CITY OF BURBANK
BURBANK WATER AND POWER
STAFF REPORT

DATE: **February 2, 2023**
TO: Burbank Water and Power Board
FROM: Dawn Roth Lindell, General Manager, BWP
SUBJECT: **December 2022** Operating Results

***Please note that changes from last month's report are in BOLD**

SAFETY

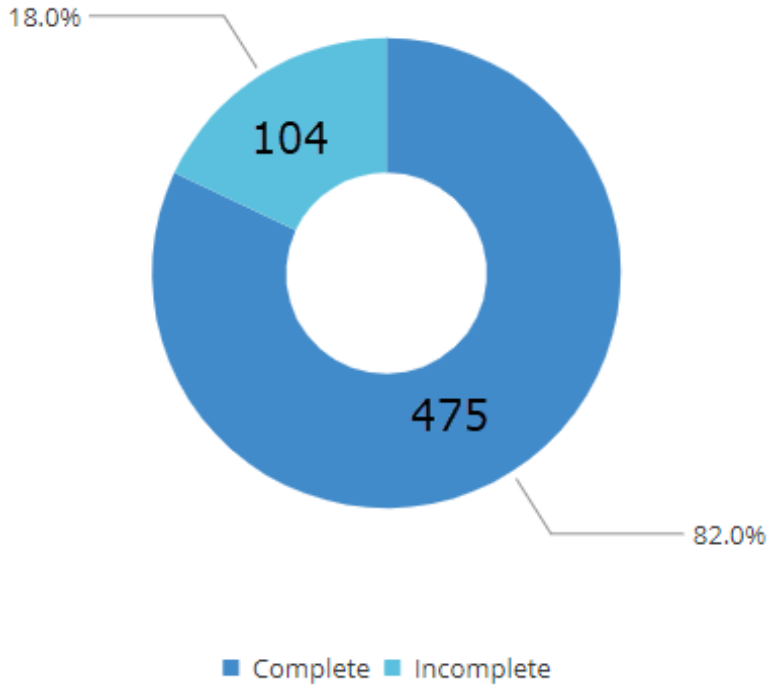
As a progressive and proactive utility, BWP tracks all environmental, health, and safety (EHS) related events, such as observations, near misses, and incidents. Staff tracks action items for these events from start to closure in order to avoid injury or damage to the city or public property. BWP continues to exceed its goal of closing 80% of action items. For this reporting period, BWP has closed 82% of corrective and preventative action items.

BWP continues to make progress on its efforts to improve employee engagement, as measured by incident, near miss and observation reporting. By reporting these events, we create opportunities to learn and prevent harm to people, the environment and property. For this reporting period, BWP has received 212 EHS-related reports for 2022 to count towards the annual goal of 300.

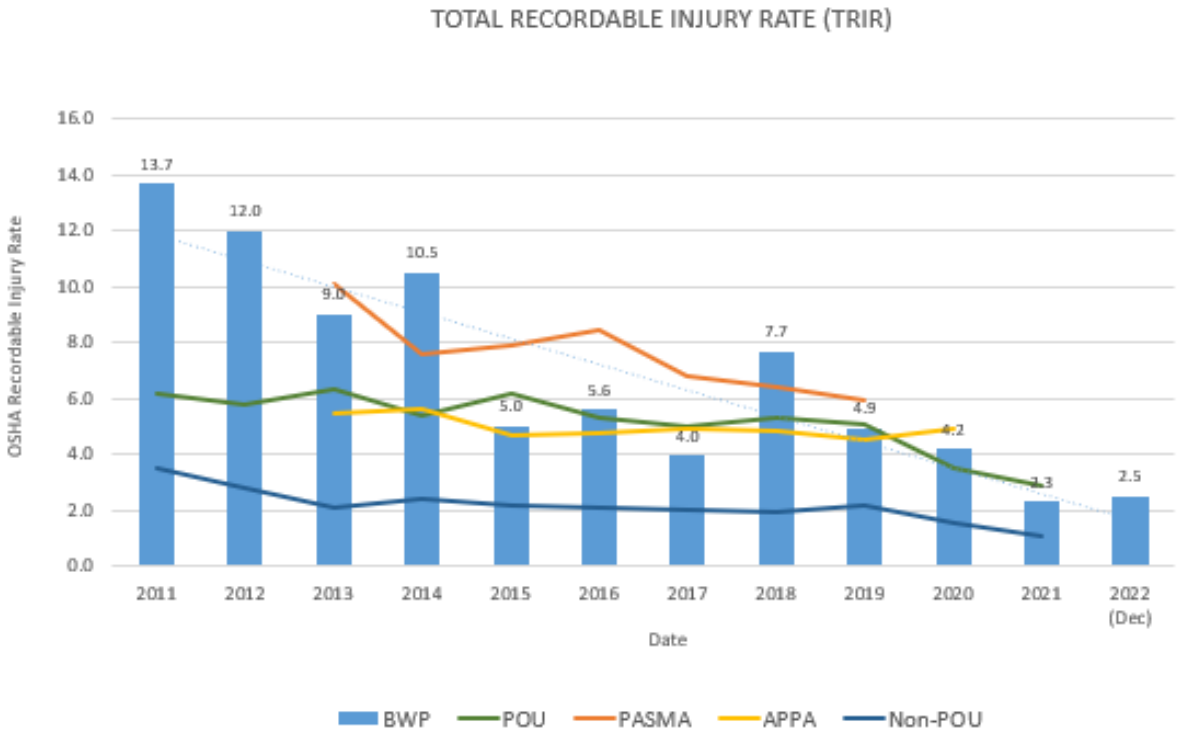
For December 2022, BWP experienced one OSHA recordable injury. BWP's 12-month rolling average OSHA total recordable incident rate is 2.5.

1. **IE-2212-0003-1 – Warehouseman received strain to the lower back while helping another employee move ground rods to their storage location.**

Corrective & Preventative Action Items (80% Goal):



OSHA Total Recordable Incident Rate:



OSHA Recordable Injury Rate = No. of recordable cases per 100 full time employees. Current year expressed as 12 month rolling average
POU - Publicly Owned Utilities - Bureau of Labor Statistics
PASMA - Public Agency Safety Management Association (Local Utilities only Data)
APPA - American Public Power Association - Average recordable injury rate for similar sized organization
Non-POU - Bureau of Labor Statistics, all non-govenrnmental utility services

Electric Financial Results

In **November,** the energy demand was **11**% below budget, primarily driven by conservation and slightly lower than average temperatures. Net income was **$940,000** which was **$2,373,000** better than budgeted. The favorable variance was primarily attributed to lower than planned retail power supply and transmission expenses and lower than planned operating expenses, offset by lower than planned retail sales.

Fiscal-year-to-date (FYTD) energy demand was **on** budget. For FYTD **November**, net income was **$5,604,000**, which was **$8,110,000** better than budgeted. The favorable result was primarily attributed to lower than planned operating expenses, higher than planned retail sales with a favorable wholesale margin.

For additional details, please see the attached financial statements.

Water Financial Results

In **November**, potable water demand was **4%** lower than budget due primarily to the ongoing response to the Governor's 15% water reduction request and Burbank being in Stage III of the Sustainable Water Use Ordinance. **Stage III limits outdoor watering to one day a week on Saturday from November to March.** Net income was **$560,000**, which was **$690,000** better than budgeted. The favorable variance was primarily attributed to **higher than planned recycled sales, and** lower than planned operating and water supply expenses.

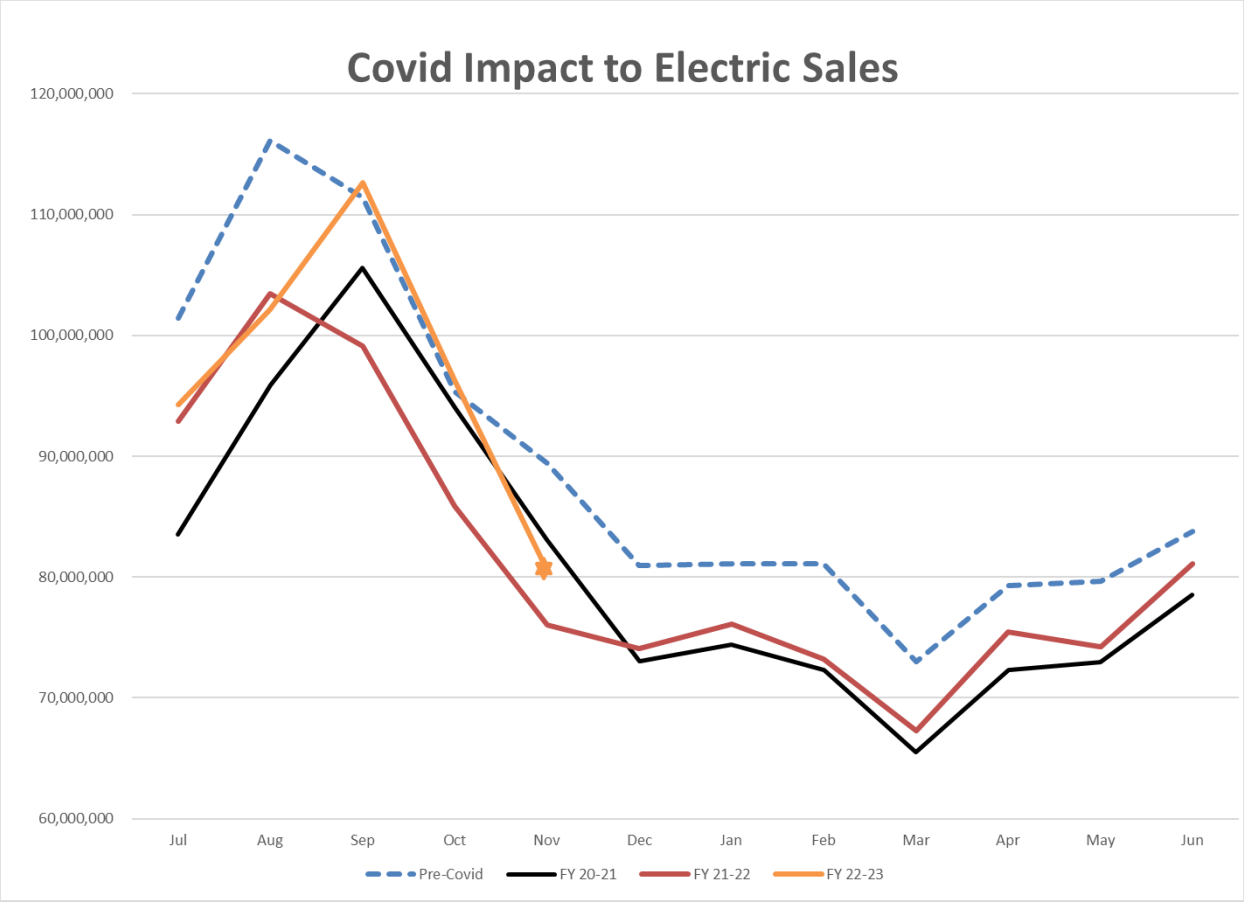
FYTD potable water demand was **6%** lower than budget. For FYTD **November**, net income was **$2,950,000** which was **$2,116,000** better than budgeted. The favorable variance was attributed to lower than planned operating expenses and water supply expense, **higher than planned recycled sales & other revenues,** offset by lower than planned operating revenues.

For additional details, please see the attached financial statements.

