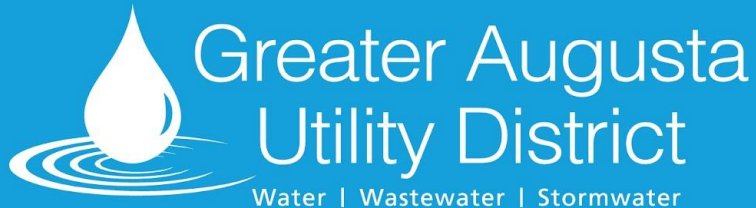


II. GAUD 2022 Planning Meeting

Wednesday, October 27, 2021 | Augusta Civic Center
Welcome & Overview



III. GAUD 2021 Overview

History

- Augusta Water District formed in 1903
 - Tasks: Drinking water and fire protection
- Augusta Sanitary District formed in 1960
 - Tasks: Sewer and stormwater conveyance



Merger—One Utility, Under GAUD

2007 Legislative act combined these tasks under GAUD

- Drinking water and fire protection
- Sewer collection system - Hallowell and Augusta
- Stormwater collection system - Augusta
- Trunkline sewer collection (Monmouth, Winthrop, Manchester, Hallowell, Augusta)
- Wastewater treatment

Sewer & Stormwater Infrastructure

- Separated sewer: 120 miles
- Combined sewer: 21.8 miles
- Separated stormwater: 99.9 miles
- 4,655 catch basins
- 732 drain manholes
- 3,276 manholes



Drinking Water Infrastructure

- Miles of pipe: 125.8
- Public fire hydrants: 500
- Private fire hydrants: 182



Drinking Water Assets

- 6 storage tanks
- 12 million gallons peak storage
- 5 wells (3 west, 2 east)
- 8 stations (pumping or disinfection)



Laying 6-inch Water Main Through Ledge on Riverside Drive

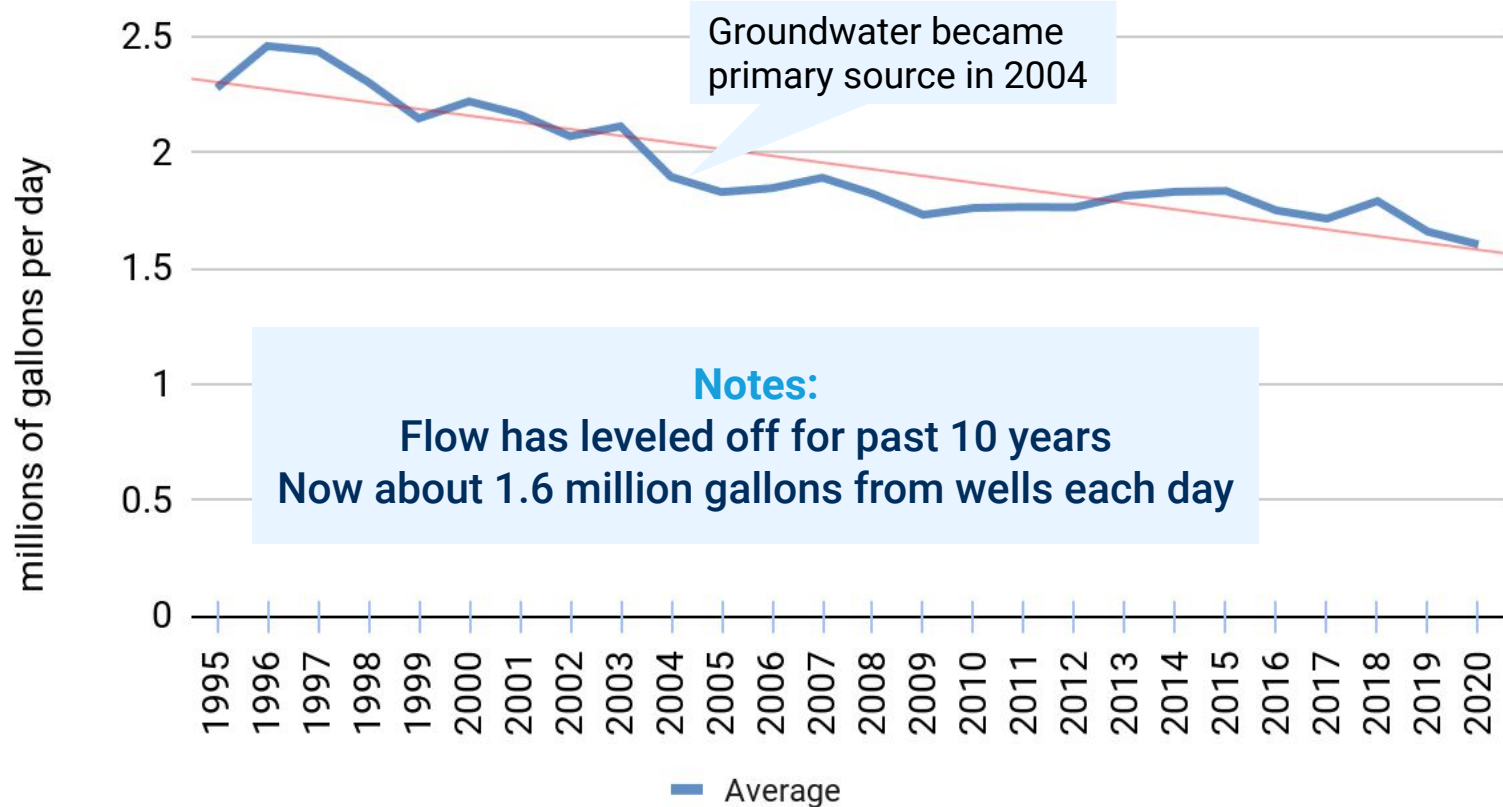


Customers, Drinking Water & Fire Protection

- Drinking water: 5,442 service connections
- 4,630 residential (average monthly use = 517 cubic feet = 3,867 gallons = 129 gallons per day)
- 728 commercial
- 84 government
- 323 fire protection connections



