# The State of the Utility 2019

Bureau of Governmental Research, May 14, 2019

Ghassan Korban, Executive Director of the Sewerage and Water Board of New Orleans



## NEW DEAL, NEW DAY

#### **New Infrastructure Funds**

- One-Time: \$50 million
  - \$34M to pay vendors and drainage's debt to water and sewer systems
  - \$16M for projects (Hazard Mitigation Grant Program reimbursements)
- Deferred Gulf Opportunity Zone payments: \$17.5 million
- Recurring: \$26 million
  - Increase the budget for the City's Public Works Department
  - Start to address aging water infrastructure
  - Modernize the drainage system, replacing steam with electric power



### **OUTDATED 25-Hz STEAM POWER**







TURBINE 1: **1909** – 6 MW

TURBINE 3: **1929** - ~7 MW

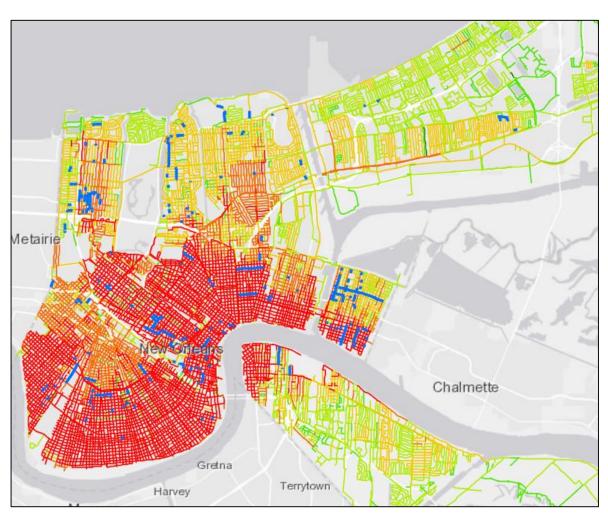
TURBINE 4: **1915** – 20 MW



Steam-powered water pumps at the Carrollton Water Plant



## AGING WATER INFRASTRUCTURE



Age of Water Mains	Length of Water Mains (miles)	Percent of distribution system
1900 - 1919	525.02	34.3%
1920 - 1939	208.22	13.6%
1940 - 1959	309.35	20.2%
	389.47	25.5%
1980 - 1999	97.35	6.4%
2000 - 2019	0.90	<b>0</b> %*
TOTAL:	1,530.3	

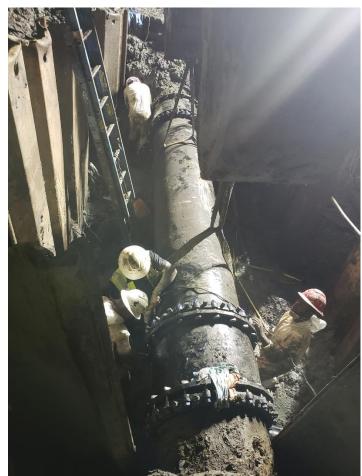
Indicates approximately 23 miles of repairs/replacements made under various post-Katrina construction programs

\*0.05%

### May 3 break on S. Claiborne Ave.

- 30-inch diameter cast iron water main installed circa 1905.
- Impacted Uptown neighborhoods between South Claiborne, South Carrollton, Napoleon and the Mississippi River.
- Took approx. 24 hours to repair.
- Boil Water Advisory ended May 5.







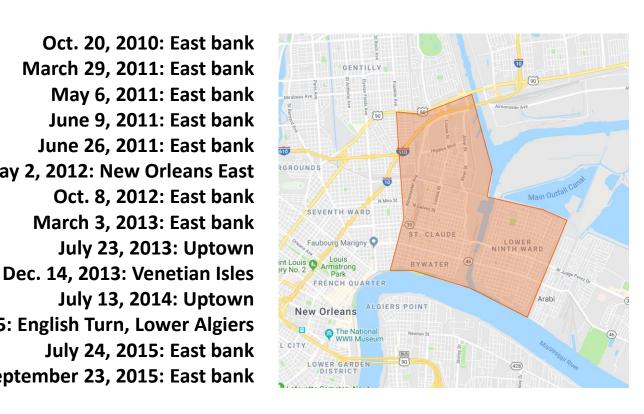
## **28** Boil Water Advisories since 2010