COVID-19 and Drought Impacts

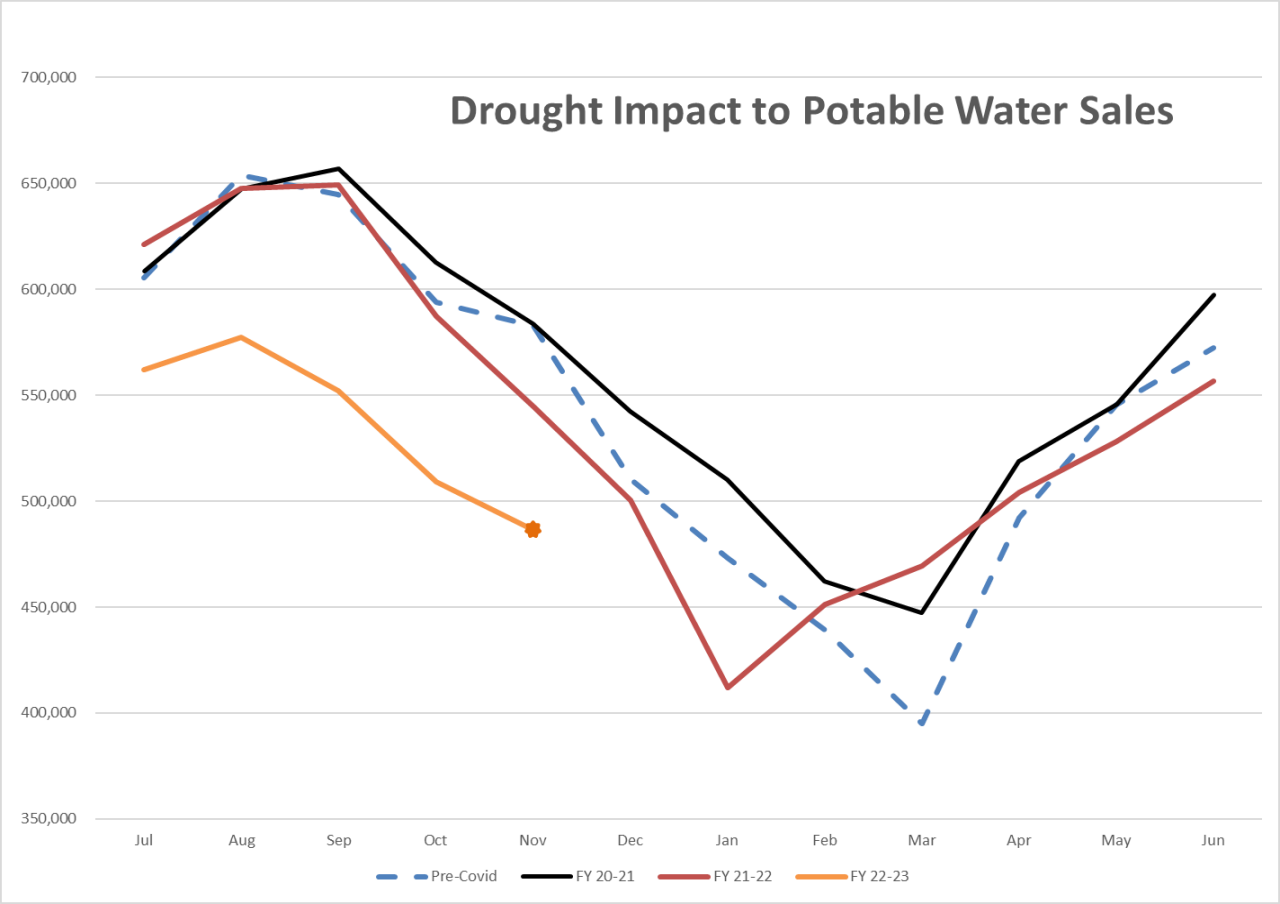
On March 19, 2020, the COVID-19 pandemic impacted commercial demand for energy in Burbank and has resulted in a continuous reduction of electric demand.

The chart below for the electric fund shows current fiscal year sales compared to prior fiscal years and pre-COVID. **November** sales were **10% lower** compared to **November** pre-COVID. **However, the decrease was primarily driven by cooler weather.** Fiscal year-to-date sales were **4%** lower compared to the same period pre-COVID.



The Governor called for all Californians to voluntarily reduce water use by 15% from 2020 levels. **November** sales were **17%** lower compared to **November** pre-COVID**.** This is attributable to **the ongoing drought response** – not due to COVID. Fiscal year-to-date sales were **12.8% lower** compared to the same period pre-COVID. Water sales in general have been minimally impacted by the pandemic, where the decrease in commercial sales was offset by an increase in residential demand.

The chart below shows current fiscal year potable water sales compared to prior fiscal years and pre-COVID.



Inflation

In the last year, BWP's net income has been heavily impacted by increasing inflation. U.S. inflation has climbed as high as 9.1%. In many cases, we are seeing expenses for utility-grade items much higher than 9.1%. Below are examples of utility items impacted by inflation:

- Emissions control system upgrade for the Lake One Unit – an increase of 25% from $2 million to $2.5 million
- A renewable solar, plus energy storage project - increase of 71%, from $35/MWh to $60/MWh
- New substation buildout - increase of 47% from ~$17M to ~$25M
- Rebuild substation - increase of 67% from ~$9M to ~$15M
- **Transformers – increase 25% to 50% and lead time is 1-3 years**
- **Network core upgrade – increase of 24% from ~$1.25M to ~$1.56M**
- **Fiber optic cable – increase of 20%**
- Copper coils for 1-inch service lines - increase of **100**% from $**4.33** to $**8.65** per foot
- 8-inch ductile iron pipe – increase of **5**2% from $**17.12** to $**26.10** per foot
- **12-inch ductile iron pipe – increase of 79% from $25.10 to $44.84 per foot**

- **Fire hydrant – increase of 41% from $3,151 to $4,457**
- **Water meter boxes 45%**
- Other increases in materials:
    - Plastic conduit 125%
    - Chlorine gas **300%**
    - **Ammonia gas 100%**
    - Plastic 57.7%
    - Metals 35.5%
    - Precast concrete products 12.8%
    - Concrete 9.9%
    - **Paving materials: 14%**
    - **Bleach 72% increase from $1.15 to $1.98 per gallon**
    - **Aqueous ammonia 123% increase from $930 to $2,073 per ton**
    - **Liquid Caustic 23% increase from $735 to $907 per ton**
    - **Sulfuric Acid 83% increase from $.112 to $.206 per pound**
    - **CEMs gases 12%**
    - **Oil/Lubrication 40-50%**

Accounts Receivables

The chart below shows the change in receivables that are over 30 days old for BWP's electric and water funds.

*Excludes in-lieu and utility users' tax.

WATER DIVISION

Burbank's Water Use

The table below shows water use in Burbank during **December** 2022 compared to **December 2020** measured in gallons per capita per day (gpcd). The baseline year of 2020 is used to measure the governor's call for a 15% reduction in monthly water use.

	Average Monthly Use
December 2020	132 gpcd
December2022	96 gpcd

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	125	126	104	112	141	149	157	162	159	153	136	132
Goal	106	107	88	95	119	127	134	138	135	130	116	112
2022	106	128	127	131	133	145	148	146	123	126	**112**	96
	-15.2%	1.6%	22.1%	17.0%	-5.7%	-2.7%	-5.7%	-9.9%	-22.6%	-17.6%	**-17.6%**	-27.3%

Water use, in terms of gpcd, during **December 2022** was **27.3%** less than the **December 2020** baseline. However, we also look at the cumulative water use since July 2021, which looks at the long-term trend and ignores monthly variations. Our cumulative water use through December 2022 is **6.7%** less than baseline. Monthly water use will be tracked and reported versus 2020 values and continue to monitor the response to the Governor's order to reduce water consumption by 15%. All values are compared with the standard of 2020 water consumption.

Burbank Operating Unit (BOU) Water Production

The table below provides the operational data for the BOU for the months of **January** 2022 through **December** 2022.

Month	BOU Capacity Factor	BOU Ave. Flow Rate	Total System Blend % MWD/BOU
22-Jan	80.41%	7,237 gpm	20% / 80%
22-Feb	82.55%	7,429 gpm	20% / 80%
22-Mar	84.87%	7,638 gpm	20% / 80%
22-Apr	93.03%	8,373 gpm	12% / 88%
22-May	91.64%	8,247 gpm	15% / 85%
22-Jun	88.89%	8,000 gpm	22% / 78%
22-Jul	89.21%	8,029 gpm	26% / 74%
22-Aug	87.83%	7,199 gpm	24% / 76%
22-Sep	79.99%	7,905 gpm	20% / 80%
22-Oct	88.00%	7,920 gpm	14% / 86%
22-Nov	78.24%	7,042 gpm	14% / 86%
22-Dec	64.60%	5,814 gpm	17% / 83%
		Ave Blend %-last 12 months	19% / 81%

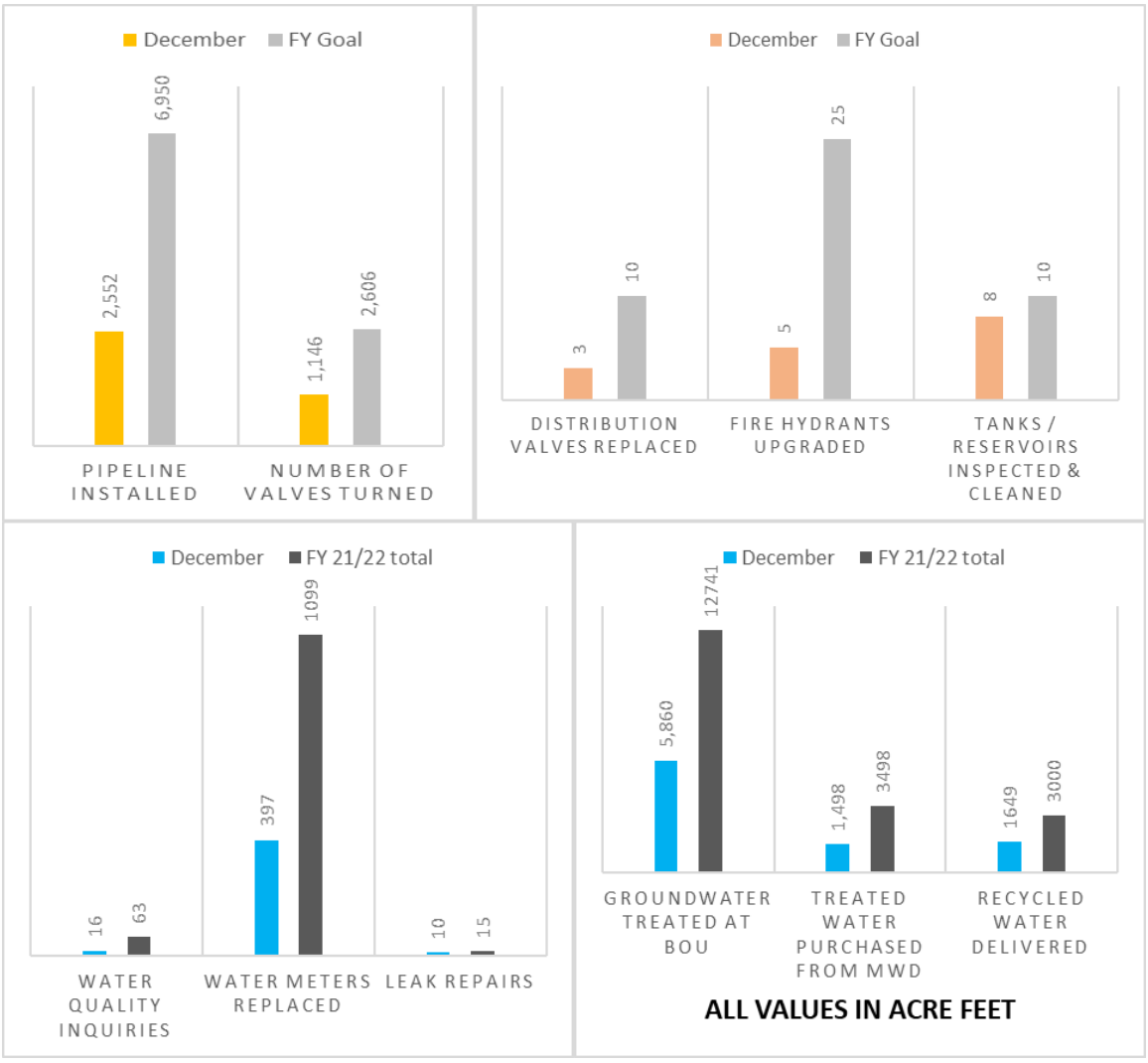
The total system blend percentage represents the total amount of water that was purchased from the Metropolitan Water District (MWD) vs. the amount treated by the BOU. This, along with the capacity factor, is an important measure of efficiency. The capacity factor may fluctuate based on demand and plant production; the blend percentage measures how much of the total system's demand is made of purchased or produced water. The amount of MWD water needed is determined by demand, availability of BOU water, and O&M outages.