Average daily drinking water production

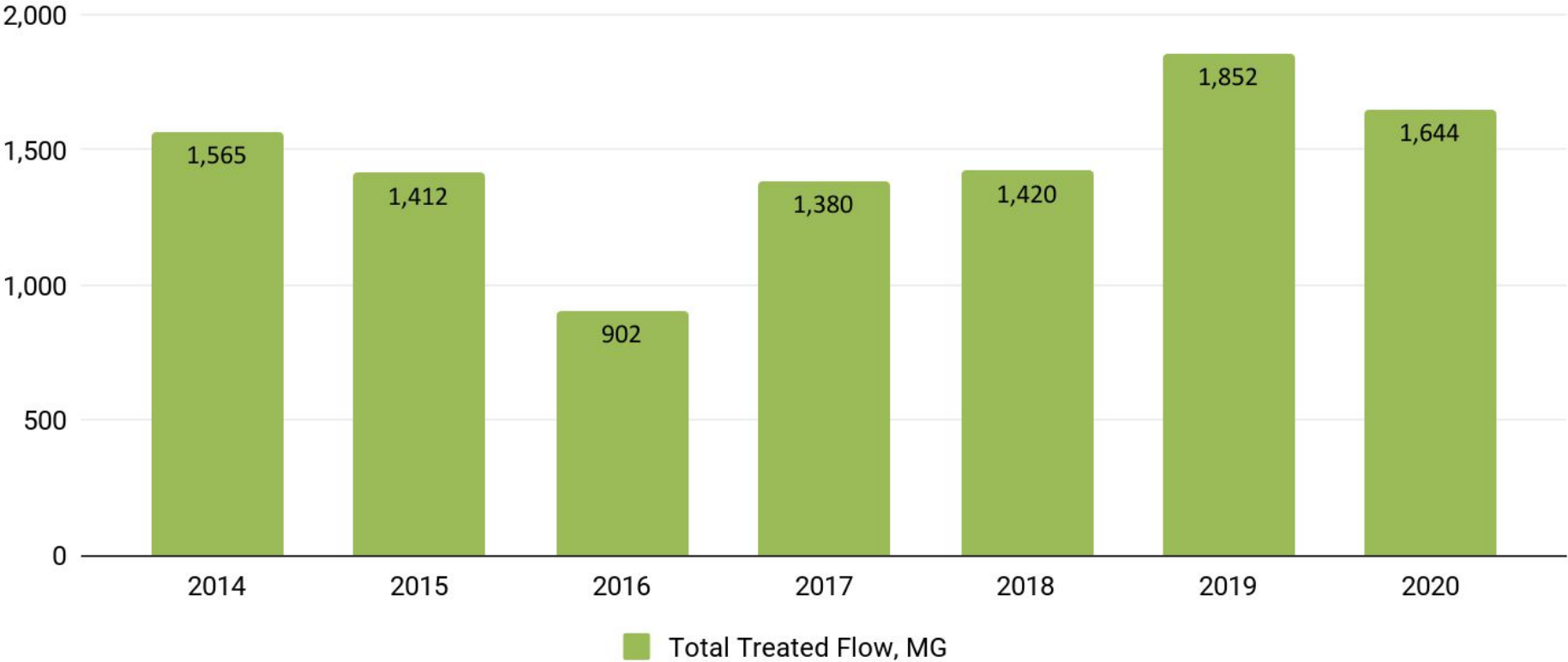


Customers, Sewer

- 5,211 service connections
- 4,400 residential
- 722 commercial
- 89 government
- About 762 customers in Hallowell (14%)



