

# 2020 YEAR END REPORT



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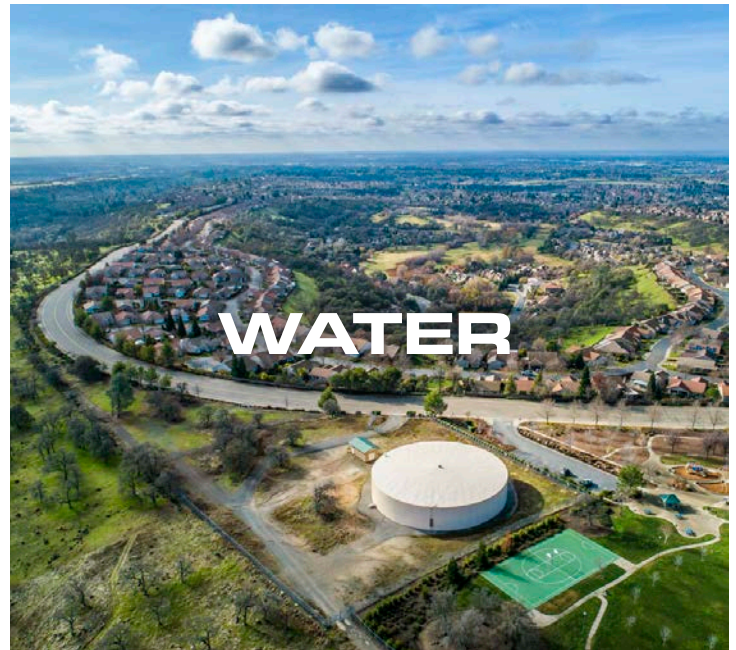
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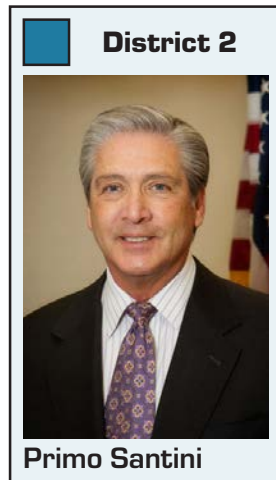
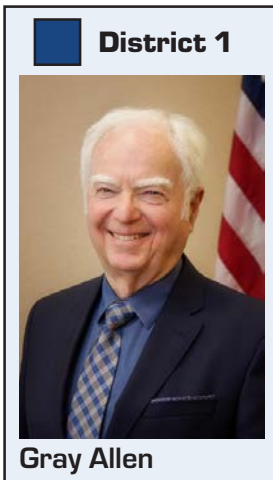
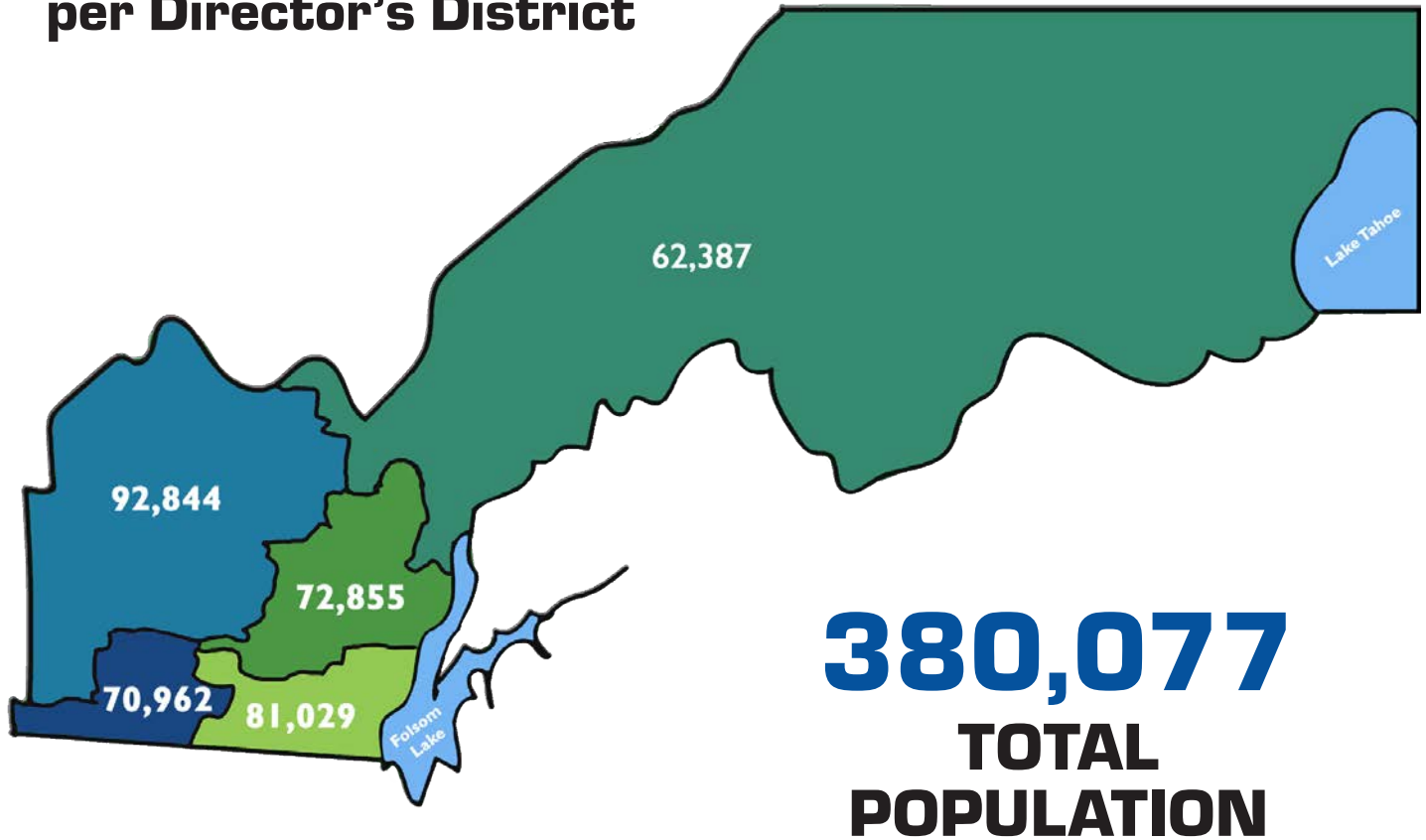


***"As a county-wide agency for the people of Placer County, PCWA prides itself in having clear missions around water, energy, and stewardship. 2020 has been a remarkable and challenging year for all of us. On behalf of the Board of Directors, we are proud of the progress and achievements made in 2020, in spite of challenges, and with our new general manager, Andrew Fecko, appointed in March."***

***Joshua Alpine,  
2021 Board Chairman***

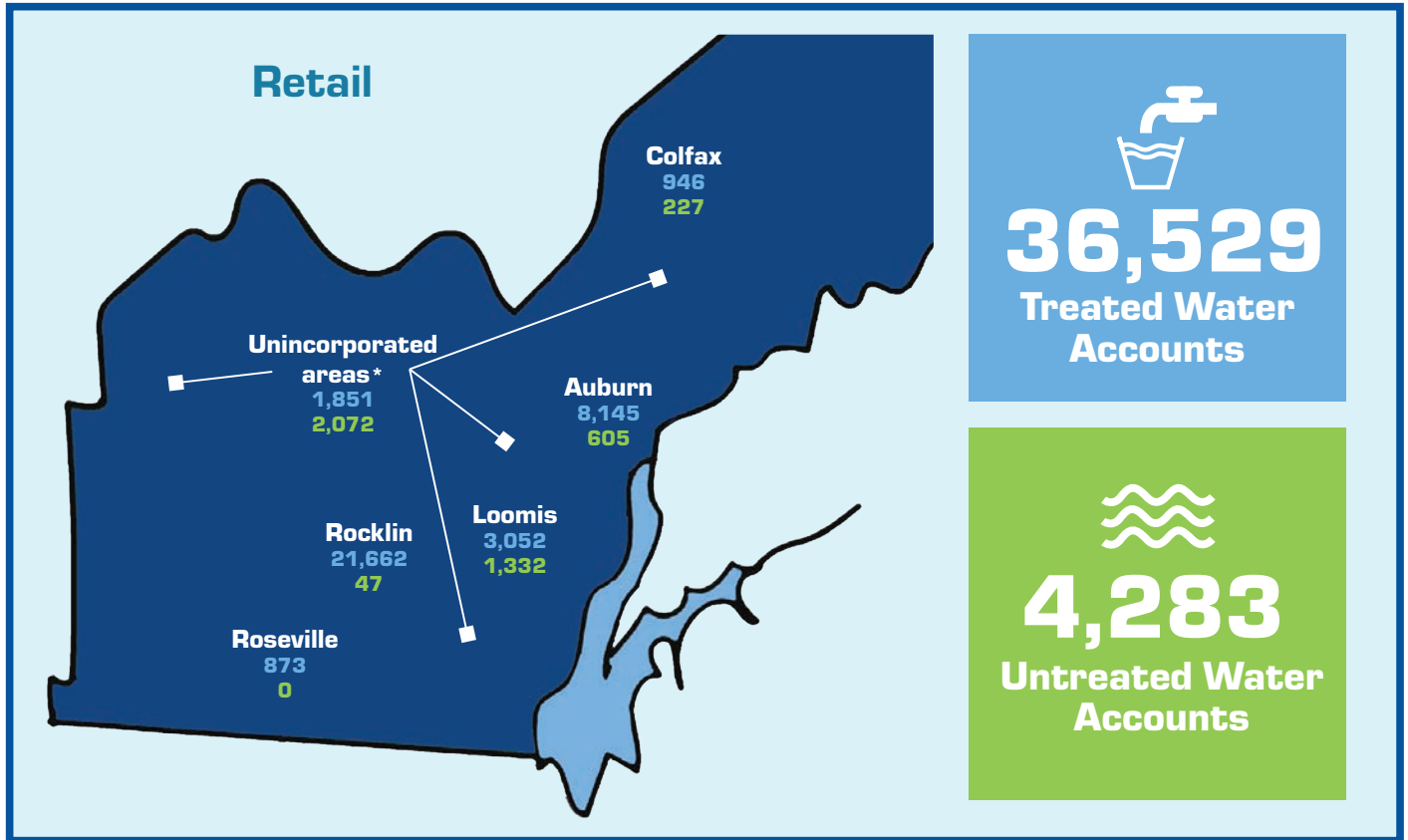
## BY THE NUMBERS

### Placer County Population per Director's District



The five member Board of Directors comprise the governing body of Placer County Water Agency. Each Director is elected to a four-year term by the registered voters in five geographic districts of Placer County. Boundaries of each district coincide with Placer County supervisorial districts. Each Director represents the members of the public within their respective district, as well as the general public within the Agency's 1,500 square mile county-wide jurisdiction of Placer County.

