# St. Charles Parish

Department of Waterworks

August 5, 2024

Greg Gorden



## Waterworks Vital Stats

• **WATERWORKS MISSION**: Provide a sufficient supply of safe drinking water and water for fire protection to the citizens of St. Charles Parish.

### 60 Staff Members

•	Administrative,	Office/	Billing/	14

- Distribution 23
- Treatment Plant 23
- Total Budget (FY 2024): \$14,458,914
- Total Assets: \$47,801,580



## Billing & Meter Reading Stats

### **BILLING STATS**

- Average Customer Sales (per month): \$1,083,935
- Water Sales:
  - 18% Commercial
  - 39% Industrial
  - 43% Residential
- Water Bills Produced:
  - Total 261,011
  - Reminder/Late Notice 51,277
  - Lock-Offs 3,865
  - Final 1,886
- Customer Pay Methods:
  - 20% Bank Drafting
  - 19% Mail
  - 35% Online Pay
  - 26% In-Person

### **METER READING STATS**

- **Accounts Read:** 270,564
- Number Reread (Inconsistencies): 2,676
- Water Services Installed: 136
- **Total Meters:** 22,547
  - 2,778 Manual Read Meters (12%)
  - 19,769 Automatic Read Meters (88%)

## 2023 Production, Treatment, Distribution Stats

- Waterworks Treatment Plant Operators collect:
  - 270 chlorine samples per month throughout the water system
  - 120 chlorine samples per day at each treatment plant
- One operator per 12-hour shift performs an average of 319 water analyses.
  - 465,740 water analyses per year by each operator.
- Waterworks conducts analyses on chlorine, fluoride, pH, hardness, alkalinity, turbidity and conductivity daily in each plant and monthly throughout the distribution system.
- Meters Read Monthly: 22,547
- Work Orders Completed: 21,072

## **Automatic Meter Project**

### Benefits of Automatic Metering

- Improved accuracy
- Greater transparency for customers
- Real-time data critical alerts by type and sever
- Track total system usage by billing area
- Mobile work orders
- Reduce staff needed to read meters
- Bring meter-reading process up-to-date

### What It Will Entail:

- Installation of up to 17,000 new meters
- Installation of base stations & multiple repeaters throughout the parish





## Automatic Meter Project

• **Project Goal:** Install fixed base, remote read water meters to every Waterworks

customer

Types of Meters (2022)/(2023)/ 2024

Manual Read Meters: (10,606)/(4,478)/2,778

Drive-By Meters: (6,321)/(5,866)/4,248

• Fixed-Based Meters: (7,086)/(13,172)/15,521

Total Project Cost: \$8.5 Million

FY 2021 Project Budget: \$2 Million

FY 2022 Project Budget: \$2 Million

FY 2023 Project Budget: \$1.5 Million

FY 2024 Project Budget: \$1.5 Million

• FY 2025 Project Budget: \$1.5 Million



# Automatic Meter Project Update

#### PEDAL VALVES™ DAILY REPORT

St. Charles Parish (Phase 3)

Pedal Valves, Inc. (PVI) Status Report for Saturday May 13, 2023

Primary Installation Routes for Today (currently dispatched): 006613, 006651, 006673

#### Production Statistics for 05/13/2023:

Small Water Meter Work Orders Completed: 0

Intermediate Water Meter Work Orders Completed: 0

Large Water Meter Work Orders Completed: 0

Water Installations Pending QC Work: 0

Custom Service Work A: 0
Percentage Complete: 99.97%

No. of Mechanics: 0

Installation Project Summary:

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Row	Size	Retro	Install	Other	Total	DNDQty	Installed	Complete %
1	5/8" X 3/4"	0	6334	0	6334	209	6111	99.77%
2	1"	0	400	0	400	17	395	103.13%
3	TOTALS	0	6734	0	6734	226	6506	99.97%

Total Full Replacements: 6506

Total Register Replacements: 0

Total Radio-Only Replacements: 0

#### **Route Saturation:**

Row	UtilityID	CycleRoute	Total	Installed	DNDQty	Remaining	Saturation
1	W	001144	1	1	0	0	100.00%
2	W	001154	137	135	1	1	99.26%
3	W	001156	222	221	1	0	100.00%
4	W	001159	138	132	6	0	100.00%
5	W	001160	113	109	4	0	100.00%
6	W	002272	146	142	3	1	99.30%
7	W	002274	138	136	2	0	100.00%
8	W	002276	52	51	1	0	100.00%
9	W	002278	88	85	3	0	100.00%
10	W	002280	80	78	2	0	100.00%
11	W	002282	99	95	4	0	100.00%
12	W	002284	121	117	4	0	100.00%
13	W	002286	137	136	1	0	100.00%
14	W	002289	152	148	4	0	100.00%
15	W	002290	115	115	0	0	100.00%
16	W	002292	90	90	0	0	100.00%
17	W	002293	23	22	1	0	100.00%
18	W	004430	120	118	2	0	100.00%

