



The Sewerage & Water Board **OF NEW ORLEANS**

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May 14, 2021

Dear Chairman Giarrusso and members of the Public Works Committee:

Below please find the Sewerage and Water Board's (SWBNO) second quarterly report to the Public Works Committee, as required by Louisiana Revised Statute 33:4091. In addition to the information required by statute, we also have provided responses to the specific questions submitted by Council offices.

We are available at your convenience to discuss any of the topics in further depth and look forward to presenting at the June Public Works Committee Meeting.

Regards,

Ghassan Korban
Executive Director

I. STANDARD INDUSTRY METRICS FOR BEST PRACTICE

a. Financial Metrics and Updates

Below are schedules reflecting open and closed accounts as of March 31, 2021, as well as delinquent account information through the same time period. COVID and the suspension of the shut-off policy have impacted our collections efforts, as they have for utilities around the country.

Recognizing this, Congress created a one-time funding plan to help low-income residents pay outstanding water bills. The program is being administered in a manner similar to LIHEAP (the energy payment assistance program), with funding flowing through the state to utilities. We are working closely with the state and Total Community Action to prepare for the receipt of this funding and implement a program that will immediately benefit qualified customers. While helpful, we expect to only receive \$3 million total from this funding effort; this disbursement is based on Census data.

Meanwhile, we have started to plan for the re-instatement of our shut-off policy in the coming months as COVID restrictions are lifted and the economy recovers. We are cognizant of the ongoing challenges of our customers and the need to continue improving billing efforts, both of which will inform the timeline for this effort along with the utility's need to collect revenue to support critical infrastructure operations.

Finally, we have continued efforts to identify funding opportunities in all arenas. We are working closely with the city and our state and federal delegations to advocate for dollars from the proposed Federal Infrastructure Act and American Rescue Plan - both of which include drinking water and wastewater improvement projects as priorities. We look forward to sharing the outcome of these efforts in our next report.

Customer Receivables Past Due Report
As of March 31, 2021

Open Accounts

	PAST DUE OPEN ACCOUNTS	TOTAL AMOUNT DUE	PAST DUE AMOUNT (>60+ DAYS)
Residential	23,070	\$ 49,078,486	\$ 39,806,101
Multi-Family	595	\$ 3,435,200	\$ 2,847,353
Commercial	1,326	\$ 11,007,311	\$ 8,979,357
Industrial	2	\$ 1,363	\$ 246
TOTALS	24,993	\$ 63,522,360	\$ 51,633,057 *

Closed Accounts

	PAST DUE CLOSED ACCOUNTS	TOTAL AMOUNT DUE	PAST DUE AMOUNT (>60+ DAYS)
Residential	32,466	\$ 30,740,811	\$ 29,930,321
Multi-Family	759	\$ 894,698	\$ 872,571
Commercial	1,292	\$ 3,382,256	\$ 3,312,790
Industrial	23	\$ 140,679	\$ 140,679
TOTALS	34,540	\$ 35,158,444	\$ 34,256,361 *

*Uncollectible amounts have been fully reserved for in the valuation of accounts receivable;
Customer Receivables, net is \$43,622,470 as of March 31, 2021.

Delinquency schedule:

	0-30 Days	31-60 Days	61-90 Days	91-120 Days	121+ Days	Unapplied Amount	Total Amount*
Sewer	\$ 9,161,859	\$ 4,323,517	\$ 4,213,994	\$ 4,189,006	\$ 55,415,418	\$ (348,433)	\$ 76,955,362
Water	\$ 7,233,223	\$ 3,645,016	\$ 3,654,913	\$ 3,608,886	\$ 48,916,091	\$ (2,004,246)	\$ 65,053,883
Total	\$ 16,395,082	\$ 7,968,533	\$ 7,868,907	\$ 7,797,892	\$ 104,331,509	\$ (2,352,679)	\$ 142,009,245

b. Customer Service Improvements

SWBNO's meter reading initiative continues to bear fruit. We are fully staffed with close to 60 full-time meter readers and have a system in place to address turnovers quickly. As the chart below shows, the team is consistently reaching more than 80% of all meters. We reached 87% during a week recently with no rain days. The meter reading and billing teams have met and are coordinating on quality improvements to reduce the number of flagged bills that require internal review. These are the source issues that lead to bill disputes, and we expect to see a decline in disputes as these improvements continue to be implemented.

