YEAR END REPORT

1

PCWA

15:20



TWENTY



WATER

ENERGY

STEWARDSHIP

Ŝ



TABLE OF CONTENTS

ABOUT THE AGENCY

About the Agency	2
PCWA At-A-Glance	3

BY THE NUMBERS

Customer Overview	
Staffing	5
Social Media Engagement	6
Water Efficiency Rebates	7
Financial Snapshot	8
2023 Adjusted Agency Budget	
2023 Projected Agency Revenue	
Where Water Rates Go At-A-Glance	
Treated Water Production	
Middle Fork Project Energy Production	13

STORYLINES

Stewardship of Our Natural Resources	
Where Does Your Water Come From?	
Investments in Your Community Water Systems	
A Closer Look at Water Supply Reliability	

PROJECT HIGHLIGHTS

Water System	
Danner Curstern	
Power System	

"After two dry years throughout the state, California experienced one of its wettest winters ever in 2023. PCWA is proud to have met all of our customers' needs through the last drought while continuing to build infrastructure for the future."

- Robert Dugan, 2024 Board Chair

ABOUT THE AGENCY

PCWA is a retail and wholesale water service provider, delivering treated and untreated water to a variety of customers throughout Placer County. Customers include residents, businesses, farms, cities and towns, local governments, and private water purveyors.

In addition, PCWA owns and operates the Middle Fork Project (MFP), a multi-purpose water supply and hydroelectric project, located on the Middle Fork American River. The MFP supplies water for homes, industry, and agriculture within western Placer County and clean, renewable energy to the California electric grid.

2

The Agency's district boundaries coincide with the Placer County supervisorial districts.



DISTRICT 1 Gray Allen



3

4

DISTRICT 2 Primo Santini



DISTRICT 3 Mike Lee



DISTRICT 4 Robert Dugan



5

DISTRICT 5 Joshua Alpine

PCWA AT-A-GLANCE





236,900 acre-feet of water delivery capacity

	_

44,000+ customers provided with water service

223.75

megawatts of installed

generation capacity

	1

1957 the year the Agency was created

miles of canal



1,500 square miles of service area



water treatment plants delivering safe drinking water

(כ	
n—	(ر		Π
U	<u> </u>		U

646 miles of treated water pipeline





powerhouses supplying clean hydroelectric energy to the CA grid



member Board of Directors, elected by the people of Placer County, and serving 4-year terms

BY THE NUMBERS CUSTOMER OVERVIEW



of Weimar's water system

STAFFING

58 Engineering and

Engineering and Water System Operations

30

Customer Services

60 Field Services

36

Power System Operations & Maintenance and Energy Marketing

18

Human

Resources

Information Technologies

Financial Services

5

General Manager's Office

Total Number of Employees: 232

BY THE NUMBERS 5

SOCIAL MEDIA ENGAGEMENT



6 2023 YEAR END REPORT

WATER EFFICIENCY REBATES

708 Rebate Applications Received







FINANCIAL SNAPSHOT

Water Division Credit Outlook*









Agency Assets and Net Postion*



\$682M Investments in capital assets





Cash & investments



\$38M Capital assets currently under construction





Agency Performance





2023 ADJUSTED AGENCY BUDGET

Total Budget

\$180M



4% Debt Service | **\$7.8M**

3% Agency Wide Operations | **\$5M**



2023 PROJECTED AGENCY REVENUE Sources by Division









Operations & Maintenance

Renewal & Replacement Projects



Administration







Customer Service

TREATED WATER PRODUCTION

Water Use From Two Primary Sources



Yearly Commitments to Serve New Treated Water Accounts



Annual Drinking Water Production



Decade over decade, annual drinking water production has increased to meet the demands of Placer County's growing population.

Year	Population Served by Retail Water System
1990	49,391
2000	67,321
2010	91,648
2020	116,327*
2023	122,225

*Population estimate revised using 2020 Census data.

MIDDLE FORK PROJECT ENERGY PRODUCTION

GREEN, RENEWABLE ENERGY





STORYLINES

Stewardship of our Natural Resources



BATTLE OF THE BLAZE

PCWA, having experienced the impact of the King Fire, is actively engaged in forest restoration. Collaborating with public and private agencies, we've successfully treated 12,000 acres through tree and brush removal, and by conducting prescribed burns.