## Phase 1: Montz, Norco (complete)

• 6,734 meters installed

## Phase 2: New Sarpy, Destrehan (complete)

• 3,700 meters installed

# Phase 3: Bayou Gauche, Des Allemands, Paradis, Boutte and Luling (complete)

• 3,000 meters installed

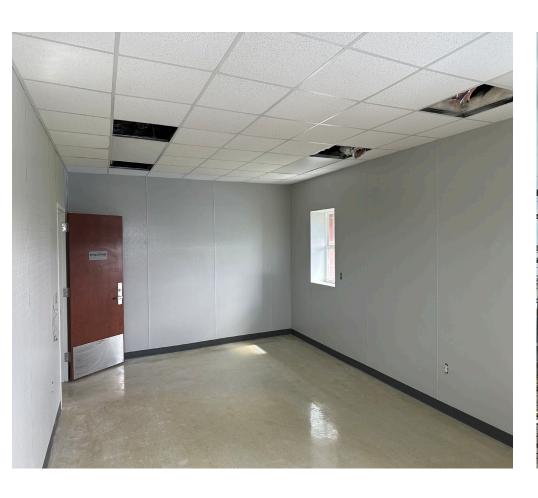
### Phase 4: Willowdale, Ama and St. Rose

2,778 meters to be installed in September

# Hurricane Ida Repair Update

- West Bank Billing Office and Treatment Plant repairs complete.
- East Bank Treatment Plant repairs are 45% complete.
- East Bank River Intake repair has been issued a limited Notice to Proceed.

# East Bank Treatment Plant Repairs





## Waterworks Cost Analysis

- Waterworks completes 30 separate cost analysis on an annual basis
  - 25 Fee/Rate analysis
  - 5 Operating cost analysis
- Year to year comparisons of the department's cost to provide services contrasted to the cost to provide essential services

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# Why do we conduct an annual analysis?

- Serious financial stewardship of public asset(s)
- When the dept quotes an amount it is backed up by financial data
- Important piece for budget and financial planning
- Provide accurate costs of service(s) to residential, commercial and industrial customers
- Accurate tracking of comparison cost data points:
  - The impact of equipment/appurtenances changes for installations and repairs
  - Equipment usage for large repair and upgrade projects
  - Changes in personnel costs year to year
  - Cost to produce a gallon of potable water

FEE / RATE SUMMARY		CURF
	COST	FE
Reimbursement for Billing (Per Bill)		
Sewer	\$1.39	\$
Solid Waste and Recyling	0.57	(
New Water Service Installations		
5/8" x 3/4"	1,209.27	825
1"	1,533.07	1,100
2"	3,549.31	3,500
New Water Service - Meter Installation (Only)		
5/8" x 3/4"	439.22	43
1"	587.16	58
Connect Fees	31.90	30
Reconnect Fees	29.50	30
NSF Fees	42.54	30
Meter Reread Fees	28.26	
Damage Fee		30
Plus actual labor costs to repair damages:		
Remove and Replace Meter	50.39	50
Replace Broken Padlock	39.32	39
Replace Broken Locking Device	96.53	90
Replace Broken Curb Stop	96.53	
Plug line and Bury Service	535.81	-
Remove and Replace Service at Main	800.06	
Repair Fire Hydrant damaged by Theft of Water	166.42	166