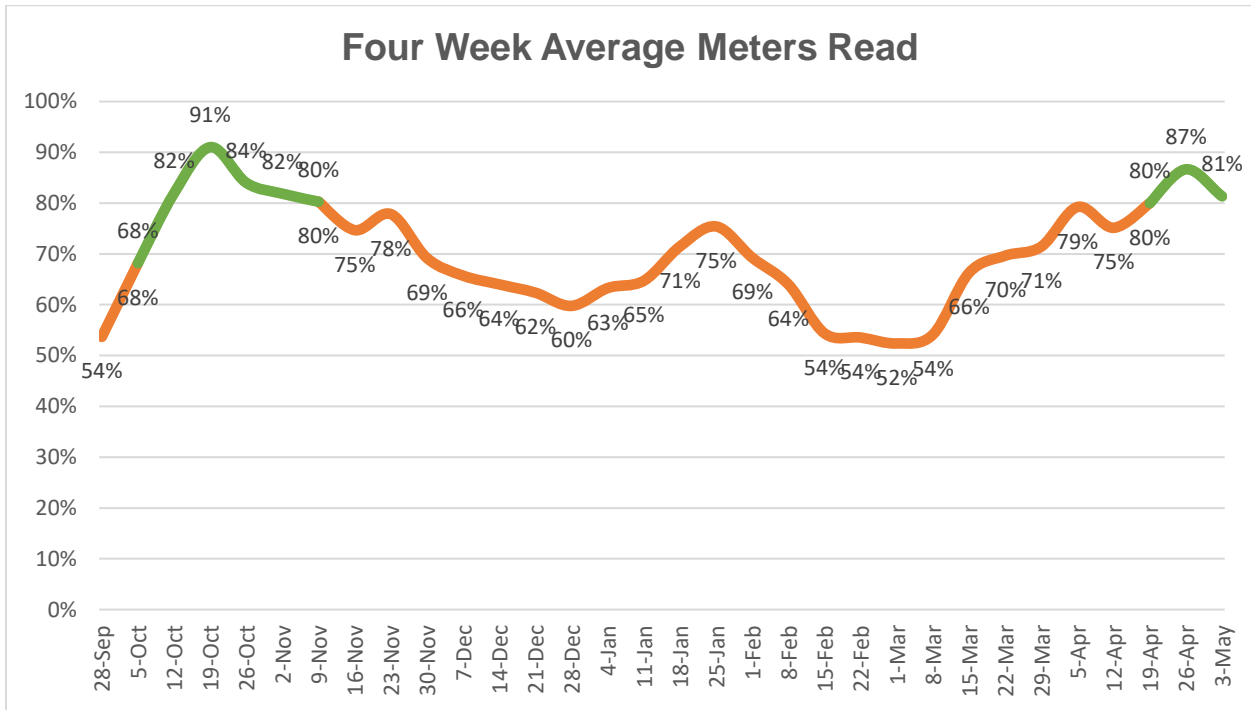
Below are metrics reflecting meter reading, billing, and customer service efforts:

METER READING

Total number of active accounts:

Total Number of Active Accounts	
January 2021	137,944
February 2021	138,479
March 2021	138,301

Average Number of Bills Flagged by System and Reviewed	
January 2021	803
February 2021	570
March 2021	644



Billing Cycle Data:

Days in Billing Cycle		
	Average Number of Days in cycle	Number of Bills within 28-32 day range
January 2021	31	134102
February 2021	29	126751
March 2021	28	105780

Actual and Estimated Bills:

Year		Actual Reading Bills	Estimated Bills	Total Bills	Percentage of Actual reading Bills
2021	Jan	106971	31504	138475	77%
	Feb	64481	51786	116267	55%
	Mar	110464	52605	163069	68%

Customer Call Center Metrics:

	Calls Received	% Answered	Average Wait Time	Payment Arrangements	Walk-In Customers	E-mails Received	Total Customers Served
January 2021	22,019	88%	2 min 20 secs	138	3,384	4,267	36,126
February 2021	19,650	92.6%	1 min 33 secs	109	2,942	3,905	34,510
March 2021	21,780	95.5%	0 mins 47 secs	128	2,851	5,311	41,072
April 2021	19,519	95.4%	0 mins 42 secs	123	2,324	3,800	34,122
YTD METRICS	82,968	92.8%	1 min 21 secs	498	11,501	17,283	145,830

Customer Service and Contact:

S&WB implementation of Verint EM Pro is in the *third* phase of five phases: Discovery, Design, *Build*, Test, Production. June 30, 2021 is the planned launch date. Once implemented, Verint EM Pro will be the primary tool our 52-WATER call agents will use to handle customer inquiries. EM Pro will be designed to give quick and consistent answers to customers. In the instance when a customer issue cannot be immediately resolved, EM Pro will be able to track the progress of bill investigations across the multiple S&WB departments that may be involved, and the customer will receive regular updates on progress. Verint EM Pro also has an internal escalation protocol that will alert senior and supervisory staff if work product is languishing ensuring timely resolution of all customer issues.

The empowerment of Customer Service front-line staff to make bill adjustments beyond the removal of late fees requires extensive cross-training to ensure deep knowledge of both the billing and work order systems, as well as relevant policies. This cross-training of front-line employees will be complete before Q4 2021.

We are also pleased to announce that SWBNO's engagement with HDR Engineering for communications and public relations services has been finalized. The firm will partner with our Communications Department to focus on:

- Research-driven key messages
- Website content and graphics/web updates
- Radio and newspaper PSAs
- Print and electronic bill inserts that reinforce key messaging driving by research determinations

Escalations and Work Orders:

The SWBNO escalations team made a commitment to provide weekly updates to Council offices on submitted billing or infrastructure issues. We acknowledge that the process has taken longer to implement than the team originally thought, but the internal departments responsible for the tracking these issues have met numerous times to craft a process that will be feasible and successful going forward. We are on track to address billing issues on a weekly basis and will focus efforts going forward on improving turnaround time and substance on work order issues.

The work order categorization remains largely unchanged since our last report, but is set forth below:

Category "A" – 24 hours: requires immediate attention; for example, a ruptured major water main that may cause a home or series of homes to be without water – or worse, bring water pressure down citywide causing a boil water advisory OR overflowing sewer. If Category As go unaddressed, there could be significant risk in property damage or public health, so if a Category A comes in, often crews must drop everything and rush to that job. Which often means their scheduled work for the day is pushed back.

Category “B” – 48 hours: requires same-day attention (or as close to that as is feasible); for example, a service line leak, very low water pressure or intermittent sewer blockages. Lower risk of damage or concerns with public health, but they are generally addressed within 24 to 48 hours.

Category “C” – requires attention that can be scheduled with other projects for efficiency, for example, a minor leak near a sidewalk, in the street, requests for new connections or other work that is needed but no imminent threat of property loss or public health concerns. It is difficult to provide timelines for this category because they are very frequently pushed in response to more critical issues that use our available resources. When an issue worsens or changes in nature, it is prioritized as a category A or B. We understand this is not an optimal situation, and we are working to find funds and resources (such as MaxPave 2) to help address these longer term, less emergent issues.

Because Category A responses are immediate, there is no time for planning or coordination. Often this also means that residents will not receive “notice” that they will be without water. They are either without water because of the break itself or crews had to turn off water quickly to isolate the break so pressure does not drop citywide.

As the number of Category A and B Work Orders increase, overall productivity in getting Category C work decreases. Category C Work Orders allow more time to plan and group together in geographic areas and as such, can be accomplished at a greater rate of production. Given the current age of most the infrastructure, the rate of decline in the system has been increasing, leading to more Category A & B Work Orders.

c. Prevention of Waste and Fraud

We are pleased to report that, as of this week, SWBNO’s Finance and Administration Committee has recommended approval of the updated procurement policies set forth in our revised Procurement Manual. The attached manual is the result of coordination among SWBNO departments to identify clear, streamlined, and efficient methods for tracking contracts and spending. The requirements will help the utility hold our external partners accountable and will further promote transparency at the Committee and Board levels.