WWTP Annual Flow



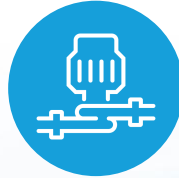
Customers, Stormwater

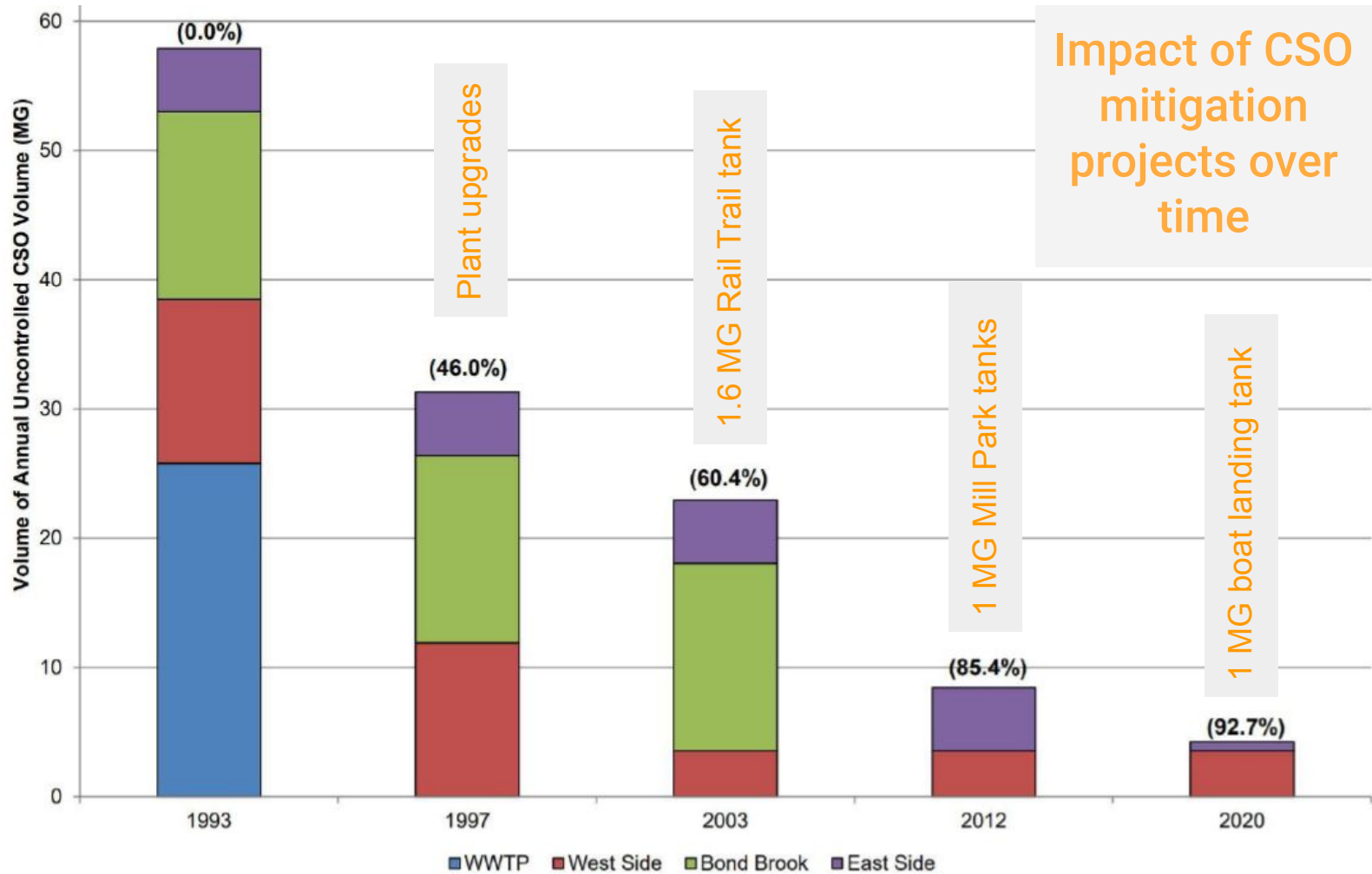
- 2022 convert all customers to ERU
- 4,585 total customers
 - 3,908 residential
 - 605 commercial
 - 72 government



Sewer & Stormwater Assets

- 13 pump stations
- 4 Trunkline stations
- Wastewater treatment plant
- Combined sewer storage tanks
 - Rail trail
 - Mill park
 - Boat landing
 - Reduction in CSO events since 1990s





Combined sewer overflows - next steps

- 2020 Long Term Control Plan
- Need more data
- Smarter infrastructure

Table 4-1. Cost Estimates for Recommended CSO Abatement Components

Component	Cost (2020 Dollars)	Remarks
1. HGL Modification for CSOs 005B, 006, 007 and 031 - West Side Subarea	\$10,000-\$15,000	
2. Regulator Modifications for CSOs 029E and 029F - West Side Subarea	\$5,000	
3. HGL Modification for CSOs for CSOs 019, 020 and 021- East Side Subarea	\$0	Stop Plank adjustment; may require ESI Throttling Gate pending RTC study (see 4 and 5, below)
4. West Side Infrastructure Study	\$100,000-\$150,000	Includes survey, monitoring and modeling
5. Enhanced RTC Program Study	\$10,000-\$15,000	
Subtotal	\$125,000-\$185,000	
6. ESI Throttling Gate	\$35,000-\$45,000	If recommended per RTC study or other considerations
Total	\$160,000-\$230,000	

Trunkline - 50 Years of Regional Collaboration

- Regional partnership 1970
- Monmouth, Winthrop, Manchester, Hallowell, Augusta
- GAUD owned infrastructure paid for by Trunkline
- 14% WWTP costs
- Add TL member to GAUD board?



PFAS action

- GAUD proactively measured for PFAS at each of the five wells twice in 2021;
- no samples exceeded the 20 ppt standards recently set by the Legislature;
- October, 2021 samples showed wells are still below 20 ppt; Kennebec River PFAS level is about the same as measured in east side wells

The pipes...



The pipes...



Inside of a water main that was repaired in 2020.
The pipe was installed 134 years ago.

The pipes...



- Inside of a sewer pipe that is failing.
- Cracks, tree roots.
- Collapse would cause sewer backups.

The pipes...

Most significant capital cost

Sewer / storm can be relined / inspected

Assume pipe lasts 100 years

Replace 1% of pipe per year



1% pipe replacement goals and costs

\$250 / foot replacement = \$1.32M / mile

Water 130 miles x \$1.32M / mile x 1% = \$1.72M / year

Sewer 140 miles @ \$250 / foot = \$1.85M / year

Storm 100 miles @ \$200 / foot = \$1.05M / year

Budget

Total annual budget	\$11.5M
○ Drinking water & fire	\$3.9M
○ Sewer	\$3.7M
○ Stormwater	\$4.0M
■ ERU stormwater revenue	\$2.1M
■ Catch basin stormwater revenue	\$1.8M
■ Catch basin revenue from COA	\$1.0M

Grants

\$1M NBRC siphon / fiber
/ water project

\$1M principal
forgiveness siphon
project

Free electric cars



Grants we've applied for...