PCWA's commitment extends to projects like Long Canyon, aiming to protect forested watersheds for future generations and ensure a safe and reliable water supply. Our customers can be assured PCWA is emphasizing proactive measures against wildfires to maintain water quality and supply integrity, air quality, quality of life, recreation, and the ecosystem.



WILDLAND FIRE COMMISSION

General Manager Andy Fecko was appointed to a federal committee, under the Bipartisan Infrastructure Bill, addressing catastrophic wildfire risks. PCWA's involvement in this effort is crucial, as wildfires threaten not only our water supply that is sourced from forests, but also its quality. The federal commission's recommendations, delivered in a 340-page report, include the necessity for more prescribed fire, improved prefire response planning, and increased funding for water agencies managing forested watersheds.

Mr. Fecko's Top 3 favorite recommendations:

i.e. here's what local government can act on...

- We need more active forest management to return our forests to a sustainable condition.
- We need more prescribed fire on more regular intervals to keep our forests clear.
- We need to focus on protecting communities throughout the west.

Progress on French Meadows Forest Restoration Project



Healthy forest (treated)



Prescribed burn





Congressman Kiley at Mosquito Ridge Road closure (after Mosquito Fire)



Legislators and their staff at the proposed Long Canyon Project

Working on efficient ways to remove sediment from our reservoirs



Ralston Afterbay Reservoir (after King Fire)



Middle Fork American River to Ralston Afterbay Reservoir (after Mosquito Fire)





INVESTMENTS IN YOUR COMMUNITY WATER SYSTEMS

It will cost \$425 million over 25 years to accomplish long-term infrastructure reliability, according to an independent analysis of the Agency's water system, completed in 2021. In 2022, the Agency adopted a rate increase, effective in 2023, to address the ongoing need to renew and replace aging infrastructure. The new rates will provide an average annual revenue stream of \$17 million dedicated to this effort.

In 2023, \$11.34 million was invested through PCWA's **Renewal and Replacement Program.** This program helps to ensure the system's reliability and sustainability for existing and future customers.

Treated Water Transmission & Distribution	\$3.8M
Raw Water Transmission & Distribution	\$2.4M
Other/Miscellaneous	\$2.2M
Water Treatment	\$1.9M
Treated Water Storage	\$1.0M
Untreated Water Storage	\$0.04M
Total Investments in 2023	\$11.34M





A CLOSER LOOK AT WATER SUPPLY RELIABILITY

The State Water Project, the Central Valley Project, and Placer County Water Agency Supply Projects

Comparing State and Federal Water Supply Projects to Our Locally Developed Supplies



Placer County Water Agency (PCWA)

Pacific Gas & Electric Company's (PG&E) Drum-Spaulding Project

- Locally established, long-term water supply contract
- 125,000 acre-feet in contract rights

Middle Fork American River Project (MFP)

- Locally authorized, constructed, and funded
- 120,000 acre-feet in consumptive water rights
- Two major reservoirs: Hell Hole and French Meadows

Placer County Water Agency (PCWA) % Allocations





Local Control of Our Water Future

California is unique in the fact that most of its precipitation falls from the sky in the north and along the Sierra mountains, while the vast majority of its population is to the south. The state and federal water supply projects were envisioned as economic drivers that would store and move water from where it falls to where it is used in the Central Valley and southern California. Unfortunately for those who rely upon these supplies, as the demand has grown with California's population, the reliability has degraded with environmental strains on the Delta.

PCWA was created with the vision of a locally built and controlled water supply on the American River, which was completed in 1967. We later connected to another local water supply from the Yuba River, contracted with PG&E from their hydropower system. Together, these supplies provide an entirely different level of reliability for Placer County as compared to most of California.

PROJECT HIGHLIGHTS

Ginger Drive Main Replacement

COST: \$2,700,000

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Treated Water Transmission & Distribution

PURPOSE: This project removed existing pipelines and services originally installed in the backyards of private properties, and installed new infrastructure in public right-of-ways to customer homes, ensuring enhanced accessibility and safety while minimizing disruption to customers' homes and landscapes.

