



CITY OF ATLANTA DEPARTMENT OF
**watershed
management**

Atlanta City Council | City Utilities Committee **Department Quarterly Report**

Mayor Keisha Lance Bottoms | Kishia L. Powell, Commissioner
November 13, 2018 – FY 2019 – 1st Quarter



CITY OF ATLANTA DEPARTMENT OF
**watershed
management**



Reports to Council

Peyton Pipe Yard - Indoor Air Quality Evaluation and Timeline



Peyton Center Pipe Yard – 2750 Peyton Rd., NW, Atlanta (Council District 9)

The Peyton Center Pipe Yard houses the Office of Linear Infrastructure Operations (“OLIO”) water distribution crews. Crews use the facility to pick up materials and equipment and shower, if needed. The current structures on that property consist of a Five-Wide modular building and a Double-Wide modular building that contain bathrooms for men and women and offices. In addition, the building at issue houses the employee locker rooms, breakrooms, bathrooms, gym, and offices (the “Building”).

April 20, 2017 – DWM’s Office of Safety, Security and Emergency Management (“OSSEM”) conducted a Safety Wellness Meeting at the Pipe Yard, at which time a concern about an odor in the Building’s bathroom was raised and a work order was created to investigate.

April 26, 2017 – OSSEM’s Industrial Hygienist performed a limited indoor air quality assessment, walkthrough assessment and mold testing. The Building was cleaned by a third-party. The sewer backup was caused by a Watershed shirt being stuffed into the sewer line. The line was cleared by OLIO crews.

May 4, 2017 – OSSEM Management received the mold report indicating that the test results were within acceptable ranges, based upon EPA 402-K-01-00 (*Mold Remediation in Schools and Commercial Buildings Guide*). No visible “suspected” mold growth was observed.

June 15, 2018 – Following a report of health concerns, a third-party contractor (BioRestore) was engaged by DWM to test the Building. Preliminary results - negative for mold and asbestos.

June 18, 2018 – BioRestore issued final report to the Department confirming no visible mold growth observed and sample results were within acceptable ranges, according to EPA 402-K-01-00 (*Mold Remediation in Schools and Commercial Buildings Guide*).

October 4, 2018 – Sewer back-up occurred, causing the Building interior to flood. Standing sewer water extracted and the Building was cleaned and sanitized by Steamatic within 24-hours of the initial event. All water damaged materials and furnishings were removed. Lockers were cleaned and returned to original locations. OLIO supervisors instructed staff not to enter Building.

Peyton Pipe Yard, cont'd



October 9, 2018 – OSSEM conducted an inspection of the Building. The Building still had exposed insulation. Employees were again instructed by supervisors to remove their belongings from the lockers and not reenter the Building.

October 23, 2018 – OSSEM conducted walkthrough assessment of each modular trailer and the restricted Building to determine if health hazards exist. Based upon visual inspection, Industrial Hygienist did not find any visual signs of health hazards in modular buildings. OSSEM identified final restoration activities that needed to be completed in Building. OSSEM reminded employees that Building was restricted to authorized personnel only.

October 24, 2018 – Deputy COO performed site visit and began action plan with DWM to address issues. Deputy COO observed that no employees or vendors were in the restricted Building.