Oct. 20, 2010: East bank March 29, 2011: East bank May 6, 2011: East bank June 9, 2011: East bank June 26, 2011: East bank May 2, 2012: New Orleans East Oct. 8, 2012: East bank March 3, 2013: East bank July 23, 2013: Uptown

July 13, 2014: Uptown June 1, 2015: English Turn, Lower Algiers July 24, 2015: East bank

September 23, 2015: East bank



June 2, 2016: Lower 9th Ward

Sept. 20, 2017: East bank

Jan. 17, 2018: New Orleans East

Jan. 18, 2018: Expanded to East bank

Jan. 23, 2018: West Bank

May 22, 2018: Venetian Isles

Aug. 4, 2018: Venetian Isles

Sept. 22, 2018: Lower 9th Ward

Oct. 19, 2018: Lower 9<sup>th</sup> Ward

Oct. 20, 2018: East of Franklin Avenue

Nov. 17, 2018: East bank

Dec. 19, 2018: Peoples Avenue Triangle

Feb. 4, 2019: Bywater, St. Claude, Lower 9th Ward

May 3, 2019: Uptown

## WATER LOSS



	New Orleans	National Average
Water Main Issues	67 repairs per 100 miles/year <sub>1</sub>	14 breaks per 100 miles/year <sub>2</sub>
Water Loss rate	55.3 percent₃	<b>16</b> percent₄

<sup>&</sup>lt;sub>1</sub>Estimate based on 351 water main repairs completed in 2019 as of May 5

<sup>&</sup>lt;sup>2</sup>Utah State University Water Main Breaks Study, March 2018

<sup>32017</sup> Water Loss Audit

<sup>&</sup>lt;sup>4</sup>Environmental Protection Agency, 2013





### **NEW ORLEANS SEWER SYSTEM**

**1,450 miles** sewers, ranging in size from **8 inches to 7 feet** in diameter

82 electrically operated pumping and lifting stations (SPS)

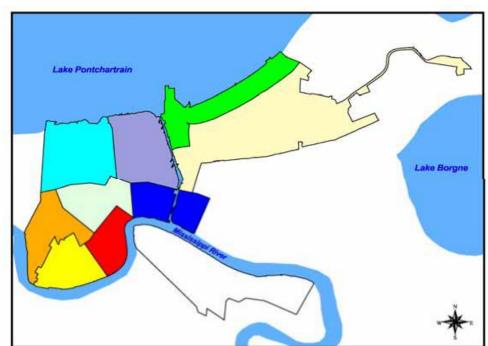
## SEWER CONSENT DECREE PROGRESS 1997-Present Day

#### **Completed Basins**

- 9<sup>th</sup> Ward –2018
- Central Business District 2005
  - Uptown 2005
  - Gentilly 2004
  - Lakeview 2001

#### **Basins Underway**

- New Orleans East October 2019
  - South Shore October 2021
  - Carrollton October 2025





### **SWBNO** and **DPW PARTNERSHIP**

#### **DRAINAGE**

#### 1992 Agreement

- DPW manages catch basins and lateral drain pipes less than 36 inches in diameter
- SWBNO manages pipes 36 inches and larger, as well as all drainage pumps and power generation
- Consistent, constant coordination during rain events
- **Ultimate goal**: One system, one utility to own it

## JOINT INFRASTRUCTURE RECOVERY REQUEST PROGRAM

- \$1.67 billion in projects started
- 116 projects in planning
- 57 projects in design
- 5 projects in bid & award
- 12 projects in construction
- 6 projects closing out

#### MAX PAVE PROGRAM

- 865 targeted service cuts,93% complete
- DPW addressing SWBNO backlog of unpaved service cuts
- Ultimate goal: SWBNO to regularly repave service cuts within 30 days







### IMMEDIATE PRIORITIES

- Initiate Master Plan effort (2-3 year, \$3-5 million endeavor)
- Weatherize Turbine 6 for colder temperatures
- Install Frequency Changer to start eliminating steam turbines
- Build more redundancy into Entergy feeder system
- Automated Metering Infrastructure (AMI)