Key Performance Indicators

The graphs below illustrate the progress the water division has made on key performance measures through **December.** Note that the values provided need to be viewed with respect to where we are in the fiscal year. Pipeline installation is **37%** complete, and we are **58%** through the fiscal year.

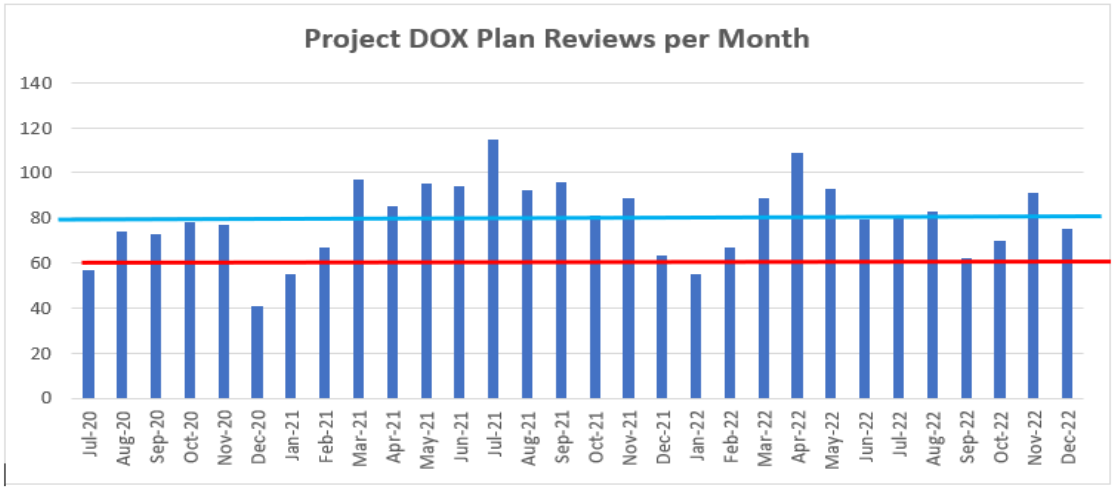
Chlorine gas deliveries have improved, but the main issue is the availability of truck drivers. To provide a backup to our chlorine gas supplies, staff installed a sodium hypochlorite tank and related equipment so that we now have two forms of chlorine to use (sodium hypochlorite is liquid chlorine – essentially bleach). This spreads the shortage risk across two forms of chlorine instead of relying on just one. Although the availability has slightly improved, the price of the chemical remains volatile. Since June 2021, the cost of chlorine has increased by **300%.** For this fiscal year, it increased by 29.25%.

We closely monitor chlorine gas supplies and track them daily.

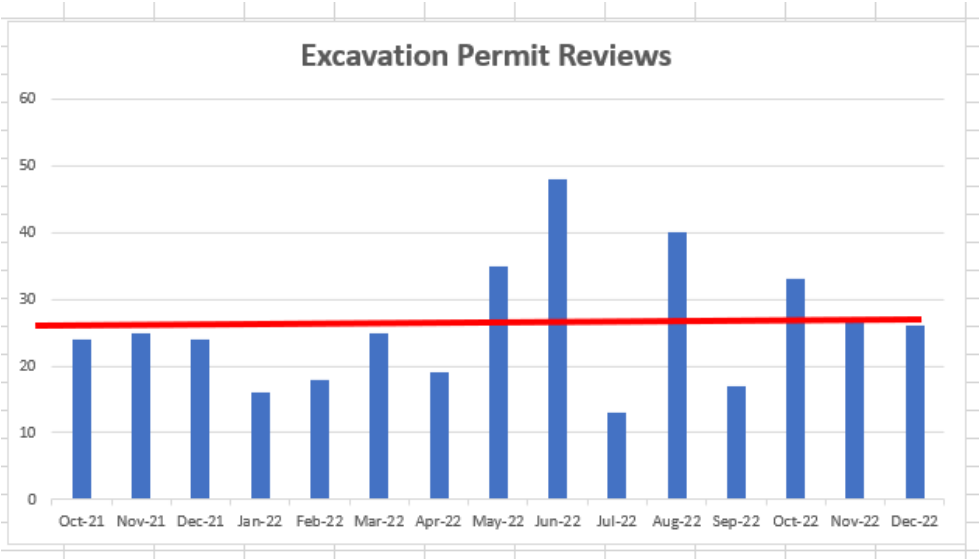


Plan Reviews

The Water Division has seen a significant increase in plan reviews starting with the onset of the COVID-19 pandemic, and we began tracking them in July 2020. Most of the plan reviews are ADUs (accessory dwelling units).



*Blue line is the average *Red line is the production capacity of an experienced planner



Leak Alert Notifications

In 2009, BWP began installing an automated metering infrastructure (AMI) system by Itron. Full deployment of the system (approximately 26,000 endpoints for water) was completed in 2011.

The benefits of AMI technology allow data to be collected rapidly and frequently and can be analyzed to find higher than normal usage and alert customers of leaks. BWP began providing leak alert service to residents who registered to receive notifications. This service, called Water Smart, works by receiving hourly water usage from the meter and analyzing this data to determine if a leak might be present based on continuous usage. In

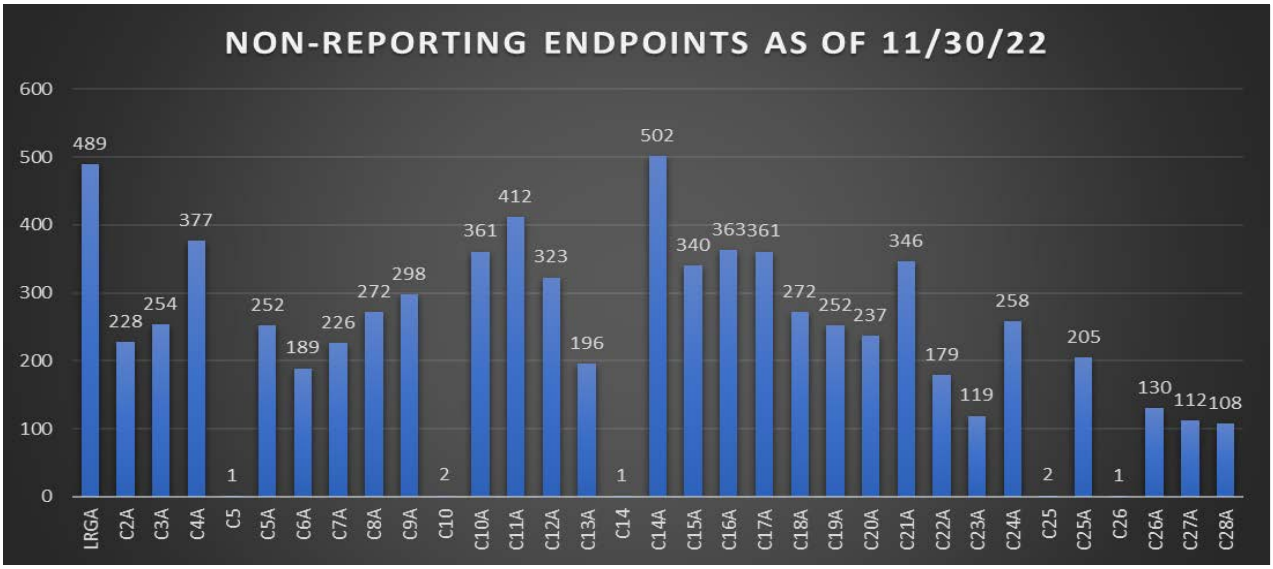
December 2022, WaterSmart sent out **604** notifications to customers, including **485** email leak alerts, **112** print leak alerts, **6** text message leak alerts, and **1** voice alert.

Unfortunately, a high number of water meter communication modules are not working reliably, and replacement units are no longer manufactured. As of **December 31, 2022,** BWP was not able to receive remote reads for **7,668** water meters out of 27,090 (**28%** of the total) due to failing communications modules and they had to be read manually. In March 2021, staff deployed an interim automatic meter reading (AMR) system to read meters with failed communication modules. However, we cannot receive the continuous communication that enables us to notify these customers of leaks.

BWP notified customers who participate in the leak alert program that the failure of these communication modules prevents the sending of leak alert notifications, and due to the continuing failures, BWP continually notifies the affected customers. The AMR system does not enable BWP to notify customers of leaks at all. This will leave customers vulnerable to unnoticed leaks causing water damage, bills that could reach thousands of dollars as well as unnecessary and significant water waste.

The schedule for the AMI project is provided below:

- September 15, 2022 - Release of Request for Proposals (RFP)
- September 30, 2022 - Pre-proposal meeting (virtual)
- October 3, 2022 - Due date for RFP questions
- October 21, 2022 - Due date for response to RFP 2:00 PM
- November 7, 2022 - Interview/negotiation dates
- January 30, 2023 – Notice of award
- February 1, 2023 – Notice to proceed (NTP)
- August 1, 2023 – Network Installation, Software Integration, Field Testing
- August 2023 to September 2024 – Full Deployment
- December 31 – 2024 – Project Completion



Burbank's Path to Sustainable Water Use

Burbank Water and Power is committed to facilitating a sustainable community. Our state is currently facing severe drought conditions. The drought makes our water-saving efforts more critical, and BWP wants to ensure our efforts drive lasting change. We have adopted the ADKAR change management model to help us deliver on this transformation and have been planning efforts to help our community make lasting change. The ADKAR change model describes the steps that need to be taken, starting with awareness, desire, knowledge, ability, and re-enforcement. The table below describes these steps, and the actions BWP has completed and plans on completing.

	Completed	Planned
Increasing drought and water conservation awareness	• Digital Currents (**2022**: January, March, April, May, June, July, August, September, October, November. **2021:** August, September, October, November, December) • Print Currents (April 2022, November 2021, July 2022) • BWP drought webpages • BWP Online Account Manager banners • Social media (Facebook, Twitter, Instagram) • Flyers with watering schedule and conservation programs information • Bill inserts • Bill graphics • Graphic on bill envelope • MyBurbank advertisement • Burbank Channel advertisement • Educational videos (Burbank's water story, drought and conservation programs, and Stage II rules) • Press release – Stage III • Parks & Recreation newsletter advertisement • Burbank Channel advertisement • Educational video for stage III • Water city hall turf with recycled water	• Highlight how BWP employees are saving water in their own daily activities to promote water conservation in Digital Currents in Q1 2023. • Continue to provide drought updates and water-saving resources to customers through digital and print *Currents* newsletters.