Northern Border Regional Commission

- Siphon, 6,200' of water main and fiber, \$4.9 M, **\$1M received in grant funding**

CWSRF (wastewater DEP funding program)

- Siphon only, \$2M total, 900' of pipe and structures - **\$1.158M received in grant and loan forgiveness**
- This program is not accepting applications for 2023 until the spring of 2022

DWSRF (drinking water DHHS funding program)

- Manchester water main - 6,250' of new 12" or 16" and 22,000' of 12" pulled through 1905 vintage 24" - \$5M
- Connect water main beneath the Kennebec from State Street to Hospital Street - \$3M
- Highland Avenue water main replacement - 2022 joint City of Augusta project - 2,900 feet - \$1M
- SCADA software, hardware and implementation - \$0.2M

County

- WWTP - resiliency project - new electrical service out of the floodplain, new generator, fiber and SCADA - \$3M

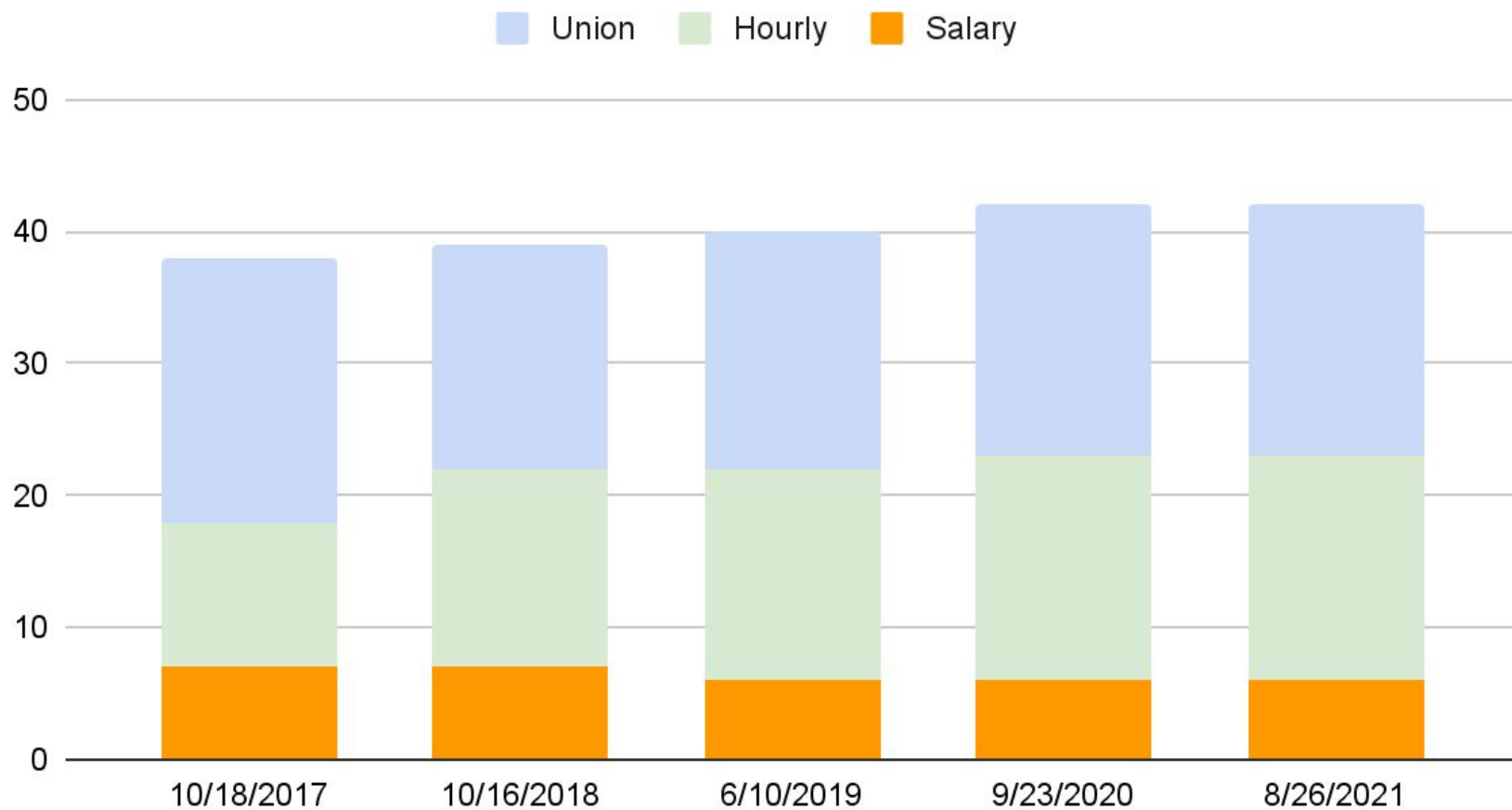
Sewer / water main extensions

Sec. A-7. System extensions.

- 1. All water line extensions must be made in accordance with the governing statutes and rules of the Public Utilities Commission.**
- 2. The district has the right to determine whether extensions to its sewer system are made, with such discretion to be subject to review by the authority of local and state health officials and the Department of Environmental Protection. A sewer extension must be in conformity with adopted municipal plans and ordinances regulating land use.**
- 3. A decision to invest funds in a specific sewer main extension requires a majority vote of the trustees and must include an affirmative vote of the voting representative from the City of Hallowell.**

