

March 1, 2023

Dear Chairman Thomas and Members of the Public Works Committee:

Please find the Sewerage and Water Board of New Orleans' fourth 2022 quarterly report to the Public Works Committee below, as required by Louisiana Revised Statute 33:4091. This report highlights data from 2022 generally, and from Q4 specifically, in the context of the six focus areas of our Five-Year Strategic Plan.

The report begins with an overview of our utility's Financial Stability, as the other five focus areas of our strategic plan become harder to deliver without adequate funding. Then you'll find information about how we're making strides to elevate our customer service, followed by operational and infrastructure improvements. To make meaningful change, we must optimize our organization and technology while also empowering our workforce. Our progress related to those efforts is also included below. Lastly, this report closes with an overview of how we're continuing to engage with all of our stakeholders.

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We look forward to discussing these topics and answering any questions you may have at the March 15 Public Works Committee meeting.

Regards,

Ghassan Korban, P.E.

Executive Director, Sewerage and Water Board of New Orleans





I. STRATEGIC PLAN OVERVIEW

In developing this report for the last quarter of 2022, the Sewerage and Water Board of New Orleans (SWBNO) reflected on the progress and challenges we experienced throughout the year. Overall, the state of our utility is strong. We have overcome hurdles in many areas to make significant strides forward, and we enter 2023 with defined priorities that align with our Five-Year Strategic Plan.

Five-Year Strategic Plan



Financial Stability

Workforce

Development

Infrastructure Resilience and Reliability



Modernization







Organizational and Operational Improvement

Customer Service Excellence and Stakeholder Engagement



After receiving Board of Director approval for our first-in-ageneration strategic plan at the beginning of the year, we turned our focus to implementation. We formed six working groups, one dedicated to each of the strategic plan's focus area, which met quarterly to discuss successes,

challenges, and key performance indicators. We regularly report on their progress to our Board of Directors' Operations Committee.

During 2022, we carried out a range of plan-aligned tactics within the timelines the working groups identified for them. Highlights include:

- Updated our purchasing policies
- Incorporated affordability outcomes into the development of our financial plan
- ▶ Increased options for customer self-service and expanded payment locations
- Overhauled our strategy for reading water meters; provided additional resources to support the meter reading team
- Reviewed our customer dispute process and participated in the development of new policies
- Completed an inventory of our software and systems; documented cybersecurity policies
- Completed an assessment of our asset management risks; established a working group on the subject
- Developed and implemented a new management structure for General Superintendent's Office, which oversees the engineering and operation of our drinking water, wastewater, and drainage systems

To foster similar improvement in 2023, the working groups added new tactics for their focus areas in their first meetings of the new year. We will continue to track and report on their efforts.









II. FINANCIAL STABILITY

Practice strong fiscal stewardship and ensure timely revenue recovery while balancing affordability with investments necessary to deliver critical services.



COMPREHENSIVE FINANCIAL STUDY

In 2022, we completed a comprehensive financial study to understand our water and sewer system revenue, the cost of providing those services to our customers, and the costs associated with capital projects to sustain and improve the service we provide.

The study found that the income our water and sewer rates generate cover our obligatory debt service and the cost of our day-to-day operations and maintenance. However, current revenue leaves nearly all of our five-year capital improvement projects unfunded – in spite of our success in securing \$499 million in state and federal resources in 2022 and applications for an additional \$42.6 million that we have already submitted for 2023.

Financial Snapshot



Financial stability is fundamental to our ability to achieve stability and service improvements in our other five Strategic Plan focus areas. Because of the importance of this topic, we prepared for early 2023 conversations about water and sewer rates, affordability, and investment priorities with our employees – who are also our customers and provide valuable perspective as a focus group. With feedback from our workforce in hand, we intend to work with our Board of Directors









to determine the best path forward for conversations about this challenging topic with other stakeholders and the broader community in 2023.

2023 BUDGET ADOPTED

In December 2022, our Board of Directors adopted 2023 operating and capital budgets. The budgeted operating revenues for fiscal year 2023 remain flat at approximately \$277 million. Budgeted operating expenses are \$359 million, with the cash portion of operating expenses up by \$12.5 million from higher salaries and utilities expenses.

The adopted capital budget identified potential project uses of \$518 million in 2023 and funding sources of \$441 million, necessitating certain projects being included in the Capital Budget pending the identification of additional funding sources. Budgeted debt service is \$51 million for 2023 inclusive of the 2022 Drainage Tax Bond which closed December 2022.

BY THE NUMBERS: 2022 FINANCIAL PERFORMANCE

As of December 31, 2022:

- Our operating revenue was \$273.4 million relative to the budgeted amount of \$275.9 million.
 - Lower billed consumption for water and sewer service of approximately \$7.2 million was overset by an increase in other operating revenues of \$4.0 million.
- Our operating expenses were \$326.6 million versus a conservatively budgeted \$367.2 million.
 - In the face of high inflation expectations, commodity price spikes, and ongoing supply chain disruptions, we set the 2022 operating budget conservatively (i.e., with a relatively high "worst-case scenario" in mind) at the end of 2021.
 - To spend the full operating budget, we would have had to take on additional debt or draw down our cash reserves. Both actions would have been acceptable to protect critical utility operations, but neither would have supported our longer-term financial stability goals.
 - Through disciplined spending, we were instead able to preserve a favorable debt coverage ratio on the year by operating \$40.6 million below budget.
 - After the resumption of normal bill collection activities, which we paused as a public health protection measure during the majority of 2020 and 2021, we also experienced lower expenses related to bad debt and money owed by customers.









- Ad valorem drainage tax revenue was \$60.6 million, which was above the budgeted amount of \$59.5 million. The increase is based on actual remitted taxes received from the City.
- As noted, our capital budget remained largely unfunded.