	• Email and letter to commercial, industrial, and institutional (CII) customers about Emergency Water Regulation • Burbank Bus advertising • HeyBurbank feature – July 2022 https://youtu.be/v6Z2aBQVMCU • Burbank Recycle Center advertisement • Doorhangers for water waste violations • Magnolia Blvd banner • Enforcement notifications via letter for watering violations: Education letter number 1, Education letter number 2, fine of $100, fine of $200, fine of $500 Outreach efforts to notify customers of the MWD pipeline repair that resulted in no outdoor watering from September 6-20, 2022 • Launched temporary Recycled H2O to Go Program • Updating community of November 1st water schedule change to one day per week, on Saturday from November to March. • **Print advertisements will be placed at ~40 Burbank retail locations for one month starting physical advertising options in Burbank, such as at Burbank parks and local retail locations, anticipated to launch in January 2023.** • **Advertisement placed in Burbank Bulletin advertisement in January 2023 and will run in February 2023.**	
Increasing the community's	• Automated leak alerts to customers	• Exploring options for service-based events, and local community

desire to make change	• Report water waste online form – Stage II • Report water waste online form – stage III • Targeted communications on irrigation schedule compliance and high-volume users to customers based on WaterSmart AMI information • BWP participated in the 2022 National Night Out event in August 2022, and promoted water conservation at the event. • BWP sponsored one of the Starlight Bowl summer concert series and promoted water conservation at the event. • Home Improvement Program door-to-door outreach • Participated in rain barrel distribution event with other cities in September 2022, resulting in 17 residents signing up to receive rain barrels • Updated website and began promoting Turf Removal Rebate Increase to $3 sq. Ft, including video testimonials from BWP customers who participated in the program. • **Launched Demonstration Gardens grant program for drought tolerant landscaping and local gardens. BWP has received ~30 inquiries from customers who reached out to learn more about the program.** • **Launched campaign promoting commercial water-saving rebate programs in November 2022. The campaign will be promoted until the end of December 2022.**	events to promote water conservation.

	• **Table tents for restaurants launching in January 2023.**	
Customer knowledge on how to make change	• Signage and pool cover rebate applications for local shops • Drought flyer with water conservation programs information • Lobby signage with water conservation programs information • Portable signage with water conservation programs information for local events (National Night Out, Starlight Bowl) • Customers' testimonials and resource recommendations on turf replacement • **Promote water conservation and turf replacement classes offered by MWD/Green Gardens Group in BWP newsletters and on social media.** • **Developed virtual Water Educational course to provide education to customers who have received a citation from a Water Waste Violation. The course launched in December 2022.**	
Ability to make change	• Increased rebate amounts for: o Flow monitoring device - $150 o High-efficiency clothes washer - $150 o Rotating sprinkler nozzle - $5 o Weather-based irrigation controller - $100 o Soil moisture sensor system - $100 o Premium high-efficiency toilet - $100	Reducing the cost for customers to make change: • Continue offering water conservation giveaway items (buckets, soil moisture sensors, adjustable nozzles for hose, etc.) to encourage water use efficiency

	• Turf Removal Rebate increased from $2 sq/ft to $3 sq/ft. • Home Improvement Program additions for sprinkler check and controller programming for common areas of multi-family unit buildings • Provide no-cost showerheads, and kitchen and bathroom aerators to customers in the BWP lobby • Provide no-cost toilet dye tablets to help customers detect toilet leaks • Leak assistance grant for income-qualified households • Conducted social media giveaway to provide collapsible buckets to capture sink water for use on outdoor plants. • Provided soil moisture sensors daily to first two Recycled H2O to Go participants. • Innovative Conservation Program (ICP) pilot project enables water usage monitoring and leak detection services for multi-family property owners and tenants **Reducing the cost for customers to make change:** • **Reinitiate Demonstration Garden Grants Program.** • **Added additional funding for water efficiency rebates; Turf Removal Rebate increased from $2 per sq ft to $3 per sq ft.** • **Partnered with neighboring cities to have a "Rain Barrel Distribution Event" on January 8, 2023.**	
Reinforcement, including progress	• Fill the "Burbank Tank" graphic that staff will update monthly on	• **Lawn signs will be distributed to homes who complete their**

updates and recognition	the BWP website and in Digital Currents. •	**home audit starting January 30th** • Develop a customer recognition program for customers who are saving water and launch the rewards program by February 2023.

Projects

Water Main Break – 219 West Ash Street:
Crews work hard and fast to repair a leak on this early 1950's 6-inch cast iron water main. This particular section of pipe had a radial crack right at the corporation stop that serves the resident's service connection. This repair was completed by using a full-circle repair clamp as well as installing a new corporation stop. Much of the city's pipes are nearly a hundred years old and getting older and we will continue to have main breaks as our assets age. Fortunately, we have a dedicated team that offers a quick response, which prevented this break from turning into a catastrophic event.

ELECTRIC DISTRIBUTION

ELECTRIC RELIABILITY

In **December** 2022, BWP experienced one sustained feeder outage. In the past 12 months, automatic reclosing has reduced customer outage time by approximately **970,637** customer minutes.

Reliability Measurement	January 2021 – December 2021	January 2022 – December 2022
Average Outages Per Customer Per Year (SAIFI)	**0.3105**	**0.2226**
Average Outage Time Experienced Per Year (SAIDI)	**16.4 minutes**	**4.54 minutes**
Average Restoration Time (CAIDI)	**52.83 minutes**	**20.41 minutes**
Average Service Availability	**99.997%**	**99.999%**
Average Momentary Outages Per Customer Per Year (MAIFI)	**0.2862**	**0.2318**
No. of Sustained Feeder Outages	**13**	**7**
No. of Sustained Outages by Mylar Balloons	**1**	**2**
No. of Sustained Outages by Animals	**0**	**0**
No. of Sustained Outages by Palm Fronds	**2**	**1**

The predictive-analytics-driven equipment replacement program has been placed on hold since 2021 due to scarcity of equipment, longer than usual lead times, and low staffing levels. This action will drive reliability numbers slightly lower over time; however, staff believes this is an acceptable impact as maintaining the program would deplete our existing equipment stock and exposes the utility to the risk of not having equipment available if a major disaster occurs. Staff will re-assess commencing with the replacement program once equipment levels are sufficient and lead times are normalized.

Supply Chain

The electric utility industry has been heavily impacted by the pandemic over the last several years. Pricing and lead times for equipment have increased at an accelerated pace. Below is a list of lead times for the most common distribution equipment:

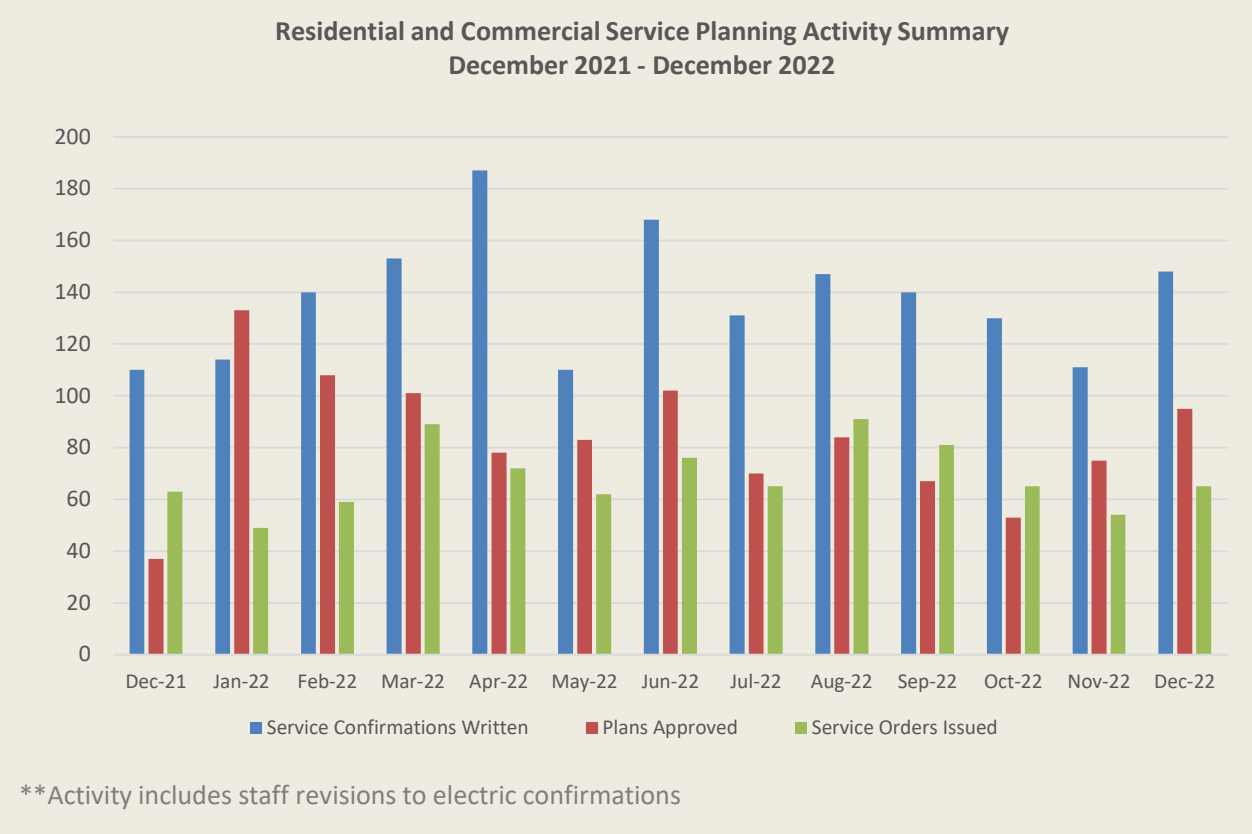
Equipment	Typical Lead Time	Current Lead Time
Transformers	12-16 weeks	150+ weeks
Meters	4-6 weeks	**38+ weeks**
Cable	12-16 weeks	**50+ weeks**
Poles	6-8 weeks	**30+ weeks**

PROJECT UPDATES

Residential and Commercial Service Planning Activities

BWP provides our residential and commercial customers with the electrical power they need for new services or upgrades to their existing services. In order for a customer to obtain a building permit for their construction, BWP service planners must visit the customer's facility and fill out an electric service confirmation form which details what type of service is required and how it will be served. After reviewing and approving a customer's electrical plans, BWP service planners issue service orders to our field crews to carry out the inspections and electrical service work. The graph below summarizes the monthly activity for our residential and commercial service planning group within the T&D engineering section.

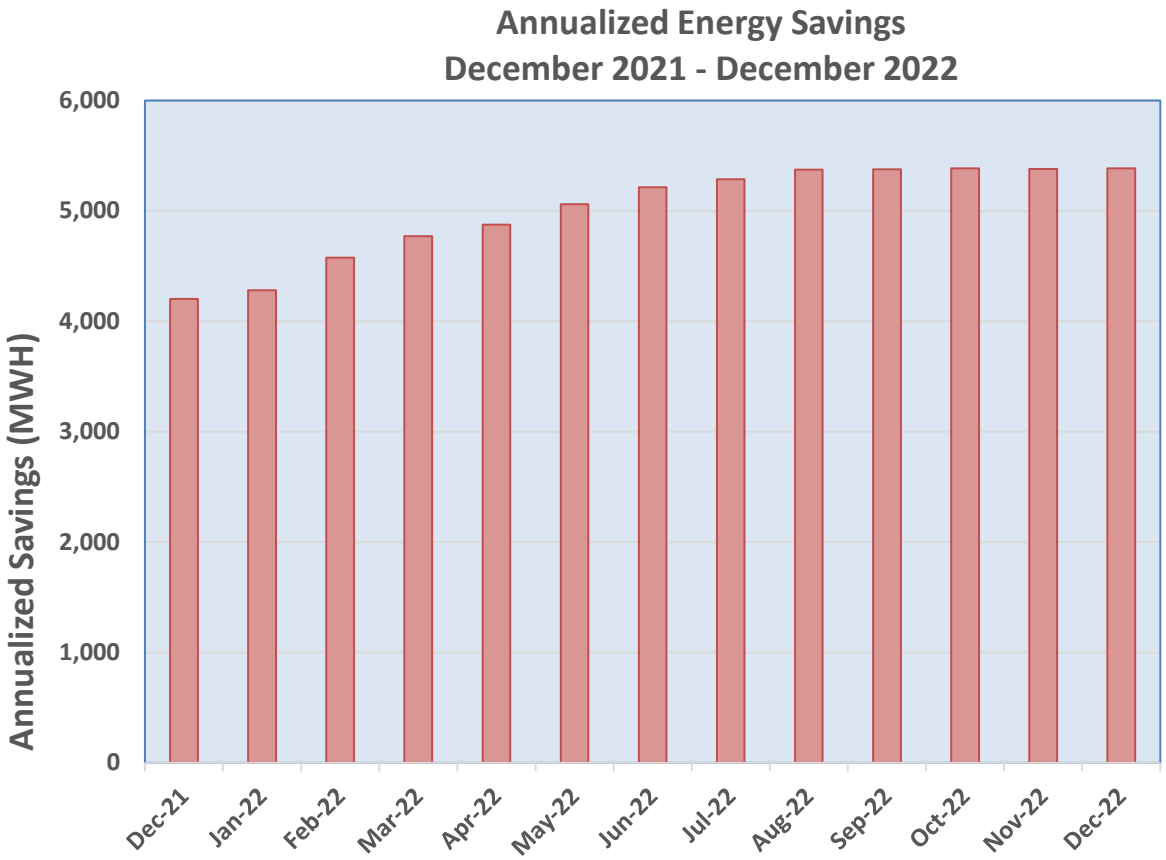
The electrical engineering section is seeing an unprecedented amount of development requests including large site developments, major housing developments, and accessory dwelling units. In the last decade, BWP has energized about 400 new residential units. Based on the current proposed development, BWP is on the path to energizing more than 2,000 new residential units in the next three to four years. This is a tenfold increase in the amount of development. If this level of work is to continue, the electrical engineering section will need to staff accordingly to be able to keep up with the maintenance work that is currently being placed on hold to accommodate the development work and resulting capital projects.