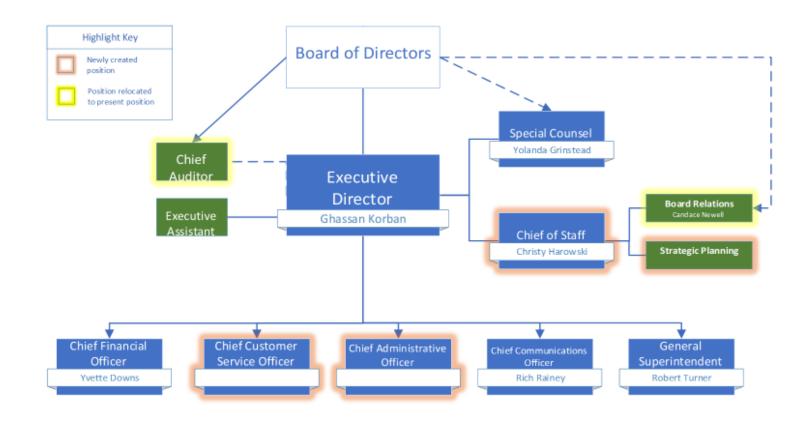
## CUSTOMER CARE

### **BILLING PROGRESS**



- DISPUTED BILLS Down from 26,000 in 2017 to approximately 5,000 today
- TRANSFERS (New Accounts) down from 12,000 pending to fewer than 500; 7-day average wait to open a new account
- PAYMENT PLANS 5,795 entered in 2019
- METRICS Expanding data tracking of billing and collections processes (consumption estimates, shutoffs, call wait times, etc.) to map progress; build accountability

## **Customers Matter**



- **ELEVATE** Customer Service's importance within the management structure
- ELEVATE public accountability through an independent, Internal Chief Auditor



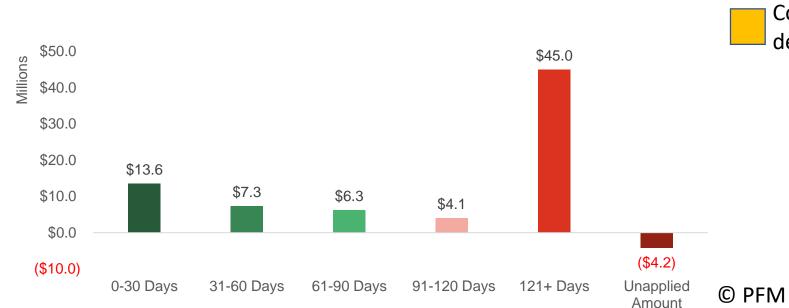


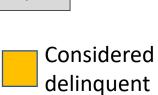
## THANK YOU

## **ACCOUNTS RECEIVABLE AS OF APRIL 5**

	0-30 Days	31-60 Days	61-90 Days	91-120 Days	121+ Days	Unapplied Amount	Total Amount
Sewer	\$7,384,788	\$3,987,112	\$3,345,696	\$2,201,559	\$22,807,202	(\$1,811,804)	\$37,914,553
Water	\$6,175,364	\$3,357,464	\$2,918,118	\$1,861,825	\$22,207,048	(\$2,356,812)	\$34,163,007
Total	\$13,560,152	\$7,344,576	\$6,263,814	\$4,063,384	\$45,014,250	(\$4,168,616)	\$72,077,560*

<sup>\*</sup>this is a snapshot. The amount is dynamic as new bills go out and payments come in.





## OTHER FUNDING OPPORTUNITIES



EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program	Federal low-interest loan up to \$200M	
LDEQ's Clean Water State Revolving Fund (CWSRF) loan program	\$10M for sewer system improvements	
100 Resilient Cities	\$100M for solar power and assets	
Stormwater Management, Water and Sewer Service Rate Study	??	
Future Market Opportunities	??	

## **Employees Matter**

- Preserve practical institutional knowledge
- Reward excellence; Promote valuable employees
- Executive Director's Employee Advisory Council
  - Entirely employee-driven
  - Reports recommendations directly to Executive Director
  - Members appointed from every SWBNO division
  - Chairs elected
  - Charter and bylaws drafted and approved by Council vote