COLLECTIONS

• At the end of December 2022, \$57.2 million remained in outstanding overdue customer receivables (i.e., bill amounts overdue by 60 days or more), an increase of \$0.5 million since last quarter.



 The delinquency rate, defined as the uncollected ratio of billed versus collected revenue in the last 12 months, remained under 5% in Q4.

SWBNO continues to offer interest-free payment plans to customers with past-due amounts to address arrearages.

Active Accounts1

Month	Number of Accounts
October 2022	138,957
November 2022	138,476
December 2022	138,438

Number of Billing Exceptions²

Month	Average Number of Billing Exceptions
October 2022	500
November 2022	441
December 2022	725

The fourth-quarter average for billing exceptions increased almost 10% over the third-quarter average. Although it may be counter-intuitive, this indicates progress rather than a problem. The new meter reading strategy, implemented in November, allowed us to reach many meters that had not received an actual read in months. We pulled many of the bills for those accounts for manual staff review and verification before sending the actual-read bills to customers.

ACCOUNTS RECEIVABLE

In Q4, the number of past-due accounts increased while the total dollar amount owed to SWBNO went down. While SWBNO has more delinquent customer accounts, some high-dollar

amount differs substantially from the accountholder's typical use. After review with a confirmed reading or estimate, bills are corrected if necessary.





¹ Active accounts are those that have an active meter installed.

² A billing exception is a bill put on hold by SWBNO for further review, usually because the



non-residential accounts caught up on their overdue bills, which helped improve our overall position. The table below reflect the dollar amounts owed to SWBNO by customers with open accounts as of December 31, 2022.

Open Accounts

Past-Due Ope Accounts		Total Amount Due	Past Due \$ Amount (60+ Days)	
Residential	22,592	\$47,067,954	\$40,432,108	
Multi-Family	686	\$4,574,979	\$3,959,696	
Commercial	1,656	\$15,527,163	\$12,773,205	
TOTALS	24,934	\$67,170,096	\$57,165,009	
Compared to Q3	-505	-\$588,583	-\$407,081	

Closed Accounts

As of December 31, 2022, there were 23,311 closed accounts with an unpaid balance. These accounts are referred to third-party collectors.

When defining the value of accounts receivable, we accounted for those receivables that are unlikely to be collected (or uncollectible amounts). As of December 31, 2022, customers with closed accounts owed SWBNO \$31,397,012, omitting the uncollectible portions.

DELINQUENCY

The table below breaks down the value of past-due bills by time overdue. As explained above, collections continued to improve in Q4 – particularly in the accounts with bills overdue by 120 days or fewer – after collection activities resumed last year.

	0-30 Days	31-60 Days	61-90 Days	91-120 Days	121+ Days	Total Amount*
Sewer	7,521,707	4,340,718	3,924,704	2,685,193	63,475,257	81,163,631
Water	6,417,502	3,617,456	3,382,572	2,343,013	55,792,359	69,882,995
TOTALS	13,939,209	7,958,174	7,307,276	5,028,205	116,813,762*	151,046,626
Compared to Q3						-1,191,048

^{*}Column total includes unapplied pending payments of \$2,453,853







^{**}Prior to allowance for uncollectible accounts



SPECIAL INITIATIVES

Late Fee Forgiveness Program

From October to December 2022, SWBNO partnered with the City of New Orleans on a Late Fee Forgiveness Program. To give New Orleanians a chance to catch up on overdue bills, we voided over \$41,800 in late fees for the 4,400+ customers who made down payments on their debt and arranged no-interest payment plans for the remaining balance.

To participate, a residential customer's account had to be delinquent, meaning more than \$50 overdue by 60 days or more. For low-income customers who could not pay 25 percent of their balance up front, we offered a reduced down payment of 15 percent.

Low-Income Household Water Assistance Program (LIHWAP)

In Q4 2022, SWBNO awarded nearly \$892,100 in LIHWAP funds to help 1,485 low-income households regain water service or avoid shutoffs. The Q4 awards brought the total amount distributed last year to \$1,552,100.

This partnership of SWBNO, Total Community Action (TCA), and the Louisiana Housing Corporation relied on one-time federal funding. We recognize the importance of affordability in our community. We have joined other water utilities around the country to advocate for a permanent federal program for water and sewer assistance, similar to those that exist for gas and electric utility support.

In addition to LIHWAP, SWBNO partnered with the City to distribute \$2,090,457.57 to help 1,462 households through the Emergency Rental Assistance Program (EARP). We also assisted 623 households with \$125,000.00 of bill support from our own revenue.

INNOVATIVE FUNDING EFFORTS

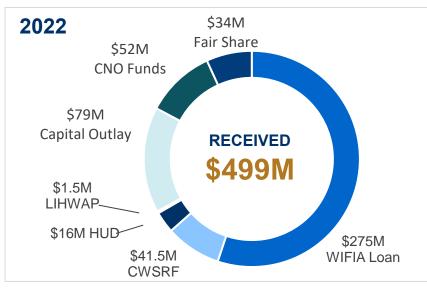
Real, long-term improvements do not happen without funding. In 2022, we took it upon ourselves to find creative, innovative funding sources. We brought in almost \$500 million in grants and low-interest loans to get things done without having to ask our customers for more money. We've also applied for an additional \$42 million to help fund programs like wastewater treatment plant repairs, and we're researching other options, such as the Drinking Water State Revolving Fund, Lead Service Line Repair Program, and the Inflation Reduction Act, to address even more of our capital needs.

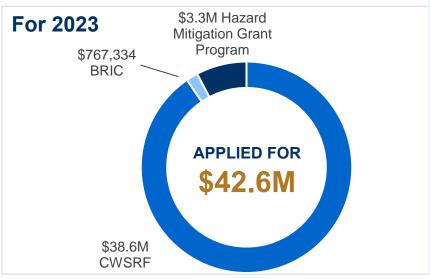






Innovative Funding Summary





RESEARCHING

Drinking Water State
Revolving Fund

for Smart Meters (\$67M)

Lead Service Line Replacement Program \$42M Available

Inflation Reduction Act





III. CUSTOMER SERVICE INITIATIVES

Meet and exceed the service needs of our customers.