STREET LIGHTING

LED Replacement Program

In accordance with the Street Lighting Master Plan, BWP is replacing high-pressure sodium (HPS) street light luminaires with light-emitting diodes (LED) luminaires. Replacement is carried out on a maintenance basis, and LEDs are installed daily as the HPS luminaires burn out. LED replacements consume approximately 60% less energy. To date, **91.72%** of the total street light luminaires have been converted to LEDs, which translates to an annualized energy savings of **5,386** MWh or a **58.11%** reduction in energy consumption. LED conversions have also reduced the evening load by **1,248** kW**,** which shortens the "neck of the duck curve" and reduces the amount of energy generation that BWP needs. The graph below shows the annualized energy savings in MWh for the past 13 months.



Wireless Telecom Attachments

BWP has entered into four master license agreements to allow communication carriers to attach, install, operate, and maintain communication facilities on street light poles with the public right-of-way.

For the communication carriers to build a new location for a wireless telecom attachment, BWP must first provide an electric service confirmation, which details how the location

will be served. Each design must meet the city's aesthetic requirements as well as BWP's design guidelines. Once BWP approves the plans and a Public Works permit is issued, BWP issues work orders to our field crews to carry out inspection as well as the electrical and street lighting work. The table below summarizes the activity that has taken place to date:

	Confirmations in Progress	Written Confirmations	Plan Signoffs	WTA Work Orders Issued	WTA Sites Energized
Total	0	256	**14**	**10**	**46**

CUSTOMER SERVICE OPERATIONS

BWP continues to assist customers through the COVID-19 pandemic. Customer Service Representatives (CSR) assist customers by making payment arrangements to reduce the amount in arrears and provide additional resources to help customers manage their finances related to their utility bill. BWP staff continue to proactively engage customers to reduce their arrears by encouraging payment arrangements to any customer they interact with that has a 60-day or greater past due balance. We currently have **241** customers who have an active payment arrangement, resulting in a reduction of arrears by **$767,713.** BWP will continue to encourage payment arrangements to assist our customers to manage their outstanding arrears.

On October 27, 2020, the Burbank City Council approved resuming non-payment disconnections of medium, large, and extra-large commercial customers. Disconnections were discontinued once California Arrearage Payment Program (CAPP) was announced, due to the prohibition of disconnections for 90 days after applying CAPP funds to customer accounts in May 2022. Thereafter, BWP began notifying medium, large, and extra-large commercial customers via letter and personal phone calls that disconnection for non-payment would resume as of July 6, 2022, and encouraged payment arrangements. In addition, several communications were sent to customers subject to disconnection including letters, e-mails, and automated phone calls. Since the beginning disconnections, a total of **six** medium, large, or extra-large commercial customers have been disconnected for non-payment, resulting in a reduction in arrears by **$36,198.39**. Customers are making their payments and/or entering into a payment arrangement.

In late June 2022, we received notification that the legislature and Governor had approved a new round of funding for unpaid electric bills resulting from the COVID pandemic. There is $239.4 million available for publicly owned utility (POU) accounts. This new program, known informally as CAPP 2.0, will operate in a similar fashion as CAPP 1.0 with a few key differences. CAPP 2.0 will have a longer COVID-19 pandemic relief period that extends from June 16, 2021, through December 31, 2021, and will only benefit active residential customers. On October 25, 2022, BWP submitted an application to apply for the CAPP 2.0 program. BWP received $637,838.06, which was applied to the accounts

of 1,393 active residential customers on December 28, 2022. **609 customers who received assistance in 2021 have received assistance again.**

Since CAPP 2.0 will not be applied to commercial customers, on August 4, 2022, the BWP Board reviewed and passed the proposal to resume disconnections for small commercial customers beginning September 1, 2022, with a 7-0 vote. On August 23, 2022, City Council voted 3-1 to approve resuming power disconnections for small commercial customers effective September 1, 2022. After receiving approval from City Council, BWP immediately began notifying all small commercial customers via letter, e-mail, and automated phone calls. Small commercial customers who are eligible for disconnection, began receiving an official notice as of September 6, 2022. BWP began disconnecting small commercial customers for non-payment effective September 29, 2022. From September 29, 2022 through **January 23, 2023**, **142** small commercial customers have been disconnected for non-payment, resulting in a reduction in arrears of **$204,734, and 71 customers established payment arrangements totaling $399,074. The 71 small commercial customers on payment arrangement are no longer eligible for disconnection as long as they continue to meet the terms of the arrangement.**

As of November 2, 2022, 159 small commercial customers had arrears over 60 days and were eligible for disconnection. As of January 23, 2023, that number has dropped to 79. This indicates that small commercial customers are continuing to make payments or enrolling in payment arrangements to avoid disconnections.

As of December 26, 2022, there are 3,557 residential customers with at least 60 plus days of arrears. Currently, the 61-90 day arrears is $834,669 and the 91 plus days arrears is $4,295,910, totaling $5,130,579. Of the 3,557 residential customers, 71 receive the Lifeline rate for low-income seniors over the age of 62 and disabled customers, and 75 customers receive the Burbank Utility Service Subsidy (BUSS). 994 customers with 60-plus days of arrears received assistance from the state's California Arrearage Assistance Program in 2021.

Staff has been reaching out to all 3,557 customers monthly advising them of BWP's various payment assistance programs. Staff is increasing our efforts to reach these customers by promoting payment assistance programs via social media communication channels. BWP's December issue of Digital Currents featured bill assistance programs and was emailed to 30,800 customers and had a 76% open rate.

BWP will request City Council approval to resume normal operations by restarting disconnections on residential customers, effective April 3, 2023. As of December 19, 2022, BWP has over $6 million dollars in total residential arrears, which is equivalent to a one-time 2% water rate increase and a 2% electric rate increase for all BWP customers. Re-establishing power disconnections for residential

customers will reduce financial exposure to losses and cost-shifting to all customers.

Outstanding Debt

As of **January 9, 2023**, the following is the current outstanding debt by commodity:

Aging By Service Type				
Service Type	**31-60**	**61-90**	**91+**	**Total**	**% of Total**
ELECTRIC	**$ 1,773,156**	**$ 494,223**	**$ 2,749,894**	**$ 5,017,272**	**62%**
WATER	**$ 209,275**	**$ 114,765**	**$ 567,015**	**$ 891,055**	**11%**
SEWER	$ 180,529	$ 103,707	$ 562,329	$ 846,565	10%
SOLID WASTE	$ 173,445	$ 107,785	$ 745,431	$ 1,026,660	13%
FIBER OPTIC	$ 165,224	$ 56,233	$ 88,880	$ 310,336	4%
GENERAL SERVICE	$ 1,169	$ 616	$ 4,064	$ 5,848	0%
MISCELLANEOUS	$ -	$ -	$ 18	$ 18	0%
Grand Total	**$2,502,797**	**$877,328**	**$4,717,630**	**$8,097,755**	**100%**

BWP Call Center Call Types & Volume

CUSTOMER CONTACT TYPES	% OF CALLS
BALANCE	15%
UPDATE CUST ACCOUNT INFO	15%
PAYMENT ISSUES	3%
HIGH BILL/USAGE REVIEW	3%
DUPLICATE BILL REQUEST	3%

	Nov - 21	Dec - 21	Jan - 22	Feb - 22	Mar - 22	Apr - 22	May - 22	Jun - 22	Jul - 22	Aug - 22	Sep - 22	**Oct - 22**	**Nov - 22**	**% Inc/Aug**
Call Volume	2,845	3,102	3,234	2,833	3,340	3,148	3,314	3,311	3,220	4,001	4,436	3,983	**3,010**	**-24.4%**

CUSTOMER CONTACT TYPES	**% of Calls**
Update Customer Account Info	**19.0%**
Balance	**17.0%**
Conservation Programs & Rebates	**3.0%**
Disconnect / Reconnect	**3.0%**
Payment Issues (Non-Autopay)	**2.5%**

	Dec - 21	Jan - 22	Feb - 22	Mar - 22	Apr - 22	May - 22	Jun - 22	Jul - 22	Aug - 22	Sep - 22	Oct - 22	Nov-22	**Dec - 22**	**% Inc/Aug**
Call Volume	3,102	3,234	2,833	3,340	3,148	3,314	3,311	3,220	4,001	4,436	3,983	3,010	**3,037**	**1.0%**

Call volume **remained steady, with a 1% increase from November. The majority of the calls in December were related to balance inquiries and requests to update their account information.**

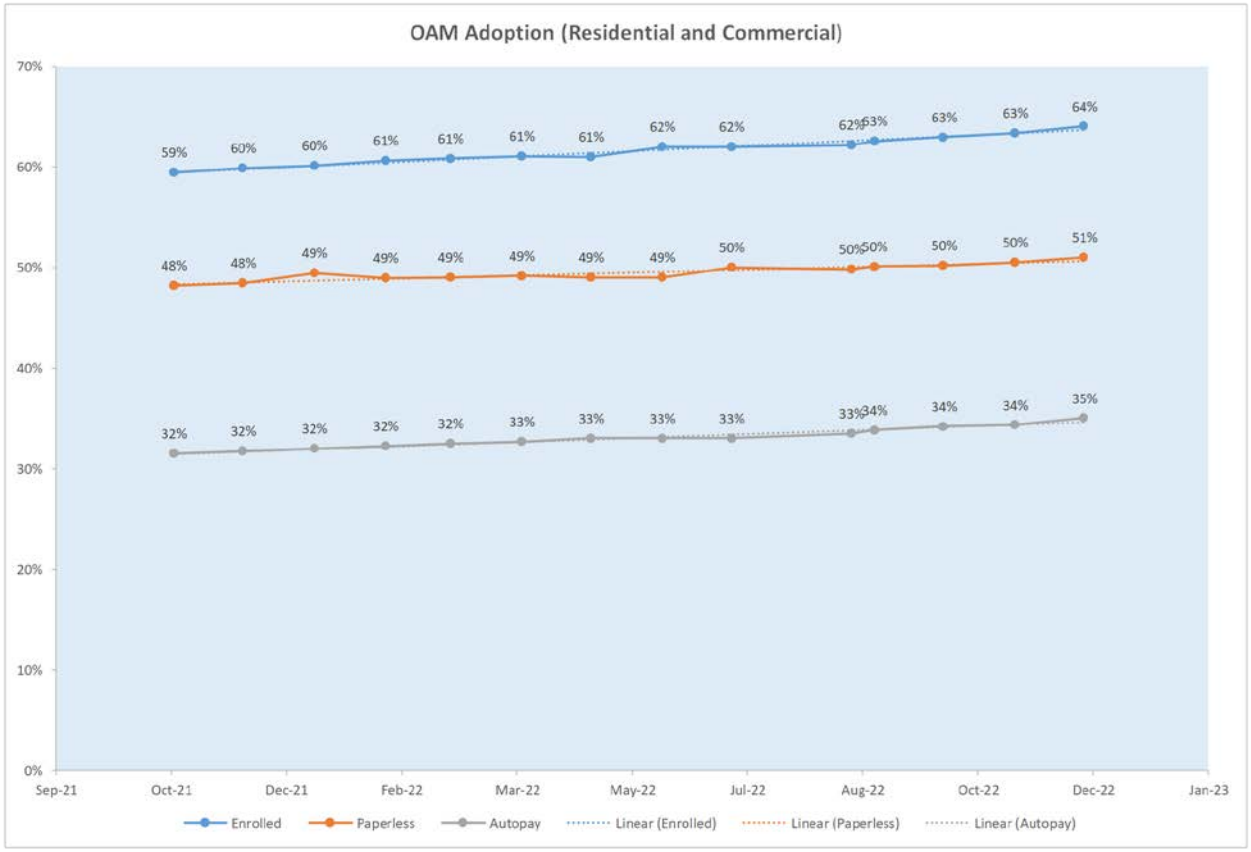
Online Account Manager

The Online Account Manager (OAM) is BWP's online customer portal. Customers can view their utility bills, make payments, change addresses, and enroll in automated bill and

payment notifications. The enrollment in the online account manager (OAM) is currently **at 64% of all active accounts**; increases in enrollments have been on the rise since the COVID-19 pandemic. Of the 37% of customers who are not currently enrolled in OAM, 86% of those customers are residential. Of all registered OAM accounts, about 82% are paperless customers helping BWP reduce costs, save trees and reduce carbon emissions. BWP will continue its efforts to drive customers to the OAM, paperless, and autopay. These initiatives will continue to drive down costs.

