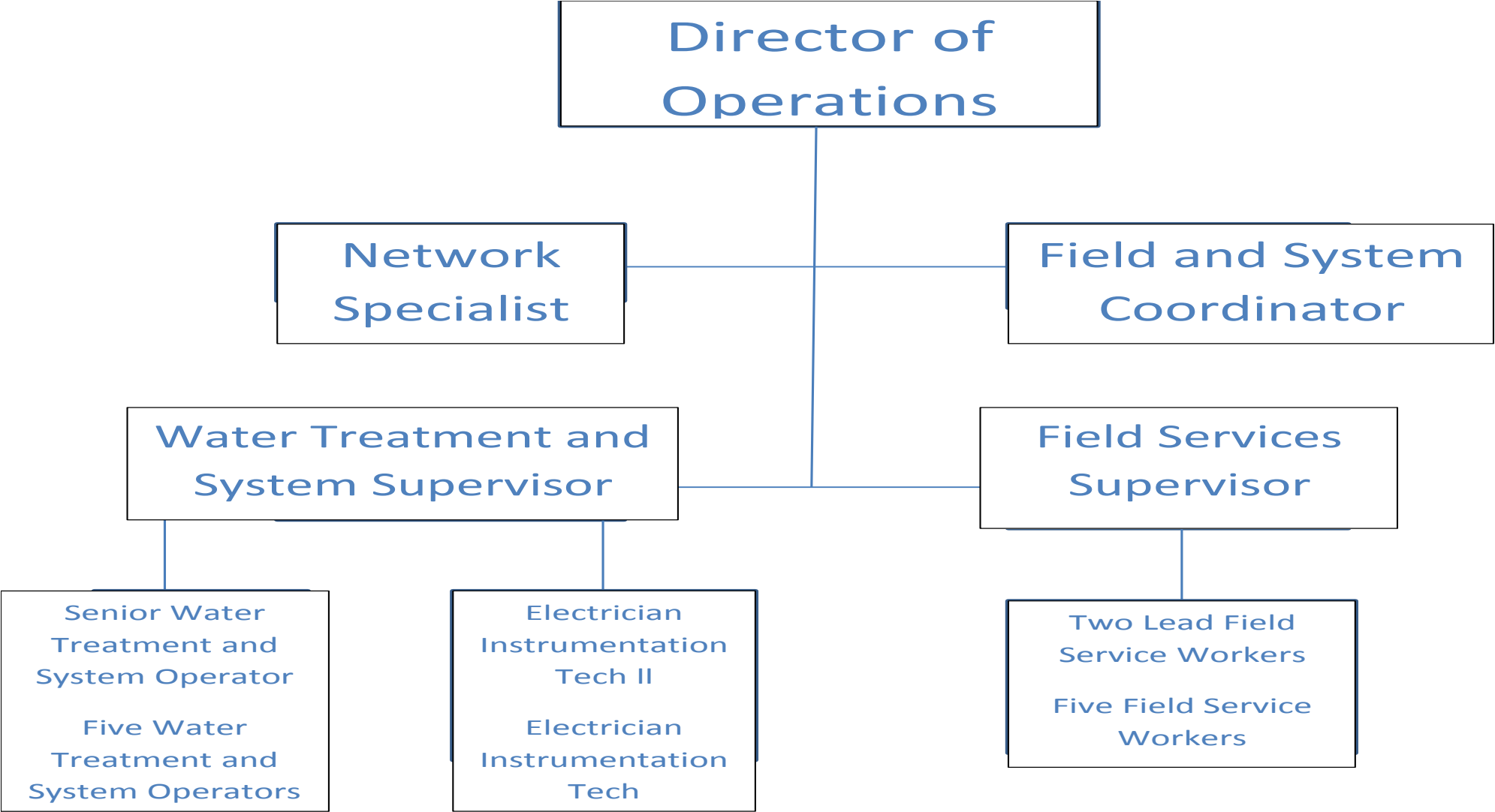


Operations Department

SLVWD

Operation Organizational Chart

Total of 20 personnel



Operating Budget

- Contract and Professional Services
 - Outside Contractors and Professionals
 - Outside Water analysis
- Operating Expenses
 - Operating supplies: non-inventory parts, hardware, and supplies
 - Small tools: new and replacements, and maintenance of existing
 - Rentals, Leases, and Permits
 - Chemicals and Lab Supplies
- Maintenance
 - Buildings and Facilities
 - Vehicles
 - Safety Equipment
- Facilities
 - Utilities: power and gas
 - Communications: telephone, internet, and radio
- General Administration
 - Office Supplies: paper products, general office products, and cleaning supplies
 - Subscriptions, certifications, trainings, conferences, and meetings