We recognize that positive interactions with SWBNO can inspire

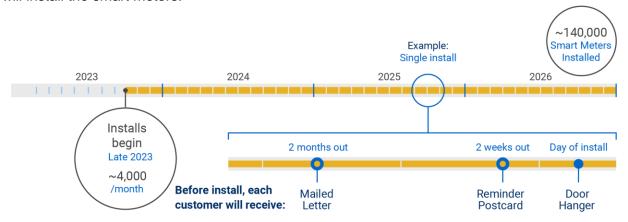


customers' trust and confidence. For most customers, that relationship plays out through our billing process and customer service experiences. To continue progress in this Strategic Plan focus area, we emphasized three areas in the fourth quarter of 2022: our smart metering program, meter reading and billing improvements, and customer experience metrics.

SMART METERING PROGRAM

To modernize the way SWBNO tracks water use, the utility's Board of Directors approved a contract with Aqua-Metric to oversee the installation of a Sensus <u>smart water metering system</u> for all customers in December. With the contract in place, Aqua-Metric immediately began work on the system's wireless communication infrastructure.

This fourth-quarter milestone paved the way for the phased installation of approximately 140,000 smart meters over the next four years. EMP, an experienced New Orleans-based firm, will install the smart meters.



The new meters will use Advanced Metering Infrastructure (AMI) — a reliable, proven technology — to digitally measure water use at customer homes and businesses. The system will send the consumption data to SWBNO's billing system via secure radio waves. By ending the need to manually read almost 140,000 water meters every month, smart metering will nearly eliminate inaccurate and estimated bills.

The technology will also allow customers to manage their accounts online. New options will include unusual water use and potential leak notifications, access to near real-time water use









readings, and other tools to actively manage water expenses. We anticipate the full project will cost around \$67 million.

SMART METERING INTERNAL EDUCATION



With our smart metering program launching in 2023, our Communications Team partnered with the Smart Metering Program Management Team to host internal kickoff meetings with SWBNO employees. These events took place in November 2022 across three of our campuses (Carrollton Water Treatment Plant, St. Joseph Street, and Central Yard).

SWBNO is committed to helping every employee understand this technology, and we will provide training to

support employees who take on new roles.

METER READING & BILLING

Until our smart metering system is fully installed, we will continue to face the challenges posed by manual meter reading. Most surprise high bills result from many months of estimated consumption in a row. Without actual meter reads to bring charges back into line with a customer's actual use, too-low estimations can result in a backlog of unbilled service. That manifests as a high bill once an actual meter read takes place and months of underbilling are corrected at once.

In Q4, SWBNO introduced a new meter-reading strategy to reduce the margin of error when estimating water use. Launched in November 2022, the new strategy calls for staff to read every customer's meter every other month and estimate water use for the months between actual reads. With approximately 70,000 reads to perform each month instead of nearly 140,000, our completion rate should approach 100 percent every two months. For comparison, our previous process yielded a 60-70 percent completion rate on average and left some meters unread for months at a time.

As a result of this approach, customers will receive bills that reflect actual water use more accurately, either from physical meter reads or more precise estimates that average in more actual reads. The goal is that every account in our service territory has at least two actual reads by the fourth month after implementation.

Since the strategy was implemented, Customer Service has been able to read approximately 95 percent of scheduled routes each month.









Although some customers who have not received estimated bills before will under this approach, we anticipate better billing results by eliminating most situations where meters go unread for months at a time. Overall, bills will reflect actual water use more accurately, either from physical meter reads or more precise estimates that average in more actual reads.

Additionally, the meter reading team hired eight new employees in Q4. The goal is for Meter Reading to continue hiring as needed to counteract high turnover rates, until Smart Meter installations are well underway.

Below are Q4 Meter Reading metrics:

Meter Read Staffing

Q4 2022	2022 Goal	Description
44 staff members	60 staff members	The average number of staff actively reading meters. (Note: The total number of positions was increased to 60 from approximately 40 in 2020 to improve the team's resilience to days off, turnover, etc.)

BILLING DISPUTE METRICS

18 percent fewer bill disputes initiated year-over-year

DETAILED Q4 BILL DISPUTES

The table below provides bill dispute information for Q4 2022. Overall, in Q4 2022, customers initiated 18 percent fewer bill disputes compared to Q4 of 2021.

Month	Bill Disputes Initiated	Bill Disputes Completed	Average Days to Close Dispute
October	969	1,108	79
November	935	800	83
December	796	676	81

^{*} The 2021 end-of-year average was 57 days. The Customer Service Department's 2022 goal was to reduce the average to 45 days (by 21 percent). Q4 trended high due to a focus on closing out very old disputes (more than 120 days) and addressing escalations quickly (average of 9 days). Making progress in these areas resulted in a higher average metric for disputes overall.

More robust billing dispute metrics are helping SWBNO understand and improve the quality of its customer service. At the end of Q4 2022, 2.3 percent of accounts (roughly 3,219) had open disputes. Although we did not reach our goal of two-percent by the end of the year, this









represents a 0.5 percent decrease from 2021 (2.7 percent). We will continue to work toward the two-percent goal in 2023.

Metric	Q4 2022	2022 YTD	2022 Goal	Description
Bill Disputes: Time-to-Resolution	81 days	79 days	45 days	The average number of days it takes to complete the bill dispute process.
Billing Escalations: Received vs. Resolved	66%	58%	TBD	A new metric that compares the number of billing escalation complaints received to the number resolved.
Billing Escalations: Time-to-Resolution	9 days	7 days	15 days	The average number of days to resolve a billing escalation (i.e., customers who have gone through the bill investigation process but have unresolved issues remaining should be able to reach a resolution within 15 days).