## Customer Overview



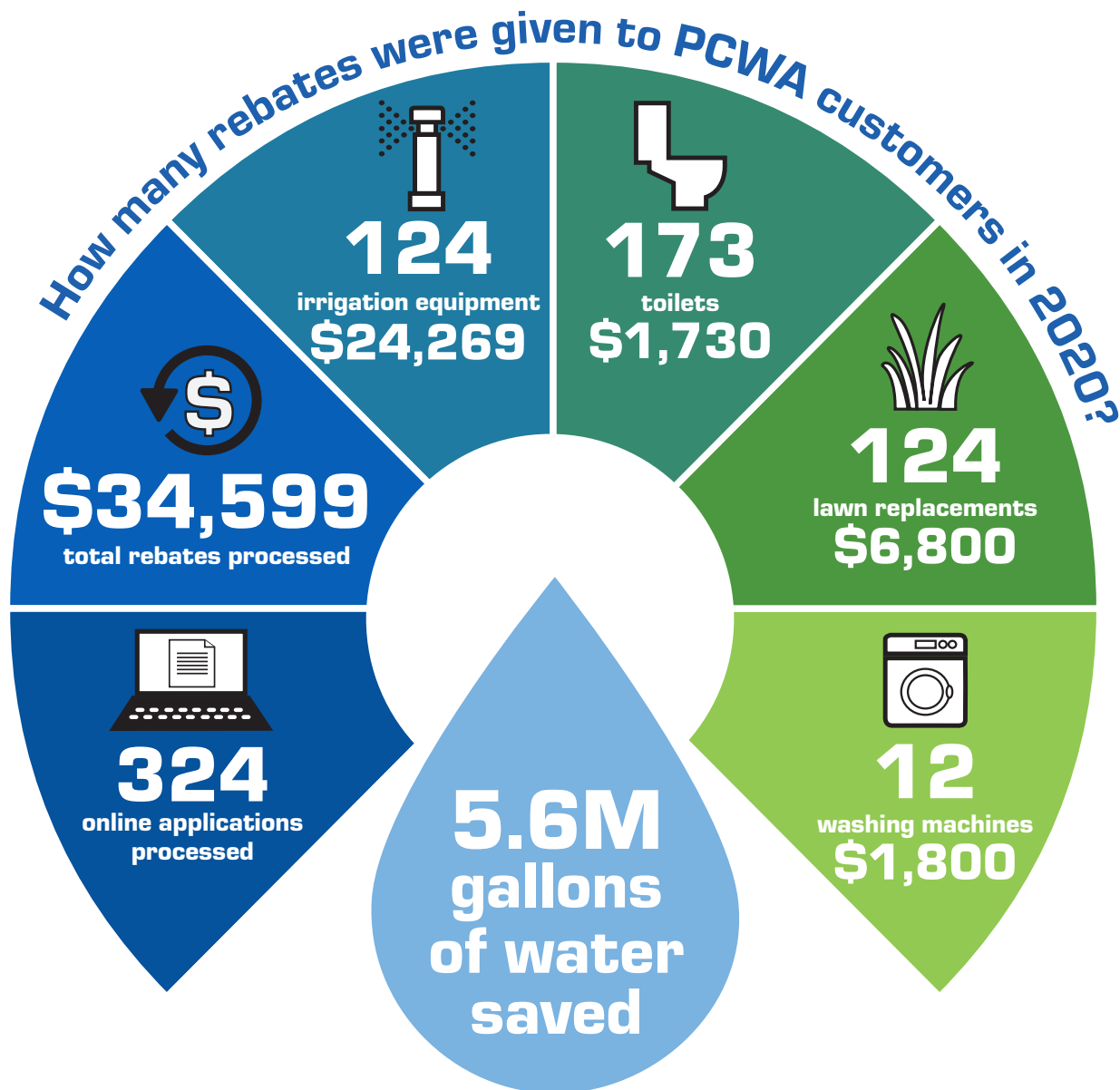
\*Unincorporated areas include:

Alta	Weimar	Penryn
Dutch Flat	Applegate	Granite Bay
Gold Run	Newcastle	West Placer

■ Treated Water Customer(s)  
■ Untreated Water Customer(s)



## Water Efficiency Rebates

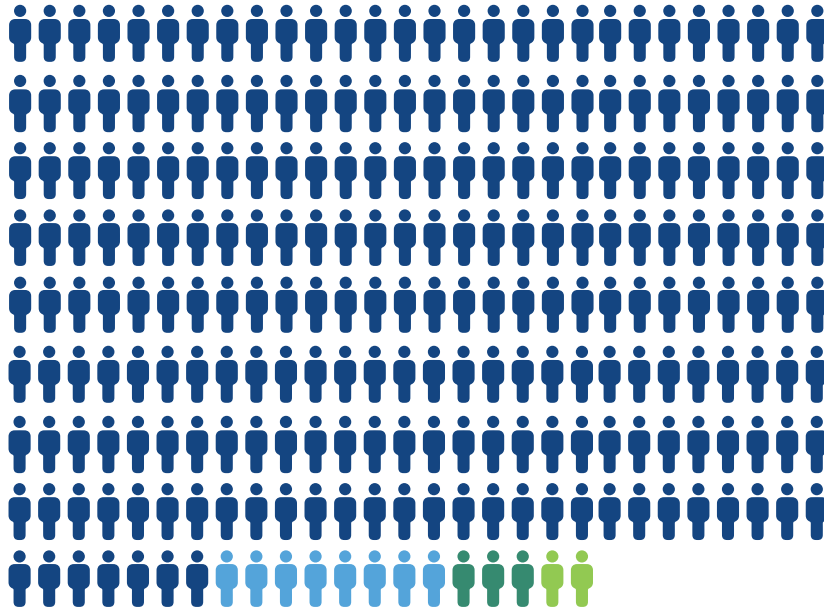


### Top 3 Customer Payment Methods



# Staffing

## Employee Classifications



**231**  
Regular  
employees

**8**  
Temporary  
employees

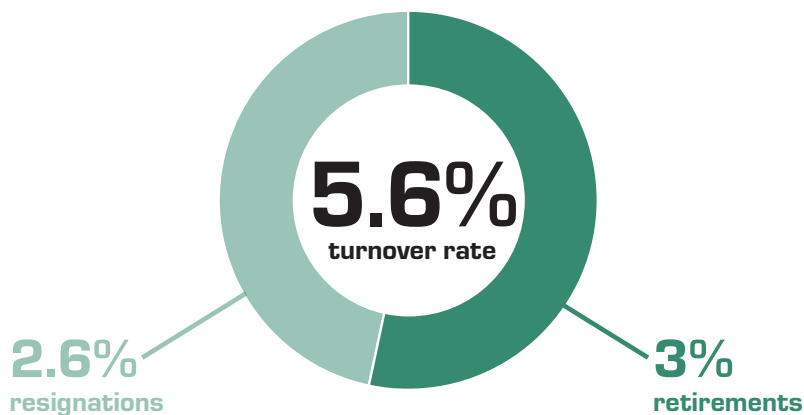
**3**  
Retired  
annuitants

**2**  
Seasonal  
employees

**244** People  
Employed

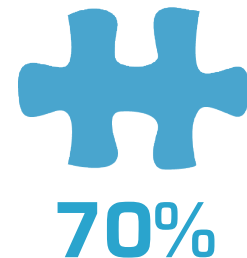
## Employee Turnover Rate

The Agency enjoys the luxury of a stable workforce as substantiated by an overall low turnover rate.



## Succession Planning

The Agency prefers filling positions from within over external recruitment.



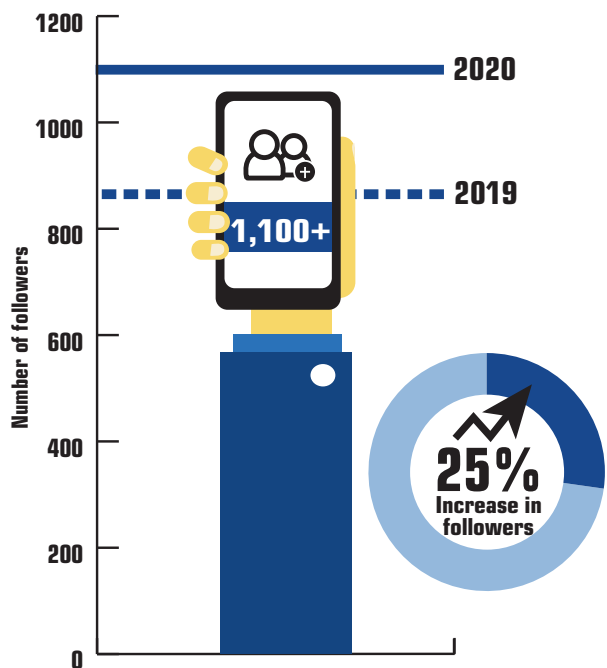
of supervisory and managerial  
positions, which vacated due to  
retirement over the last 3 years,  
have been filled through  
succession planning.

## Social Media Stats

As a result of sustained online communications and public outreach efforts, PCWA had a substantial increase in followers on both of its main social media platforms.



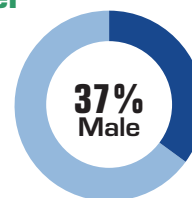
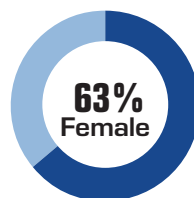
### Facebook



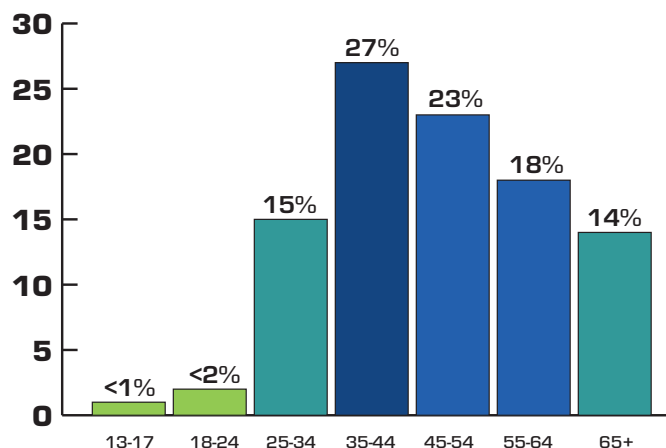
### Key Demographics

Facebook audience

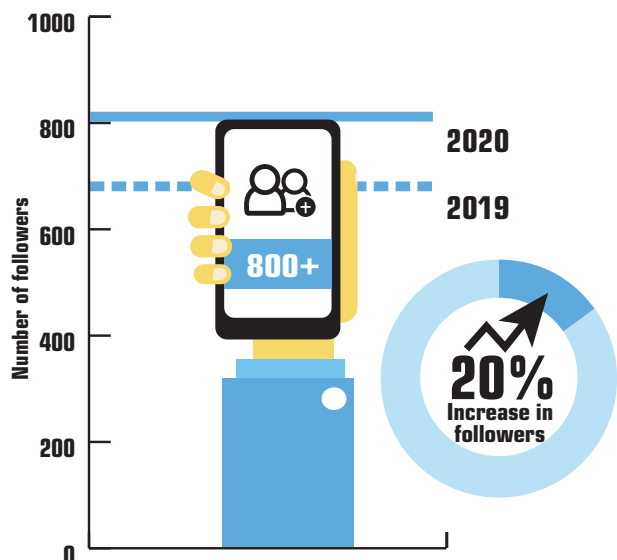
#### Gender



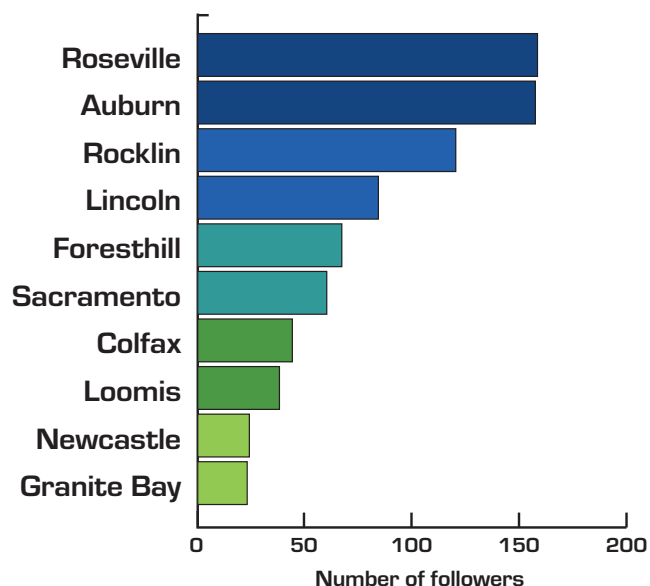
#### Age



### Twitter



### Top 10 Cities Where Followers Reside



# Awards and Media Outreach

Below is a representation of some of the awards staff has earned and media outreach efforts in 2020:

## In the media...



**Rob On The Road**  
Air date: November 9, 2020

**Voices of America**  
Published: November 9, 2020



## New 40-year license issued to Placer Water Agency for Middle Fork American River Project

STAFF REPORT

The Placer County Water Agency and Placer County announced Thursday the Federal Energy Regulatory Commission has issued a new 40-year operating license for the Middle Fork American River Project (MFRP).

The MFRP provides water supplies, clean hydroelectric power, public recreational opportunities and environmental stewardship for the people of Placer County and the region.



BRIE ANNE COLEMAN • COURTESY  
Ralston Afterbay on the Middle Fork American River.

**Auburn Journal**  
Published: November 9, 2020

**Gold Country Media**  
Published: October 9, 2020

## Gold Country Media

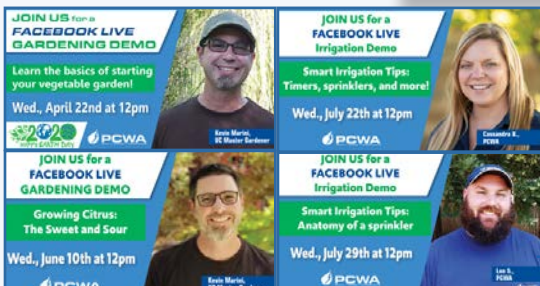
### Placer County Water Agency's Middle Fork Project paying dividends



Robert Dugan Oct 02, 2020 9:30 AM

In 1937, the Placer County Water Agency was created by a special act of the California Legislature because the people of Placer County wanted to control their own water future.

After a subsequent vote of Placer County residents in 1961, the agency sold bonds and built the Middle Fork American River Project (MFRP or Project), a combined hydroelectric and water supply project that provides water to western Placer County and carbon-free energy to the California electric grid.