SLVWD North / South

- Boulder Creek
- Brookdale
- Ben Lomond
- Lompico
- Zayante
- Scotts Valley
- Manana Woods
 - Total of 6,506 Connections

SLVWD Felton

- Felton
 - Total of 1,359 Connections

That is a Total of 7,865 Service Connections

The District also has a Total of 58 Dedicated Fire Service Connections

Surface Water Treatment Plants

- The District Has 9 Surface Water Intakes
 - Six Spread Across Ben Lomond Mountain On District Watershed
 - Three In Felton On District Watershed
- Lyon Surface Water Treatment Plant
 - Located off Highway 236 and Redwood Drive
 - At 365 Madrone Avenue in Boulder Creek
 - Treats Water From Sweetwater Creek, Clear Creek, Forman Creek, and Pevine Creek
 - Three Filters, Units 1 and 2 Constructed 1994, Unit 3 Constructed 1999
- Kirby Surface Water Treatment Plant
 - Located off Highway 9 and Kirby Street
 - At 195 Kirby Street in Felton
 - Treats Water From Bull Creek, Bennett Creek, and Fall Creek
 - Two Filters Constructed 1996

Kirby Water Treatment Plant



Kirby Water Treatment Plant



Kirby Water Treatment Plant



Lyon Water Treatment Plant



Lyon Water Treatment Plant



Fall Creek Intake

- Fall Creek Intake has Bypass Requirements
- Normal Rainfall Fall Creek Intake Bypass Requirements
 - April 1 through October 31, 1.0 cubic feet per second
 - November 1 through March 31, 1.5 cubic feet per second
- Dry Conditions Fall Creek Intake Bypass Requirements
 - April 1 through October 31, 0.5 cubic feet per second
 - November 1 through March 31, 0.75 cubic feet per second
- *San Lorenzo River USGS Big Trees Flow Requirements*
 - September, 11 cubic feet per second
 - October, 26 cubic feet per second
 - November 1 through May 31, 21 cubic feet per second
 - June – August, No Requirements

Fall Creek Fish Ladder and Intake



Fall Creek Intake Days of Violation

	Fall Creek Bypass Flow Number of Days in Violation	Big Trees Bypass Flow Number of Days in Violation
2019 (1/1/19-5/1/19)	0	0
2018	0	57
2017	0	31
2016	0	29
2015	112	146
2014	38	171
2013	0	112
2012	0	47
2011	0	15
2010	0	33
2009	N/A*	66
Grand Total:	150	707

District Wells

- All District Wells Are Disinfected and Treated At The Well Head
- Quail Well Field
 - Quail Well 4A, Constructed 2001
 - Quail Well 5A, Constructed 2000
- Olympia Well Field
 - Olympia Well 2, Constructed 1981
 - Olympia Well 3, Constructed 1990
- Pasatiempo Well Field
 - Pasatiempo Well 5A, Constructed 2012
 - Pasatiempo Well 7, Constructed 1990
 - Pasatiempo Well 8, In Construction 2019



District Tanks

- The District Has 39 Tank Sites
 - Total of 52 Tanks With 8.8 Million Gallons of Storage
 - Twenty Steel Tanks: 14 Welded Steel, and 6 Bolted Steel
 - Fifteen Redwood Tanks
 - Fifteen Poly Tanks
 - Three Concrete Tanks
- Deteriorating Redwood Tanks
 - Nine of the Fifteen are in the Process of being Replaced
 - Five in the Lompico Area, In Design
 - Two in the Felton Area, In the Process of Procuring Easements
 - Two in the Ben Lomond Area, In Design
- Painting and Coatings on Steel Tanks
 - The District Should Start Painting and Coating Two Tanks a Year to get the 16 Tanks in Need Done in the Next 8 years
 - Life Expectancy of Painting and Coatings is 25-30 Years
 - The Majority of the Steel Tanks in the District are 30 Plus Years of Age, and Never Been Painted and Coated