CUSTOMER EXPERIENCE

2022 IN REVIEW

- 520,300+ customers interactions (office visits, calls, etc.)
- 285,000+ calls received by our Call Center
- Almost 1/3 of customer calls answered in 60 seconds or fewer
- Handled calls 8 seconds more quickly on average

Over the last year, our customer service team leaned into changes to better serve New Orleans. In 2022, our Customer Service team had over 500,000 customer interactions, and about 285,000 of those were calls to our Call Center.

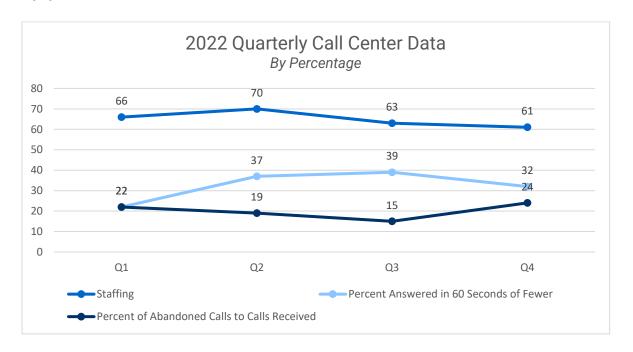
On average in Q4, about 33 percent of customer calls were answered in 60 seconds or fewer compared to an average of 22 percent in Q1. In Q4, we saw abandoned calls decrease by 13 percent in Q4 compared to Q1 2022; however, the overall proportion of abandoned calls to total calls received remained around the same (24 percent in Q4 compared to 22 percent in Q1).





Staffing is still an area needing improvement, hovering around 60-70 percent rather than our goal of 90-100 percent.

In the industry, it is typical to experience an increase in the volume or complexity of customer service requests when operational changes are made. Because we adopted many overlapping strategies to improve performance in 2022, our call center metrics remained relatively flat. However, we believe the changes have set a foundation for better performance outcomes in 2023.



Q4 CALL CENTER METRICS

Customer Service hired four new employees in Q4, all of whom were trained in February 2023. Customer Service will continue to hire monthly until it reaches 100 percent staffing, which is anticipated by the end of Q2 2023.

Throughout 2022, we struggled to achieve the customer service call center time-to-answer and handle time goals we set for ourselves. Given the depth and complexity of the issues our staff navigate with customers, the current levels may not be appropriate benchmarks for us. Our Customer Service Department will reflect on these metrics in 2023, balancing the desire to answer and handle issues quickly with the countervailing goal of providing the personalized, high-quality of service that comes with a willingness to invest time in individual customers' issues.







The table below summarizes call center performance in Q4.

Month	Staffing Percentage	Calls Received	Percent Answered in 60 Seconds or Fewer	Average Handle Time ²	Abandoned Calls ³	Total Calls Answered
October	60%	21,221	39%	5:08	3,206	18,015
November	57%	21,486	27%	5:25	5,423	16,063
December	67%	21,416	21%	5:25	6,639	14,777

² Handle Time - Average time an agent spent working with a customer

³ Abandoned Calls - The number of callers who hung up before reaching a customer service agent

Metric	Description	Q4 2022	2022 Overall	2022 Goal
Service Level: Customer Service Line	Answer 85% of our customer service calls in 60 seconds or fewer.	12%	17%	85%
Service Level: Emergency Line	Answer 85% of our emergency calls in 30 seconds or fewer.	45%	47%	85%

¹ Answer time thresholds were updated this quarter from 30 to 60 seconds for customer service and from 15 to 30 for emergency calls. The year-to-date (YTD) data reflects a blend of attainment at the previous thresholds and this guarter's new information.

BILLING ADVISORY COMMITTEE

SWBNO is participating in the Council's newly created Billing Advisory Committee. The Committee aims to enhance the customer experience by improving our utility's billing policies and streamlining processes.

In furtherance of billing policy updates adopted by the Council in December, SWBNO has created new electronic hearing judgement forms along with updated billing rules and regulations. When we launch in early 2023, these materials will be available to all customers on the SWBNO website. In the meantime, SWBNO has begun informing customers of the Council's new administrative hearing option by including Council appeals forms with SWBNO administrative hearing judgments.

SWBNO looks forward to continued collaboration with the City Council to improve our customers' experiences. As the implementing agency, it is important to SWBNO to develop a process that our utility can effectively, consistently, and legally deliver in practice. We will continue the conversation until all parties are confident the proposed changes will achieve these goals.









Plumbing Permits at NOLA One Stop

In December, SWBNO and the City of New Orleans signed a Cooperative Endeavor Agreement (CEA) to include plumbing permit applications at NOLA One Stop. Once the merger is complete, all permit applications will be available on the City's One Stop Shop online permitting system. We anticipate the integration to be complete in early Q1 2023.

Customer Service Dashboard

The Customer Service Department continues to track and report metrics to its online KPI dashboard. SWBNO made the dashboard available on www.swbno.org in Q3 2022. Metrics can be found in Data & Statistics.







IV. OPERATIONS UPDATE

Ensure safe and efficient operations. Improve the efficiency and resiliency of current and future infrastructure by leveraging partnerships and innovative approaches to funding and sustainable design.

POWER

THE SWBNO POWER COMPLEX



In Q4 2022, SWBNO and Entergy New Orleans celebrated the groundbreaking of the first phase of the SWBNO Power Complex, which includes a dedicated substation. The dedicated substation, along with static frequency changers and new combustion turbine generators, will replace the existing power generation equipment with a modernized system designed to power New Orleans' drainage and water pumps in a more reliable, resilient, and cost-effective way.

