought emergency declarations continued throughout California and voluntary calls for conservation shifted to mandatory conservation requirements, demands started declining. Increased awareness of the intensifying drought conditions, followed then by wet conditions in December resulted in lower demands overall in 2022 compared to 2021.

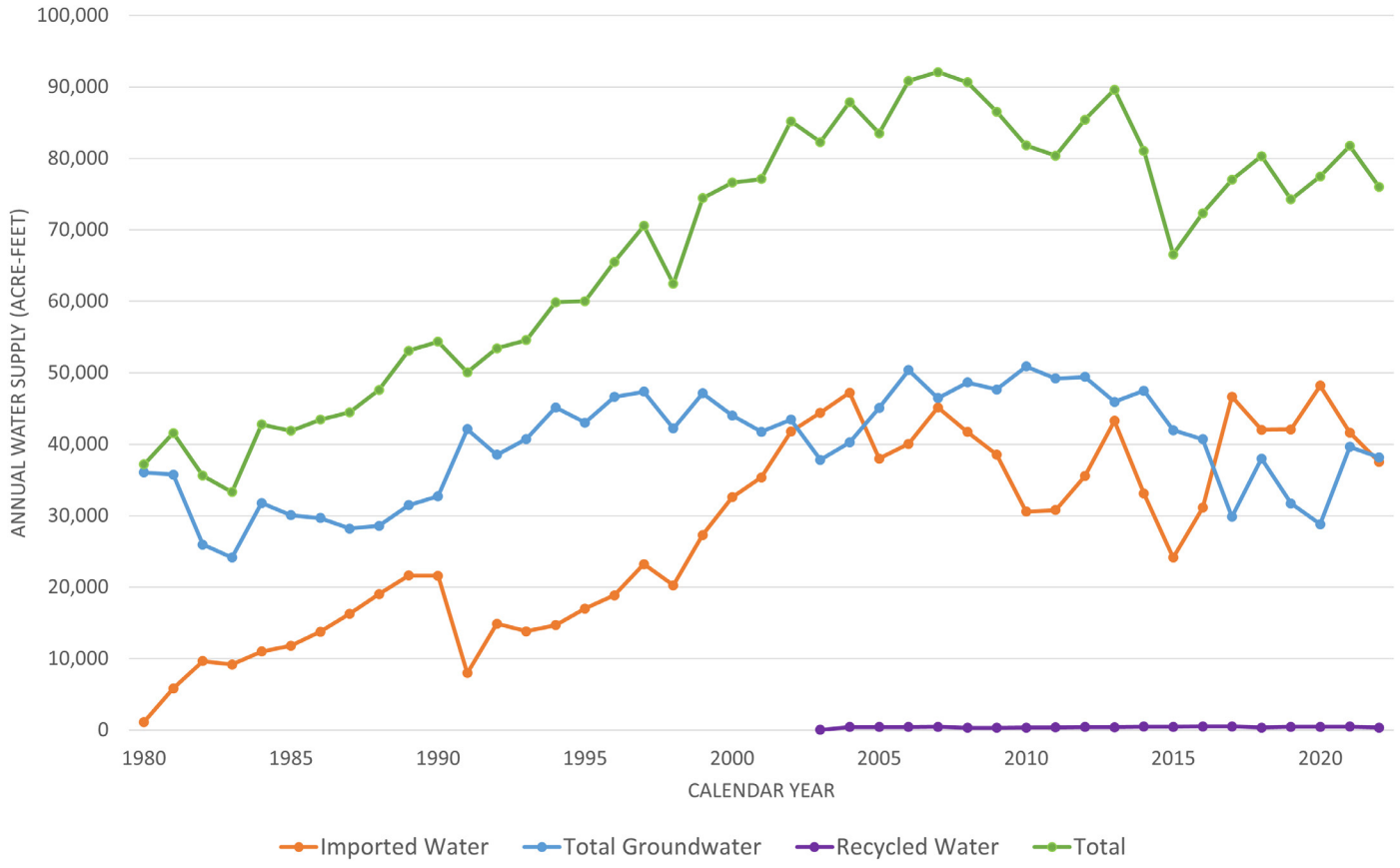
Figure 4-3 Historical and Projected Water Use



4.2 Water Supply Utilization

The annual utilization of local groundwater and imported water since 1980, complemented by the addition of recycled water, are graphically illustrated in **Figure 4-4**. Detailed summary tables of water utilization by municipal and agricultural entities over the complete record beginning in 1980 (when SWP supplies were first delivered into the Valley) are provided in **Appendix A**. As depicted in **Figure 5-4**, the use of imported supplies and groundwater throughout the Valley was just about even overall.

Figure 4-4 Total Water Supply Utilization

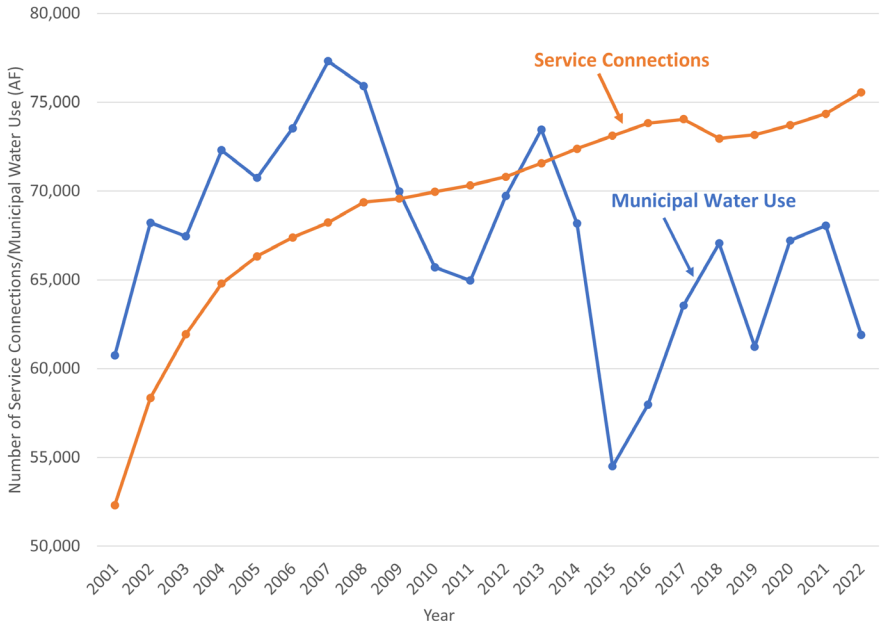


4.2.1 2001-2022 Municipal Water Use

Service connections and corresponding municipal water use are depicted in **Figure 4-5**. Overall demands per service connection decreased in 2022 again as water conservation mandates returned and drought conditions persisted. 2022 mandates required continued demand reductions through conservation and outreach programs.

*There is a slight decrease in service connections in 2018 which was the result of VWD incorporating a similar methodology to the other divisions in not counting service connections for fire and vacant construction locations.

Figure 4-5 Service Connections and Municipal Water Use*



4.2.2 2012-2022 Agricultural and Other Water Uses

A detailed history of water supply utilization for agricultural and other non-municipal uses are summarized in **Appendix A3**. The category of Small Private Domestic, Irrigation and Golf Course uses includes an estimated 500 afy of individual private pumping from the Alluvium. Long term annual water supply utilization for all agricultural and other non-municipal uses has generally remained stable.

4.3 2022 Imported Water Supply and Utilization

SCV Water has a contractual Table A Amount of 95,200 afy of water from SWP. The initial allocation for 2022 was announced on December 1, 2021 at 0% SWP Table A with water available for only HH&S, based on 55 gallons per person per day on an as needed basis. SCV Water at the time had other supplies available to meet HH&S therefore did not require water from the SWP to meet early demands. In January after significant precipitation in December the allocation was increased to 15%, but after a record dry period from January to March the final allocation was reduced back to 5% (4,760 af) for a second year in a row. **Table 4-2** summarizes SCV Water's 2022 imported water supplies available and utilization of water to various entities including delivery to SCV Water customers and Los Angeles County Waterworks District No. 36 (LACWD 36).