**Facebook Live**  
Air dates: April 22 2020  
June 10, 2020  
July 22, 2020  
July 29, 2020

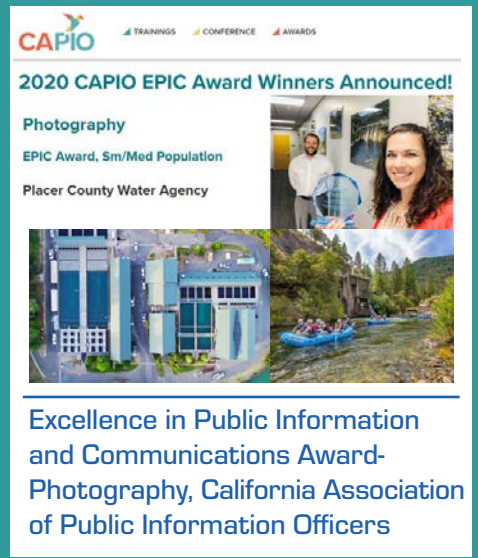
## In the spotlight...



**Clair A. Hill Agency Award for Excellence, Association of California Water Agencies**



**WaterSense Excellence Award, U.S. Environmental Protection Agency**



**Excellence in Public Information and Communications Award-Photography, California Association of Public Information Officers**

## Celebrating 20 Years of the Water Forum



The Water Forum Agreement is a commitment to the co-equal goals of water for the Lower American River environment and for the people of our region. In 2020, the Water Forum held a symposium to celebrate 20 years. Then PCWA Board Chair, Robert Dugan, was given the honor to introduce and converse with the keynote speaker, Lieutenant Governor of California, Eleni Kounalakis.



Original Artwork by Stephanie Taylor



PCWA Director of Strategic Affairs, Tony Firenzi, spoke at the symposium about climate change, impacts to the American River watershed, and what we are doing in response.



## 2020 Financial Snapshot

### Water Division Credit Outlook



**AAA**

Standard & Poor's rating



**4.17**

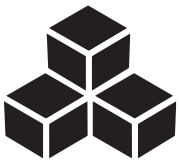
Debt service coverage ratio  
Ideal ratio = 2 or higher



**17%**

Debt ratio

### Agency Assets and Net Position\*



**\$655M**

Investments in  
capital assets



**\$80M**

Agency reserves



**\$185M**

Cash & investments



**\$54M**

Capital assets currently  
under construction



**\$62M**

Outstanding debt



**\$53M**

Retirement commitments

### Agency Performance



**\$125M**

Agency revenue



**2%**

Return on  
investments



**\$75M**

Operating budget

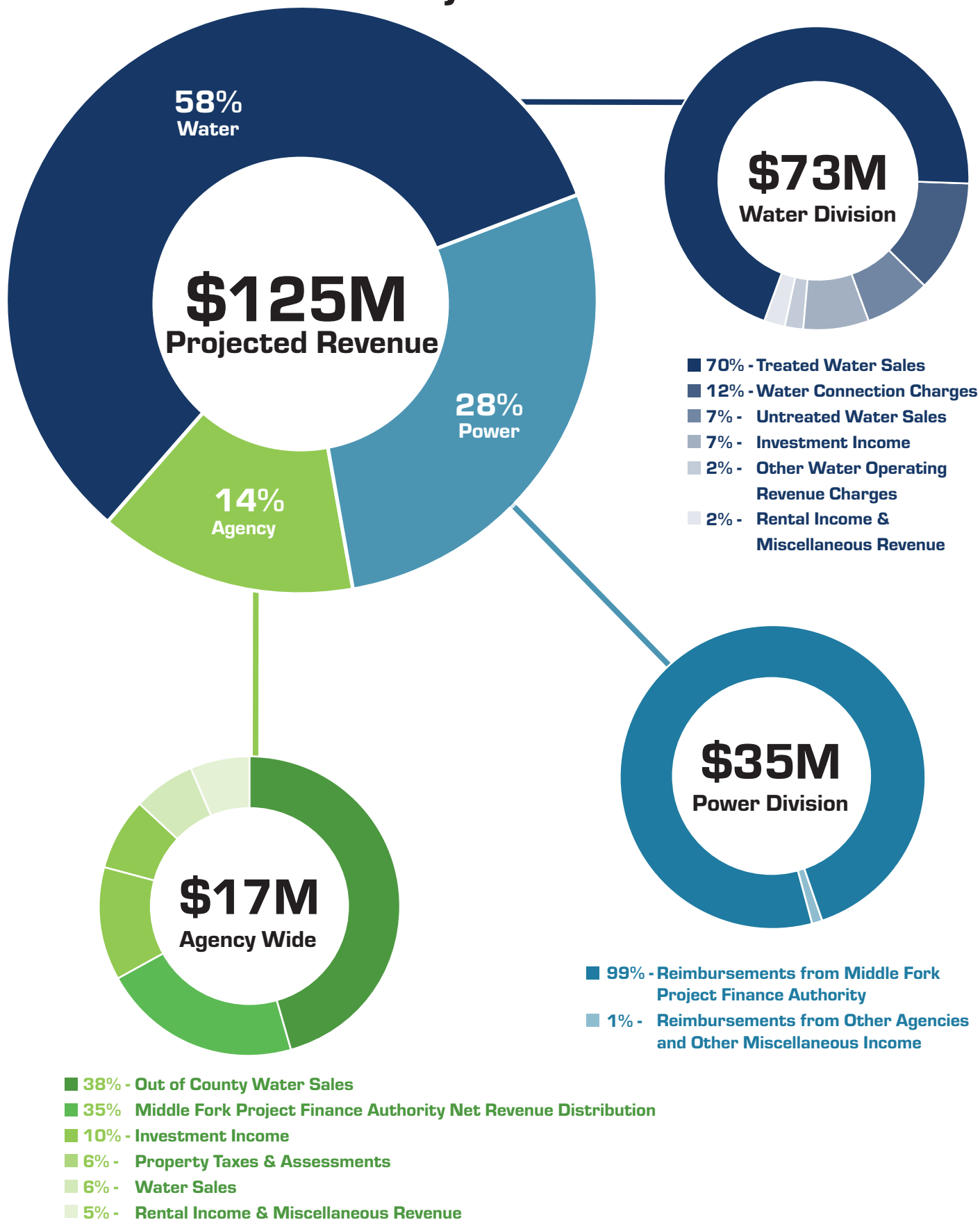


**\$41M**

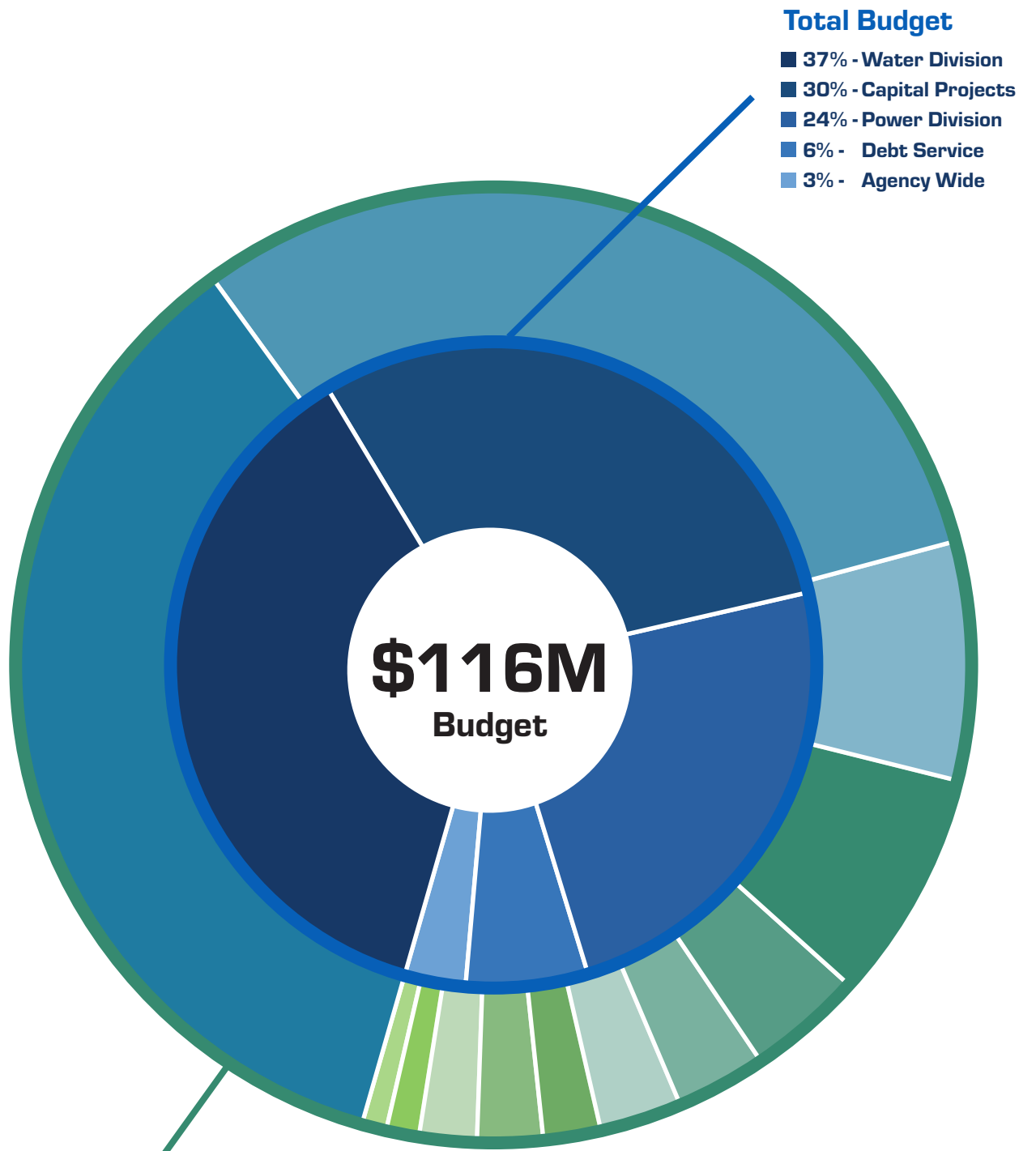
Funded 2020 Budget  
Capital Investment  
Program

\* As of 1/1/20

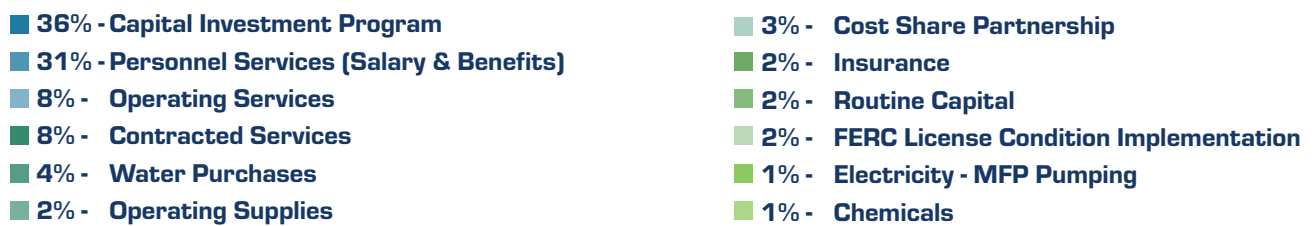
## 2020 Projected Agency Revenue Sources by Division



# 2020 Adjusted Agency Budget



## Total Combined Budget



## Canal System Improvements



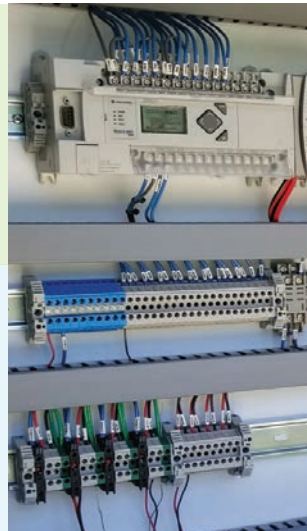
Communication technology and automated flow control gates being installed along canals are saving both water and canal operator "windshield time."

**5**  
automated  
gates

**360** acre  
feet  
water  
saved

**1**  
SCADA-  
operated  
reservoir

**156** hours  
reduction in  
staff travel  
time



**103** linear  
feet  
flume tin  
replaced

**746** linear  
feet  
flume  
under-structure  
rebuilt



Flume tin and under-structure replacement are maintenance items every year at PCWA, saving water and preventing catastrophic failure.



Lining our earthen canals with a cement material called gunite, the same thing used in swimming pools, vastly decreases water seepage and protects berms from catastrophic failure.