Executive Director Ghassan Korban spoke at the event on behalf of SWBNO alongside Mayor LaToya Cantrell, Entergy New Orleans President and CEO Deanna Rodriguez, and Councilmember Joe Giarrusso.

Other members of the New Orleans City Council were also present, including Council President Helena Moreno, Councilmember Vice President JP Morrell, and Councilmember Oliver M. Thomas. Other Louisiana delegate attended as well, such as U.S. Senator Bill Cassidy, M.D., Congressman Troy A. Carter, Sr., and Louisiana District 4 Senator Jimmy Harris.

In conjunction with substation construction, SWBNO began work on our first major construction project for Phase 1 of the Power Complex, the utility rack connecting the east and west sides of the Carrollton Water Plant campus, in December. When Phase I is complete, the facility will draw power from the Entergy New Orleans grid and convert it to 25-hz power for our use. A new modern, turbine generator will also provide additional power for backup as needed.

The current project schedule anticipates completion of the substation and Phase I work by the spring of 2025.

The fourth quarter of 2022 saw additional power system milestones.









- We awarded contracts for the purchase of transformers and other auxiliary equipment
- We advertised contract 1415, a large civil construction contract for foundations and other underground work.

POWER SOURCES AND AVAILABLE POWER

This chart provides the status of each major component of SWBNO's power system. Notably in Q4, the EMDs were outfitted with equipment to reduce the noise pollution emitted when they are running. This effort already has improved the quality of life in the neighborhood surrounding the Carrollton Water Plant.

Unit	Frequency	Capacity	Available
T4	25 Hz	20 MW Tested at 18 MW during	18
Т5	25 Hz	commissioning 20 MW Tested at 18 MW during commissioning	17.5
Carrollton Frequency Changers 1&2	Converts 60 Hz to 25 Hz	8.5 MW	8.5
Station D Frequency Changers 3 & 4	Converts 60 Hz to 25 Hz	12 MW	12 MW
West Bank Power Complex (Algiers Water Treatment Plant)	Converts 60 Hz to 25 Hz	2.5 MW	2.5
Five EMDs	25 Hz	12.5 MW (total) 2.5 MW (each)	12.5 MW
T6 (via Plant Frequency Changer)	Converts 60 Hz to 25 Hz	3.75 MW	3.75
		Peak 25 Hz capacity (includes 3.75 MW that could be converted from T6)	66.25 MW
T6	60Hz	22 MW	22
		Peak 60Hz capacity	22 MW





(full capacity – does not subtract	
3.75 that could be converted to	
25 Hz)	

DRINKING WATER

WATER HAMMER MITIGATION PROJECT UPDATE

PHASE 2: CLAIBORNE PUMPING STATION

SWBNO completed Phase 2 of the federally funded Water Hammer Mitigation Project in Q4 2022. As of October, all four of the pumps at the Claiborne Pumping Station have been replaced. With new parts, the pumps can adjust to fluctuations in water



pressure, helping to further decrease the likelihood of citywide precautionary boil water advisories.

In Q4, the project team made final adjustments to make the new pumps fully operational. As a result, Claiborne Avenue will be restored and fully open (including intersections) in early 2023.

The construction cost of this phase was \$38,163,954.96 as of the end of 2022. We expect to present final change orders related to Phase 2 construction costs at the March 2023 Board of Directors meeting with final acceptance in April 2023.

IMPROVED DRINKING WATER RELIABILITY



Largely thanks to our Water Hammer Mitigation Program, we're proud that SWBNO provided uninterrupted citywide water service last year. Although there were a few localized advisories (e.g., drivers hitting fire hydrants or contractors digging on top of water mains), we achieved zero widespread precautionary boil water advisories in 2022.

In addition, we accomplished the following in connection with our drinking water system in 2022:









- Treated 58 billion gallons of water, which met or exceeded all federal water quality standards
- Performed 100,000+ water quality analyses
- Distributed 300+ home lead testing kits to customers

LEAD SERVICE LINES

We are monitoring potential changes to the federal Lead and Copper Rule, and we have met with the Louisiana Department of Health to discuss the availability of Infrastructure Investment and Jobs Act (IIJA) related state revolving funds and administrative requirements for lead service line inventory and replacement.

In June of 2022, we entered a Memorandum of Understanding (MOU) with BlueConduit to begin a lead service line inventory using innovative technologies. We anticipate initial model results in Q1 2023. Once the inventory of lead service lines in New Orleans is complete, SWBNO will apply for \$42 million of federal Environmental Protection Agency (EPA) funding available for Louisiana.

SEWERAGE

CONSENT DECREE

Five consent decree sewer main rehabilitation projects were underway with WIFIA funding as of Q4 2022. The projects are located in the Mid-City and Carrollton sewer basins.

SWBNO is on track to complete its consent decree requirements by 2025.

WASTEWATER TREATMENT PLANT

In 2022, \$11.5 million was approved for wastewater treatment plant improvements. SWBNO spent \$7.5 million on Hurricane Ida-related capital projects, which included Fluid Bed Incinerator (FBI) repairs. We spent an additional \$1.6 million on additional FBI refractory and shell repairs unrelated to Hurricane Ida, as well as the design of the Phase One Project at the East Bank Wastewater Treatment Plant.

We also committed \$2.5 million to maintenance and repairs, including:

- Clarifier #6 underground RAS Pipeline Repair
- RAS Pump Rotating Assembly Replacement and Install
- Clarifier #8 MLSS Piping Liner Repair
- Utility Water Pump and Strainer Rehab









#3 Effluent Pump Rebuild

The 2022 FEMA-funded capital projects helped restore the Eastbank Wastewater Treatment Plant back to its pre-Hurricane Ida condition and provided a foundation for compliance. In addition, the Fluid Bed Incinerator received much needed refractory repairs that will ensure its operational longevity.