Table 4-2 2022 SCV Water Imported Water Supply and Utilization (acre-feet)

Imported Water Supply	
2022 Final SWP Table A Allocation [1]	4,760
Total SWP Carryover to 2022 [2]	8,750
Total SLR Backup Storage [3]	4,995
Buena Vista/Rosedale Rio-Bravo [4]	11,000
Rosedale Rio-Bravo WSD Banking Program [5]	20,000
Semitropic SWRU	5,000
Mitigation Water [11]	13
Flexible Storage Withdrawal	1,993
Yuba Accord Water	748
Total 2022 Imported Water Supply	**57,259**

Table 4-2 2022 SCV Water Imported Water Supply and Utilization (acre-feet) (CONTINUED)

Imported Water Utilization	
Service Deliveries [6]	37,506
SCVWA/DWR/Purveyor Metering [7]	713
Flex Payback [8]	1,993
Total Carryover to 2023 [9]	9,433
Total SLR Backup Storage Balance [10]	7,614
Total 2022 Imported Water Utilization	**57,259**

Footnotes for Table 4-2

1) Final 2022 allocation was 5% of contractual Table A amount of 95,200 af, which progressed as follows:

Initial allocation, December 1, 2021	0%	0 af
Update, January 20, 2022	15%	14,280 af
Final allocation, March 18, 2022	5%	4,760 af

2) Total carryover from 2021 available in 2022 was 8,750 af. Of that amount, 1,799 af were delivered and the rest was carried over to 2023.

3) Total San Luis Reservoir Backup Storage supply from 2021 available in 2022, of the 4,995 AF total, 4,376 AF was delivered and remaining supplies stayed in storage for 2023.

4) Final 2022 BVRRB utilization of total 11,000 AF (6,242 AF delivered to SCV Water, remaining 4,755 AF allocated to San Luis Reservoir Backup Storage Balance for use in 2023)

5) Final 2022 RRB Water Banking Recovery utilization of total 20,000 AF (17,776 AF delivered to SCV Water, remaining 2,224 AF allocated to San Luis Reservoir Back Storage Balance for use in 2023)

6) Includes water used at Groundwater Treatment Facilities for blending and discharging to stormwater system.

7) Reflects water loss, use by the Rio Vista Water Treatment Plan (including 290 AF in 2021 for Water Conservation Garden), and meter reading differences.

8) Flexible Storage supply used in 2022 totaled 1,993 AF. In December 2022 Table A water was delivered to payback all flexible storage supplies used. Available balance for 2023 is 6,060 AF.

9) Total Table A carryover from 2022 available in 2023.

10) Total San Luis Reservoir Backup Storage supply from 2022 available in 2023.

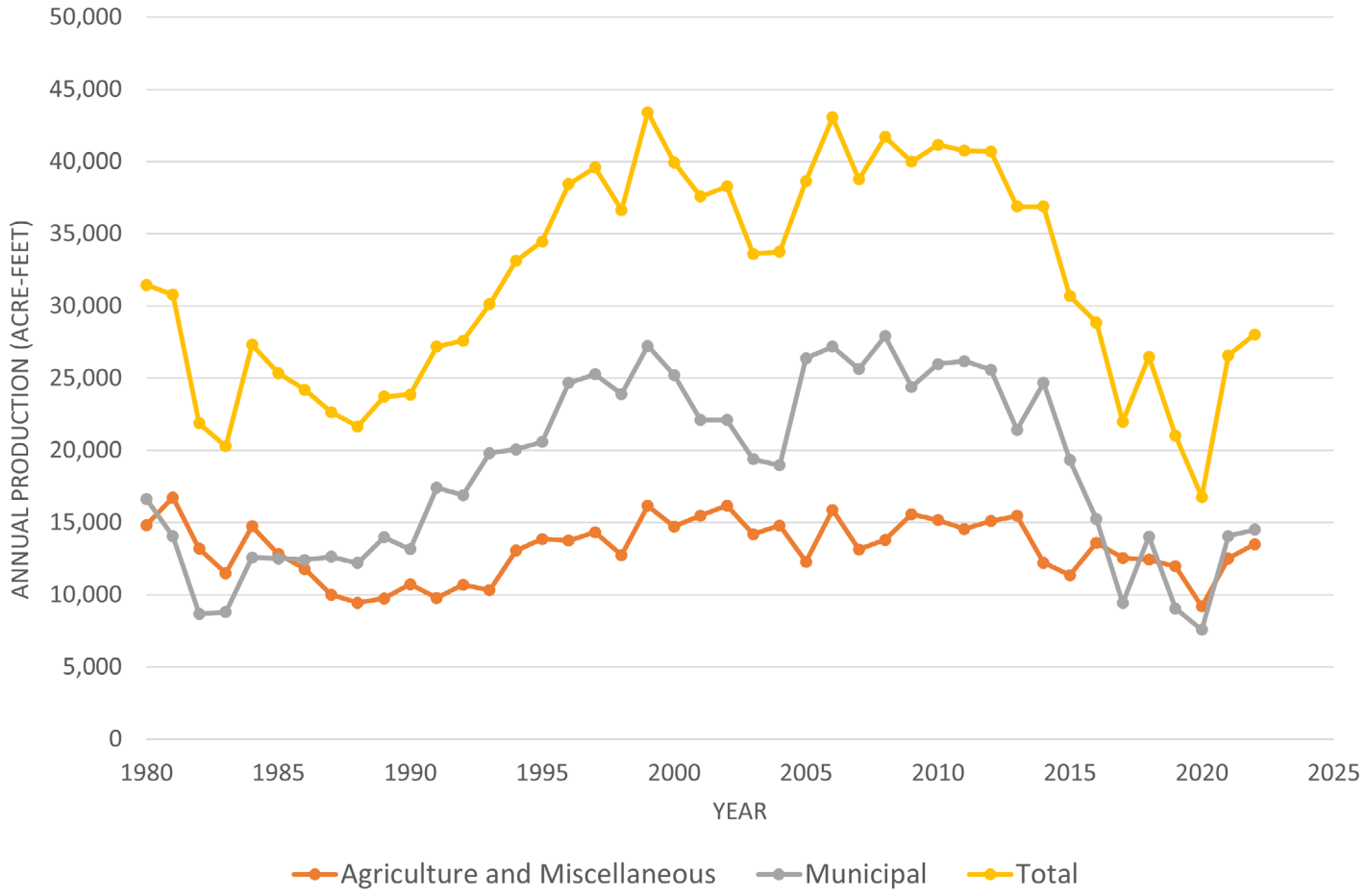
11) As a result of aqueduct pump ins, mitigation water of 172 AF was split up between all SWC. SCVWA's portion was 13 AF

The largest portion of supplies were delivered to SCV Water customers and LACWD 36 (37,506 af). In addition, to assure full Flexible Storage for potential recurrent dry conditions in 2023, remaining Table A water was utilized to payback flex supplies used during the 2022 summer peak months. Due to the extended dry period, well restoration projects in progress, and uncertainty of 2023 hydrology, SCV Water also maximized banking program recovery in 2022. Surplus banked water recovered was stored in San Luis Reservoir (SLR) as "Backed Up" water to be more readily available in 2023. In total, 17,047 af of combined carryover and SLR backup supplies were intentionally reserved to minimize shortage risks for persistent drought conditions expected to continue into 2023.