II. BENCHMARKS OF SUCCESS REGARDING COORDINATION WITH DPW

a. JIRR Project Coordination and Customer Notification

Through procedures included in the JIRR Standard Operating Procedures, S&WB and DPW have developed a communication process to prevent or reduce redundancy of design and construction overlap within each project. S&WB has assigned a JIRR Project Manager and Network Engineer to each JIRR project. These individuals coordinate with the DPW Project Manager during the scoping phase of the project and at each design milestone. During the scoping phase, DPW lists each individual block undergoing roadway restoration. When full road restoration is triggered by DPW’s FEMA-obligated replacement criteria, S&WB then performs an assessment on each utility based on age, condition, and materials to determine the feasibility of replacement. Upon assessment,

S&WB then provides a utility scoping list to DPW for utility replacement or rehabilitation. Either DPW's or S&WB's Engineer of Record will design the proposed utilities and at each design milestone, all parties will review plans and specifications. When each project is at 100% design, the title sheet, along with the funding obligations are executed by each organization.

S&WB also has a Construction Project Manager assigned to each JIRR project. Throughout the construction process, this Construction Manager (CM) is involved in the day-to-day activities with the Construction Contractor. Any utilities damaged or affected during construction are immediately brought to the S&WB CM's attention and a resolution is determined in conjunction with the DPW Construction Manager, Project Consultants and the Construction Contractor. If the utility affected is a result of Contractor damage or negligence, S&WB has a means of "damage claiming" that contractor to seek monetary reimbursement for any expenses S&WB incurred to make any necessary repairs. In most instances, the Construction Contractor is directed by the S&WB CM to make the required repairs immediately at their expense. Contractors are made aware of this procedure at preconstruction conference meetings and have been compliant.

When a contractor requests a valve test closure or full water closure to allow for a new water main to be tied into the water network, or to make a water main point repair, it triggers several entities to coordinate the creation and distribution of resident/business notifications on the official RoadWork NOLA letterhead. For example, for a water valve "test closure," the process is as follows:

1. Prior to calling for a test closure, Contractor to call SWB CM to plan anticipated closure area. Contractor and SWB CM will review valve maps to determine the affected blocks.
2. Contractor calls S&WB Networks Department to schedule test closure and provide them with the relevant closure and contact information.
3. Contractor follows up after that phone call with an email and attaches a letter for test closure. The letter includes the necessary details and the closure area: "The test closure will affect X street from A street to B street, and C street from D street to E street, etc..." and copies the RoadWork NOLA Outreach staff and the SWB CM on that email.
4. A Networks Manager approves the closure and sends the SWB CM an approval email.
5. SWB CM creates work order, sends an email to: SWB Zone, SWB outreach, DPW outreach, Waterline (SWB/DPW/Consultant) Inspector, and Contractor and/or Subcontractor stating WO number, Date, Time, location and anticipated affected area for test closure.
 - a. This email triggers RoadWork NOLA outreach to create the RoadWork NOLA letterhead flyer which includes the date, time, location and affected blocks and sends PDF flyer to contractor.
6. Contractor prints flyer and places to all residents on affected blocks plus those on corner lots for those blocks 24 hours prior to the test closure.

*Scheduling for water valve full closures is similar to the above, except the contractor should already have the list of the affected blocks and include that in the letter to Networks following the scheduling phone call. Residents must receive notification flyer 48-hours in advance of closure.

*Waterline test and valve closures involving water mains 16” diameter and greater involve a more rigorous approval process internally at SWB to ensure that the larger water transmission main and distribution networks are not adversely affected by a closure.