**9,686** linear  
feet  
canal lined  
with gunite

**1,754** cubic  
yards  
gunite lining  
applied to canals



# Treated Water System Improvements

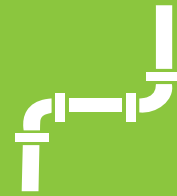
Replacing old water mains, service laterals, and other treated water infrastructure reduces water loss, improves water quality, lowers future maintenance and labor costs, improves firefighting capabilities, and increases overall system reliability.



**2,070** feet  
new, 8-inch ductile iron  
water main installed

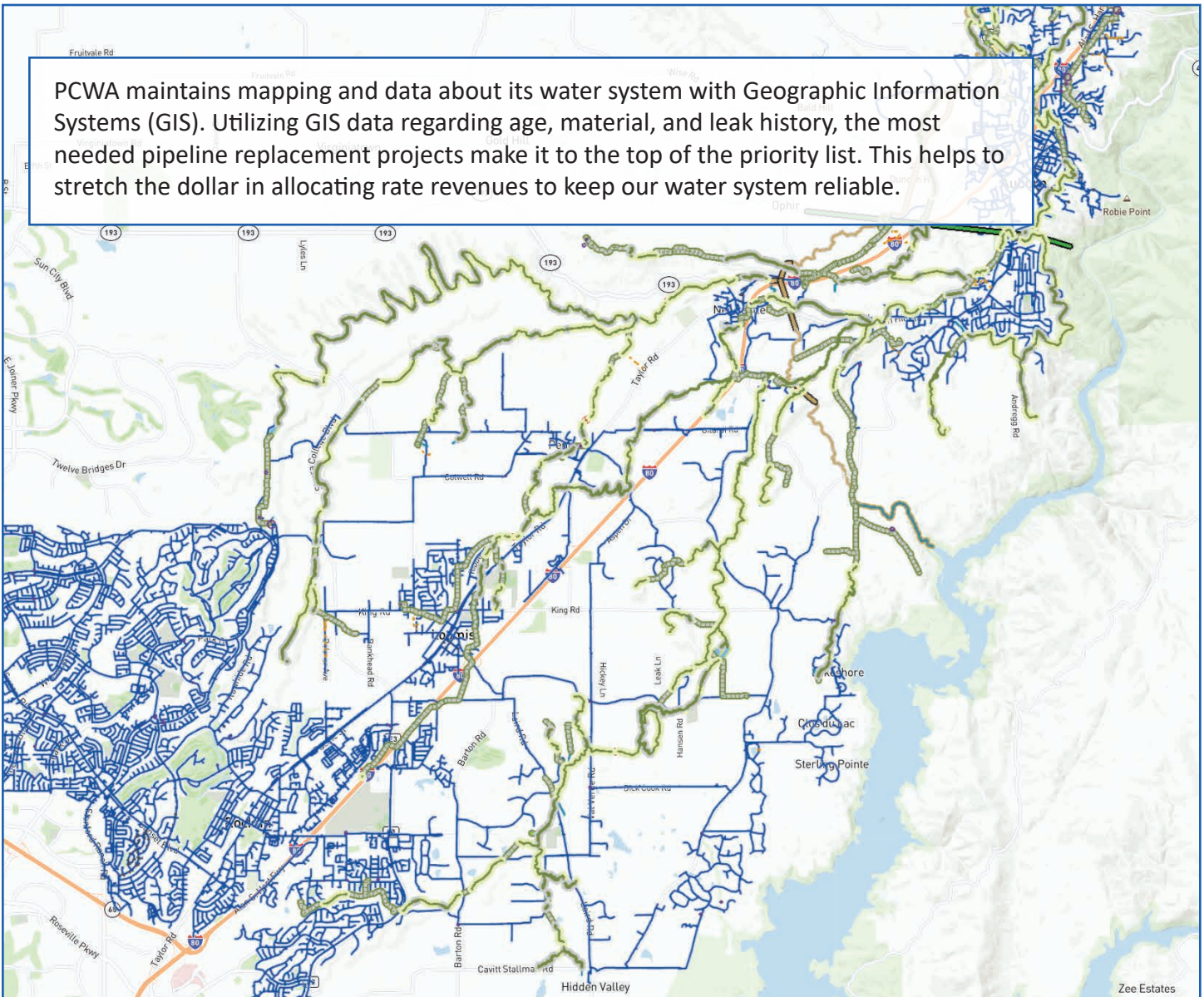


**66**  
water mains  
replaced



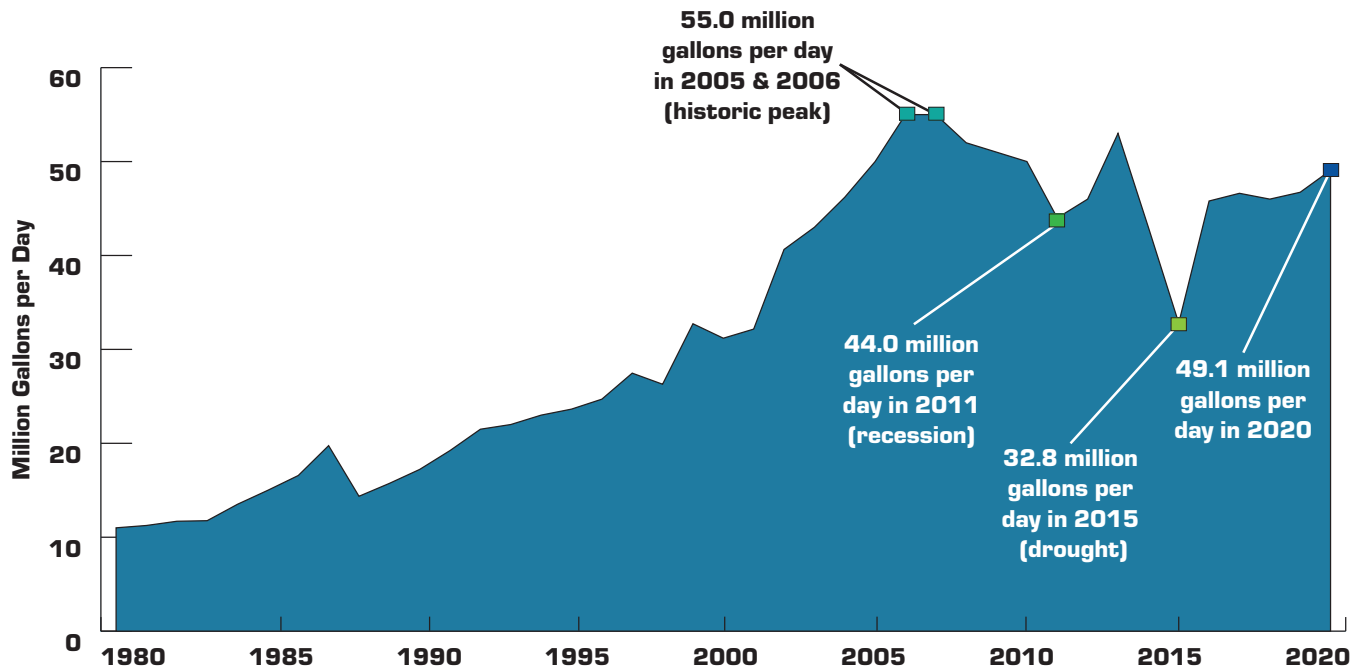
**180**  
service laterals  
repaired or replaced

PCWA maintains mapping and data about its water system with Geographic Information Systems (GIS). Utilizing GIS data regarding age, material, and leak history, the most needed pipeline replacement projects make it to the top of the priority list. This helps to stretch the dollar in allocating rate revenues to keep our water system reliable.

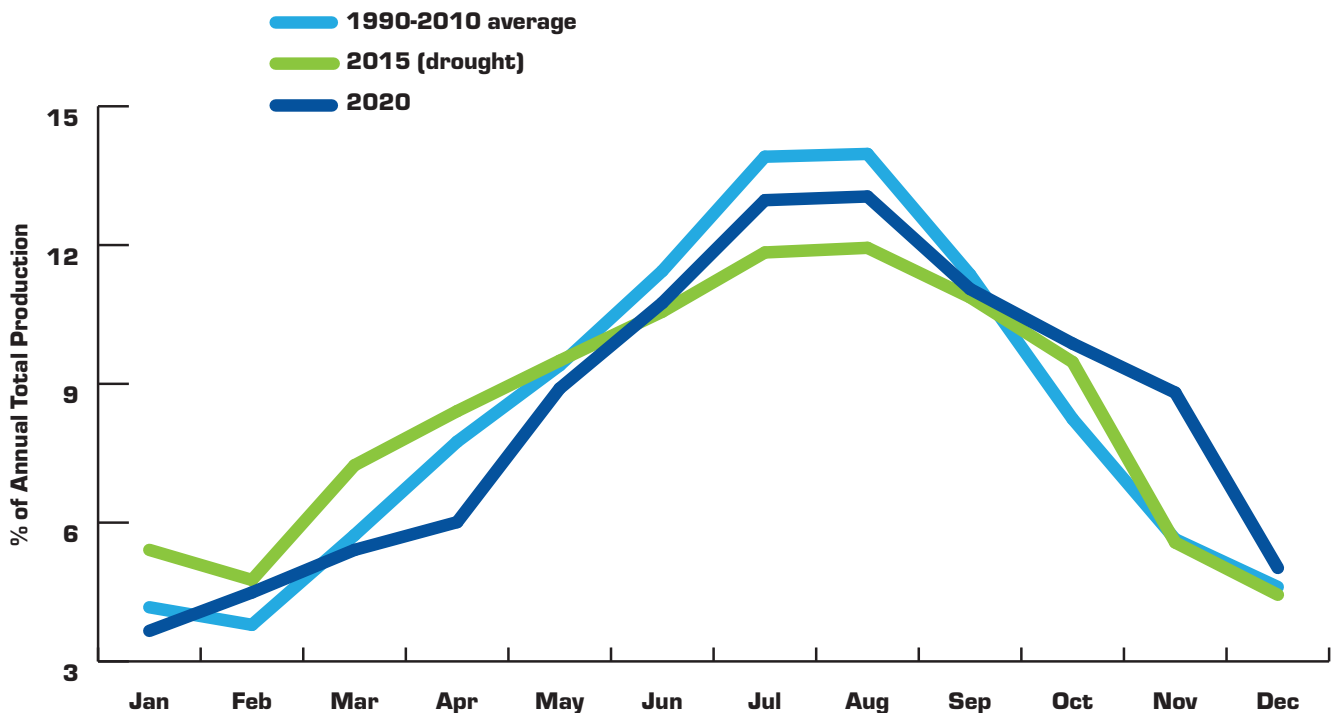


# Drinking Water - Supply and Demand

**Peak Summer Demand  
1980 to 2020**



**Monthly Drinking Water Production**



Gains from outdoor water efficiency efforts during the 2015 drought have continued into 2020.

In 2009, state legislation mandated  
**20%** conservation of water,  
 per capita, by 2020.