BWP continues to market and promote general OAM outreach campaign utilizing every owned channel, including on-bill messaging, *Digital Currents*, print *Currents*, social media, and BWP's website. Last fiscal year BWP set a target to reach 66% OAM adoption. This last 3% has proven to be challenging. In Q4 for FY 22/23 BWP will again try a targeted marketing campaign to increase enrollment.

Below is the chart outlining activity for the OAM:



	Active	% of Total Active Accounts
Active Users	33,417	64%
Paperless	26,615	51%
Autopay	18,135	35%

SUSTAINABILITY, MARKETING, AND STRATEGY

BWP'S Energy Efficiency and Water Savings – Fiscal Year to December 31, 2022

BWP manages a comprehensive portfolio of resource efficiency programs for residential and commercial customers focusing on energy efficiency, peak load reduction, water conservation, transportation electrification, and greenhouse gas savings.

BWP is currently at 6% of our demand energy efficiency and 5% of our energy efficiency savings target. We have established plans to make up ground by the end of the fiscal year. The strategies include filling vacant positions which will help us in driving program enrollment, including a key accounts manager to promote commercial rebates, and an enhancement of the Home Improvement Program's scope of services with direct outreach to the Burbank Housing Corporation to retrofit and electrify multiple housing units.

BWP's Refrigerator Exchange Program offers income-qualified customers a new Energy Star certified refrigerator in exchange for their old, inefficient refrigerator. The Refrigerator Exchange Program has had **41 refrigerators exchanged** since the beginning of the fiscal year.

BWP's Shade Tree Program provides an arborist visit and delivers shade trees to help customers shade their properties, reduce A/C usage, and clean the air. The program has **delivered 110 trees** since the beginning of the fiscal year**.**

In addition, the *Home Improvement Program (HIP)* offers energy-water surveys and efficiency measure installations to all Burbank single-family residential, multi-family residential, and multi-family common area customers. Some of the HIP's services include direct installation services of weather-based irrigation controllers, high-efficiency sprinkler heads, soil moisture sensors for low-income single-family and multi-family common area customers, and properties within the disadvantaged community areas of Burbank. Furthermore, the program offers energy-water surveys and the installation of efficiency measures for multi-family common area customers. **This month, 44 households participated in HIP, a total of 277 customers have participated in the HIP since the beginning of the fiscal year.**

Some additional energy efficiency programs include residential and commercial rebates for the purchase and installation of high-efficiency measures, AC Replace Before It Breaks, and LivingWise.

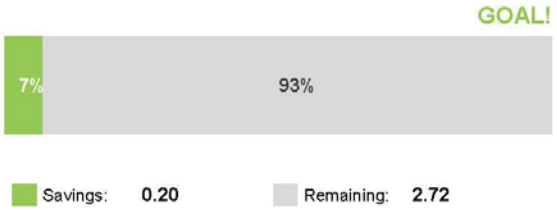
BWP continues to offer various water conservation programs and incentives to the community. In addition to giveaways of low-flow showerheads and aerators at no cost and direct installation of water efficiency measures delivered through the HIP, Burbank residents and businesses are eligible for various water-saving technology rebates funded and administered by the Metropolitan Water District's (MWD) Regional Incentive Program. Starting in August, BWP used its water public benefits charge fund this fiscal year to establish additional incentive levels to help its residential and commercial customers reduce their water use during the ongoing drought. BWP increased turf replacement rebates by 50%. Residential customers have been particularly responsive and the program and within 2 and a half months the rebates have been fully subscribed. BWP has shifted funds into the residential turf replacement program to support 100,000 square feet of turf to be replaced in Burbank.

BWP recently **relaunched** the Hydration Station Program for commercial customers. The program offers rebates for water filling stations to provide the community with access to safe and reliable tap water while also helping reduce plastic bottle waste. MWD funds the Hydration Station Program.

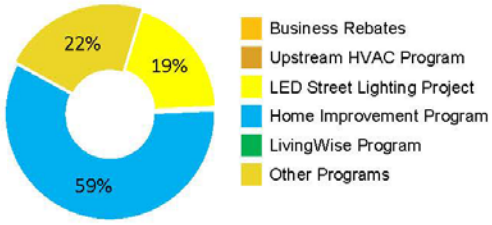
Energy Efficiency Savings FYTD 2022-2023 Period ending on 12/31/2022

1% Demand Goal = 2.92 MW

Demand Savings to Date

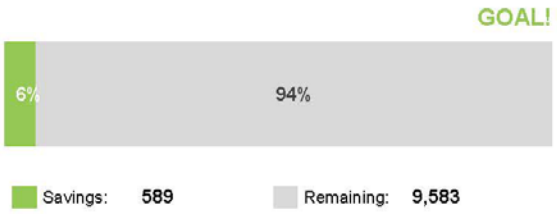


Savings by Program

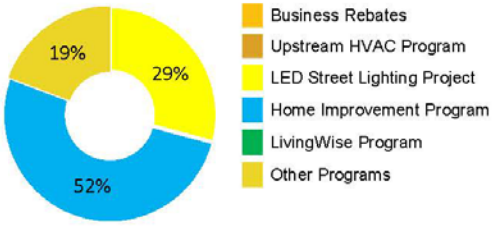


1% Consumption Savings Goal = 10,172 MWh

Savings to Date

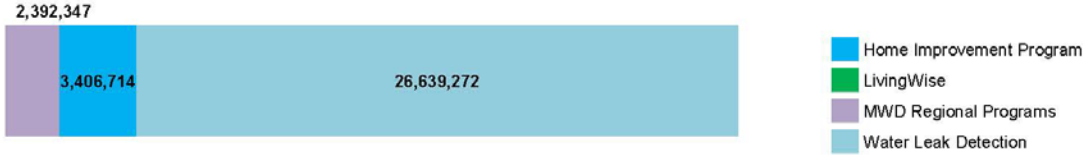


Savings by Program



Water Efficency Program Savings

Gallons of Potable Water



32,438,333 Gallons of Water Saved for FY 22/23

Efficiency Direct Program Costs* FYTD 2022-2023

**Electric Programs: $541,452

Commercial Programs
Residential Programs
Both Residential and Commercial Programs

***The sum of the program values may differ from the total due to rounding to the nearest dollar.*

Water Programs: $247,412

Home Improvement Program
LivingWise
MWD Regional Program
Water Leak Detection

*Direct program costs reflect rebates and payments to program implementers, they do not include marketing and administration costs

Electric Vehicle (EV) Charging Program

BWP plays a key role in facilitating the adoption of transportation electrification through education and the development of programs and initiatives.

The city now has seventy-three public EV charging ports, including two DC fast chargers and 24 curbside ports. As of **November** 1, the public charging rate is **$0.18** per kWh for all hours at a level two charge. The public charging rate is **$0.29** per kWh for DC fast chargers for all hours.

Public Charging Energy Delivery

In **December,** the per-port average revenue was **$144**.

Period	Average Usage	Average Total Revenue	Average Per Port Revenue	Notes
Dec 2019 - Feb 2020	28,047 kWh	$4,779	$101	Pre-COVID, all units operational
March 2020 - Feb 2021	14,211 kWh	$2,724	$60	COVID downturn
March 2021 - May 2021	23,889 kWh	$4,299	$91	COVID recovery period
June 2021 – November 2022	**45,459**kWh	**$8,397**	**$115**	Post-installation of new ports
October 2022	**56,070**kWh	**$10,692**	**$144**	Most recent month

New Public EV Charging Station Construction

Due to supply chain issues for electric metering cabinets, the energization of all charging ports has been delayed. In the current fiscal year, BWP will be able to energize at least two projects: stations near John Burroughs High School and Theodore Roosevelt. These are the first of 8 projects that were delayed to fiscal year 2022/2023 from fiscal year 2021/2022 due to supply chain issues. These 8 projects were planned to install 31 new level 2 ports and one new DC fast charging station. **Construction for the final curbside site, Verdugo and Lake, started in November. Meter service cabinets arrived in November to energize the projects currently in construction. The stations were planned for energization during December, but Building and Safety Inspection availability has delayed energization until January 2023.** BWP is still looking for alternative solutions to complete these projects. For the projects not in the right of way, we are exploring options that would use panels similar to house panels, mounted on H frames, that may have shorter delivery timelines. For the right of way, this would not be acceptable, and we would need to wait for the appropriate cabinets.