The Phase One Project will help stabilize the Eastbank Wastewater Treatment Plant with new, modern technology and equipment upgrades. This project will include:

- replacing all the Return Activated Sludge (RAS) pumps in our North RAS Pump house with submersible type pumps,
- · replacing up to four clarifiers mechanisms, and
- adding a Waste Activated Sludge (WAS) storage system with a septage receiving station.

SERVICE REQUESTS (WORK ORDERS)

In December, SWBNO hired Steve Nelson to join the leadership team as Deputy General Superintendent for Operations. This position's responsibilities include managing the Networks Department, which performs field repairs. One of Steve's first initiatives was to develop a field repair escalations process, similar to SWBNO's billing escalations process, to better track and report on outstanding, elevated repair issues. We look forward to reporting the data from that effort in our next quarterly report.

We prioritize work orders, which guide the repair and maintenance of SWBNO infrastructure, by the impact the associated repair would have on the water, sewerage, and drainage systems.

Because of the average age of the components of SWBNO's water and sewerage systems, both categories carry substantial work order backlogs. However, many items in those backlogs will be addressed through in-progress capital improvement programs, including the Sewer System Evaluation and Rehabilitation (SSERP) and Joint Infrastructure Recovery Roads (JIRR) Programs.

Work Order Classification

Category A

requires emergency attention

Category B

requires same-day attention

Category C

requires attention that can be scheduled with other projects for efficiency









2022 IN REVIEW

11,800+

Water Work Orders Closed

- 643 hydrant work orders closed
- 665 valves work orders closed
- 2,698 meter work orders closed
- 2,843 paving restoration projects

8,500+

Sewer Work Orders Completed

- 180 miles of sewer line cleaned
- 175 miles of sewer line inspected

Q4 2022

Total Work Orders (Oct. 1 – Dec. 31)

New: 9,817 | **Closed:** 6,724

Backlog: 16,283 (5.76% increase from Q3)

Sewer

New: 2,484 | Closed: 2,014 |

Backlog: 8,722 (0.74% decrease from Q3)

Water

New: 4,670 | Closed: 2,958

Backlog: 4,161 (13.88% increase from Q3)

Meters

New: 926 | Closed: 648

Backlog: 463 (9.72% increase from Q3)

Paving

New: 1,517 | Closed: 957

Backlog: 2,860 (16.17% increase from Q3)









Other

New: 220 | Closed: 147

Backlog: 77 (8% increase from Q2)

Project Manager Activities in Q4

- Inspected:
 - 2,636 sewer manholes
 - o 225,000 feet of sewer lines
 - o 736 hydrants
 - o 306 valves
- Cleaned 153,000 feet of sewer lines

DRAINAGE

DRAINAGE CONSOLIDATION WORKING GROUP

SWBNO is an active participant in the City's Drainage Consolidation Working Group. To date, we have worked closely with the City's Chief Administrative Officer's (CAO) office, members of the City Council, and external stakeholders to analyze potential efficiencies and service improvements – and related costs – associated with combining New Orleans' small and large drainage systems. While work continues, the City has dedicated additional funds for catch-basin cleaning for this year, and SWBNO continues to support efforts to study permanent funding sources for additional drainage services (e.g., a stormwater fee).

DRAINAGE PUMP STATUS

95 of 99 drainage pumps were available for service as of December 30, 2022. All four pump stations with a drainage pump down had redundancy.

- DPS 6 at Metairie Road: I Pump is out of service due to a pump bearing issue.
 - Impellor shipped to manufacturers facility in Wisconsin. Return to service expected Q2 2023.
 - H Pump returned to service on July 27, 2022, making 12 additional drainage pumps and two constant-duty pumps available at this station
- DPS 10 in New Orleans East: No. 1 pump is out of service
 - Three additional drainage pumps are available for use at the station
- DPS 13 near Tall Timbers Algiers: No. 4 Pump on standby for Emergency Use Only.
 - Five additional drainage pumps and one constant-duty pump are available at this station
- DPS 16 in New Orleans East: No. 2 Pump is out of service due to a coupling issue as of June 14, 2022.







Three additional drainage pumps are available at this station

GREEN INFRASTRUCTURE

In Q4, our environmental affairs staff continued to assess eight green infrastructure projects to determine their existing condition, functionality, and future maintenance needs.

Most notably, on December 28, 2022, Rotolo Consultants completed initial construction of the Bayou St. John GI project. Tree plantings by Groundwork New Orleans and SOUL are scheduled for early 2023. Weekly site meetings with Rotolo Consultants, Dana Brown and Associates, Sustaining Our Urban Landscape (SOUL), and SWBNO began in November.

Maintenance also continued for the Aurora Rain Gardens, Hollygrove Greenline, and SWBNO's St. Joseph Street Administration Building Green Roof projects.



Bayou St. John Green Infrastructure Project Initial Construction

Additionally, we have continued to provide temporary in-house maintenance at the Hollygrove Greenline Green Infrastructure site since the project partner – the Carrollton-Hollygrove Community Development Corporation – dissolved. Our grounds maintenance teams have also continued periodic mowing of the site and will do so until we secure a long-term contract.

JIRR PROJECTS

In cooperation with the City of New Orleans, SWBNO continued to advance projects in the Joint Infrastructure Recovery Roads (JIRR) Program. Updates on work initiated or completed, new contracts advertised or awarded, and other accomplishments achieved within the program during Q4 include:

- JIRR projects completed four total to date
- One more project moved to contract closeout 34 total to date
- Four more projects moved to warranty 56 total to date
- Four more projects started construction 104 total to date
- Three more projects in award 107 total to date
- 20 projects in bid and award
- 73 projects in final design
- 13 projects in preliminary design
- 27 projects in planning

In addition to the JIRR projects, SWBNO acts as the lead agency for water transmission and sewer main projects throughout the city. During Q4, four drinking water transmission main projects were







under construction and one started construction. The work will improve the reliability and resilience of some of the city's critical water supply arteries.