Human Resources

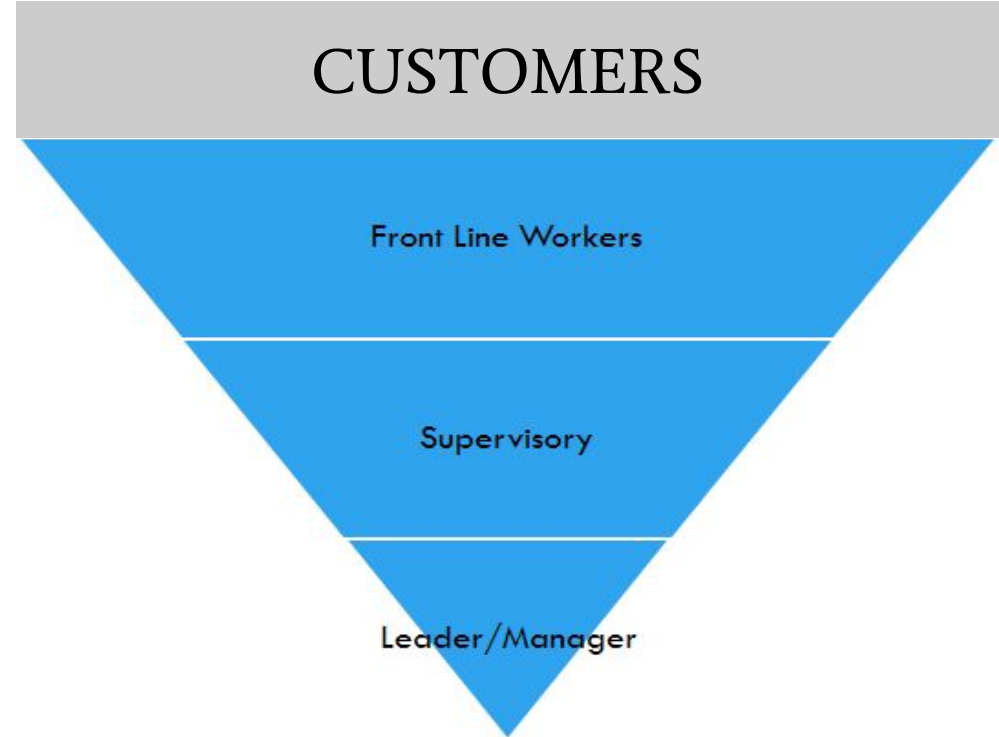
Position count over time



TRADITIONAL LEADERSHIP STYLE
“I STATEMENTS”
SHOWS WHO’S IN CHARGE



SERVANT LEADERSHIP STYLE
“WE STATEMENTS”
TOGETHER WE SUPPORT THE CUSTOMER



2021 Human Resources Accomplishments

Provide professional development opportunities for entire GAUD staff

- Completed all mandated annual safety training
- Consistently conducted weekly or biweekly management meetings
- 72% of the Management & Professional staff continue to serve on external boards and/or committees (Zoom & In Person)
- One (1) individual received Class 5 Wastewater Certification
- One (1) individual received WSO Class II Distribution License
- Continued to send (2) supervisors to Management Candidate School and (2) managers to Leadership classes
- Several attended specific online Zoom Training classes

2021 Human Resources Accomplishments

Provide Trustees with direction/guidance/information to become the best stewards for the communities we serve

- Continued GM report to highlight items in addition to Board agendas
- Continued GM emails to highlight items of interest between Board meetings
- **Revised/Updated Personnel Policy Manual** - Updated overtime practice for night work, Modified 401A employer contribution to match MainePERS employer contribution, Added Juneteenth holiday to the schedule, Updated leave for Federal Disaster Relief, Removed some restrictions of taking Leave Without Pay.

2021 Human Resources Accomplishments

Continue to develop/maintain working relationships with municipalities, regulators, contractors, and community groups

- Continued to work with the DEP & USACOE on permitting / environmental assessment for Siphon River Crossing
- Continued joint planning with the City of Augusta and other municipalities
- Continued monthly meetings with Trunkline Group
- Successfully completed projects with the City of Augusta & Trunkline as well as WWTF & Pump Station upgrades

2021 Human Resources Accomplishments

Continue to improve communications with all stakeholders

- This summer's internal efforts continued to focus on
 - Setting Direction
 - Gaining Feedback
 - Identifying Issues & Concerns
 - Providing Resources
- Organizational changes continue to be identified, communicated, and expectations established to set people up for success

2022 Human Resources (Additional Personnel)

- **Electrical/Instrumentation Technician**
 - Position needed to calibrate and maintain functional flow meters, devices and alarms in support of our SCADA system
- **Maintenance Mechanic (WWTF)**
 - Position needed to maintain and repair facility equipment
- **Assistant Shop Mechanic**
 - Position needed to maintain and repair fleet and equipment
- **Project Engineer (WWTF - PS - Trunk Line)**
 - Position needed to design and manage small and large capital work
- **Engineering Tech**
 - Position needed to provide design, management, and job costing for CIP pipe projects
- **GIS/Data Librarian**
 - Position needed to provide for the preservation, access, retrieval, and re-use of the relevant data and datasets for future reference

2022 Human Resources Goals

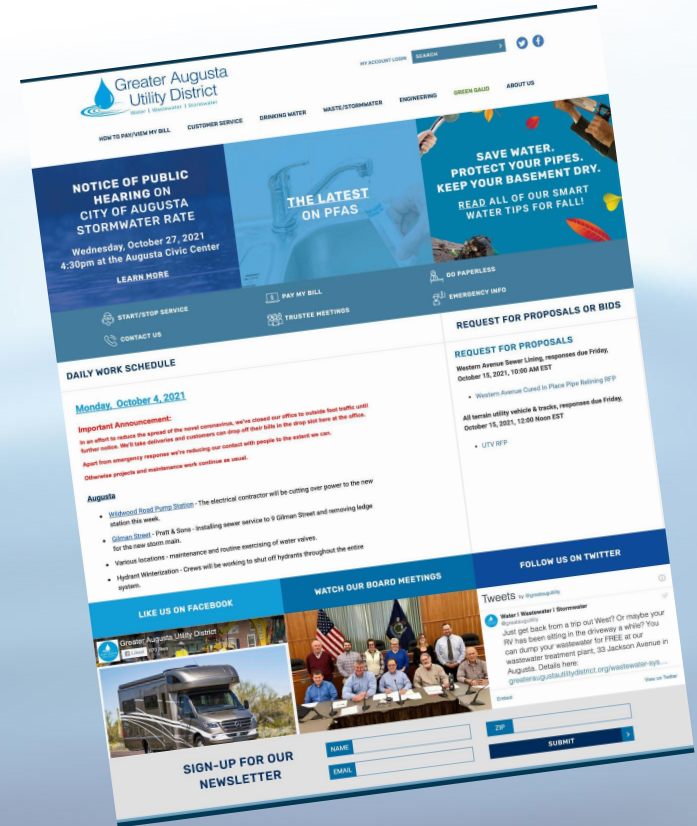
- Continue to provide Professional Development opportunities for entire GAUD Staff
 - Implement Board approved ORP to ensure appropriate resources needed to sustain current & future operations
- Continue to provide the Board Direction / Guidance / Information to become the best stewards of the communities we serve
 - Improve communications with no surprises @ meetings
 - Establish 5/10 year funded plan for CIP & Maint of district assets
- Continue to develop and maintain working relationships with municipalities, regulators, contractors, and community groups
- Continue to improve communications with all stakeholders