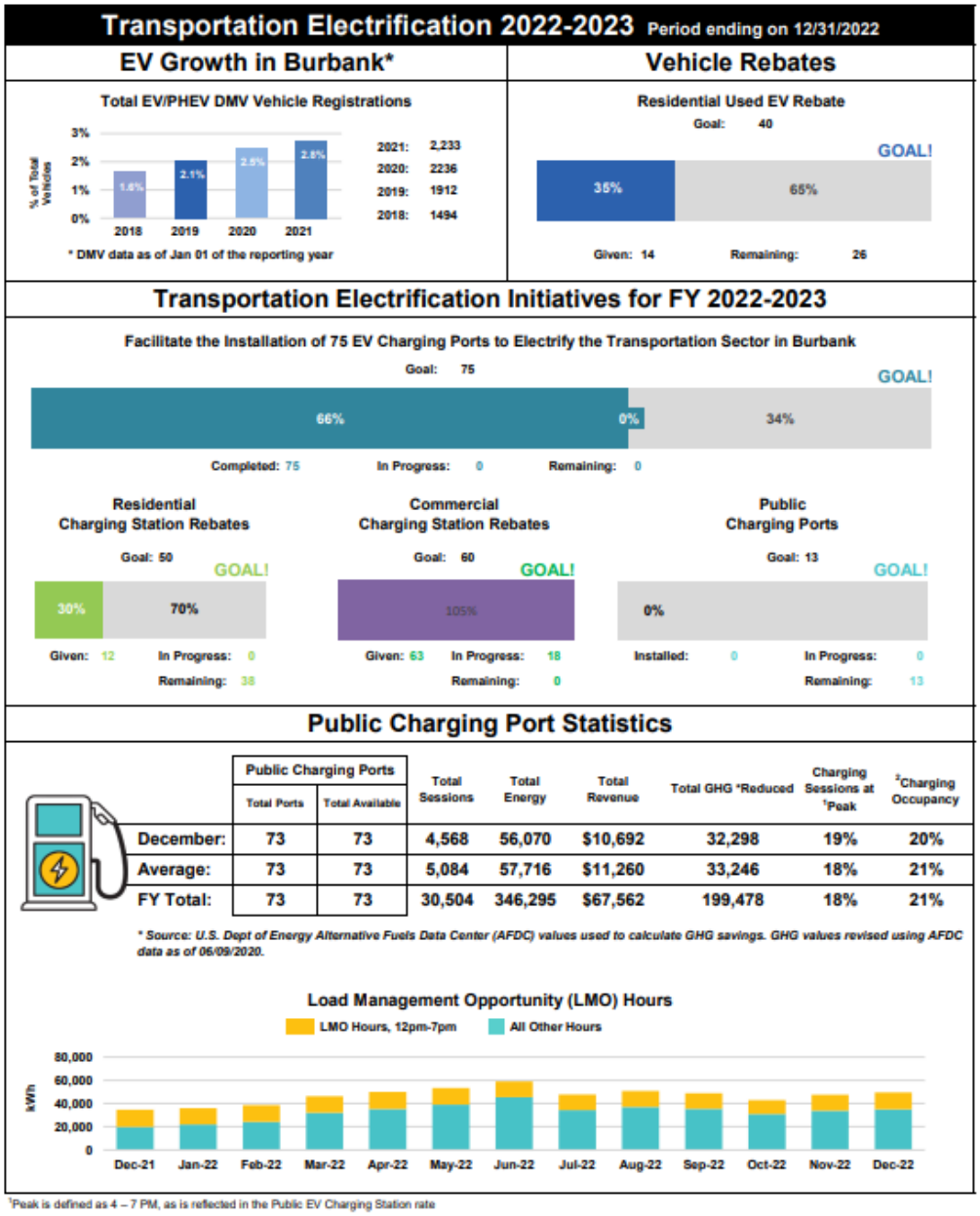
Commercial Rebate Program

BWP currently has reservations for 18 commercial EV charging ports.

A rebate was issued to IKEA for the 21 ports installed to support their local electric delivery fleet. A rebate was issued for 2 ports installed at Signature Post in November. A rebate for 40 ports installed at Netflix's parking was issued in December 2022.

Residential Rebate Program

One residential rebate was distributed in **December 2022.**



	Public Charging Ports		Total Sessions	Total Energy	Total Revenue	Total GHG *Reduced	Charging Sessions at [1]Peak	[2]Charging Occupancy
	Total Ports	Total Available						
December:	73	73	4,568	56,070	$10,692	32,298	19%	20%
Average:	73	73	5,084	57,716	$11,260	33,246	18%	21%
FY Total:	73	73	30,504	346,295	$67,562	199,478	18%	21%

** Source: U.S. Dept of Energy Alternative Fuels Data Center (AFDC) values used to calculate GHG savings. GHG values revised using AFDC data as of 06/09/2020.*

[1]Peak is defined as 4 – 7 PM, as is reflected in the Public EV Charging Station rate

[2]Charging Occupancy is defined as the percentage of time EV's are charging at stations for all available hours in a given month across all charging stations

Rooftop Solar and Battery Installations

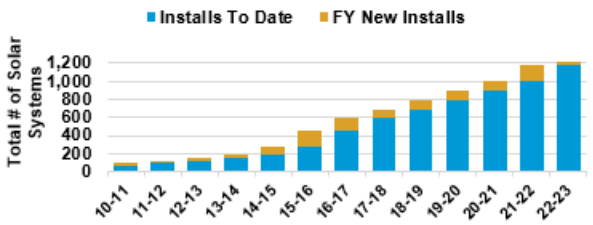
Customer-owned rooftop solar system installations continue to grow. Burbank Water and Power does not provide rebates for installing these systems. However, the 26% Federal Investment Tax Credit in 2020-2022 makes purchasing solar and/or battery systems more accessible. The tax credit expires starting in 2024 unless renewed by Congress.

Customer Rooftop Solar Installations

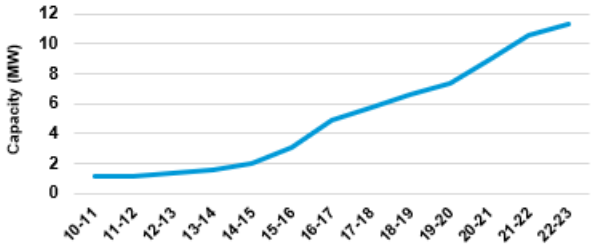
DECEMBER 2022

Reporting Month				All Time			
Solar Installations	10	5.99	0.17	Solar Installations	1,071	5.52	5.92
	Residential	Avg. Size (kW)	Installed Capacity (MW)		Residential	Avg. Size (kW)	Installed Capacity (MW)
	0	0.00	0.00		51	100.98	5.15
	Commercial	Avg. Size (kW)	Installed Capacity (MW)		Commercial	Avg. Size (kW)	Installed Capacity (MW)

Total # of Solar Systems



Total Rooftop Solar Capacity



Reporting Month				All Time			
Battery Installations	0	0		Battery Installations	20	35	
	Installations	Batteries			Installations	Batteries	
	0	0.0			145	466.6	
	Power (kW)	Energy (kWh)			Power (kW)	Energy (kWh)	

TECHNOLOGY

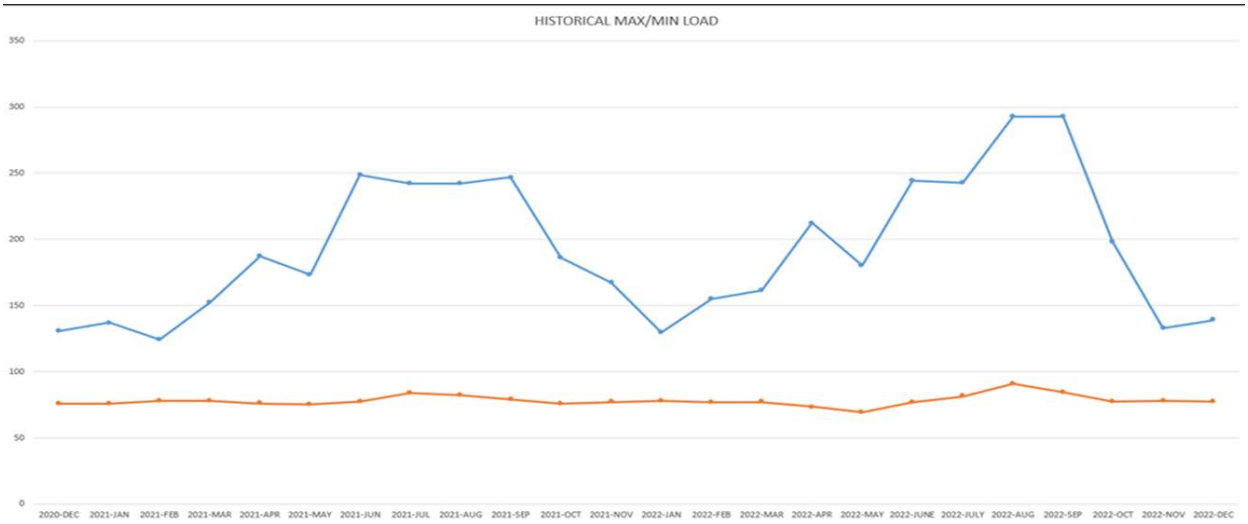
Broadband Services (ONEBurbank)

	December 2022 New Orders	Revenues for December 2022	FYTD 2022-23 Revenues	FYTD Budget
Lit	0	$163,990	$985,155	$800,000
Dark	2	$184,840	$1,127,315	$1,200,000
Total	2	$348,830	$2,112,470	$2,000,000

POWER SUPPLY

BWP SYSTEM OPERATIONS:

The maximum load for **December 2022** was **139.0 MW** at **10:51 AM** on **December 12, 2022,** and the minimum load was **77.6 MW at 3:41 AM** on **December 26, 2022.**



YEAR	MAX LOAD	MAX DATE
2022	292.8 MW	06-September-22 15:58
2021	248.5 MW	15-June-21 14:57
2020	292.3 MW	18-Aug-20 15:22
2019	282.66 MW	04-Sep-19 15:31
2018	306.3 MW	06-Jul-18 16:41

The Burbank power system did not experience any natural gas supply issues for **December 2022.**

Southern California continues to experience natural gas reliability and affordability challenges because of supply and demand mismatches. SoCalGas' system capacity and supply are primarily a function of two components: (1) transmission pipelines, which bring gas into and then transport it throughout the system; and (2) underground natural gas storage connected to transmission pipelines near system load. While one component of the system's limited supply is the transmission pipeline reductions and outages, the other critical component is storage operating constraints from the CPUC restricting the use of the Aliso Canyon Storage Facility. The current effective withdrawal protocol is restrictive but is less restrictive than the previous protocol, in that Aliso Canyon was only allowed to be withdrawn from if curtailment was imminent, but now can occur under less acute circumstances. As a result, BWP has not had issues with obtaining adequate gas supplies to operate its natural gas fired generators; however, the supplies have been at a much higher price than normal due to national and global issues and increases in demand.

Limited supply, coupled with high demand, has caused natural gas prices to increase significantly.

Following the Russia and Ukraine conflict, Russia implemented sharp reductions in exports of natural gas to Europe. According to the Energy Information Administration (EIA) report, U.S. liquefied natural gas exports to Europe exceeded Russia's exports in the third quarter. This is the first time this has occurred in history. For the first eight months of 2022, U.S. gas exports were 14% higher than in 2021. For the first 8 months of 2022, power generation, residential and commercial sectors demand caused U.S. demand to increase by 4%. U.S. storage levels were well below the 5-year average at the end of September 2022. U.S. natural gas prices reached their highest level since the summer of 2008, due to tight supply-demand balance and low storage levels. LNG exports are expected to increase another 4% next year, adding to the current U.S. supply/demand issue.

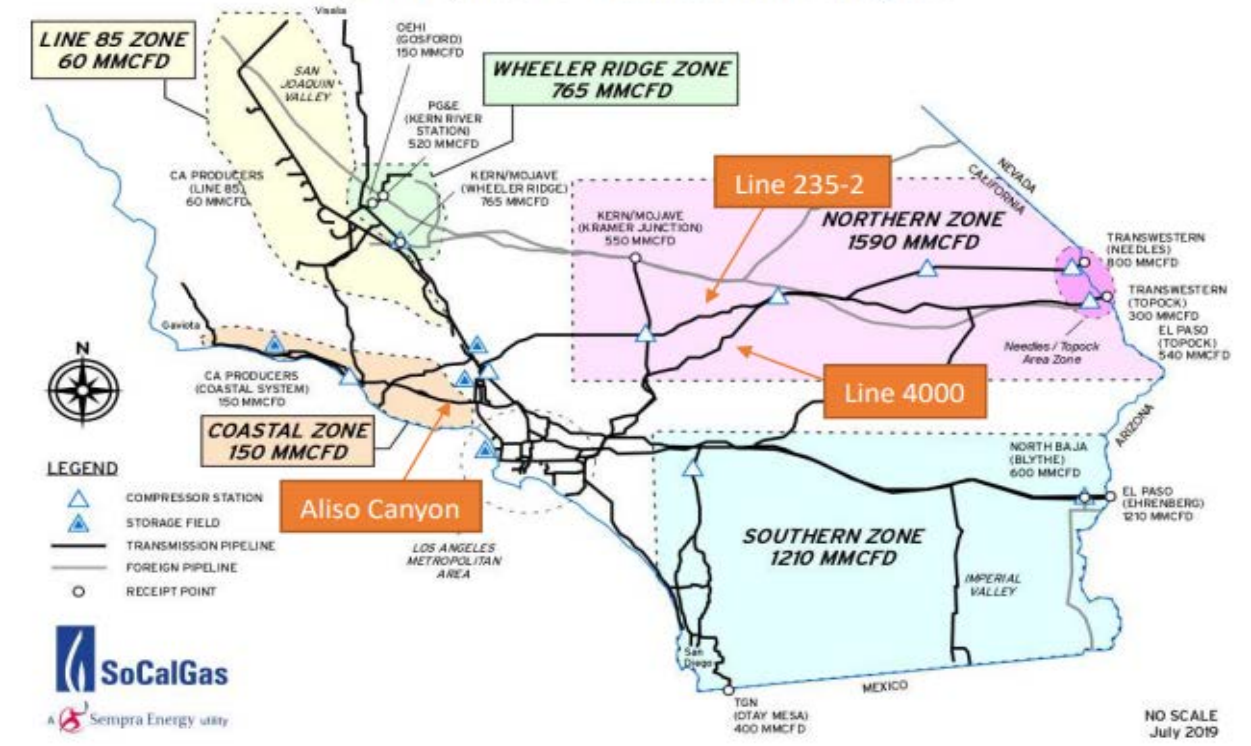
From the Federal Energy Regulatory Commission (FERC) October 2022 West Natural Gas Market Report, the table (below) shows that natural gas prices in 2022 are about three times higher than in 2019 and 2020. The price of natural gas jumped due to extreme winter (2021) weather followed by the Russia-Ukraine conflict, and these higher prices are expected to continue into 2023 and will continue to have a negative impact on BWP's budget. BWP continues to hedge (procure natural gas at fixed prices for future delivery) to minimize the risk and exposure to extreme pricing; however, the higher prices increase BWP's cost of generation, impact market prices for power, and have negative impacts on the budget.