In 2022, JIRR projects resulted in:

- 2.25 miles of transmission main rehabilitated
- 26+ miles of water distribution mains rehabilitated
- 3.9 miles of sewer mains replaced

PROFESSIONAL ENGINEERING SERVICES

In 2022, SWBNO completed the evaluation and scoring process to establish a list of qualified firms to provide a variety of engineering and technical consulting services, via a Request for Qualifications solicitation. This list of qualified firms was officially approved in the January 2023 Board of Directors meeting.

Several near-term projects utilizing this list of firms are planned, including development of an RFP for a new Asset Management System, as well as a master planning effort for our water treatment system.

DECEMBER WINTER FREEZE

During the week of December 19, 2022, Southern Louisiana experienced a multi-day winter freeze that affected New Orleans. Our staff prepared extensively for this event, and as a result, we performed well with only minor incidents. Water pressure never dipped below normal levels, no precautionary boil water advisories were necessary, and no major mains broke due to freezing temperatures.

Our Communications Department also partnered with NOLA Ready to communicate freeze preparation messaging to our customers to ensure their homes, drinking water, and families were protected.

V. ORGANIZATIONAL IMPROVEMENTS

Optimize the utility's organizational structure, alignment, and capacity. Modernize technology and system integration to improve reliability and efficiency of operations and enhance customer service.



CHIEF AUDIT EXECUTIVE

In line with its Five-Year Strategic Plan, SWBNO welcomed Ed Sutherland as its first Chief Audit Executive. This newly created position will champion organizational and operational improvement, a key focus area for the utility.









Sutherland will oversee SWBNO's Internal Audit Department, which reviews the utility's operations and programs to ensure work is completed efficiently, while aiming to increase transparency and mitigate risk. Primary focus areas for evaluation and improvement include the adequacy and effectiveness of risk management, control, and governance processes. The Chief Audit Executive will also make recommendations to safeguard SWBNO's resources and ensure those recommendations are implemented across the utility—ultimately strengthening SWBNO's internal control environment.

The Chief Audit Executive will report directly to the SWBNO Board of Directors—and specifically the Audit Committee—with additional administrative reporting to the Executive Director.

FINANCIAL MANAGEMENT SYSTEM

SWBNO received RFP proposals for a new financial management system. The five shortlisted vendors gave software demonstrations during October and November 2022. Evaluation of proposals is anticipated to be completed in March 2023.

CYBERSECURITY

Enhancing cybersecurity and technology systems resiliency is one of the technology modernization goals laid out in our utility's 2022-2027 Strategic Plan. In Q4 2022, our Information Systems Department made several cybersecurity improvements. The department also received its full 2023 budget request for additional improvements.

Here's a look at the department's Q4 2022 cybersecurity enhancements:

- Improved SWBNO's overall phishing risk score from 19.8 to 17.9. (The optimal risk range is from 0-20; the total risk range is from 0-100.)
 - The SWBNO's phish-prone score of 4.1 percent is now lower than our comparable industry average of 5 percent.
- Completed the installation and implementation of a Security Information and Event Management solution, thereby greatly increasing the Board's cybersecurity.
- Tested and configured a new mobile device management system, which will be deployed on new laptops and cell phones when they are distributed. The testing and configuration have delayed the cell phone upgrade and mobile computer distribution, which will now be completed in Q1 2023.

In Q4 2022, SWBNO's Information Systems Department also:

 Performed successful year-end upgrades of Cogsdale CSM (billing system) and Microsoft Dynamics Human Resources and Payroll systems.







Applied an ADA template to SWBNO's intranet site to increase accessibility.

HEALTH, SAFETY, AND TRAINING

SWBNO continues to improve its safety practices by placing more emphasis on preventing safety incidents from happening in the first place, as opposed to reacting to them.

Here's a look at SWBNO's other Q4 safety highlights:

Employee Sustained Injuries: 18 in Q4 2022 (72 YTD)

Employee injuries decreased by 25 percent in Q4 compared to Q3, and by a total of 6 percent in 2022 compared to 2021.

We are stricter in our definition of "injury" than other utilities, so we track higher than most in industry. Still, if you look back over the last few years, we've continuously had a downward trend in the number of injuries.

OSHA Training

In Q4, 114 employees completed OSHA trainings, which greatly exceeded our monthly OSHA training completion goal of 10 or more OSHA trainings. In 2022, 291 employees currently active completed OSHA 10, and as of the end of Q4, more than 51 percent of SWBNO employees have completed OSHA training.

This quarter, SWBNO had:

- 112 OSHA 10* course completions (compared to 92 in Q3 2022)
- Two OSHA 30 course completions (compared to two in Q3 2022)

OTHER TRAINING

October	November	December
 Health and Wellness 	 Safety Culture 	Electrical Safety
 Safe Job Procedures 	Bug Protection	Office Ergonomics

The Safety Department also:

- Completed two safety orientation presentations in Q4 for new SWBNO employees
- Assisted in an asbestos and job hazard analysis training session in October 2022

Safety Behind the Wheel







^{*}OSHA 10-hour training is now mandatory for all SWBNO employees



In Q4, SWBNO took several steps to proactively ensure employees with driving privileges travel safely.

Safety and Risk Management began requiring every SWBNO driver to complete defensive driving training within six months of acquiring driving privileges. Safety also procured additional defensive driving training courses for drivers the Accident Review Board determines would benefit from additional defensive driving training.

Additionally, the Accident Review Board began holding hearings for employees who speed excessively while driving. GPS systems in the utility's vehicles can alert security when excessive speeding occurs. When this happens, employees who speed and their supervisors are notified and required to attend Accident Review Board hearings for reviews of their driving privileges and/or corrective actions, such as defensive driving training.