4.4 2022 Groundwater Extractions Alluvium and Saugus Formation

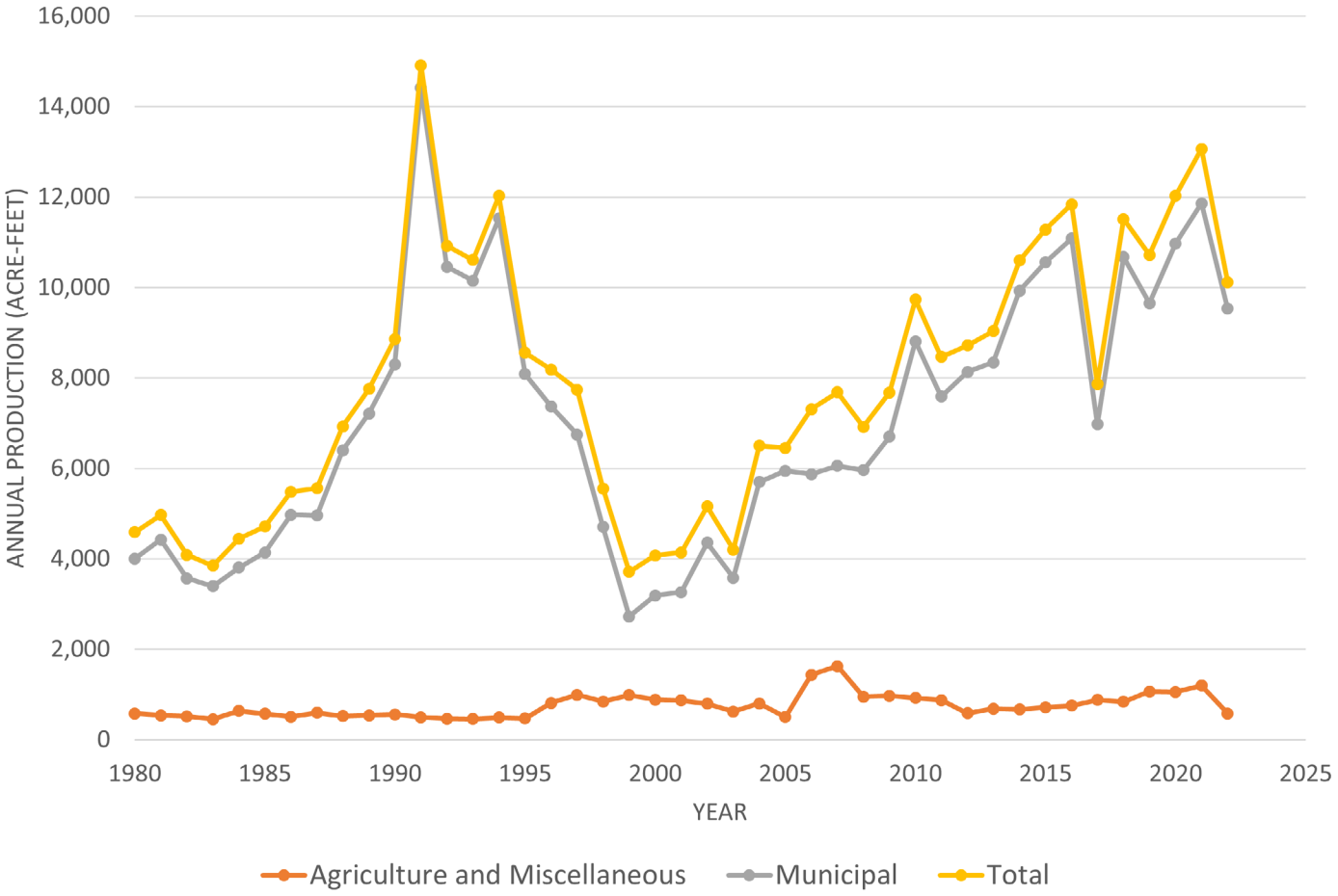
Of the total alluvial pumping in 2022, approximately 52% was for municipal water supply, and approximately 48% was for agriculture and other private uses, including individual domestic uses. **Figure 4-6** shows Alluvial production trends in the Valley.

Figure 4-6 Groundwater Production - Alluvium



The overall historic record of pumping from the Saugus Formation is illustrated in **Figure 4-7**. The bulk of Saugus Formation pumping in 2022 was for municipal water supply, and the balance was for agricultural and other uses.

Figure 4-7 Groundwater Production - Saugus Formation

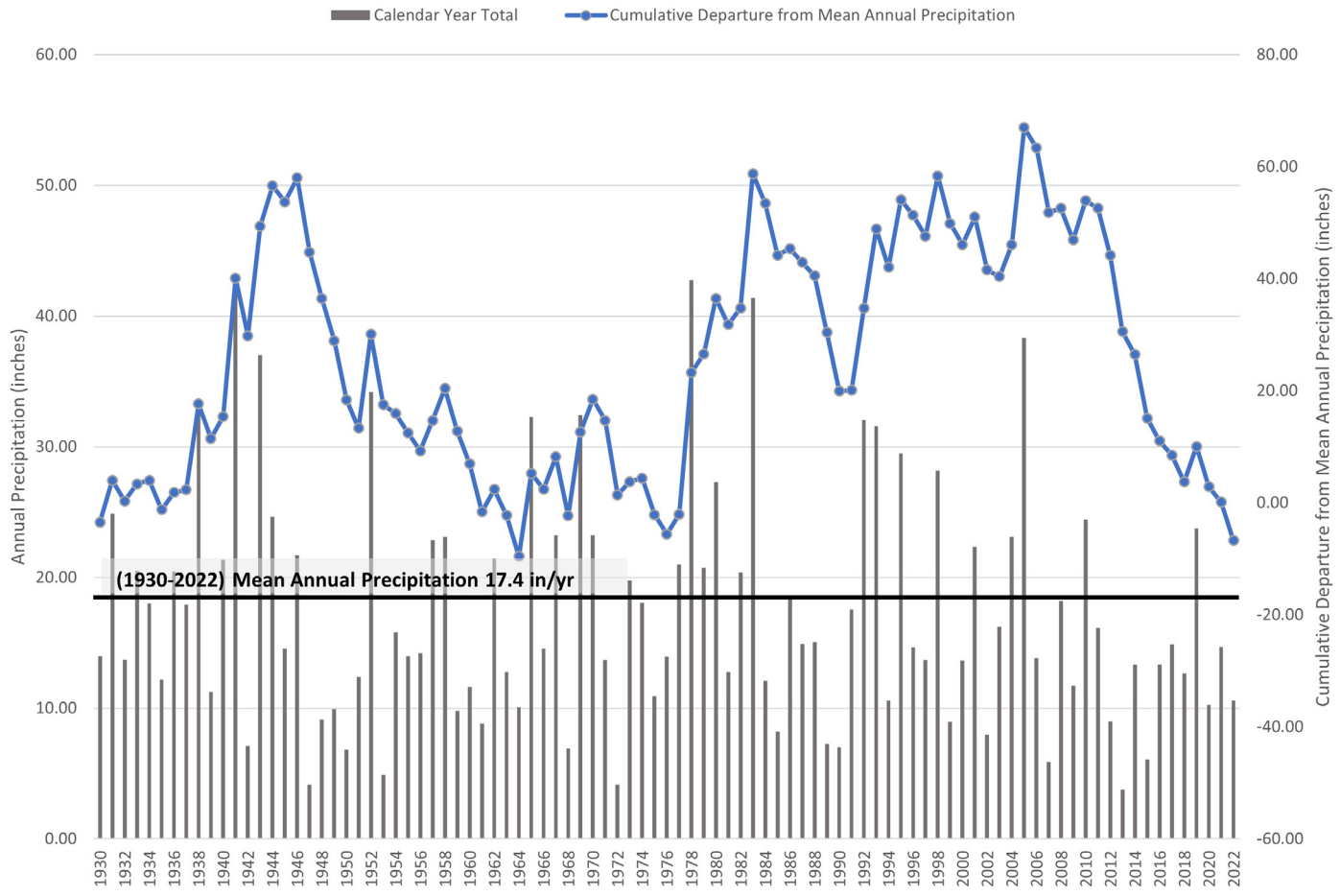


CHAPTER 5 WATERSHED AREA

5.1 Rainfall Trends

The Valley is characterized as having an arid climate. Historically, intermittent periods of below-average precipitation have typically been followed by periods of above-average precipitation in a cyclical pattern. The longer-term precipitation records for the Newhall Fire Station #73 gage are illustrated in **Figure 5-1**. Long-term annual (calendar year) average precipitation at that gage is 17.4 inches calculated for the 1930 through 2022 period. **Figure 5-1** also shows the cumulative departure from mean annual precipitation which shows periods of above average rainfall (increasing slope or trend with time) and below average rainfall (declining trend or slope with time). Precipitation in the 2022 calendar year was below the long-term average at 10.5 inches.