Unexpected water main breaks are communicated to the S&WB CM from the field personnel, and that CM is responsible for informing the DPW CM, Roadwork NOLA staff, S&WB Outreach, S&WB Chief of Networks, and S&WB General Superintendent. They coordinate the emergency response for a S&WB Networks Valve crew to operate valves so that the broken pipe can be isolated to allow for a repair to be made by the Construction Contractor or S&WB Networks crew. They also make every attempt in the field with inspectors and the Construction Contractor to notify residents door-to-door to inform them of an interruption of service. When possible, residents are provided with a notification flyer stating that their water service was temporarily off.

b. MaxPave Program

Phase 2 of the MaxPave Program will be implemented this year. The City and SWBNO are working to finalize funding sufficient to address the remaining backlog of pavement cuts, with anticipated start date this summer.

c. Service Cuts

Zone 7, the Networks team assigned to roving work order issues, is given the opportunity to evaluate the size and complexity of a service cut. Small patches and sections of sidewalk fit well into the current equipment and skill set of Zone 7 employees. Zone 7 also is capable to provide temporary asphalt patches and asphalt restorations on lower volume streets. A very limited number of concrete street panels are done by Zone 7. All other restoration work is then referred to Technical services and it is tasked to contractors for completion. Guidance on sewer and water jobs is provided by LDH and terms of the EPA Consent Decree. Guidance on pavements is to provide highest priority on streets of highest volume and sidewalks of highest pedestrian traffic where there is system continuity.

III. EFFICIENCY AND EFFECTIVENESS OF INFORMATION SYSTEMS

Pursuant to discussions at the March 2021 Public Works Committee meeting, we are working on building dashboards with the most informative public-facing information for our web site. Our internal teams are identifying meaningful customer service metrics, and they will work with our PR consultant, HDR Engineering, to design a web page devoted to billing and other issues our customers care about. We aim to meet our 6-month time frame commitment on this effort.

On the infrastructure side, we have been consistently providing power and pumping updates to the press and via social media ahead of any significant weather events. Going forward, we will also post those on our web site. Updating the water main age map on SWB’s website is a work in progress. Our engineering and IT teams are working together to find ways to update the water main repairs in GIS in an efficient manner with our existing resources.

With regard to the backflow issue at DPS 12, engineering is currently working on plans and specs to install an anti-siphon device on the pump. The design is similar to what we have done in the past when older-aged pumps have had similar issues (e.g., at DPS 4). The design is approximately 50% complete and we anticipate the design work will be complete within 60 to 90 days. It is anticipated that engineering will issue an NTP for construction no later than the end of Q3 2021. In the meantime, the pump is fully operational, and the pump operators have standard operating procedures to manually prevent the issue from occurring until the anti-siphon is installed.

IV. ASSESSMENT AND STATUS OF OPERATIONS AND CAPITAL PROJECTS

a. Power and Pumping

We remain on track to complete significant improvements to our existing power equipment this year, as well as to establish an agreement with Entergy for the commissioning of a new power substation by 2023.

A chart outlining the status of each major component of SWBNO’s power program is below, with status updates in **red**:

Power Source	Plan	Timeline	Approx. Cost	Funding Source*
Turbine 4	Repair and return to service as soon as possible	COMPLETE: T4 is online in a testing capacity and is expected to be fully operational soon.	\$1.1M	Drainage system funds
Turbine 5	Repair before next hurricane season – will provide 20MW of additional power for the rest of service life (5-10 years) Stack demo completed; work on control system and stack construction underway.	6-8 months On target for completion by early June.	\$5-6M	Insurance Proceeds (less \$1M deductible)
Turbine 6	Winterize and maximize capacity to transform 60Hz	February 2021 Completion –	\$700,000	Fair Share One-time funds

	into 25Hz power via new frequency changer	<p>bids opening 9.24.20</p> <p>Delayed work to mid-June so T4 and T5 could be online when T6 is offline for the 2-3 day equipment installation process.</p>		
Turbine 7	<p>Procure and install to replace T5 and become cornerstone of modern power generation suite</p> <p>CDBG application submitted and approved; LDEQ Air Permit application proceeding (critical path)</p>	<p>12-14 months</p> <p>Funding officially approved; design work underway; LDEQ permit application submitted and underway.</p>	\$18 - \$20M	\$13M CDBG funds; \$4M Fair Share recurring funds
Frequency Changer	<p>Procure and bring on site for utilization with T6 to maximize machine capacity</p> <p>RFP re-bid expected early Feb.</p>	<p>8 months</p> <p>Low bid received and will be considered by Board for approval on May 19.</p>	\$16M	\$13M Fair Share/HMGP funds; Capital Outlay funds (pending approval)
Substation Site (C7/C8)	Development of site necessary for substation construction, placement of frequency changers, and T7	<p>Spring 2021 Completion</p> <p>On target for Q2 of 2021 for C7 Basin; Q4 for C8 Basin (addressing water</p>	\$8.5M	\$7M State Capital Outlay funds