Safety Liaison Q4 Activities

October	November	December
One Job Hazard Analysis Each	One Job Hazard Analysis Each	One Job Hazard Analysis Each

Safety Coordinators in Q4 2022:

- Completed 34 job site visits
- Investigated 2 reports of injury
- Resolved and closed seven safety hazard issues at three SWBNO locations

Workers' Compensation Highlights:

- Open extended Workers' Compensation claims settled since October of 2021 reached a projected total savings of over \$4 million during Q4 2022. This includes projected payroll indemnity exposure and medical cost exposure.
- Workers' Compensation extended open claims (open longer than a year) are down by two during Q4 2022. Open extended Workers' Compensation claims in October 2021 were 52; today, there are 23.



VI. WORKFORCE DEVELOPMENT AND ENRICHMENT



Support and develop a high-performing team that is skilled, committed, inspired, rewarded, engaged, and accountable.

RECRUITMENT

In Q4 2022, SWBNO proudly hired 63 new employees, totaling 239 new hires for 2022. Employee Relations also handled 39 total separations (terminations, resignations, and retirements) during the months of October through December.

SWBNO has 304 budgeted vacancies year-to-date.

YOUTHFORCE NOLA INTERNS

In 2022, SWBNO hosted three YouthForce NOLA interns—two in Business Services and one in Risk Management. The Business Services interns helped our teams conduct an inventory of reports and files. Our Risk Management intern helped in our efforts to pickup debris surrounding the Westbank Wastewater Treatment Plant by conducting property ownership research.

<u>YouthForce NOLA</u> is an education, business, and civic collaborative that builds bridges between school and work. The program's mission is to prepare New Orleans public school students for successful pursuit of high-wage, high-demand career pathways and facilitates systems change to accelerate and sustain progress. SWBNO is proud to support this program, and we are grateful for the interns who helped us serve the City of New Orleans.

BENEFITS

New Third-Party Insurance Provider

Open enrollment for SWBNO's new third-party insurance through UMR, United Healthcare occurred October through November 2022. As of December 2022, 2,136 enrolled in SWBNO's Group Healthcare Plan.

COMPENSATION INCREASE

Last quarter, the City Civil Service Commission approved a proposal to give City of New Orleans employees a pay increase across the board, including SWBNO employees.

All employees of SWBNO have received a Compensation Letter Summary with a breakdown of their pay rate according to Civil Services Guidelines. Compensation letters were mailed out toward the end of December 2022.









The first one-time payments of five percent of annual salaries occurred during Q4 2022. Moving forward, employees can expect a five percent pay increase in January 2023 and a 2.5 percent pay increases in January 2024 and 2025.

MORNING BREW

Human Resources has continued hosting internal Morning Brew townhall meetings to assist in its progress toward interdepartmental transparency. In December 2022, HR held a Morning Brew session at St. Joseph Street (December 2), Peoples Avenue (December 9), and the Carrollton Water Treatment Plant (December 16). This event informed SWBNO employees about holiday payroll scheduling, insurance cards, January 2023 salary increases, and more.







VII. STAKEHOLDER ENGAGEMENT

Proactively communicate and engage with stakeholders.

COMMUNICATIONS

WEFTEC

In October 2022, SWBNO served as the host utility for the <u>Water Environment Federation's Technical Exhibition and Conference</u>

(WEETEC), the largest water industry conference in North

(WEFTEC), the largest water industry conference in North America. Executive Director Ghassan Korban welcomed attendees with remarks at the conference's opening general session. He also participated in multiple sessions and panel conversations, sharing his expertise and the experience of SWBNO with other utility leaders.



SWBNO employees also represented New Orleans well. Tyler
Antrup gave a presentation as part of a "Overcoming Uncertainty: Confident Decisions in the Face of Climate Challenge" session, and he shared SWBNO's Strategic Plan process as part of a "Diversity, Equity, and Inclusion, and Equity: Aspects of Resource Planning" session.

Several other SWBNO employees judged the WEFTEC Operations Challenge, a competition where wastewater collection and treatment operators compete on tasks related process control, laboratory, collection systems, maintenance, and safety.

Attendees of WEFTEC also had the opportunity to join a tour of Drainage Pump Station 6, and the U.S. Commercial Service's International Delegation toured the Carrollton Water Treatment Plant.

POWER COMPLEX NEIGHBORHOOD OUTREACH

The new Power Complex at the Carrollton Water Treatment Plant campus is a milestone project for SWBNO and the reliability of its drinking water and drainage systems. SWBNO recognizes, however, that the facility has residential neighbors who will experience impacts during its construction. In November, the Communications Department invited neighbors of the future Power Complex to a meeting focused on the upcoming construction process, its likely impacts on residents, and how to reach SWBNO and Entergy with questions, concerns, and requests during the process.

ENVIRONMENTAL COMMUNITY OUTREACH

Through Q4 2022, Environmental Affairs staff led educational outreach focused on green infrastructure in the community and schools.











Night Out Against Crime block parties with other SWBNO departments (October 4)



KIPP Central School 8th grade stormwater and green infrastructure outreach activity (October 13 and 27)



Catch basin cleanup event in City Park (October 20)

- APWA-sponsored stormwater training for contractors at the Regional Planning Commission building in Orleans Parish (October 4)
- WEFTEC's Waterpalooza event at the Good Shepherd School (October 7)
- Gentilly Fest (October 7-9)
- WEFTEC community service project at St. Augustine High School (October 8)
- WEFTEC Conference outreach table (October 10-12)
- Tree-planting and trash boom installation dedication at Florida and Elysian Fields Avenues (October 15)
- Green infrastructure infiltration testing with Dutch company Deltares and Groundworks NOLA (October 17 and 20)
- New Orleans Career Center presentation (November 10)
- Tour of the St. Joseph Street administrative building's green roof for Scape Studio landscape architects (December 19)