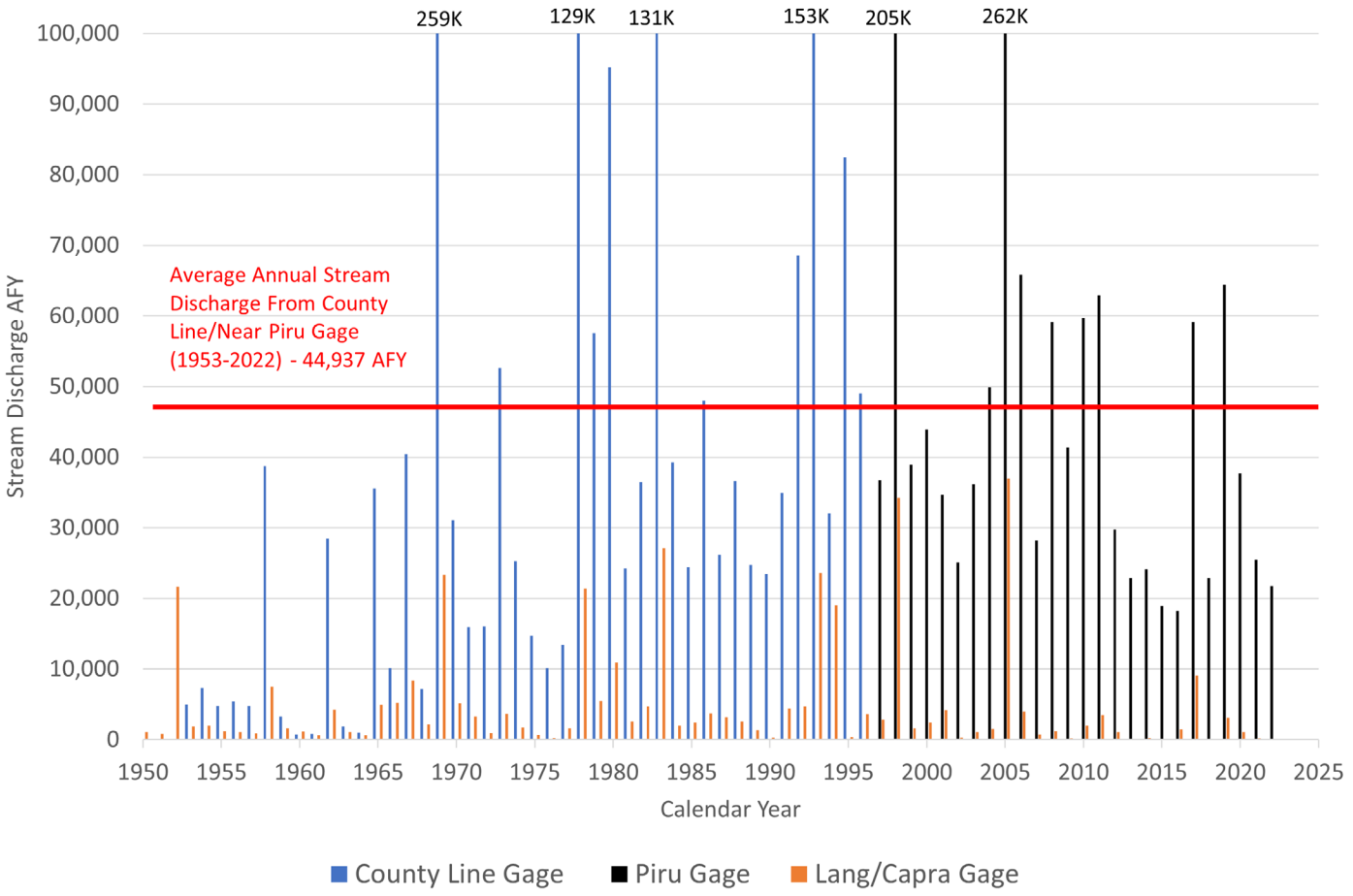
Figure 5-1 Annual Precipitation and Cumulative Departure from Mean (Newhall Fire Station #73 Gage)



5.2 Santa Clara River

Historical Santa Clara River flow has been monitored at an upstream gage located at Santa Clara River above Lang Railroad Station, at Lang gage (F93B-R) and Capra Road Railroad Crossing, and two downstream gages (County Line (11108500) and SCR (11109000) at Piru) (**Figure 5-2**). **Figure 5-2** depicts historical annual variations in streamflow discharge from three gages back to 1950. 2022 discharges are representative of below average rainfall for the Valley.

Figure 5-2 Annual Stream Discharge



CHAPTER 6 WATER CONSERVATION

As California continues to manage its valuable water resources through the challenges of climate change, water reliability issues, and population growth, SCV Water is committed to providing a robust water conservation program comprised of several measures, including education, incentives, and conservation mandates, to its customers in the Valley.

These programs were critical during drought conditions which started in 2020 and continued into 2022. The skills and tools customers implemented for water use efficiency were key in meeting statewide goals set to reduce overall water demand. In November 2021 as conditions worsened, SCV Water enacted Stage 1 of its WSCP and Water Conservation and Water Supply Shortage Ordinance, and in early 2022, after the driest January through March conditions ever experienced, the Governor issued an emergency order that mandated adoption of Stage 2 of the conservation plans (11-20% conservation). SCV Water moved into Stage 2 by April of 2022.

Stage 2 of the WSCP and Ordinance limits irrigation to three days per week in addition to the continued prohibition of the water waste provisions itemized in Stage 1. Following successful implementation of Stage 2 coupled with increases in conservation engagement, education, and programmatic uptake, water conservation savings improved. SCV Water submitted monthly reports to the State Water Resources Control Board (SWRCB), which started in 2021, to track all Agency conservation progress across the state. In 2022, SCV Water's customers conserved 2.7 billion gallons from May through June compared to same period in 2020. Compared to statewide performance, SCV Water customers were on par with cumulative savings at 6%, and its conservation performance was greater than the South Coast region cumulative savings of 4.9% compared to 2020.

1. In 2022 SCV Water also continued collaborating with Los Angeles County and the City of Santa Clarita via the Sustainable Water Action Taskforce (SWAT) to aggressively implement water conservation and water use efficiency programs in the SCV Water service area as the drought and mandated conservation regulations persisted. SCV Water provides extensive information on their website regarding water conservation tips, gardening classes, and rebates https://yourscvwater.com/save-water-money/#_rebates).

As noted in **Table 6-1**, SCV Water surpassed its respective SB X7-7 20% by 2020 reduction in gallon per capita day (GPCD) requirement and LACWD 36 achieved conservation reductions even though it was not subject to the reduction requirements.

Overall, 2022 saw a continued return to dry conditions for the Valley and the State. However, despite a continued growth in service connections, there has been a long-term overall decrease in water consumption since 2008.

Table 6-1 Interim Conservation GPCD Targets and Current Levels								
Division	Baselines (GPCD)	2020 Targets (GPCD)	Actual 2020 (GPCD)	2021 Targets (GPCD)	Actual 2021 (GPCD)	2022 Target (GPCD)	Actual 2022 (GPCD)	Percent Reduction
SCV Water Total (combined)	272	220	204	212	208	207	183	33%
LACWD 36[a]	235	188	125	183	119	179	91	61%

Source: 2022 Actual GPCD

a) Since Los Angeles County Waterworks District No. 36 does not have 3,000 AF served or 3,000 connections, SB X7-7 did not apply.

CHAPTER 7 REFERENCES

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Kennedy/Jenks Consultants, Groundwater Treatment Implementation Plan, April 2021 with 2023 Amendments.

Memorandum of Understanding between the Santa Clara River Valley Upper Basin Water Purveyors and United Water Conservation District, August 2001.

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Santa Clarita Valley Water Agency, 2020 Urban Water Management Plan, Los Angeles County Waterworks District No. 36, Cooperating Agency, June 2021.