FACTS & STATS: Approximately 2,000 linear feet of 8-inch main was replaced, along with 50 service lines featuring new meters and meter boxes. Additionally, four fire hydrants were installed as part of the project. Coordination efforts with customers were vital, necessitating approvals for the installation of new services prior to commencement.









East Towle Road Pipe Replacement

COST: \$125,000

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Treated Water Transmission & Distribution

PURPOSE: This project aimed to reduce leaks and after-hours calls due to interruptions in service. This pipeline in Alta is located in the woods on very steep terrain and can be extremely dangerous to navigate in the dark to make repairs at night.

FACTS & STATS: At 400 feet in length, this pipeline drops 160 feet in elevation. Crews replaced 500 feet of 1950's era wrapped steel main with a new, larger diameter ductile iron pipe, allowing for more water to flow.



Hilmont Avenue Pipe Replacement

COST: \$176,600

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Treated Water Transmission & Distribution

PURPOSE: Due to a history of leaks and being at a dead-end, it was necessary to replace this section of pipeline. By upsizing and looping this part of the system into an adjacent pipeline, the project increases firefighting capabilities, improves water quality, increases reliability, and reduces the annual number of leaks in the system.

FACTS & STATS: Crews replaced 380 feet of 2-inch 1950's era cast iron main feeding 11 services, with 8-inch C900 PVC pipe, continuing an additional 40 feet. "Looping" allows for water to maintain healthy flows through the system.





College Way Main Break Repair

COST: \$43,760

FUNDING SOURCE: Rates - Operations & Maintenance

PROJECT TYPE: Treated Water Transmission & Distribution

PURPOSE: Crews received a report of a break in a main pipeline. This emergency repair was required to get customers and the water in this portion of the system back into service, with good water quality, and in a timely fashion.

FACTS & STATS: The outage required for this repair affected multiple homes, businesses, and a veterinarian clinic. The report came around 5:00 a.m.; after gathering staff and equipment, crews were able to have the main flushed and back into service around 1:30 pm and the road fully repaved and reopened to traffic by 5:00 pm. Crews did all that work in a mere 12 hours!





Stanford Ranch Tank Recoating

COST: \$1,000,000

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Treated Water Storage

PURPOSE: This 2.5 million-gallon distribution storage tank, located in the heart of Rocklin, was recoated on the interior and exterior. Recoating the tank will protect against rusting and prolong its useful life.

FACTS & STATS: A large hole was cut in the side of the tank to allow large equipment inside during the project. Prior to recoating, the tank was modified to allow for the installation of a mixer in the future, if needed, to improve water quality. Cathodic protection equipment was also replaced to prevent corrosion.







Monte Vista Filter Replacement

COST: \$1,100,000

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Water Treatment

PURPOSE: A new pressure filter and standby emergency generator were installed to provide reliability and redundancy for the Monte Vista Water Treatment Plant.

FACTS & STATS: The plant previously relied on a single filter for treating water and is now able to switch to the other filter, if needed, to continue to supply water.



Foothill Grit Screen Structure

COST: \$1,200,000

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Water Treatment

PURPOSE: A new, fine screen unit was installed in the grit structure to provide initial screening and removal of grit and organic material entering the headworks of the water treatment plant prior to the sedimentation and filtration processes.

FACTS & STATS: Grit is small rocks, pebbles, sticks, leaves, and other small debris that may enter the canal water.



Auburn Tunnel Pump Station No. 2 Pump Repair

COST: \$339,980

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: This project replaced one of the six pumps located within the Auburn Tunnel Pump Station (ATPS) No. 2.

FACTS & STATS: This pump station was originally placed into service circa 2007. Water is pumped from the Middle Fork American River through the Auburn Tunnel to the Ophir Road and Auburn Tunnel Pump Stations, located two miles away. From 210 feet below ground elevation, the water is then pumped into a transfer basin. From there, the water can be moved to the Agency's Foothill Water Treatment Plant via PG&E's South Canal by gravity or pumped through the Foothill Raw Water Pipeline.