**PCWA beat the target by 8%.**

**261**

Target  
GPCD

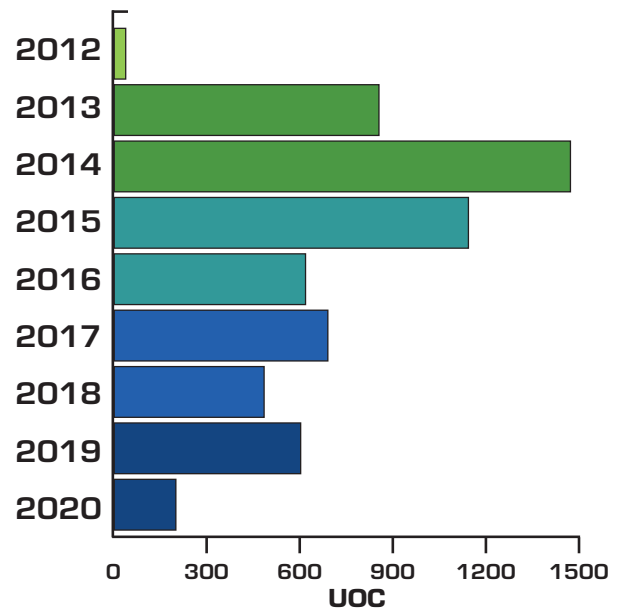
**240**

Actual  
GPCD



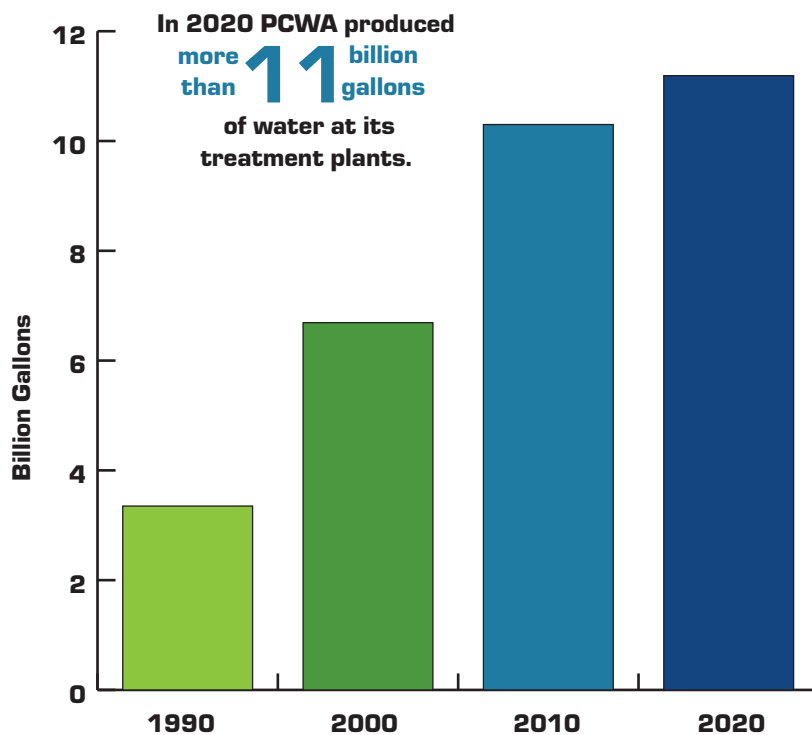
Expressed in Gallons per Capita per Day (GPCD)

### Yearly Commitments to New Treated Water Services



Expressed in Units of Capacity per Year (UOC)  
 1 UOC = 1,150 Gallons per Day

### Drinking Water Production per Year

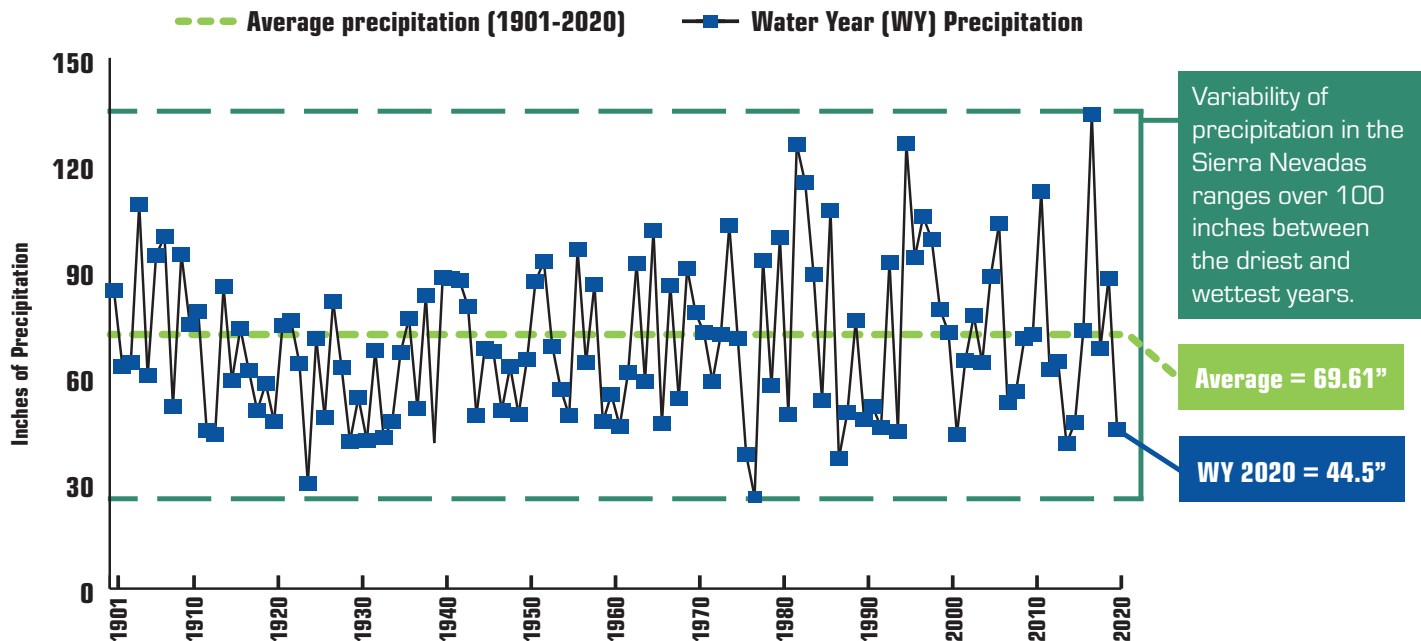


Decade over decade, annual drinking water production has increased to meet the demands of Placer County's growing population.

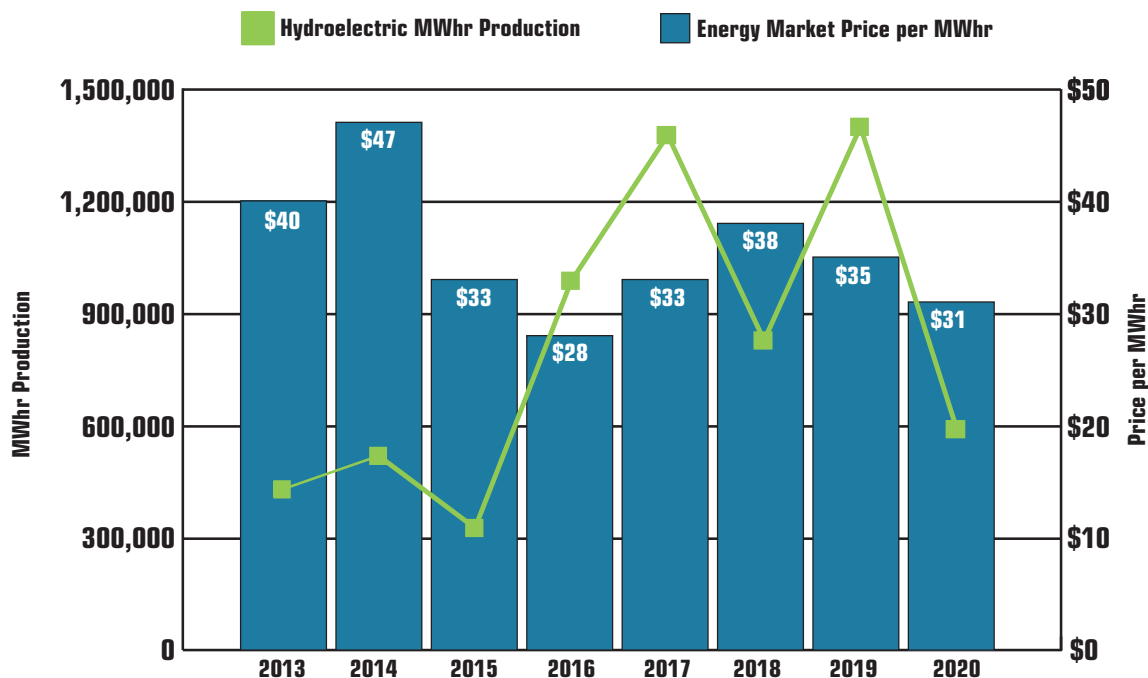
Year	Population Served by Retail Water System
1990	49,391 *
2000	67,321
2010	91,648
2020	108,225

\*Estimated

## Variability of Annual Precipitation



## Middle Fork Project Energy Production & Market Prices



Even in dry years, PCWA's Energy Marketing team optimizes energy revenue.

## Middle Fork Project Energy Production

Since 2013 the Middle Fork American River Project has produced an average of

**1,100 GWhrs** of  
clean  
hydroelectric  
energy

That's enough  
energy to power

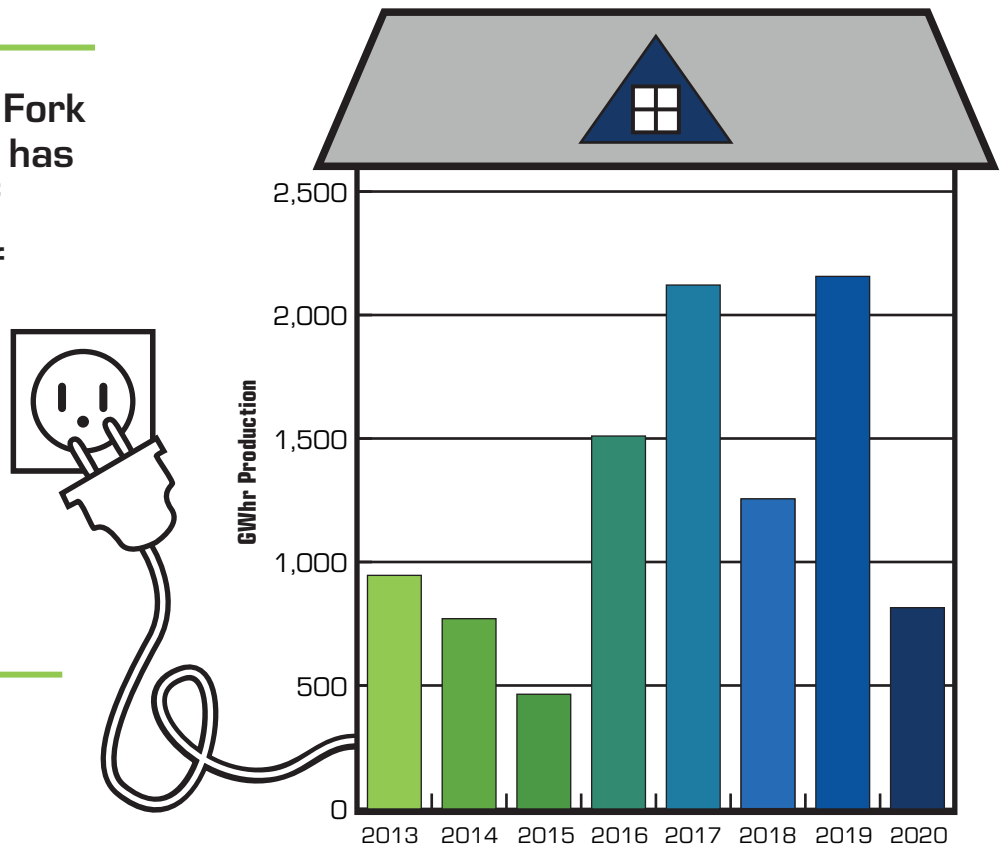
**165,000** homes.\*

\* Average California home uses  
6.684 MWhrs per year

MWhr = Megawatt hour

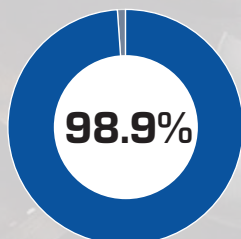
GWhr = Gigawatt hour

1,000 MWhrs = 1 GWhr

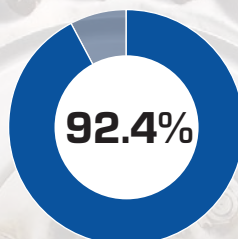


### Reliable Energy

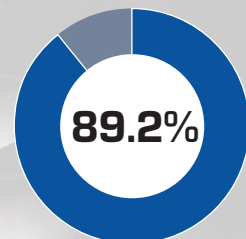
Percentage of hours hydroelectric generating units were  
available to be connected to California's energy grid:



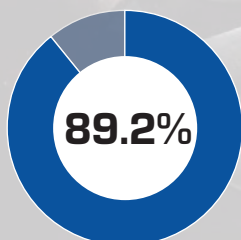
Hell Hole



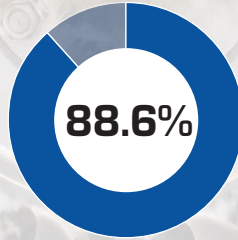
French Meadows



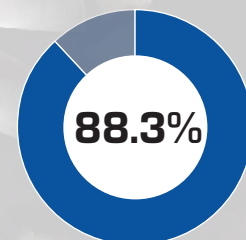
Middle Fork #1



Middle Fork #2



Oxbow



Ralston

Unavailable hours include preventive and corrective maintenance, and capital improvement projects.

## DEPARTMENTAL ACHIEVEMENTS

### GENERAL MANAGER'S OFFICE



**By Andrew Fecko,  
General Manager**

2020 was a year of significant transition for the Office of the General Manager (GM). The retirement of my long-time colleague Einar Maisch in March gave me the opportunity to serve as General Manager of one of the premier water agencies in California. We were immediately met with tremendous staffing and personnel challenges provoked by the COVID-19 pandemic and the state and federal responses that placed significant restrictions on the Agency's workforce. Nevertheless, the Agency's missions of delivering clean water to our customers and producing clean energy for California's electric grid were never interrupted. Every Agency employee made significant personal and professional adjustments in their lives to accommodate new working conditions to achieve these outcomes, and I am grateful for all of their efforts.