		intrusion issue).		
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**Where funding sources do not match the total cost, the difference will be funded through capital budget earmarks*

With T4 online, our power generation ability will improve. The chart below shows that we now have more redundancy in the system, and we will be back to a significantly more comfortable place in another month when T5 is online as well. Recognizing that it is a significant burden on our neighbors when we run the EMDs, we will prioritize the use of T1, T4, and T6 for power needs going forward.

Although we are working to reach a state in which the EMDs are no longer needed, we know there is always a possibility that we will have to rely on them if any of our turbines become unavailable. As such, we worked with a consultant to identify the best options for mitigating the noise the EMDs produce going forward. We have identified an alternative and it is being designed. We are also looking for funding sources to help us with the implementation efforts, which will cost between \$600,000 and \$800,000.

Available Power:

Unit	Frequency	Capacity in MW	Available
T1	25 Hz	Approx. 6 MW	6
T3 – Decommissioning Underway	25 Hz	Approx. 6 MW	0
T4	25 Hz	20 MW	18 MW
T5	25 Hz	20 MW	0
Carrollton Frequency Changers 1&2	Converts 60 to 25Hz	8.5 MW	8.5
Station D Frequency Changers 3&4	Converts 60 to 25Hz	12 MW	12
Five EMDs	25Hz	12.5MW (total)	12.5
		Total 25 Hz:	57 MW
T6	60 Hz	15 MW	15 (60 Hz)

In addition to the above projects, we remain focused on several critical efforts:

- Plans for the construction and commissioning of a dedicated Entergy substation on the site of the Carrollton Water Plant are well underway. SWBNO and Entergy have coordinated on every aspect of the project, including design plans, cost estimates, savings analyses, and future rate structure proposals. We expect the project to go before the City Council in August for approval.
- SELA Algiers Drainage Canal Update: The General DeGaulle Canal Widening Project is ongoing and ahead of schedule. SWBNO is in the process of sending its local cost share payment to the Corps to construct the remaining option. The project consists of widening the existing canal from Shirley Dr to Behrman Hwy. In addition, the Corps has selected an engineering consultant to increase the pumping capacity at DPS No. 13.
- The Claiborne Pumping Station rehabilitation continues to progress on schedule. The complete refurbishment of our largest potable water pumps is key to providing safe drinking water. Phase 1 (two of four pumps) will be complete this summer, with the full project scheduled for completion by next summer.

b. Automated Meter Infrastructure

Progress on AMI is underway. The project manager, Jacobs Engineering, has initiated the meter survey and is in the process of drafting the RFP for implementation. As part of that effort, Jacobs has provided an estimate of \$45 million for purposes of evaluating financing alternatives. Approximately \$20 million of capital has been segregated for capital projects after the March 3, 2021 bond refunding, and SWBNO is utilizing monthly savings from debt service costs in 2021 to further add to this amount for capital projects. Multiple funding sources are being considered and evaluated to provide necessary financing including Fair Share amounts, municipal bonds, state revolving funds, bank financing and perpetual lease as SWBNO continues to pursue terms which will facilitate the project and provide sound financing to the extent grant funding is not attainable.

c. Hurricane Preparation

SWBNO held its internal Hurricane Season preparation roundtable and participated in the citywide preparation seminar at the Convention Center last week. SWBNO takes several specific measures, including those below, to prepare for hurricane season:

- Emergency generator testing
- Fleet evacuation plan
- Canal readiness
- Fuel and chemical backup plans
- Coordination with Flood Authority pumping stations