District Booster Pump Stations

- The District has a Total of 30 Booster Pump Stations
 - Nine are Block Construction
 - Fifteen are Wood Construction
 - Five need Replacement
 - Four have no Structure
 - These all need Structures
 - One will have a Structure as part of the Swim Tank Project
 - Two are Underground Pit Concrete Vaults

Six of these Booster Stations have Standby Generators

The District also has Three Portable Generators that are Mobilized and Shuffled around during Power Outages

The District is in need of more Generators at Multiple Locations due to the new PG&E Fire Protections Power Shut Downs, and also to Reduce ManHours of Moving Generators Back and Forth During the Storm Season Power Outages

Programs

- Meter Change Out Program
 - Started 2016
 - Average of 500 Meters a Year, Includes Damaged and Dead Meters
- Quarterly Tank Inspections (State Requirement)
 - Every Tank Is Inspected Quarterly by District Staff
- Annual State System Inspections (State Requirement)
 - Each System and all its Facilities Annually by State Inspector
 - Each Treatment Plant Annually by State Inspector
 - Laboratory Every 2 Years by State Lab Inspector
- Valve Exercising Program (State Standard)
 - The District Exercises Valves as Needed
 - Need Personnel to have a Scheduled Program
- Flushing Program
 - The District has a Flushing Program in the Well Field Areas of the District
 - This takes 3 District Personnel and 3 Months to Complete Annually

Programs Continued

- Sampling Programs (State Requirements)
 - Weekly Bacteria logical Samples in the Systems
 - Monthly Effluent at Treatment Plants
 - Bi-Monthly Influent Samples at Treatment Plants
 - Monthly Bacteria logical Samples at Surface Water Sources
 - Monthly Arsenic Samples at the Wells
 - Quarterly Iron, Manganese, and Bacteria logical Samples at the Wells
 - Annual Nitrate Samples at all Wells
 - Quarterly Perfluoroalkyl Substances (PFAS) Samples Raw Water Samples from Wells
 - Lead and Copper at Customer Taps Every 3 Years
 - Title 22 Samples Every 3 Years at the Wells
 - Unregulated Contaminates Monitoring Rule Every 3-5 Years System Wide

Quantity of District Leaks & USA-811 Utility Locates

- District Leaks

- 2017 – 266 Leaks Repaired
- 2018 – 279 Leaks Repaired
- 2019 to date – 88 Leaks
 - These do not include leaks on customer side crews respond to

- District USA-811 Utility Locates

• Year	2015	2016	2017	2018	2019
• Totals	832	707	2790	1528	234

Water Production

- Surface Water Produced

• Year	2017	2018	2019 First Quarter
• Total	440,764,000	348,259,000	115,535,000

- Well Water Produced

• Year	2017	2018	2019 First Quarter
• Total	249,711,300	340,610,800	10,093,400

• Totals	690,475,300	688,869,800	125,628,400
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Miscellaneous

- Environmental Costs on District Projects
 - This is a very Costly Must
 - Many of the areas of the Santa Cruz Mountains Inhabit Endangered Species
 - The District Must Comply With Federal and State Regulations
 - Every Project and Job Site are Different
 - That is why Environmental Review is Important
- System Modeling and Master Plan
 - The System Modeling is in the Works and will Tell us Much Need Information
 - Fire flow, Undersized Main Lines, Hot Spots for Leaks, Highly Important Improvements, and Importance of Infrastructure Upgrades and Replacements
- Financial Situation
 - The Financial Situation in the Past Has Enabled the District to do Upgrades and Replacements to the Systems Infrastructure
 - The Rate Structure now is Great for the District and is Allowing the District to Move Ahead on Much Need Infrastructure Upgrades and Replacements, Catching up on Differed Maintenance that has been ongoing

The End