We made significant organizational changes within the GM office. We consolidated the Strategic Affairs and Legal departments within this office to simplify budgeting and coordinate planning. The PCWA GM office is unique in that we are not here to simply oversee other Agency departments, we are all working professionals that have technical, legal, managerial, and administrative expertise that we use to guide strategic initiatives of all Agency functions.

With the retirement of long-time Agency Secretary/Clerk to the Board Cheri Sprunck, we took the opportunity to reorganize the administrative functions of the Clerk and the Executive Assistant to better serve the Board and the professional staff within the GM office. Lori Young and Vibeke Figueroa staff these positions and are essential to keeping Board business moving forward in an organized and efficient way, resulting in a strong sense of confidence in all public facing matters.

Darin Reintjes moved from the Energy Marketing Department to be the Director of Resource Management. In his new role, Darin coordinates technical efforts related to water management and long-term supply planning for the Middle Fork and Drum-Spaulding projects, including water transfers, long-term potential climate and hydrology conditions, and regulatory challenges associated with Folsom Reservoir management. Darin's deep technical background and broad experience within several Agency business units during his career at PCWA are assets that resulted in a successful water transfer this year as well as important progress on the American River Basin Study, the regional effort we lead with the Bureau of Reclamation and several regional water agency partners.

Tony Firenzi moved from the Technical Services Department to fill my former position as Director of Strategic Affairs. His background in water supply and infrastructure planning along with coordination with local interests, like that of land development, offer a helpful skillset to our executive functions. Tony's duties are wide ranging and usually involve long-range initiatives, partnerships, and external affairs. PCWA is often the regional leader on these efforts, so Tony's role requires collaboration and leadership skills that led to noteworthy progress on regional projects in 2020, like the groundwater bank and RiverArc. Tony also led successful implementation of the first ever distribution of net revenues from our Middle Fork Project and is representing PCWA in Water Forum 2.0 negotiations.

We are fortunate to have staff legal counsel at PCWA, and exceptionally fortunate to have this function headed by Staff Counsel Dan Kelly. Dan brings a wealth of expertise in statewide water matters, along with practical experience in the more routine issues we encounter as part of operating public water

and power systems. The issuance of the Agency's Middle Fork Project Federal Energy and Regulatory Commission (FERC) license in 2020, after years of regulatory delay at the state level, was an historic achievement managed by Dan. He saw a unique opportunity emerge from several federal court cases and built a strategy that allowed FERC to issue a 40-year license for the Middle Fork Project. Our legal expertise and efficiency grew in 2020 with the addition of Michelle Durgarian as Legal Analyst. Michelle was formerly in the Technical Services Department and brings extensive experience in negotiating and writing contracts for the Agency. Our goal with this move was to streamline Agency contracting and create a single point of contact for

staff throughout the Agency for the many design, construction, and professional services contracts required to accomplish the Agency's mission. This streamlining is not only more efficient and cost effective, but it results in contracts that better protect PCWA interests.

I am personally very proud to have assembled a team of professionals in the Office of the General Manager that embody the spirit of this Agency. This team helps me carry out my duties, but in addition, is always looking for ways to make the Agency more efficient, more responsive to our customer's needs, and retain our leadership position as northern California's premier water and power agency.



## CUSTOMER SERVICES DEPARTMENT



**By Matt Young,  
Director of Customer Services**

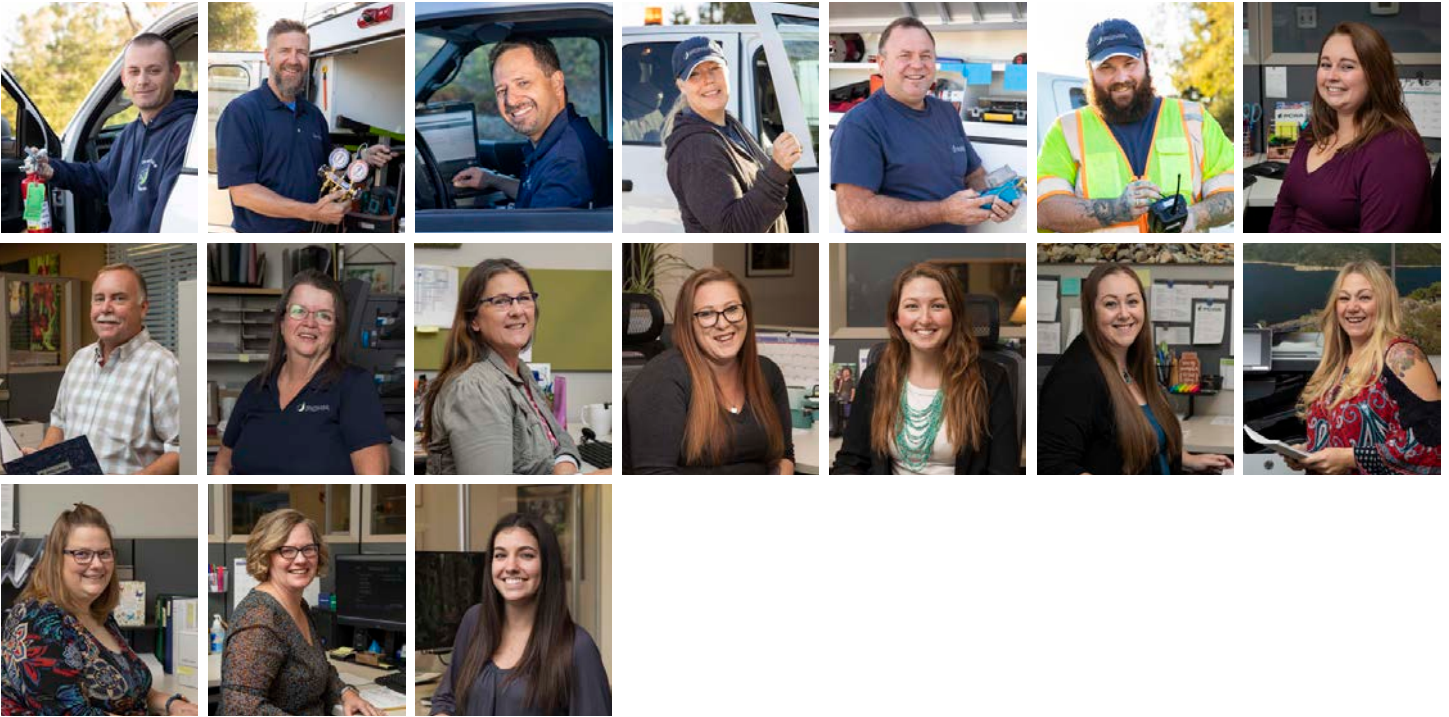
Working through a pandemic brought many challenges to the Customer Services Department in 2020, however, with a dedicated team we continued to provide a high level of service both to our customers and Agency personnel. Internally, the facilities team took immediate steps to retrofit our buildings and strengthen our sanitation and disinfection practices. This included upgrading HVAC filters to the highest safety rating at all Agency locations, and making sure our facilities were stocked with appropriate personal protective equipment and other disinfection needs. Our Public Affairs Division also started an aggressive communications campaign to assure customers that our drinking water supplies remain safe and robust. I am proud of the remarkable job my team did in adapting to new working conditions while still making service to our customers their highest priority.

As implications of the pandemic have become clearer, Customer Services faces some new realities. One such reality is included in an executive order from the Governor that affects our collections processes by suspending water shut-offs. In response, we've come up with some creative ways to help customers stay current by issuing a courtesy door tag and an extra automated call. Additionally, staff has worked closely with customers to modify payment arrangements. Through these efforts we have been able to minimize the potential debts to the Agency resulting from the executive order.

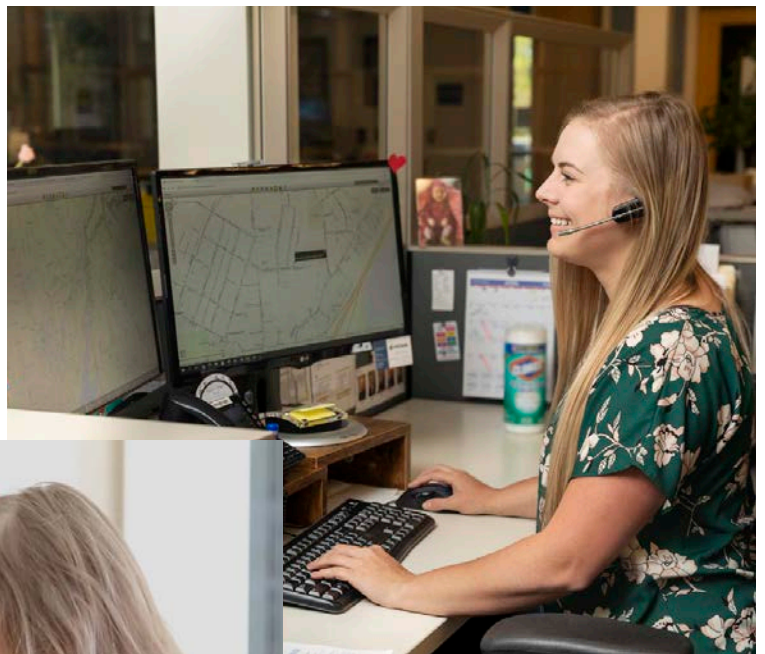
We have also had to pause our well regarded Water Wise House Call program. Still, the Water Efficiency Division assisted every customer who had an irrigation concern - via phone or email, and followed up with an investigation while maintaining social distance. Working in coordination with our multimedia team, we've also gone virtual, bringing gardening and water wise tutorials to customers via Facebook Live events. These virtual programs have been well received and have piloted a new way of conducting some of our outreach to customers.

The year's accomplishments, however, were not solely related to pandemic response. The Public Affairs Division and Water Efficiency Division were both recognized for outreach and communications. Specifically, Public Affairs took the top prize in Photography from the California Association of Public Information Officials (CAPIO), while Water Efficiency won the U.S. Environmental Protection Agency's (EPA) WaterSense Award for Excellence in Education and Outreach. This is the first time PCWA has received awards from CAPIO or the EPA, and the first time PCWA has won a statewide or national award for outreach and communications.

Whether our 2021 customer interactions are virtual or in person, we look forward to a new and innovative year filled with many more positive customer experiences. On behalf of the entire Customer Services Department, I would like to thank our General Manager, the Board of Directors, and our customers for the opportunity to serve in a unique and memorable 2020.



**PCWA staff continues to work around the clock to provide uninterrupted supply of drinking water during the COVID-19 pandemic.**



FIELD SERVICES DEPARTMENT



**By Daryl Hensler,  
Director of Field Services**

As the Director of the Field Services Department, I am amazed by the dedication and personal accountability that my staff demonstrated in 2020, managing on-call, telework, and in-office rotations with a high level of professionalism in the operation and maintenance of the Agency's water systems.

Using innovative methods and materials, along with efficient use of labor resources, we were able to complete additional projects above and beyond the planned annual list of capital and routine projects in what was a challenging year with the COVID-19 pandemic. The Caperton Reservoir elimination showed a great deal of strategic thought and interdepartmental cooperation, allowing such a multi-faceted project to be completed in-house in record time and at lower cost than outsourcing.

The automation of the outlet valve at Mammoth Reservoir is a great example of the partnering that occurs between departments at PCWA. Field Services, Drinking Water Operations and Power staff worked together to upgrade this facility – the outcome will be an abundance of saved water and reduced operator time by automating regulation of flows through the lower system.

We are driven to continuously improve in everything we do, while keeping safety as our highest priority, and are on track to complete the year with an astounding 386 days without a lost time injury/accident. The effective safety culture that my staff has embraced is world-class, providing 24/7 response while working in inclement weather and challenging situations to safely provide reliable water service to PCWA customers.



## FINANCIAL SERVICES DEPARTMENT



**By Joe Parker,  
Director of Financial Services**

Leading Placer County Water Agency's Department of Financial Services (Finance Team) is the greatest honor of my career, and this annual report gives me the opportunity to highlight the outstanding accomplishments of our exceptional team during this past year and the future ahead. We are a team of dedicated professionals that provide the financial functions of the Agency.

Throughout the year, the Finance Team performs a multitude of tasks including budget coordination, amendment and monitoring, financial analysis and special projects, financial management and reporting, treasury and cash management, procurement administration, debt management, contract review, and all financial aspects of the Middle Fork Project (MFP) Finance Authority

(Authority). Reflecting back on 2020, there are many accomplishments, yet the following are most notable.