2021 Communications Achievements

Meredith Strang Burgess

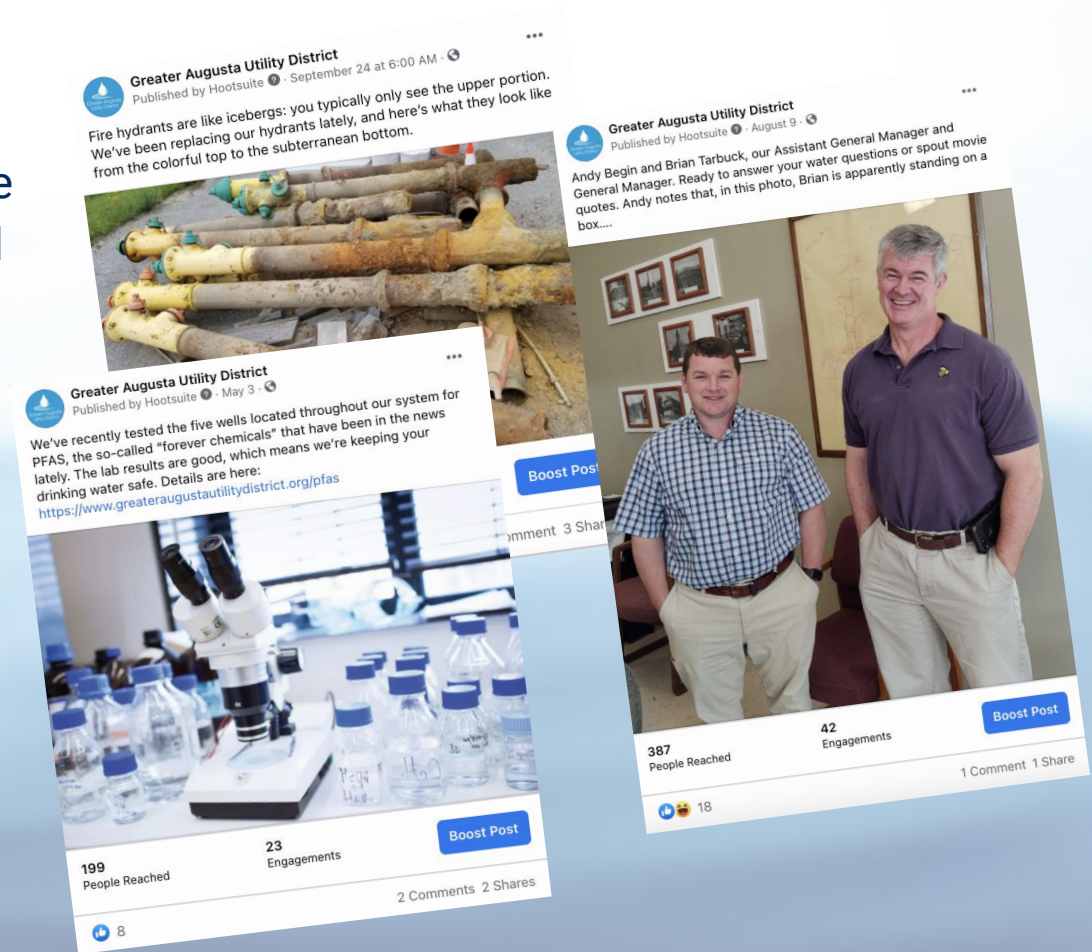
2021 has been another busy year. Updates on COVID and PFAS, along with progress on GAUD projects, have kept us busy communicating with our customers. As always the primary communication has been via the GAUD web site, the core of our information hub. Q2 of 2021 saw a significant increase in visitor traffic to the site compared to Q1.

We will continue to keep the site fresh and up to date throughout 2022.



Social Media

Social media continues to promote GAUD activities and provide useful information to consumers and customers as well as promoting water conservation and sustainability. Each month, GAUD posts a dozen or more times to its page. 870 people now “Like” the page, with 943 people following it.



Print Collateral

Billing Inserts and Newsletters have been used effectively in 2021 to support COVID and other key messaging. We also began, in the newsletter, and in social media, to start introducing members of the Board to GAUD customers.

Thumbnails of all inserts, newsletters, Consumer Confidence Report and Annual Reports are available on our Publications page on the website.



2022 Communication Goals

- Continue with regular web updates; social media; billing inserts; newsletter; CCR; and Annual Reports. Also continue to measure web and social media effectiveness and make adjustments as necessary.
- Create two videos: 1) a tour of the WWTP and 2) the GAUD water testing process.
- Increase usage of email communication
- Continue to work on customer education and outreach as needed. Including communications for planned and unplanned events in the field.
- Update GAUD Crisis Communications Plan.



Greater Augusta Utility District

2020 DRINKING WATER QUALITY REPORT

ENJOY WITH CONFIDENCE

Greater Augusta Utility District is pleased to present positive results from our 2020 assessment of the public drinking water supply we manage. Levels of potential contaminants in source water were all below the levels we target to safeguard your health. Levels of substances that may affect taste were also well within our standards.

We hope you find this Report informative. Please contact us with any questions at (207) 622-3701 or customerservice@greateraugustawater.com.

Lead & Copper: Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The primary source is materials and components associated with service lines and home plumbing.