2022 SCV Water Consumer Confidence Report - Understanding Water Quality | Santa Clarita Valley Water (yourscvwater.com)

LIST OF APPENDICES

Appendix A Table 1

Water Supply Utilization by SCV Water and Los Angeles County Waterworks District No. 36
Santa Clarita Valley Water Report

(Acre-Feet)

Year	Santa Clarita Water Division				Los Angeles County Waterworks District No. 36			
	SCV Water	Local Production		Total	SCV Water	Local Production		Total
	Imported Water[2]	Alluvium	Saugus Formation[3]		Imported Water[2]	Alluvium[4]	Saugus Formation[3]	
1980	1,126	9,467	0	**10,593**	0	-	-	**0**
1981	4,603	7,106	0	**11,709**	0	-	-	**0**
1982	6,454	4,091	0	**10,545**	145	-	-	**145**
1983	5,214	4,269	0	**9,483**	207	-	-	**207**
1984	6,616	6,057	0	**12,673**	240	-	-	**240**
1985	6,910	6,242	0	**13,152**	272	-	-	**272**
1986	8,366	5,409	0	**13,775**	342	-	-	**342**
1987	9,712	5,582	0	**15,294**	361	-	-	**361**
1988	11,430	5,079	63	**16,572**	434	-	-	**434**
1989	12,790	5,785	0	**18,575**	457	-	-	**457**
1990	12,480	5,983	40	**18,503**	513	-	-	**513**
1991	6,158	5,593	4,781	**16,532**	435	-	-	**435**
1992	6,350	8,288	2,913	**17,551**	421	-	-	**421**
1993	3,429	12,016	2,901	**18,346**	465	-	-	**465**
1994	5,052	10,996	3,863	**19,911**	453	-	-	**453**
1995	7,955	10,217	1,726	**19,898**	477	-	-	**477**
1996	9,385	10,445	2,176	**22,006**	533	-	-	**533**
1997	10,120	11,268	1,068	**22,456**	785	-	-	**785**
1998	8,893	11,426	0	**20,319**	578	-	-	**578**
1999	10,772	13,741	0	**24,513**	654	-	-	**654**
2000	13,751	11,529	0	**25,280**	800	-	-	**800**
2001	15,648	9,941	0	**25,589**	907	-	-	**907**
2002	18,916	9,513	0	**28,429**	1,069	-	-	**1,069**
2003	20,665	6,424	0	**27,089**	1,175	-	-	**1,175**
2004	22,045	7,146	0	**29,191**	854	380	-	**1,234**
2005	16,476	12,408	0	**28,884**	857	343	-	**1,200**
2006	16,548	13,156	0	**29,704**	1,289	-	-	**1,289**
2007	20,488	10,686	0	**31,174**	1,406	-	-	**1,406**
2008	18,598	11,878	0	**30,476**	1,354	-	-	**1,354**
2009	17,739	10,077	0	**27,816**	1,243	-	-	**1,243**
2010	15,188	10,607	0	**25,795**	1,141	-	-	**1,141**
2011	13,593	10,195	2,038	**25,826**	1,172	-	-	**1,172**
2012	15,600	10,192	2,164	**27,956**	471	-	794	**1,265**
2013	20,059	7,262	2,275	**29,596**	485	-	811	**1,296**
2014	21,478	4,220	1,832	**27,530**	4	-	1,238	**1,242**
2015	15,019	4,597	2,167	**21,783**	3	-	973	**976**
2016	17,943	3,485	2,494	**23,922**	3	-	1,047	**1,050**
2017	23,257	907	2,191	**26,355**	1	-	1,093	**1,094**
2018	21,611	2,465	2,136	**26,212**	5	-	1,106	**1,111**
2019	19,002	2,762	2,332	**24,096**	7	-	972	**979**
2020	23,110	2,517	2,045	**27,672**	5	-	1,257	**1,262**
2021	23,028	2,884	1,870	**27,782**	5	-	1,239	**1,244**
2022	21,118	2,963	1,531	**25,612**	0	895	90	**985**

1. Initial operation at SCV Water Groundwater Treatment Facilities required discharging treated groundwater to the stormwater system including Saugus 1 and 2 startup in 2010/2011 and V201 startup in 2018-2020.

2. Reflects State Water Project through 2006; includes imported water from State Water Project and Buena Vista WSD Agreement beginning in 2007 and continuing through the present year.

3. In January 2011, SCV Water began operation of the Saugus groundwater containment project as part of municipal water supply. The amounts of treated groundwater from Saugus 1 and 2 utilized by SCWD and NWD reflect the estimated distribution to each Division consistent with the proportions in the December, 2006 MOU that establishes amounts to be delivered to SCWD and NWD. Although the MOU indicates all the treated Saugus 1 and 2 water is delivered to NWD and SCWD, a minor, unquantifiable amount of the water may have been delivered to the other purveyors as a result of varying distribution system operations.

4. Groundwater purchased from Pitchess Detention Center.

5. Recycled water totals for 2012 and 2013 are estimates based on the water treament plant production meter; estimates were necessary due to customer meter failure.

6. Imported water was utilized to blend with the treated V201 water to lower the sulfate concentration to a permissable level for discharge to the Stormwater System. The tracking of this water began in 2019 and is estimated for 2018.

Appendix A Table 1 (continued)

Water Supply Utilization by SCV Water and Los Angeles County Waterworks District No. 36
Santa Clarita Valley Water Report

(Acre-Feet)

Year	Newhall Water Division				Valencia Water Division				
	SCV Water	Local Production		Total	SCV Water	Local Production		Other	Total
	Imported Water[2]	Alluvium	Saugus Formation[3]		Imported Water[2]	Alluvium	Saugus Formation[3]	Recycled Water[5]	
1980	0	1,170	2,363	**3,533**	0	5,995	1,644	-	**7,639**
1981	0	1,350	2,621	**3,971**	1,214	5,597	1,808	-	**8,619**
1982	0	1,178	2,672	**3,850**	3,060	3,415	897	-	**7,372**
1983	0	1,147	2,787	**3,934**	3,764	3,387	611	-	**7,762**
1984	0	1,549	2,955	**4,504**	4,140	4,975	854	-	**9,969**
1985	0	1,644	3,255	**4,899**	4,641	4,633	885	-	**10,159**
1986	0	1,842	3,548	**5,390**	5,051	5,167	1,427	-	**11,645**
1987	22	2,127	3,657	**5,806**	6,190	4,921	1,305	-	**12,416**
1988	142	2,283	4,041	**6,466**	7,027	4,835	2,300	-	**14,162**
1989	428	2,367	4,688	**7,483**	7,943	5,826	2,529	-	**16,298**
1990	796	1,936	4,746	**7,478**	7,824	5,232	3,516	-	**16,572**
1991	675	1,864	4,994	**7,533**	700	9,951	4,642	-	**15,293**
1992	802	1,994	5,160	**7,956**	6,338	6,615	2,385	-	**15,338**
1993	1,075	1,977	5,068	**8,120**	8,424	5,815	2,182	-	**16,421**
1994	906	2,225	5,103	**8,234**	7,978	6,847	2,565	-	**17,390**
1995	1,305	1,675	4,775	**7,755**	7,259	8,698	1,586	-	**17,543**
1996	1,213	1,803	4,871	**7,887**	6,962	12,433	326	-	**19,721**
1997	1,324	2,309	5,168	**8,801**	9,919	11,696	516	-	**22,131**
1998	1,769	1,761	4,557	**8,087**	9,014	10,711	149	-	**19,874**
1999	5,050	1,676	2,622	**9,348**	10,806	11,823	106	-	**22,735**
2000	6,024	1,508	2,186	**9,718**	12,004	12,179	1,007	-	**25,190**
2001	5,452	1,641	2,432	**9,525**	13,362	10,518	835	-	**24,715**
2002	5,986	981	3,395	**10,362**	15,792	11,603	965	-	**28,360**
2003	6,572	1,266	2,513	**10,351**	16,004	11,707	1,068	50	**28,829**
2004	5,896	1,582	3,739	**11,217**	18,410	9,862	1,962	420	**30,654**
2005	5,932	1,389	3,435	**10,756**	14,732	12,228	2,513	418	**29,891**
2006	5,898	2,149	3,423	**11,470**	16,313	11,884	2,449	419	**31,065**
2007	6,478	1,806	3,691	**11,975**	16,779	13,140	2,367	470	**32,756**
2008	5,428	1,717	4,195	**11,340**	16,325	14,324	1,770	311	**32,730**
2009	4,832	1,860	3,868	**10,559**	14,732	12,459	2,836	328	**30,355**
2010	3,035	2,323	4,173	**9,531**	11,214	13,054	2,995	336	**27,599**
2011	1,325	3,216	5,135	**9,676**	14,718	12,775	265	373	**28,131**
2012	2,965	2,631	4,873	**10,469**	16,522	12,770	302	428	**30,022**
2013	4,488	1,405	4,668	**10,561**	18,249	12,764	594	400	**32,007**
2014	3,942	1,383	4,520	**9,845**	7,668	19,080	2,339	474	**29,561**
2015	2,478	1,131	4,491	**8,100**	6,648	13,605	2,929	450	**23,632**
2016	2,876	626	4,755	**8,257**	10,308	11,133	2,789	507	**24,737**
2017	5,831	780	2,325	**8,936**	17,562	7,737	1,370	501	**27,170**
2018	5,583	728	2,662	**8,973**	12,555	10,837	2,837	352	**26,581**
2019	3,770	1,044	3,518	**8,332**	17,950	5,243	1,676	458	**25,327**
2020	5,439	1,322	4,018	**10,779**	18,248	3,741	2,441	468	**24,898**
2021	4,938	1,749	4,803	**11,490**	13,071	9,435	3,566	480	**26,552**
2022	3,796	1,423	4,532	**9,751**	12,592	9,233	3,382	342	**25,549**

1. Initial operation at SCV Water Groundwater Treatment Facilities required discharging treated groundwater to the stormwater system including Saugus 1 and 2 startup in 2010/2011 and V201 startup in 2018-2020.