### WATER PRODUCTION COSTS

						Capital
	<u>Billing</u>	Meter Reading	<b>Distribution</b>	<u>Treatment</u>	<u>Total</u>	<u>Improvements</u>
2014 Cost						
MG Produced				2855.4		
Cost-Dollars *	\$916,251	\$848,267	\$3,290,559	\$5,703,908	\$10,758,985	\$1,582,279
Cost Per 1000 gals	\$0.321	\$0.297	\$1.152	\$1.998	\$3.768	\$0.554
2015 Cost						
MG Produced				3155.2		
Cost-Dollars *	\$903,114	\$869,908	\$3,206,830	\$5,397,849	\$10,377,701	\$1,326,539
Cost Per 1000 gals	\$0.286	\$0.276	\$1.016	\$1.711	\$3.289	\$0.420
2016 Cost						
MG Produced				2916.4		
Cost-Dollars *	\$936,291	\$963,014	\$3,439,541	\$5,665,925	\$11,004,771	\$1,424,773
Cost Per 1000 gals	\$0.321	\$0.330	\$1.179	\$1.943	\$3.773	\$0.489
2017 Cost						
MG Produced				2974.9		
Cost-Dollars *	\$908,163	\$893,040	\$3,439,001	\$5,554,932	\$10,795,136	\$792,206
Cost Per 1000 gals	\$0.305	\$0.300	\$1.156	\$1.867	\$3.628	\$0.266
2018 Cost						
MG Produced				2997.5		
Cost-Dollars *	\$889,754	\$764,612	\$3,467,733	\$5,826,718	\$10,948,817	\$1,338,128
Cost Per 1000 gals	\$0.297	\$0.255	\$1.157	\$1.944	\$3.653	\$0.446
2019 Cost						
MG Produced				2971.0		
Cost-Dollars *	\$916,904	\$1,001,774	\$3,387,608	\$6,182,288	\$11,488,574	\$856,406
Cost Per 1000 gals	\$0.309	\$0.337	\$1.140	\$2.081	\$3.867	\$0.288
2020 Cost						
MG Produced				2880.7		
Cost-Dollars *	\$956,430	\$861,848	\$3,467,455	\$5,801,205	\$11,086,937	\$2,839,553
Cost Per 1000 gals	\$0.332	\$0.299	\$1.204	\$2.014	\$3.849	\$0.986
2021 Cost						
MG Produced		L		2880.7		
Cost-Dollars *	\$937,477	\$1,729,376	\$3,653,332	\$6,308,789	<b>\$12,628,975</b>	\$1,935,114
Cost Per 1000 gals	\$0.330	\$0.609	<b>\$1.286</b>	\$2.221	\$4.446	\$0.681
2022 Cost						
MG Produced				3045.2		
Cost-Dollars *	\$1,000,533	\$670,962	\$3,594,123	\$6,685,278	\$11,950,898	\$2,549,312
Cost Per 1000 gals	\$0.329	\$0.220	<b>\$1.180</b>	<b>\$2.1</b> 95	\$3.924	\$0.837
2023 Cost						
MG Produced				2823.0		_
Cost-Dollars *	\$1,206,836	\$784,485	\$5,037,136	\$7,589,680	\$14,618,136	\$10,067,816
Cost Per 1000 gals	\$0.427	\$0.278	\$1.784	\$2.689	\$5.178	\$3.566

# **Cost Analysis Summary**

- Flat rate fees have not been updated in 10 years
  - Costs overall have increased
  - Damages are charged at actual cost
- Water production costs 2014-2024
  - 2014 \$3.768
  - 2024 \$5.178
  - Increase 37.42%

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FEE / RATE SUMMARY		CURRENT	NET
	COST	FEE	CHANGE
Reimbursement for Billing (Per Bill)			
Sewer	\$1.39	\$1.00	39%
Solid Waste and Recyling	0.57	0.20	185%
New Water Service Installations			
5/8" x 3/4"	1,209.27	825.00	46.60%
1"	1,533.07	1,100.00	39.40%
2"	3,549.31	3,500.00	1.40%
New Water Service - Meter Installation (Only)			
5/8" x 3/4"	439.22	439.00	0.10%
1"	587.16	587.00	0.03%
Connect Fees	31.90	30.00	6.33%
Reconnect Fees	29.50	30.00	-1.67%
NSF Fees	42.54	30.00	41.80%
Meter Reread Fees	28.26		
Damage Fee		30.00	
Plus actual labor costs to repair damages:			
Remove and Replace Meter	50.39	50.39	
Replace Broken Padlock	39.32	39.32	
Replace Broken Locking Device	96.53	96.53	
Replace Broken Curb Stop	96.53	96.53	
Plug line and Bury Service	535.81	535.81	
Remove and Replace Service at Main	800.06	825.00	
Repair Fire Hydrant damaged by Theft of Water	166.42	166.42	

# **Water Rate Study**

- A review of the financial operating history of the Waterworks
- Estimate future revenue and expenses of the system
- Establish and re-affirm a rate structure that will:
  - Fund operations and maintenance
  - Provide for future capital improvements
  - Meet existing bond requirements
- Recommend any changes to stepped rate thresholds to save customers money
  - Changing the lowest tier threshold to 8,000 gallons per month from 6,000 gallons is feasible

# St. Charles Parish

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