The District's lead and copper tests showed levels that were below the regulatory action levels. While we are responsible for delivering high-quality drinking water to each property, we cannot control the variety of materials used in plumbing components on the property. You can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested. For more information, visit www.epa.gov/lead.

Where does my water come from?

In 2020, your drinking water came from one of the following wells in Augusta:

- Riverside Well, 127 MGD (million gallons)
- Sprague Well, 154 MGD
- South Well, 119 MGD
- Riverside North, 181 MGD
- Riverside South, 16 MGD

In 2020, over 186 million gallons of water were supplied from the five wells. The average flow was 1.5 million gallons of water pumped every day.

Testing for the future

The Maine Drinking Water Program (MDWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments are designed to predict the likelihood of our drinking water sources being contaminated by human activities in the future. Assessments examine geology, hydrology, land use, water land ownership or protection by local ordinance. Results are available at www.maine.gov/dep/water/swap/, and the DEP. For more information about the SWAP, please contact the DEP at (207) 687-3070.

Greater Augusta Utility District
30 Wilson Street | Augusta, ME 04301
Contact: customerservice@greateraugustawater.com
Greater Augusta Utility District
(207) 622-3701

GREATER AUGUSTA UTILITY DISTRICT-2020 DRINKING WATER QUALITY REPORT

MONITORED CONSTITUENT	MAXIMUM CONTAMINANT LEVEL (MCL)	MAXIMUM CONTAMINANT LEVEL (MCL) FOR 90% OF SAMPLES	RESULTS	SAMPLE DATE	MAJOR SOURCE IN DRINKING WATER
Total Coliform Bacteria - Note 1	0 per 100 ml	1 per 100 ml or 50%	0 per 100 ml	2/20/20	Naturally present in the environment.
Total Trihalomethanes - THM (pbf) - Note 2	0	80	79.2 Range (28.3-10.2)	1/24/20	By-product of drinking water chlorination.
Total Halomethanes Acids - HAA5 (pbf) - Note 3	0	40	3 Range (0.3-5.5)	1/24/20	By-product of drinking water chlorination.
Copper (ppm) 90% Value - Note 4	1.3	AL = 1.3	0.32	1/11-12/19/20	Corrosion of household plumbing system.
Lead (pbf) 90% Value - Note 5	0	AL = 15	1.1	1/11-12/19/20	Corrosion of household plumbing system.
Fluoride (ppm) - Note 6	4	4	0.7	12/19/20	Water additive which promotes strong teeth.
Asbestos (pbf) - Note 7	0	10	5.4	3/17/20	Erosion of natural deposits. Runoff from activities, erosion of protective systems.
Barium (ppm)	2	2	0.005	4/19/20	Discharge of drilling fluids. Discharge from natural resources. Erosion of natural deposits.
Chromium (pbf)	100	100	1.2	3/17/20	Discharge from steel and pig iron mills. Erosion of natural deposits.
Nitrate (ppm) - Note 8	10	10	2.3	6/24/20	Runoff from fertilizers, herbicides, pesticides, animal waste, septic tanks, sewage. Erosion of natural deposits.
Combined Barium (228 and 232) pCi/L - Note 9	0	5	0.004	9/19/20	Erosion of natural deposits.
Combined Uranium (ppm)	0	30	4.3	3/17/20	Erosion of natural deposits.
Radium - 226 (pCi/L)	0	5	0.11	9/19/20	Erosion of natural deposits.
Radium - 228 (pCi/L)	0	5	0.11	9/19/20	Erosion of natural deposits.
Radium (pCi/L) - Note 10	4,000	4,000	999	4/26/20	Erosion of natural deposits.
Uranium - 238 (pCi/L)	0	30	2.3	3/27/20	Erosion of natural deposits.

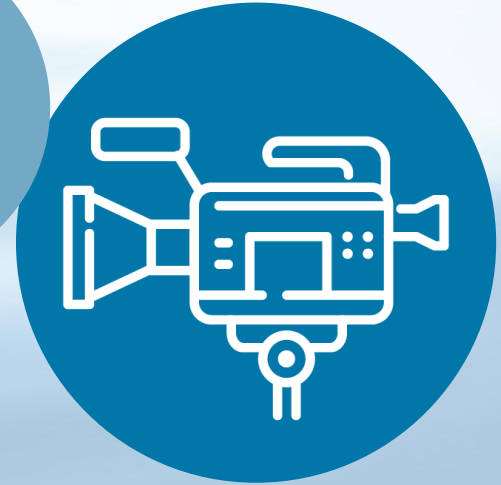
Herbicides

Pesticides

In 2020, our system was granted a "Synthetic Organic Waiver." This is a three-year exemption from the monitoring/reporting requirements for the following synthetic chemicals: Trihalomethanes (THMs), Chloroform, Carbon tetrachloride, and other synthetic organic chemicals. This waiver was granted due to the presence of these potential sources of contamination within a half-mile radius of the water source(s).

Proposed 2022 Communications Implementation

- Q1 - Winter/Spring Newsletter; any customer and rate communications; CCR; Inserts; crisis communication plan review.
- Q2 - Support any rate hearings if necessary; Annual Report to communities; inserts; and CCR distribution and promotion; shoot videos.
- Q3 - Fall/Winter newsletter; prepare for annual planning meetings; inserts.
- Q4 - Annual Planning meetings; prepare 2023 Goals.



IV. BRIEF REVIEW OF 2021 GOALS & STATUS

Goal 1: 2021 CIP Goals

Continue to implement, revise and plan capital improvement projects, monitor budgets, be proactive and keep an eye to the future. Work smarter, prioritize projects, utilize efficiencies in financing and labor. Continue proactive planning for long range water sources, CSO requirements and water, stormwater and wastewater pipe replacement.

1. Q1: Begin planning for the management of the Manchester route 202 water main project that covers construction as well as community relations and communications.
2. Q1: Create a long range plan for the Trunkline and review it annually to be sure it has a proactive work plan in place.
3. Q3: Develop a specific goal for the number of feet of pipe that GAUD replaces annually and a standard of drinking water pressure supplied to all customers. Determine the staffing and funding required to achieve these goals.