2. Reflects State Water Project through 2006; includes imported water from State Water Project and Buena Vista WSD Agreement beginning in 2007 and continuing through the present year.

3. In January 2011, SCV Water began operation of the Saugus groundwater containment project as part of municipal water supply. The amounts of treated groundwater from Saugus 1 and 2 utilized by SCWD and NWD reflect the estimated distribution to each Division consistent with the proportions in the December, 2006 MOU that establishes amounts to be delivered to SCWD and NWD. Although the MOU indicates all the treated Saugus 1 and 2 water is delivered to NWD and SCWD, a minor, unquantifiable amount of the water may have been delivered to the other purveyors as a result of varying distribution system operations.

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Appendix A Table 1 (continued)

Water Supply Utilization by SCV Water and Los Angeles County Waterworks District No. 36
Santa Clarita Valley Water Report

(Acre-Feet)

Year	SCV Water[1]			SCV Water, All Municipal Divisions, and LACWD 36				
	SCV Water	Local Production	**Total**	SCV Water	Local Production		Other	**Total**
	Imported Water [2,6]	Saugus Formation		Imported Water[1]	Alluvium	Saugus Formation	Recycled Water	
1980	--	--	**--**	1,126	16,632	4,007	-	**21,765**
1981	--	--	**--**	5,817	14,053	4,429	-	**24,299**
1982	--	--	**--**	9,659	8,684	3,569	-	**21,912**
1983	--	--	**--**	9,185	8,803	3,398	-	**21,386**
1984	--	--	**--**	10,996	12,581	3,809	-	**27,386**
1985	--	--	**--**	11,823	12,519	4,140	-	**28,482**
1986	--	--	**--**	13,759	12,418	4,975	-	**31,152**
1987	--	--	**--**	16,285	12,630	4,962	-	**33,877**
1988	--	--	**--**	19,033	12,197	6,404	-	**37,634**
1989	--	--	**--**	21,618	13,978	7,217	-	**42,813**
1990	--	--	**--**	21,613	13,151	8,302	-	**43,066**
1991	--	--	**--**	7,968	17,408	14,417	-	**39,793**
1992	--	--	**--**	13,911	16,897	10,458	-	**41,266**
1993	--	--	**--**	13,393	19,808	10,151	-	**43,352**
1994	--	--	**--**	14,389	20,068	11,531	-	**45,988**
1995	--	--	**--**	16,996	20,590	8,087	-	**45,673**
1996	--	--	**--**	18,093	24,681	7,373	-	**50,147**
1997	--	--	**--**	22,148	25,273	6,752	-	**54,173**
1998	--	--	**--**	20,254	23,898	4,706	-	**48,858**
1999	--	--	**--**	27,282	27,240	2,728	-	**57,250**
2000	--	--	**--**	32,579	25,216	3,193	-	**60,988**
2001	--	--	**--**	35,369	22,100	3,267	-	**60,736**
2002	--	--	**--**	41,763	22,097	4,360	-	**68,220**
2003	--	--	**--**	44,416	19,397	3,581	50	**67,444**
2004	--	--	**--**	47,205	18,970	5,701	420	**72,296**
2005	--	--	**--**	37,997	26,368	5,948	418	**70,731**
2006	--	--	**--**	40,048	27,189	5,872	419	**73,528**
2007	--	--	**--**	45,151	25,632	6,058	470	**77,311**
2008	--	--	**--**	41,705	27,919	5,965	311	**75,900**
2009	--	--	**--**	38,545	24,396	6,704	328	**69,973**
2010	--	1,643	**1,643**	30,578	25,984	8,811	336	**65,709**
2011	--	150	**150**	30,808	26,186	7,588	373	**64,955**
2012	--	--	**--**	35,558	25,593	8,133	428	**69,712**
2013	--	--	**--**	43,281	21,431	8,348	400	**73,460**
2014	--	--	**--**	33,092	24,683	9,929	474	**68,178**
2015	--	--	**--**	24,148	19,333	10,560	450	**54,491**
2016	--	--	**--**	31,130	15,244	11,085	507	**57,966**
2017	--	--	**--**	46,651	9,424	6,979	501	**63,555**
2018	2,245	1,931	**4,176**	41,999	14,030	10,672	352	**67,053**
2019	1,343	1,156	**2,499**	42,072	9,049	9,654	458	**61,233**
2020	1,394	1,212	**2,606**	48,196	7,580	10,973	468	**67,217**
2021	594	387	**981**	41,636	14,068	11,865	480	**68,049**
2022	0	0	**0**	37,506	14,514	9,535	342	**61,897**

1. Initial operation at SCV Water Groundwater Treatment Facilities required discharging treated groundwater to the stormwater system including Saugus 1 and 2 startup in 2010/2011 and V201 startup in 2018-2020.

2. Reflects State Water Project through 2006; includes imported water from State Water Project and Buena Vista WSD Agreement beginning in 2007 and continuing through the present year.

3. In January 2011, SCV Water began operation of the Saugus groundwater containment project as part of municipal water supply. The amounts of treated groundwater from Saugus 1 and 2 utilized by SCWD and NWD reflect the estimated distribution to each Division consistent with the proportions in the December, 2006 MOU that establishes amounts to be delivered to SCWD and NWD. Although the MOU indicates all the treated Saugus 1 and 2 water is delivered to NWD and SCWD, a minor, unquantifiable amount of the water may have been delivered to the other purveyors as a result of varying distribution system operations.

4. Groundwater purchased from Pitchess Detention Center.

5. Recycled water totals for 2012 and 2013 are estimates based on the water treament plant production meter; estimates were necessary due to customer meter failure.

6. Imported water was utilized to blend with the treated V201 water to lower the sulfate concentration to a permissable level for discharge to the Stormwater System. The tracking of this water began in 2019 and is estimated for 2018.

Appendix A Table 2

Individual Water Supply Utilization by Agricultural and Other Users
Santa Clarita Valley Water Report

(Acre-Feet)