Ready Cut Flume Rehabilitation

COST: \$226,260

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: This 334-foot-long flume in Newcastle was rehabilitated by replacing failing wood understructure and tin.

FACTS & STATS: Both tin and lumber were coated with products designed to lengthen their useful life, reducing future maintenance costs.





Hazard Tree Removal Project

COST: \$250,000

FUNDING SOURCE: Rates - Operations & Maintenance

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: The winter storms of 2021 caused a tree to fall next to PCWA's Boardman Canal, ripping out the side of the canal and leading to a water emergency and costly repairs. The Agency hired Mason, Bruce & Girard, Inc. to assess the upper portion of our canal system and tag trees that posed a hazard to our facilities. The Agency is working to mitigate hazards by removing hazardous trees (working from highest to lowest hazard level) wherever possible, in hopes of avoiding damage to our facilities caused by fallen trees in the future.

FACTS & STATS: A total of 87 hazard trees were removed in 2023.



Storm Response

COST: \$54,440

FUNDING SOURCE: Rates – Operations & Maintenance

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: Heavy snowstorms in our upper system (Alta to Colfax) can present significant challenges to open canals. Heavy snow topples trees and then those trees, along with snow and ice can build up, plug the canals, and stop flows. Flows that slow or stop can further cause more of the canal's system to ice up. Crews can easily spend weeks trying to get water flowing during and after big storms.

FACTS & STATS: In recent years, the Agency has invested in equipment capable of clearing access roads and/or moving over and through the snow so that crews can access hard to reach portions of the system.





Ben Franklin Service Box Repair

COST: \$25,375

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: Repairs were made to this Agency-owned service box near the Ben Franklin Reservoir, which was leaking and inefficient. The old design of the box also made troubleshooting suspected private-side leaks very difficult. The repairs will help prevent and diagnose future issues.

FACTS & STATS: Old box baffles were removed, and the box was lined with gunite to stop leakage. New customer turnouts with valves were added to allow individual isolation of the private lines.





Canal Automation and Efficiency

COST: \$165,000

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: Replacing older, manually operated canal gates with automated gates increases both water and operational efficiency. This project highlights one gate installation in 2023. Three others were installed previously and there is one more planned for installation in 2024.

FACTS & STATS: Automated gates not only save water, but they allow the canal operators to remotely control the flow of water through the gates.



Canal Gunite Lining

COST: \$951,000

FUNDING SOURCE: Rates - Renewal & Replacement

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: The Agency lines canals with gunite to stop leaks that would otherwise cause damage to PCWA's facilities and potentially to neighboring properties. It also increases the canal's ability to efficiently convey water through our system.

FACTS & STATS: A property owner nearby felt that lining the canal with gunite would lessen the visible appeal of the original, unlined, earthen canal, but when they saw the finished product, they were happy with the crew and their work.



Clover Valley Reservoir Spill Repair

COST: \$35,808

FUNDING SOURCE: Rates - Operations & Maintenance

PROJECT TYPE: Raw Water Transmission & Distribution

PURPOSE: Significant erosion of the spill channel was noticed and documented during an annual inspection of Clover Valley Reservoir with the Division of Safety of Dams. PCWA's Raw Water Maintenance crews came up with a plan that included filling large voids with rock and then applying gunite to repair the channel and avoid further erosion.

FACTS & STATS: One of the challenges with maintenance on raw water facilities is getting access through surrounding properties. Agency crews had to work with the land developer to obtain access and then create an access to get needed supplies and equipment to the site.





Dutch Flat Mutual Water Company Consolidation

COST: \$4,300,000

FUNDING SOURCE: Agency-Wide and Grant Funding

PROJECT TYPE: Consolidation

PURPOSE: The 112 residents in the Dutch Flat community voted to consolidate into PCWA's water system, turning their existing water system over to the Agency to operate and maintain. This consolidation project will provide the community with a safe, reliable, and domestic treated water supply.

FACTS & STATS: Through a grant from the State, the Agency made significant progress in 2023 in repairing or replacing the infrastructure to eliminate leaks and bring the system up to current code and Agency standards. The project improvements included replacing 1.5 miles of treated water pipelines; 112 services, meters, and vaults; installing a pressure reducing station; and connecting to the Agency's Alta treated water system.