After nine months of hard work by most Finance Team members, in March 2020, the MFP debt refinancing process came to a culmination with the bond pricing. Not known at the time, the price timing was ideal as we completed the issuance of one of the last municipal tax exempt pricings prior to the March 2020 COVID-19 shut down. The refinancing was extremely successful, providing net present value savings of \$6.68 million to the MFP Finance Authority, with annual debt service savings of \$460,000.

After the refinance and the Authority's closing of the 2019 year-end financials in April 2020, the Authority was able to fill the targeted reserves and realize net revenue for the first time in its history. This resulted in the Agency receiving a distribution for the first time in the project's history. The Authority distributed \$6 million to each of the partners and the Finance Team began to work with other departments regarding the distributed amount and inclusion in the Agency's County Wide Master Plan and Financial Assistance Program in development of the 2021 Agency Budget.

In March, with the Governor's shut-down order and with the help of the Agency's Information Technology Division, we quickly deployed laptops to every team member to immediately and seamlessly transition to working remotely. My staff was extremely successful in working remotely with only periodic and very limited office visits for essential duties such as printing checks once a week. Each member of the Finance Team was and is key to the department's success during this unusual and disruptive time as demonstrated each and every day by their attention to detail and quality work product.

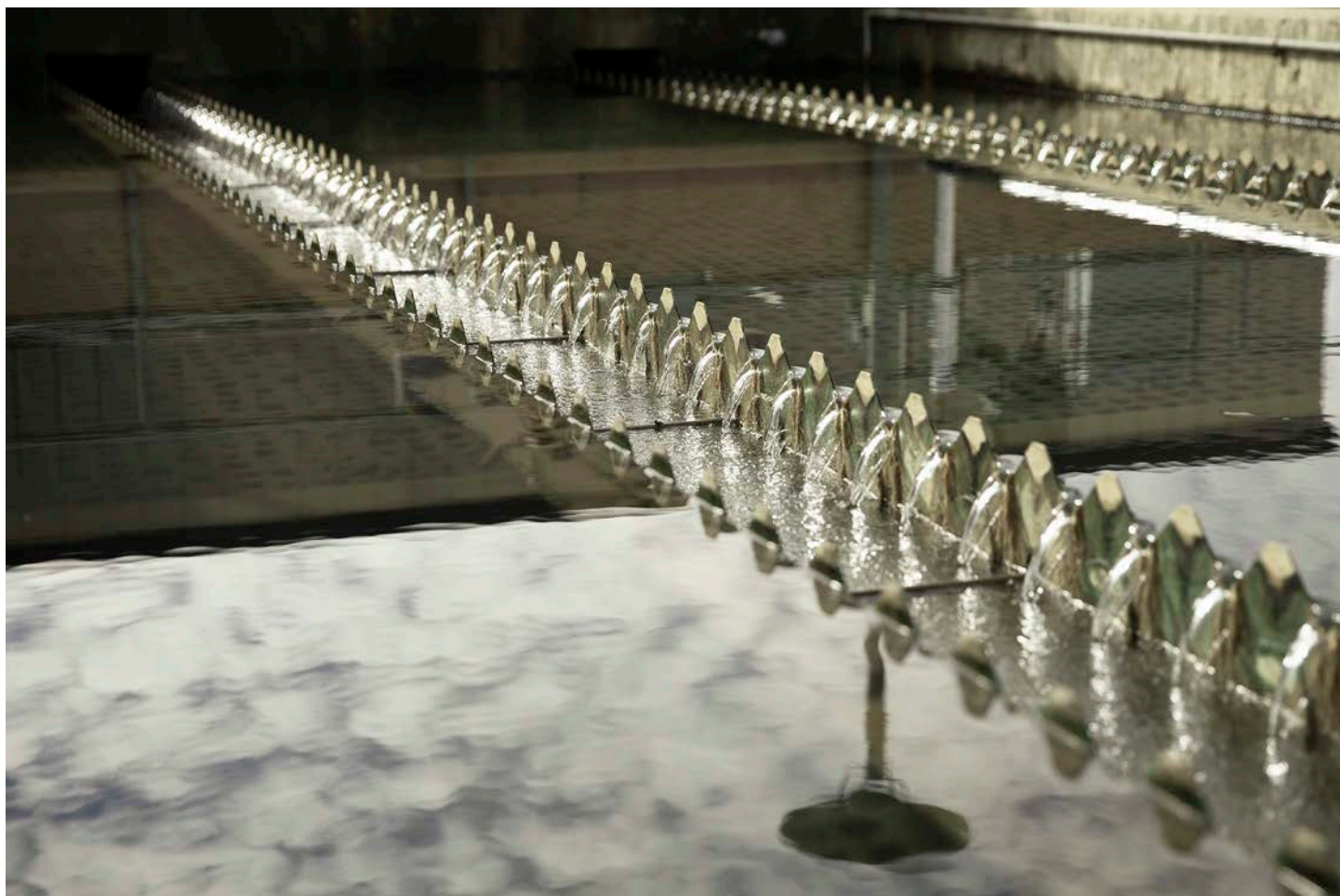
Over the past 18 months, the Finance Team was researching and evaluating opportunities to reduce the Agency's unfunded accrued pension liability. Impacts of COVID-19 on the economy and the Federal Reserve providing continual liquidity pushed interest rates/earning to all-time lows. In July, CalPERS notified its members that it fell short of its investment goals for the year ending June 30, 2020, by 2.5% (expected earnings 7% vs. actual earnings 4.5%). This not only increased the Agency's unfunded pension liability, but also increased future

payment requirements of all members, including the Agency. In seeking to reduce the annual payment on unfunded pension liability, the Finance Team initiated a conversation with a consultant to assist with this analysis. Over the course of six weeks, various scenarios to lower the Agency's annual unfunded pension liability costs were evaluated. The Agency's investment portfolio earnings compared to the cost of not paying down this large liability led to many meetings with the Finance Committee, which are still on-going, to develop a strategy to take advantage of using the Agency's healthy cash reserves to pay down its 7% debt with CalPERS. We are continuing to analyze the initial funding target and beginning to draft a Funding Policy to present to the Board in early 2021. An estimated \$35.4 million payment is required to achieve a 90% funding target, which would result

in the Agency saving almost \$2.5 million annually in interest costs.

Related to the low interest rates on investment earnings, the municipal bond market is at record low rates for debt issuance, which provides another opportunity for the Agency to finance Water Division capital projects at very attractive rates. A potential borrowing for capital improvements (renewal and replacement projects) to the Agency's water supply and delivery system has been evaluated by the Finance Committee and the professional services agreements to initiate the process of issuing tax-exempt bonds have been approved.

Despite the COVID-19 challenges of 2020, I am extremely proud of the achievements and resiliency of the Finance Team.



TECHNICAL SERVICES DEPARTMENT





**By Brent Smith,  
Director of Technical Services**

2020 was a year of tremendous challenge and opportunity for employees within the three divisions of the Technical Services Department.

I am most proud that all employees in our department came together and worked as a unified team. They turned the many challenges associated with 2020 into an opportunity to shine. They adapted to new, flexible work schedules and routines to comply with distancing and safety protocols. At no time was the safety, quality, and reliability of PCWA's drinking water compromised.

The Information Technology Division (IT) made sure that all PCWA employees had the necessary technology in place as we transitioned from a normal office setting to a "new normal" of working remotely. In addition, IT took the lead on ensuring that new forms of meeting virtually were in place and operational. This division was working tirelessly behind the scenes supporting all employees with the devices, connections, and technologies that were essential to conduct business.

It was heartwarming to witness our Engineering Division reach out and seamlessly collaborate with others on a robust risk assessment and emergency response plan in a very short amount of time in order to comply with the new federal EPA America's Infrastructure Act.

For the second year in a row, Public Safety Power Shutoffs (PSPS) became a reality and challenged our team. In short order, PCWA once again responded with a plan for temporary generation equipment to be deployed at our two most critical pumping stations: the American River Pump Station and the Ophir Road Pump Station. To ensure that future PSPS events do not impact PCWA's ability to provide reliable service, our team launched a new project in which permanent PCWA-owned equipment was planned and will be in place by October 2021.

Within the Drinking Water Operations Division, our operational technology team made huge strides forward in providing enhanced network security, infrastructure improvements, and disaster recovery strategies.

During 2020, several new employees joined each of our three divisions and many organizational changes were made to efficiently respond to new project priorities, such as those associated with PCWA's new 40-year FERC license.

The 73 employees that make up the Technical Services Department enthusiastically look forward to 2021 with continued technical services and support wherever and whenever necessary in order for PCWA to fulfill its mission within water systems, power systems, and county-wide stewardship.

## ADMINISTRATIVE SERVICES DEPARTMENT

By Michael Willihnganz,  
Director of Administrative Services

The most important objective of the Administrative Services Department is to create a safe and healthy work environment in which all employees can maximize their talents and contribute fully to the Agency's success. The two divisions within the department, Human Resources and Risk and Safety Services, work in concert on an on-going basis to achieve this objective. I am proud of the contributions these staff have provided in the Agency's successes of 2020.

The COVID-19 pandemic created unprecedented challenges and risks for the Agency and its workforce in 2020. The Agency's pandemic response consumed a significant amount of time, energy, and resources of the Administrative Services Department. We assumed the primary responsibility for monitoring federal and state COVID-19 legislation, along with state and county public health orders and directives. Our highest priority was the implementation of practices to safeguard the health of the workforce and maintain Agency operations. All other departmental programs, activities and responsibilities were relegated to a secondary priority during the year.

In March, Congress passed the Families First Coronavirus Response Act (FFCRA). This Act provides Emergency Paid Sick Leave and Emergency Family and Medical Leave for qualifying reasons related to the COVID-19 public health emergency. We responded to the legislation by creating the necessary internal infrastructure and modifying the payroll system to quickly make the benefits under the Act available to eligible Agency employees.

Many workplace practices were modified or redefined by Administrative Services during the pandemic to protect the health and safety of Agency employees. For example, events that would normally bring an assembly of employees together, such as the monthly All Hands Meeting, the annual Benefits Fair, and the Exemplary Performance Award Ceremony, were converted to highly effective virtual gatherings. Drawing on the direction from the Centers for Disease Control and Prevention (CDC) and the Placer County Public Health Department, Administrative Services has been proactive in establishing Agency-wide cleaning and disinfecting standards for Agency facilities, and implementing employee health and

safety protocols. Additionally, with the goal of providing peace of mind to Agency employees who have frequent interaction with the public, we were able to arrange for bi-weekly COVID-19 testing for interested employees. This was achieved by taking advantage of a program offered through the California Municipal Utilities Association and securing the services of a local medical clinic.

Working in collaboration with the International Union of Operating Engineers, Stationary Engineers (Local 39), a telecommuting policy was created and adopted to allow employees to work remotely. This policy provides the flexibility that employees may need as they deal with family health issues or childcare challenges brought on by COVID-19. The policy also provides the Agency with a means to keep employees physically separated yet productively employed in the event of a surge in COVID-19 cases or a new order to "shelter in place" by public health officials. Similarly, Administrative Services secured agreement from Local 39 to modify vacation accrual limits so that employees would not lose earned vacation hours when major portions of the economy were suspended and the possibility of travel was severely limited.

In 2020, our primary focus became providing the Agency with guidance, direction, and factual information regarding the COVID-19 pandemic. This level of support was essential in helping the Agency fulfill its missions and meet the needs of its customers during very difficult times.



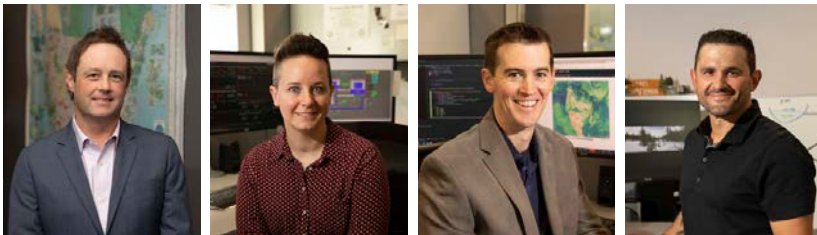
## ENERGY MARKETING DEPARTMENT

**By Ryan Cline,  
Director of Energy Marketing**

To say the least, 2020 has had its challenges for PCWA and for the Energy Marketing Department. With below average precipitation, plummeting energy prices, a new Federal Energy Regulatory Commission license, and blackouts, any year would be difficult to manage, but these challenges were exacerbated by the COVID-19 pandemic. I am delighted with how my team has made the best of these circumstances, putting clean energy from the Middle Fork Project on the California grid while optimizing revenues for operations and for the people of Placer County.