Year	Five Point			Pitchess Detention Center[1]			Small Private Domestic, Irrigation, and Golf Course Uses			Whittaker-Bermite SATP[2]		All Agricultural and Other Users			
	Local Production		Total	SCV Water	Local Production	Total	Local Production		Total	Local Production	Total	SCV Water	Local Production		Total
	Alluvium	Saugus Formation		Imported Water[3]	Alluvium		Alluvium[4]	Saugus Formation[5]		Saugus Formation		Imported Water[3]	Alluvium	Saugus Formation	
1980	11,331	20	**11,351**	0	3,000	**3,000**	500	562	**1,062**	--	**--**	0	14,831	582	**15,413**
1981	13,237	20	**13,257**	0	3,000	**3,000**	500	521	**1,021**	--	**--**	0	16,737	541	**17,278**
1982	9,684	20	**9,704**	0	3,000	**3,000**	500	501	**1,001**	--	**--**	0	13,184	521	**13,705**
1983	7,983	20	**8,003**	0	3,000	**3,000**	500	434	**934**	--	**--**	0	11,483	454	**11,937**
1984	11,237	20	**11,257**	0	3,000	**3,000**	500	620	**1,120**	--	**--**	0	14,737	640	**15,377**
1985	9,328	20	**9,348**	0	3,000	**3,000**	500	555	**1,055**	--	**--**	0	12,828	575	**13,403**
1986	8,287	20	**8,307**	0	3,000	**3,000**	500	490	**990**	--	**--**	0	11,787	510	**12,297**
1987	6,512	20	**6,532**	0	3,000	**3,000**	500	579	**1,079**	--	**--**	0	10,012	599	**10,611**
1988	5,951	20	**5,971**	0	3,000	**3,000**	500	504	**1,004**	--	**--**	0	9,451	524	**9,975**
1989	6,243	20	**6,263**	0	3,000	**3,000**	500	522	**1,022**	--	**--**	0	9,743	542	**10,285**
1990	8,225	20	**8,245**	0	2,000	**2,000**	500	539	**1,039**	--	**--**	0	10,725	559	**11,284**
1991	7,039	20	**7,059**	0	2,240	**2,240**	500	480	**980**	--	**--**	0	9,779	500	**10,279**
1992	8,938	20	**8,958**	987	1,256	**2,243**	500	446	**946**	--	**--**	987	10,694	466	**12,147**
1993	8,020	20	**8,040**	443	1,798	**2,241**	500	439	**939**	--	**--**	443	10,318	459	**11,220**
1994	10,606	20	**10,626**	311	1,959	**2,270**	500	474	**974**	--	**--**	311	13,065	494	**13,870**
1995	11,174	20	**11,194**	6	2,200	**2,206**	500	453	**953**	--	**--**	6	13,874	473	**14,353**
1996	12,020	266	**12,286**	780	1,237	**2,017**	500	547	**1,047**	--	**--**	780	13,757	813	**15,350**
1997	12,826	445	**13,271**	1,067	1,000	**2,067**	500	548	**1,048**	--	**--**	1,067	14,326	993	**16,386**
1998	10,250	426	**10,676**	12	2,000	**2,012**	500	423	**923**	--	**--**	12	12,750	849	**13,611**
1999	13,824	479	**14,303**	20	1,842	**1,862**	500	509	**1,009**	--	**--**	20	16,166	988	**17,174**
2000	11,857	374	**12,231**	3	1,644	**1,647**	1,220	513	**1,733**	--	**--**	3	14,721	887	**15,611**
2001	12,661	300	**12,961**	0	1,604	**1,604**	1,224	573	**1,797**	--	**--**	0	15,489	873	**16,362**
2002	13,514	211	**13,725**	0	1,602	**1,602**	1,063	589	**1,652**	--	**--**	0	16,179	800	**16,979**
2003	10,999	122	**11,121**	0	2,273	**2,273**	931	504	**1,435**	--	**--**	0	14,203	626	**14,829**
2004	10,991	268	**11,259**	0	2,725	**2,725**	1,071	535	**1,606**	--	**--**	0	14,787	803	**15,590**
2005	8,648	6	**8,654**	0	2,499	**2,499**	1,133	499	**1,632**	--	**--**	0	12,280	505	**12,785**
2006	11,477	934	**12,411**	0	3,026	**3,026**	1,369	506	**1,875**	--	**--**	0	15,872	1,440	**17,312**
2007	9,968	971	**10,939**	0	2,085	**2,085**	1,088	656	**1,744**	--	**--**	0	13,141	1,627	**14,768**
2008	9,191	330	**9,521**	0	3,506	**3,506**	1,100	623	**1,723**	--	**--**	0	13,797	953	**14,750**
2009	11,061	379	**11,440**	0	3,432	**3,432**	1,097	595	**1,692**	--	**--**	0	15,590	974	**16,564**
2010	10,772	366	**11,138**	0	3,446	**3,446**	957	558	**1,515**	--	**--**	0	15,175	924	**16,099**
2011	10,323	344	**10,667**	0	3,226	**3,226**	1,013	533	**1,546**	--	**--**	0	14,562	877	**15,439**
2012	11,296	0	**11,296**	0	2,722	**2,722**	1,090	586	**1,676**	--	**--**	0	15,108	586	**15,694**
2013	12,091	0	**12,091**	0	2,309	**2,309**	1,061	690	**1,751**	--	**--**	0	15,461	690	**16,151**
2014	9,262	0	**9,262**	0	2,082	**2,082**	869	672	**1,541**	--	**--**	0	12,213	672	**12,885**
2015	8,868	0	**8,868**	0	1,768	**1,768**	723	720	**1,443**	--	**--**	0	11,359	720	**12,079**
2016	11,276	0	**11,276**	0	1,616	**1,616**	713	754	**1,467**	--	**--**	0	13,605	754	**14,359**
2017	10,348	0	**10,348**	0	1,630	**1,630**	576	884	**1,460**	--	**--**	0	12,554	884	**13,438**
2018	10,231	0	**10,231**	0	1,611	**1,611**	595	634	**1,229**	209	**209**	0	12,437	843	**13,280**
2019	9,790	0	**9,790**	0	1,560	**1,560**	617	543	**1,160**	524	**524**	0	11,967	1,067	**13,034**
2020	7,291	0	**7,291**	0	1,282	**1,282**	616	612	**1,228**	448	**448**	0	9,189	1,060	**10,249**
2021	10,363	0	**10,363**	0	1,529	**1,529**	618	705	**1,323**	495	**495**	0	12,510	1,200	**13,710**
2022	11,708	0	**11,708**	0	1,677	**1,677**	124	125	**249**	458	**458**	0	13,508	583	**14,091**

1. Formerly called Los Angeles County Honor Farm; groundwater sold to LACWD 36 in 2004 and 2005.

2. Whittaker-Bermite SATP pumping beginning in 2018, although operation reportedly began in August, 2017

3. Reflects State Water Project through 2006; includes imported water from State Water Project and Buena Vista WSD Agreement beginning in 2007.

4. Sand Canyon Country Club irrigation and estimated private pumping.

5. Valencia Country Club and Vista Valencia Golf Course irrigation.

Appendix A Table 3

Total Water Supply Utilization for Municipal, Agricultural, and Other Uses
Santa Clarita Valley Water Report

(Acre-Feet)

Year	SCV Water	Local Production		Other	Total
	Imported Water	Alluvium	Saugus Formation	Recycled Water	
1980	1,126	31,463	4,589	-	37,178
1981	5,817	30,790	4,970	-	41,577
1982	9,659	21,868	4,090	-	35,617
1983	9,185	20,286	3,852	-	33,323
1984	10,996	27,318	4,449	-	42,763
1985	11,823	25,347	4,715	-	41,885
1986	13,759	24,205	5,485	-	43,449
1987	16,285	22,642	5,561	-	44,488
1988	19,033	21,648	6,928	-	47,609
1989	21,618	23,721	7,759	-	53,098
1990	21,613	23,876	8,861	-	54,350
1991	7,968	27,187	14,917	-	50,072
1992	14,898	27,591	10,924	-	53,413
1993	13,836	30,126	10,610	-	54,572
1994	14,700	33,133	12,025	-	59,858
1995	17,002	34,464	8,560	-	60,026
1996	18,873	38,438	8,186	-	65,497
1997	23,215	39,599	7,745	-	70,559
1998	20,266	36,648	5,555	-	62,469
1999	27,302	43,406	3,716	-	74,424
2000	32,582	39,937	4,080	-	76,599
2001	35,369	37,589	4,140	-	77,098
2002	41,763	38,276	5,160	-	85,199
2003	44,416	33,599	4,207	50	82,273
2004	47,205	33,757	6,503	420	87,885
2005	37,997	38,648	6,453	418	83,516
2006	40,048	43,061	7,312	419	90,840
2007	45,151	38,773	7,685	470	92,079
2008	41,705	41,716	6,918	311	90,650
2009	38,545	39,986	7,678	328	86,537
2010	30,578	41,159	9,735	336	81,808
2011	30,808	40,748	8,465	373	80,394
2012	35,558	40,701	8,719	428	85,406
2013	43,281	36,892	9,038	400	89,611
2014	33,092	36,896	10,601	474	81,063
2015	24,148	30,692	11,280	450	66,570
2016	31,130	28,849	11,839	507	72,325
2017	46,651	21,978	7,863	501	76,993
2018	41,999	26,467	11,515	352	80,333
2019	42,072	21,016	10,721	458	74,267
2020	48,196	16,769	12,033	468	77,466
2021	41,636	26,578	13,065	480	81,759
2022	37,506	28,022	10,118	342.1	75,988