Installation of treated water pipe and a fire hydrant along Main Street

Dutch Flat Mutual Water Company's water treatment plant and basins

Weimar Water Company Acquisition

COST: \$3,700,000

FUNDING SOURCE: Agency-Wide

PROJECT TYPE: Acquisition

PURPOSE: PCWA acquired Weimar Water Company (WWC), a privatelyowned water utility that provides treated water service to approximately 570 customers. Acquisition of the WWC system with PCWA's system aims to improve water supply reliability, stabilize water rates for Weimar's customers, provide water efficiency programs to help customers manage their water use, and provide full-time staff for customer service.

This project aligns with the Agency's goal of providing affordable, sustainable, and safe drinking water to underserved areas of Placer County.

FACTS & STATS: This acquisition was approved by the California Public Utilities Commission and funded through PCWA's agency wide reserves without impacting existing ratepayers. It also allows PCWA to provide service to the Midway Heights Community Services District, which serves 450 treated water customers.



Acquisition of the WWC water system is an integral link to the success of PCWA's regionalization and stewardship plans along I-80.



WWC's system includes a 1 million gallon-per-day Water Treatment Plant (WTP), a 1 million gallon steel storage tank, four 60,000-gallon steel storage tanks, an 850 gallon-per-minute pumping system which conveys water from PCWA's Boardman Canal to the treatment plant, a 500,000-gallon untreated water storage pond, and approximately 101,000 linear feet of distribution mains.

Middle Fork Powerhouse Generator Circuit Breaker Replacement

COST: \$1,200,000

FUNDING SOURCE: MFP Power Sales

PROJECT TYPE: Powerhouse Reliability Upgrades

PURPOSE: The Middle Fork Powerhouse underwent an upgrade to replace its original, air blast-type generator circuit breakers with modern, dielectric gas dead tank-type circuit breakers. The new breakers offer improved reliability and decreased maintenance requirements compared to the original equipment, ensuring more efficient operation of the powerhouse.

FACTS & STATS: The new dielectric gas dead tank-type circuit breakers utilize a non-conductive dielectric gas to extinguish the electrical arc upon breaker opening, minimizing wear and tear on the equipment, and significantly reducing maintenance needs.





Left to Right: Unwrapping second new breaker prior to installation.

First new breaker installed in breaker enclosure.

One of the two existing breakers prior to removal.



Installation of Breaker No.1 control panel in progress; Breaker No. 2 is visible inside the breaker enclosure.

French Meadows Powerhouse Generator Step Up Transformer Repair

COST: \$1,700,000

FUNDING SOURCE: MFP Power Sales

PROJECT TYPE: Powerhouse Reliability Upgrades

PURPOSE: This project repaired damage to a transformer at the powerhouse, caused by an electrical arc fault that was identified during routine testing. These repairs also accelerate the replacement of the transformer by 3 years, proactively mitigating risks associated with its nearing end of operational life.

FACTS & STATS: The transformer plays a critical role in stepping up the generator terminal voltage from 4,160 volts to an impressive transmission voltage of 60,000 volts, facilitating efficient power distribution across the system.



Close-up of the transformer shows carbon deposits and evidence of arcing (as seen by the dark color on the left).



Exterior of the French Meadows Powerhouse Step Up Transformer.



CREDITS

PCWA BOARD OF DIRECTORS:

Gray Allen, District 1 Primo Santini, District 2 Mike Lee, District 3 Robert Dugan, District 4 Joshua Alpine, District 5

PCWA STAFF: Vision and Steering:

Andrew Fecko General Manager

Tony Firenzi Director of Strategic Affairs

Brie Anne Coleman Communications Manager

DEPARTMENT HEADS: Contributing Authors:

Michael Willihnganz Director of Adminstrative Services

Matt Young Director of Customer Services

Shane Motley Director of Energy Marketing

Daryl Hensler Director of Field Services

Joseph Parker Director of Financial Services

David Russell Director of Information Technologies

Aaron Sullivan Director of Power Generation Services

Darin Reintjes Director of Resource Management

Jeremy Shepard Director of Technical Services