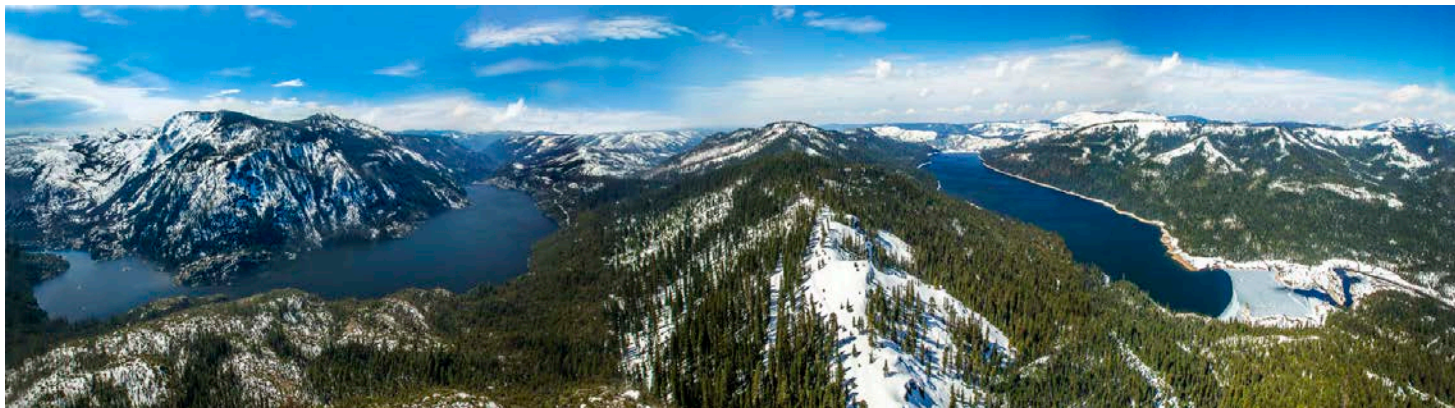
To kick the year off, below average precipitation in January and February had us all a little nervous. As March rolled in, we finally received enough rain to pull us out of a critically dry year with 67% of average precipitation for 2020. However, just as soon as it started raining and our fear of drought eased, the pandemic arrived. As worldwide shutdowns and social distancing set in, consumer demand for energy collapsed, bringing with it collapsing prices. Crude oil was at the leading edge of declines, dragging with it prices for natural gas and electricity. As summer set in, the weather was nice and the demand for energy remained at all-time lows. Energy prices rebounded by late summer and remained strong for the rest of the year, and total 2020 MFP revenues will come in around 75% of budget.

Due to the 24-7 nature of energy markets, working



from home is nothing new for us, so the transition to working exclusively from home was not an interruption. Conference calls and virtual meetings became the norm to keep the department connected. Just before the pandemic became the headline, a key member of our department left the group for a promotion, creating an open position. Ben Barker filled that opening and joined the department in April as the newest Energy Marketing Manager. He has been with the agency since 2012 and was a natural fit. We are excited to have Ben in our group, and his impact was immediate.

I ended last year's report by saying "California finds itself in a situation where there is not enough generation in-state to meet peak summer demands when the sun goes down." Unfortunately, this statement came to fruition. In August, California instituted rolling black outs for the first time since 2001, and this occurred when the sun was setting on a hot summer day. This year's blackout is the most significant energy event in California since the 2001 Energy Crisis. We all still remember that event from twenty years ago. The 2020 blackout will also influence California energy policy for decades to come.



## POWER SYSTEM DEPARTMENT



### By Jay L'Estrange, Director of Power Generation Services

2020 capped off a critical seven-year powerhouse capital improvement program by Power System Department employees. This program included upgrading the governors that run our turbines to computer control and replacing excitation systems at our generators. These improvements to the Middle Fork Project hydroelectric system will optimize deliveries to the California grid and, thus, provide the potential for increased revenue. In addition, a major upgrade and expansion of the microwave communications system and control network was completed. These improvements have greatly increased the reliability and availability of these units to generate electricity whenever called upon. I am most proud of the fact that much of this work was accomplished by my own staff rather than outsourcing, where they have taken true pride of ownership and made improvements that will last into the next generation.

The Federal Energy Regulatory Commission issued a new 40-year operating license for the Middle Fork Project. With the new license comes a host of new operating and reporting requirements, environmental studies, and infrastructure and recreation improvements. Hydro Operations has implemented the new operating requirements that are based on the type of water year the region experiences. Power System engineers have been managing planning and design for the licensed required infrastructure improvements and are ready to start implementation in 2021.

2020 has been a challenging year, however, Power System employees maintained their can-do attitude and we will continue to operate and maintain the Middle Fork Project for the benefit of the citizens of Placer County.

## PROJECT HIGHLIGHTS

### Caperton Reservoir Elimination Project

Purpose: To eliminate seepage and algae problems created by an obsolete reservoir.

Cost: \$160,000

Start date: May 15, 2020



Crews install 36-inch pipe to bypass reservoir



New inlet structure to pipe



Overhead view of project area

## Foothill Raw Water Pipeline Project

**Purpose:** To install a pipeline to provide water to Foothill Water Treatment Plant during interruption in delivery of primary supply sources.

**Cost:** \$19,940,000

**Start date:** November 25, 2019



Crews install 33-inch pipe across countryside



Construction of energy dissipation structure



Crews install 33-inch pipe up steep hillside

## Middle Fork American River Project Communications Upgrade

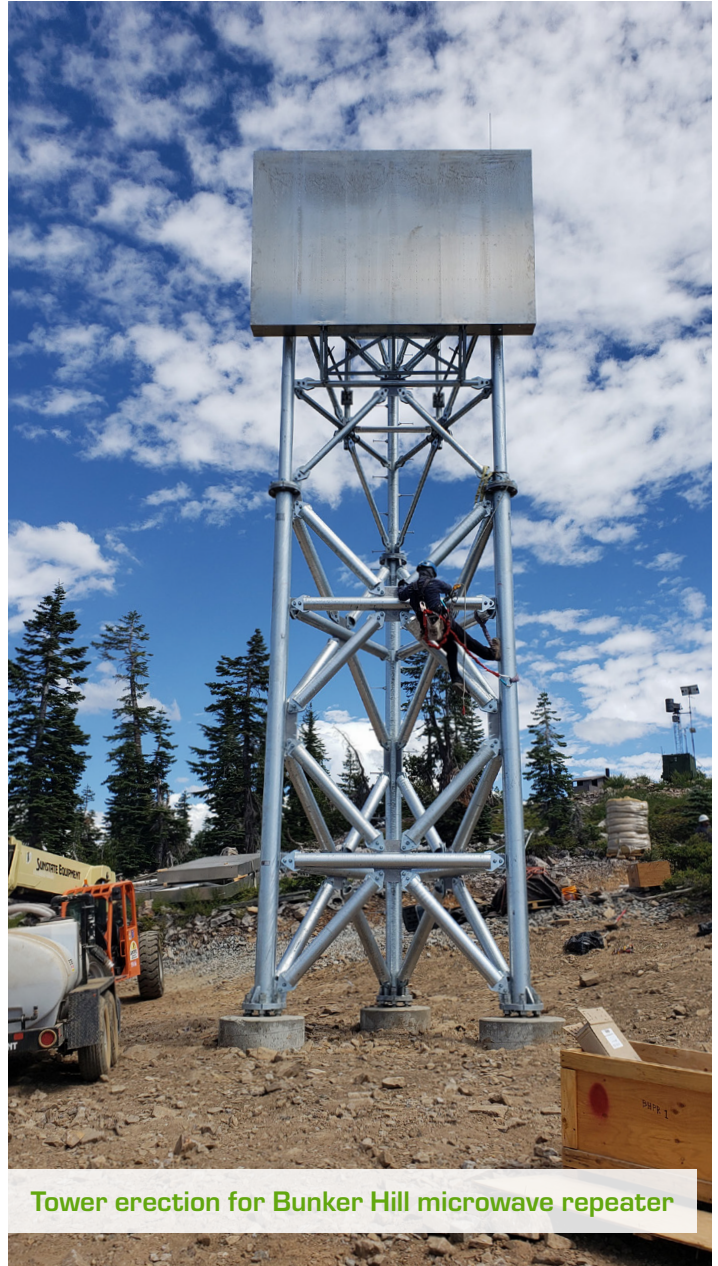
Purpose: To provide redundant, high-capacity communications to all Middle Fork Project facilities.

Cost: \$9,029,197

Start date: June 3, 2017



Foundation concrete placement for microwave repeater



Tower erection for Bunker Hill microwave repeater

## Middle Fork Powerhouse Penstock Coupling Repair

**Purpose:** To mitigate the risk of coupling rupture at the middle ring of select penstock couplings, which exhibited unacceptable brittle properties during non-destructive testing.

**Cost:** \$1,605,500

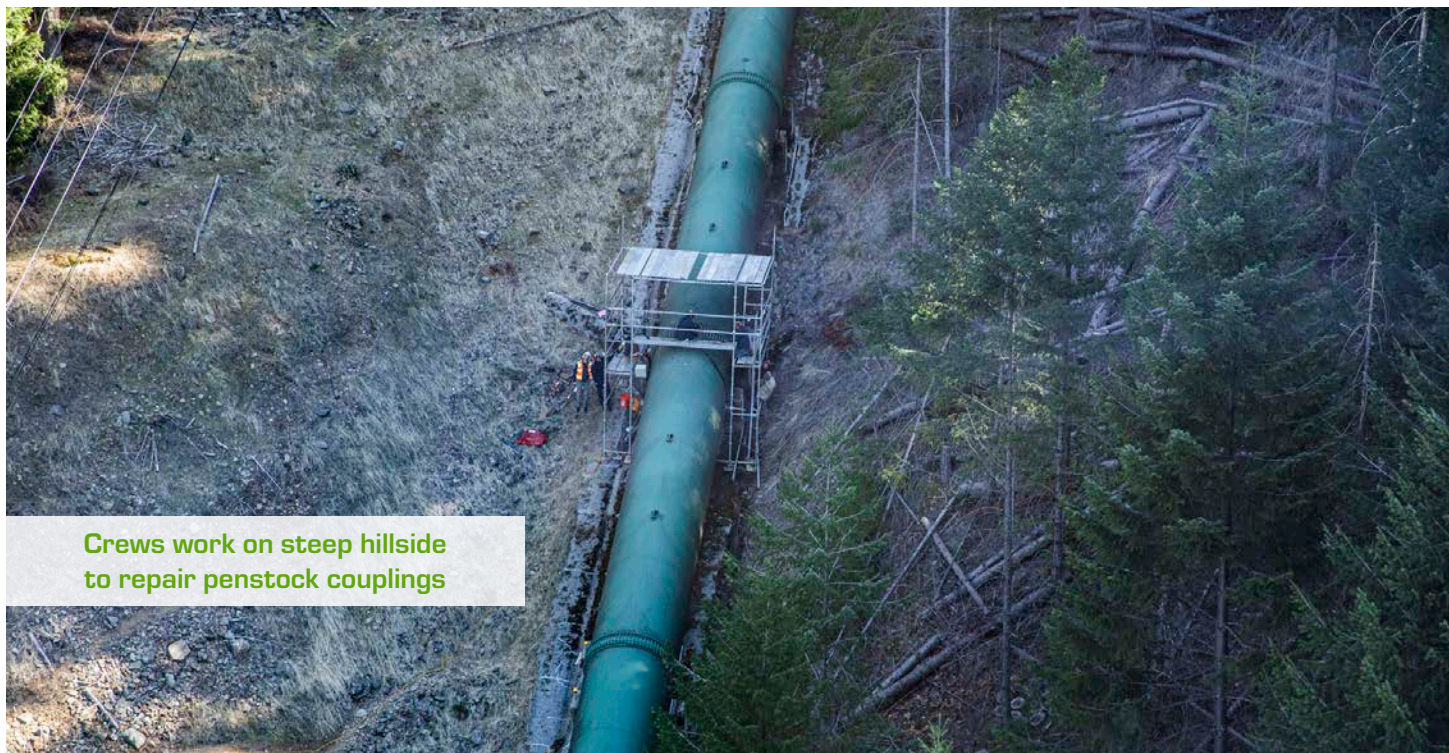
**Start date:** October 3, 2020



Brittle segment of middle ring



Coupling reassembled, post-repair



Crews work on steep hillside to repair penstock couplings

## Lincoln Metering Station

Purpose: To provide a second treated water source of supply to the growing needs of the City of Lincoln.

Cost: \$4,934,242

Start date: November 28, 2018



Construction of Lincoln Metering Station



Newly constructed Lincoln Metering Station  
and the City of Lincoln's 5 MG water tank

# 2020 YEAR END REPORT