West Day-Ahead Natural Gas Prices
Averaged Annually/Seasonally
Federal Energy Regulatory Commission Market Assessments

	Average Day Ahead Prices ($/MMBtu)	SoCal Border	Opal Wyoming Plant	El Paso Permian	PG&E Malin Oregon	Henry Hub
2019	Annual	2.67	2.78	1.11	2.83	**2.51**
	Summer	2.10	1.97	0.79	2.02	**2.39**
	Winter 2019/2020	2.17	2.23	1.06	2.27	**2.07**
2020	Annual	2.17	2.03	1.32	2.06	**1.99**
	Summer	2.07	1.81	1.24	1.83	**1.88**
	Winter 2020/2021	7.44	7.06	7.96	3.29	**3.08**
2021	Annual	6.11	5.52	5.67	4.01	**3.84**
	Summer	4.47	3.83	3.58	3.91	**3.87**
	Winter 2021/2022	5.05	4.88	4.05	4.88	**4.50**
2022 YTD	Annual	6.89	6.34	5.89	6.40	**6.67**
	Summer	7.96	7.20	6.76	7.30	**7.68**
	Winter 2022/2023					

We are keeping a close eye on labor issues and inflationary pressures and will provide an update as we get more information. We are also monitoring Senate Bill 1486, which would limit operations at Aliso Canyon, post-2027. BWP is a member of the Southern California Generation Coalition (SCGC), which continues to follow and participate in the CPUCs efforts to evaluate alternatives that would minimize or eliminate the use of Aliso Canyon. SCGC (including Burbank) continues to express concerns about reliability and the need to maintain the Aliso Canyon storage facility unless or until an alternative is identified that can supply the product and services that it provides.

Image 1: Receipt Points & Transmission Zone Firm Capacities



ELECTRICITY GENERATION:

BWP Generating Facilities

Unit	Availability	Operating Hrs	MWH (Net)	Net Heat Rate (Btu/kWh)	Number of Starts
Olive 1	0%	0	0	0	0
Olive 2	0%	0	0	0	0
Lake 1	**100%**	**0**	**0**	**0**	**02**
MPP	**92%**	**684**	**131,737**	**7,4381**	**1**

Olive 1 and 2 remained in dry storage, with a 274-day notice required to restart one unit and a 365-day notice required to restart both units. Olive 1 and 2 have been in dry storage since 2011 and 2012, respectively.

Lake 1 was placed online two times during the month of **December.**

Magnolia Power Project (MPP)

	December	FYTD	YTD
Availability	**92%**	**97%**	**95%**
Unit Capacity Factor (240 MW)	**74%**	**78%**	**72%**

MPP was shut down on December 9, 2022 to perform an offline water wash of the combustion turbine compressor. Balance of plant maintenance activities were also performed during this outage. MPP was restarted on December 12, 2022.

Tieton Hydropower Project (Tieton)

Tieton began generation on March 31, 2022, when sufficient water flow provided by the United States Bureau of Reclamation became available. Generation ended on October 19, 2022 when water flow was no longer available. A total of 54,011 MWh were generated this year which is above the annual average of 48,000 MWh. Maintenance inspections have since begun and will proceed until the next generation season begins in 2023. **There have been no unanticipated findings from the maintenance inspections that have been completed so far.**

ENVIRONMENTAL

Air Quality

No air quality updates.

Storm Water

The State Water Resources Control Board Industrial General Permit requires industrial facilities to collect, at a minimum, four stormwater samples per reporting year and compare them to statewide regulatory limits. **On December 27, 2022, January 4, 2023, and January 9, 2023, additional stormwater samples were collected for the current reporting year of July 1, 2022, to June 30, 2023. Although,** the results from the **previous** samples continue to indicate ongoing compliance issues with the **Industrial General Permit** metals effluent limitations, specifically iron, zinc, and copper, **the results are below the Time Schedule Order interim effluent limitations**. Samples were also collected from the offsite influent that commingles with BWP's stormwater discharge. The offsite samples also exceeded the limits for metals. **The results from January 4, 2023, and January 9, 2023 samples are still pending.**

In order to address the stormwater compliance issues, BWP is in the process of implementing a campus stormwater improvement project. BWP initially completed the proposed project's California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration in 2019. However, recent amendments to the CEQA guidelines now require an update to the CEQA Initial Study/Mitigated Negative Declaration. The updated Initial Study/Mitigated Negative Declaration CEQA public review period ended on July 22, 2022, and responses to comments on the document are being prepared. The environmental review was expected to be finalized when the project was approved by the Burbank City Council. However, the engineering design and permitting phase have taken longer than originally expected due to the complexity of the project as well as other factors, including the onset of a pandemic. MNS Engineers was contracted to prepare the final design plans, as well as provide engineering support and permitting support for the project. The project's final design is complete, permitting is ongoing, bid specifications will be prepared, and a request for proposals (RFP) will be issued for the construction activities. As an interim measure, BWP has also applied for time schedule orders (TSOs) that include interim limits, which are achievable for this site. The final TSOs were approved by the Los Angeles Regional Water Quality Control Board (LAWQCB) on June 7, 2021. These TSOs and interim limits will apply until the improvement project is complete. Milestone achievements are required, and project completion must be achieved by November 17, 2023. BWP submitted a TSO amendment request to the LAWQCB. The amendment consists of consolidating the BWP and MPP facilities into one TSO, requesting coverage for copper, and updating the project schedule. The TSO amendment public review process ended on July 21, 2022, and no comments were received. The amended TSO was finalized on July 31, 2022, and was received in August.

BWP has been utilizing engineers' estimates which are revised annually to establish the appropriate budgets for the campus stormwater improvement project. Based on the most recent project cost estimate an additional $3.2 million is being proposed to the BWP budgets for FY 23/24 and FY 24/25. The project scope has not changed, and the increase is entirely attributable to significant market increases. The total BWP budget for the project is proposed to increase from $3.2 million to $6.4 million. BWP also verified the accuracy of the latest engineers' estimates by reviewing recent bids other entities who are currently approaching construction of similar projects received.

PROJECT UPDATES:

Power Resources

Renewable Portfolio Standard (RPS) Compliance

BWP continues to be on track to meet RPS compliance requirements for the calendar year 2022. The calendar year 2022 goal is 38.5% RPS, **and BWP has met the goal.** BWP staff continues to evaluate renewable resources in order to meet future compliance requirements. Staff updated the RPS Procurement Plan and Enforcement Program in December 2021, which shows BWP's path forward with RPS compliance. Staff recently purchased Portfolio Content Category (PCC) 3 RPS products and PCC 2 RPS products

to meet CY2022 regulatory compliance at least cost. Staff is currently working on additional renewable contracts, in order to maintain RPS compliance for future years. Prices for long-term renewables has increased approximately 50-60% due to supply chain issues as well an increase in demand as load serving entities try to procure renewable resources to meet the state's RPS targets which are increasing by approximately 3% annually. In the last 5 months, negotiations for three of four future projects terminated, but we continue to look for other projects to meet future RPS obligations.

Integrated Resource Plan (IRP) Update

BWP has selected a vendor for the IRP and a stakeholder team **has been selected. BWP has selected stakeholders that are representative of its ratepayers. The stakeholders will serve in an advisory role in the development of the IRP.** The IRP is due to the CEC in 2024. Stakeholder engagement efforts, compliance, and costs will be some of the major factors in the 2024 IRP. The IRP development and stakeholder engagement process is expected to take 6-12 months to complete.

BWP plans to hold six stakeholder meetings from December – June and three community meetings in 2023. The first meeting took place on December 15, 2022. BWP is soliciting feedback on the IRP and the IRP survey is posted here: https://www.burbankwaterandpower.com/2024-irp

Transmission Update

BWP is partnering with LADWP on additional renewable contracts and opportunities. BWP will continue to meet with LADWP monthly to discuss transmission needs. BWP is working with LADWP on the update to the Open Access Transmission Tariff (OATT) process. LADWP has delayed the implementation of new rates by 2-3 months, with an implementation date in early calendar year 2023. The rates are expected to increase significantly, and final numbers will not be known until 2023. **Staff plans to attend all LADWP transmission stakeholder meetings, to represent BWP's concerns.**

Intermountain Power Project (Delta, UT) Renewal Progress

LADWP, BWP, and GWP (the IPP repowering participants) are working together to create a detailed roadmap for green hydrogen production and power generation at IPP. In the medium term, the IPA is targeting 30% green hydrogen combustion by July 2025, when the IPP repower project is scheduled to come online. On a monthly basis, IPP participants continue to meet to discuss the IPP renewal, including concerns about facilities development and potential additional resources at the site.

Staff continues to actively work with Intermountain Power Agency (IPA) on cost increases due to the Hydrogen Betterments Project and coal supply issues. The cost of the IPP renewal project has increased significantly, from $2.5 billion in 2019 to $3.6 billion in August 2022. BWP's share was $86.5 million in 2019 and is now $141 million (this does

not include interest). Staff will continue to track costs and report on them, as new data becomes available.

In regard to the coal supply concerns, IPP participants agreed to limit the output of the IPP units, to maintain a minimum megawatt supply sufficient to preserve the integrity of the Southern Transmission System direct current lines and meet the participants' minimal needs during the less critical times of the year. **For the foreseeable future, we will continue to see limitations with the IPP coal supply. Per discussions with IPA, IPP will only run on one unit from now through June 2023 (unless there is a critical market event), allowing the coal pile to grow. In December, due to high natural gas prices and spot market prices, unit 2 for IPP was made available for IPP participants. BWP was able to utilize both IPP units for December. This allowed BWP to save $2.04 million dollars in December. BWP was able to utilize both units due to conserving its share of coal for critical weather and pricing events. In January, both units ran until January 12, 2023. Current estimates show nearly $322,240 in savings for January 2023. Based on current coal supply projections, IPA plans to run two units from July 2023 – September 2023, during the critical summer peak months.**

Power Production

Lake One Power Plant Emissions Retrofit Project

Engineering work is ongoing, and the final design is scheduled to be completed during the month of January. The catalyst will be tested at the end of January to ensure it meets the performance specifications. Major procurement items have been ordered and are on schedule to be delivered before the construction outage. Substantial completion of the project is expected on or before June 1, 2023.

The new emissions control system will allow Lake One to remain in compliance with upcoming air quality requirements. The project consists of designing, engineering, permitting, constructing/installing, commissioning, and testing the new emissions system. This project is planned to conclude in the first half of 2023.