Goal 1: How Did We Do?

- Consolidated Highland project from two years to one; shifted to 2022
- Continued planning Winthrop redundant feed
- Trunkline long range plan - Caddyshack pump station
- Developed annual pipe replacement plan

Goal 2: Financial Goals

1. Continue smart and proactive financial planning and management, including debt management and alternative financial funding sources.
2. Monitor and anticipate future regulatory issues that will require financial investment, especially in the area of combined sewer overflow.
3. Continue annual reviews of rates needed to support water, wastewater and stormwater expenses. Develop a plan to work towards reducing and eliminating catch basin fees as well as developing a plan to equitably manage ERUs for residential and commercial customers.
4. Continue to ensure the completion of the planned solar project in Brooks.

Goal 2: How Did We Do?

- Over \$2M in successful grant applications
- Website to support PFAS testing
- Active rate committee / reviewing options to migrate to ERU only stormwater revenue
- Solar project is probably 2022 - depends on CMP - out of GAUD's hands

Goals 3: Communications & Relationships

- Continue ongoing relationships and regular communications with all municipalities in the GAUD service area as well Maine DOT and other related agencies.
- Q1: Review the GAUD crisis communication plan and make necessary updates.
- Q2: Create a plan to increase ongoing communications with the existing Trunkline membership to be sure there is proactive management of this aging yet critical infrastructure. Set a joint meeting with GAUD Trustees and Trunkline group in Q1.
- Create and execute a communications plan to support the Manchester waterline replacement project.
- Continue to work with universities to help reach infrastructure analysis and improvement goals.
- Continue current GAUD communications outreach, including but not limited to newsletters, billing stuffers, website, social media, CCR, paid communications to effectively educate the public about the services GAUD provides, PFAS, Trunkline project, investment in infrastructure, value of clean water and District efforts to provide clean drinking water and safely handle storm and wastewater treatment.

Goal 3- How Did We Do?

Successfully continued communications with municipalities, MaineDOT and regulatory agencies.

The GAUD Crisis Communications review was begun and a Table-Top Emergency drill was conducted on June 3, 2021. Work is not over as there are several different plans that need to be consolidated and reorganized in 2022.

No changes in Trunkline communications until recently (Manchester meeting / upcoming Monmouth meeting)

Engagement in Manchester in early 2021 re redundant water main continues now

2020 / 2021 projects were completed. No new projects begun for 2021 / 2022.

GAUD continued outreach to stakeholders and added new pages to web site explaining PFAS and ongoing test results. Newsletter continues to reinforce the importance of infrastructure. The videos were not able to be filmed due to masking requirements. They will be done in Spring 2022.

Goals 4: HR

- Consider how long-term planning processes (5/10-year horizon) impact human resources.
- Improve internal communications within the team.
- Develop the skills and abilities of others to fill key positions (succession planning for key positions).
- Provide opportunities for Board Members to socialize together a couple of times a year after the pandemic and at no cost to the ratepayers.

Goals 4: How'd we do?

- Developed an Organizational Risk Plan that identified six positions needed to meet current & future needs
- Established consistent weekly or biweekly department meetings (Management, Operations, Engineering, Finance/Admin)
- Established Personal Development Plans for three individuals - 2 attended leadership training / 2 attended management training
- No progress on Board of Trustees socials

Goal 5: Carleton Pond / facility reuse

- Q1. Create a Carleton Pond / Facility usage workgroup made up of representatives from GAUD Trustees and key stakeholders. The group will meet, research use options and bring its findings to ongoing GAUD Trustee meetings with recommendations for action/next steps by Q4.

Goal 5: How did we do?

- No response to RFP for land valuation
- Facility primarily used by law enforcement agencies for training
 - Augusta PD active shooter / tactical
 - Warden Service - K9
 - Maine State Police - bomb squad
- Land near plant could be used for solar depending on Manchester substation buildout

Goal 6: Proposed headwinds goals

1. Closely monitor ongoing PFOA/PFAS concerns; arsenic levels; and any possible DEP/EPA regulation changes.
2. Keep GAUD Trustees informed on possible changes that will cause new investment into mitigation and treatment.
3. Continue to scan the horizon for other possible headwinds that may affect the District.

Goal 6: How'd we do?

1. Sampled for PFAS before and after new regs adopted
2. Water meets proposed 20 ppt standards
3. Results available online
4. Visited PFAS treatment site in May in southern Maine
5. Monitoring arsenic regulation; some wells would barely exceed proposed 5 ppb standard
6. PFAS in wastewater effluent or biosolids is concerning

V. 2022 BOARD GOALS & WORK PLAN DISCUSSION

A. 2022 CIP Projects

- Highland Avenue with COA - 2,000' water pipe; 1,600' sewer pipe
- Replace broken sewer pipe beneath Kennebec River
- COA paving may drive projects on Ballard and Cushing streets
- Front Street - engineering / design
- No significant MDOT projects
- Survey for Green Street, Drew Street, Water Street for 2023 / 2024 projects

B. How We're Going To Pay For It

- Debt management - then vs now
- Catch basins / ERUs - long term goals
- Solar - projected savings - 2022?
- Grants - actively seeking grants at all times

C. Relationships & Communications

- Municipal and MDOT
- Local construction projects
- Trunkline

D. Other Items

- Future regulatory impacts
 - Forever chemicals - PFAS
 - Arsenic
- Disposition of Carleton Pond property / GF Laurin drinking water treatment plant
- New sludge and MDEP fees related to PFAS increased budget at WWTP by \$69k (4.6%)

VI. BEFORE YOU GO...

**Second planning meeting
On Monday, December 20, 2021**

ADJOURN & THANK YOU!