Appendix B

Well by Well Water Quality History SCV Water
Santa Clarita Valley Water Report

Wells	Alluvial/ Saugus	Destroyed/ Standby/ Online/Offline 2022	PFOS	PFOA	PFBS	PF-HxS	Hazard Index	VOC	Perchlorate	Manganese	History
NC-11	Saugus	OFF							x		First detected in 1997. Turned off in 2007 and remained out of service with a portion of its capacity replaced by a combination of imported water and treated water from the Saugus Perchlorate Treatement Facility (SPTF).
Saugus 1	Saugus	ONLINE	x	x				x	x		Perchlorate was first detected in 1997. Turned off in 2007 and returned to service with treatment in January 2011. Tested weekly for VOC's.
Saugus 2	Saugus	ONLINE						x	x		First detected in 1997. Turned off in 2007 and returned to service with treatment in January 2011. Tested weekly for VOC's.
Saugus 157	Saugus	Destroyed							x		First detected in 1997. Sealed in 2005 and replaced with new well.
Stadium Well	Alluvial	Destroyed							x		2002 first alluvial well detection for Perchlorate. Turned off, sealed in March 2010 and replaced with new well.
Q2	Alluvial	OFFLINE		x					x		2005 Perchlorate detected. Installed wellhead treatment in 2005 and returned to service. In 2007, there had been 2 years of subsequent operation with no detection of perchlorate, wellhead treatment for perchlorate was removed and remained an active water supply. May 2019 perchlorate detected again (MCL 6 ug/L). Well was again removed from service and treatment system added in 2020. Permiting issues caused delays and PFAS treatment was added. Q2 returned to service in June 2023.
201	Saugus	OFFLINE						x	x		August 2010, perchlorate detected, below the MCL but immediately taken out of service. Perchlorate treatment constructed in 2017, and well 201 was pumped to waste (NPDES Permit & blended with imported supplies) to help contain the perchlorate plume while awaiting permitting from DWR. In 2021, 201 was shut down due to drought conditions, still awaiting permitting. 2022, SCVWA decided to include VOC treatment for 201 and add to permit. Anticipated to return to service early 2025.
205	Saugus	OFFLINE							x		Following the detection of perchlorate in 201(2010 detection), pumping was reduced in 205. In April 2012, perchlorate was detected (at MCL 6 ug/L) in 205 and removed from service. Treatment plans similar to 201.
Pinetree 1	Alluvial	OFFLINE IN MARCH	x	x							Offline prior to 2019, fluctuated on and off with water level recovery and PFOA RL analysis. Went offline in March due to low water levels.Back online 9/7/21. Offline due to PFAS 4/6/23.
Pinetree 5	Alluvial	OFFLINE		x							Offline prior to 2019, low water levels. Offline for PFAS 6/2/2020.
Clark Well	Alluvial	OFFLINE		x							Offline March 2020.
Honby Well	Alluvial	OFFLINE		x							Offline March 2020.
Lost Canyon 2	Alluvial	OFFLINE IN MAY		x							Offline May 2022 mechanical issues.
Lost Canyon 2A	Alluvial	ONLINE		x							Offline in July 2023.
Mitchell 5B	Alluvial	OFFLINE		x							Offline in April 2020.
North Oaks Central	Alluvial	OFFLINE		x							Offline in March 2020.
North Oaks East	Alluvial	OFFLINE		x							Offline in October 2019, didn't come backonline.
Santa Clara Well	Alluvial	OFFLINE		x							Offline March 2020.
Sierra Well	Alluvial	ONLINE		x							Offline in July 2020, online in July 2021, offline May 2023.
Valley Center Well	Alluvial	ONLINE IN OCTOBER	x	x							Offline June 2019. Returned to service with treatment October 2022.
207	Saugus	ONLINE	x	x							Still online.
D	Alluvial	OFFLINE		x							Offline December 2020.
E-15	Alluvial	ONLINE		x							Still online.
E-17	Alluvial	ONLINE		x							Online December 2020 and still online.
E-14	Alluvial	FUTURE									These are not outfitted for pumping yet.
E-16	Alluvial	FUTURE									These are not outfitted for pumping yet.
N	Alluvial	ONLINE		x							Offline March 2020, backonline with treatment December 2020.
N-7	Alluvial	ONLINE		x							Offline March 2020, backonline with treatment December 2020.
N-8	Alluvial	ONLINE		x							Offline March 2020, backonline with treatment December 2020.
S-6	Alluvial	OFFLINE		x							Offline August 2019.
S-7	Alluvial	OFFLINE		x							Offline March 2020.
S-8	Alluvial	OFFLINE		x							Offline April 2020.
T7	Alluvial	OFFLINE		x							Offline April 2020.
U-4	Alluvial	OFFLINE		x							Offline March 2020.
U-6	Alluvial	OFFLINE		x							Offline June 2020.
W10	Alluvial	ONLINE		x							Offline April 2020. Back online July 2021, Offline July 2023.
Newhall Well 12	Saugus	ONLINE									Offline Jan 2023.
Newhall Well 13	Saugus	ONLINE				x	x				July 2021 perchlorate detection in N-13 of 4.1 ug/L. Quarterly monitoring since then yielded concentrataions at DRL (2 ug/L) but below MCL. Blending plan for PFAS and perchlorate in June 2023.
Mitchelle 5A	Alluvial	OFFLINE JANUARY	x	x							Well has been destroyed, but looking for replacement well (S9).
Sand Canyon	Alluvial	ONLINE	x	x			x				Offline in July 2023.
Castaic Well C1	Alluvial	ONLINE	x								Still online.
Castaic Well C2	Alluvial	ONLINE	x							x	Still online.
Castaic Well C7	Alluvial	ONLINE	x								Still online.
Castaic Well C4	Alluvial	STANDBY									Wells are in standby status.
Castaic Well C6	Alluvial	STANDBY								x	Wells are in standby status.
206	Saugus	ONLINE	x								Still online.
W9	Alluvial	ONLINE		x							Still online, Offline October 2023.
Pinetree 3	Alluvial	OFFLINE IN JULY	x				x				Offline July 2022, water levels.
Pinetree 4	Alluvial	STANDBY									Put into Standby due to water levels.

LIST OF ABBREVIATIONS AND ACRONYMS

Acronym	Acronym	Acronym	Acronym
af	acre-feet	RAA	Running Annual Average
afy	acre-feet per year	RL	Response Level
Alluvium	shallow Alluvial aquifer	RRB	Rosedale-Rio Bravo Water Storage District
AVEK	Antelope Valley East Kern Water Agency	SATP	Saugus Aquifer Treatment Plant
Basin	Santa Clara River Valley Groundwater Basin	Saugus	Deeper Saugus Formation aquifer
CCR	Consumer Confidence Report	SCV-GSA	Santa Clarita Valley Groundwater Sustainability Agency
CLWA	Castaic Lake Water Agency	SCVSD	Santa Clarita Valley Sanitation District of Los Angeles County
DDW	Division of Drinking Water	SCV Water	Santa Clarita Valley Water Agency
DTSC	California Department of Toxic Substances Control	SNMP	Salt and Nutrient Management Plan
DWR	California Department of Water Resources	Semitropic	Semitropic Water Storage District
GenX	PFNA, PFBS, PFHxS, and HFPO_DA (group of additional PFAS compounds)	SMCL	Secondary Maximum Contaminant Level
GPCD	gallons per capita per day	SWAT	Sustainable Water Action Task Force
GSA	Groundwater Sustainability Agency	SWP	State Water Project
GSP	Groundwater Sustainability Plan	SWRCB	State Water Resources Control Board
HH&S	Human Health and Safety Demands	TDS	Total Dissolved Solids
IRWMP	Integrated Regional Water Management Plan	µg/L	micrograms per liter
LACWD 36	Los Angeles County Waterworks District No. 36	USEPA	United States Environmental Protection Agency
MCL	Maximum Contaminant Level	UWCD	United Water Conservation District
MOU	Memorandum of Understanding	UWMP	Urban Water Management Plan
NL	Notification Levels	Valley	Santa Clarita Valley
PFAS	Per- and Polyfluoroalkyl Substances	VOC	Volatile Organic Compound
PFOA	Perfluorooctanoic Acid	WSCP	Water Shortage Contingency Plan
PFOS	Perfluorooctanesulfonic Acid	WRP	Water Reclamation Plant