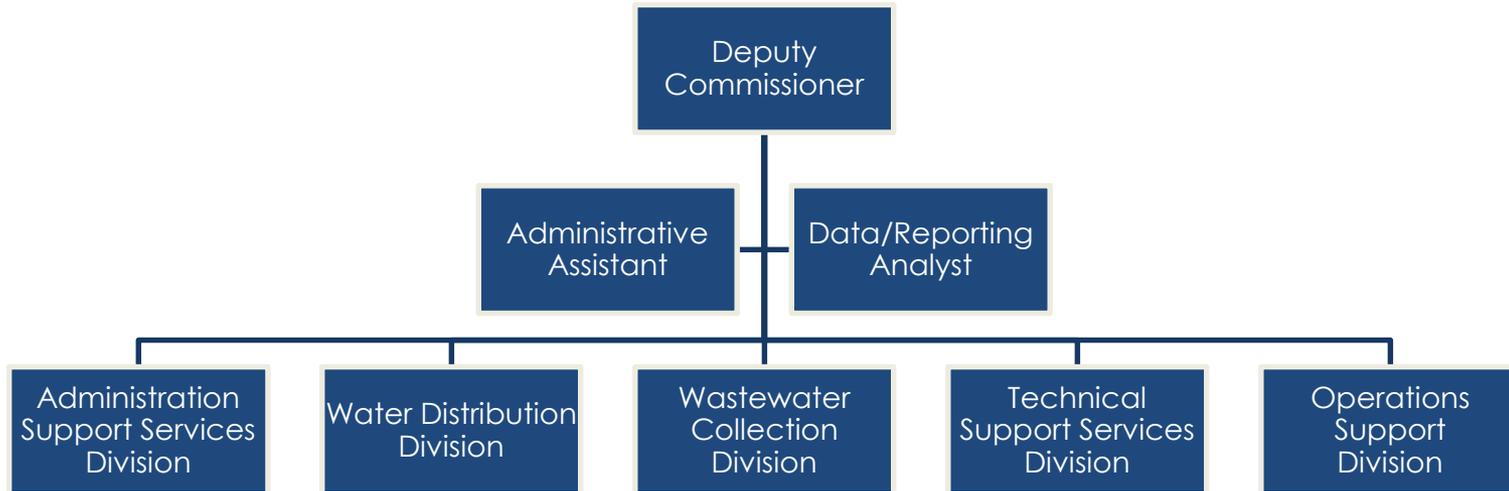
October 26, 2018 – Commissioner visited each building at site with Safety personnel and Industrial Hygienist. No employees were accessing Building and restrooms in modular buildings were working properly.

October 29, 2018 – BioRestore conducted extensive air quality and environmental testing of Building. Preliminary results - negative for mold and asbestos. Additional testing being scheduled for all buildings on site. Immediate repair needs scheduled with modular trailer vendor.

Next Steps

- New Triple-Wide modular building will be installed for the Valve Team (all other team members have been relocated to existing modular units on site) by mid-November, 2018.
- Permitting and installation of modular men's and women's restroom and shower trailers by December 31, 2018.
- Begin procuring construction contractor for new permanent facility. Three year construction schedule anticipated during which crews will be relocated to temporary facility.

Office of Linear Infrastructure Operations (OLIO) Reorganization and Competitive Pay Initiative – Sept 2018



Goals	<ul style="list-style-type: none"> • Increase operations from four to five divisions for additional support • Reduce layers of Management and strengthen leadership structure to improve accountability • Create more consistency in work practices between Distribution and Collections divisions • Organize crews to work more efficiently – maximize productivity on all shifts • Position crews to promptly respond to emerging issues and better serve our customers • Clarify job responsibilities and reporting relationships • New structure allows potential for salary growth and competitive pay in difficult to fill positions • Improve recruiting and retention
Crews	<ul style="list-style-type: none"> • Organized geographically to improve response time and versatility • Trained to respond to the wider range of work orders within scope of responsibilities
Leadership	<ul style="list-style-type: none"> • Layers reduced to provide more coverage geographically and improve accountability

OLIO Classification Actions



Action	Purpose	Title	Grade		Filled*	Vacant
Title Creations	<ul style="list-style-type: none"> Created Crew Sup II position to avoid demoting incumbent crew supervisors unable to obtain State License Superintendent position created to collapse management layers and increase accountability 	Watershed Crew Supervisor I	18		5	0
		Watershed Crew Supervisor II	20		49	2
		Area Superintendent	22		16 proposed in new position	0
Title Deletions	<ul style="list-style-type: none"> Titles eliminated due to collapse of management layers 	Wastewater Collections Supervisor	18			
		Water Distribution Maintenance Supervisor	18			
		Area Supervisor	18			
		Coordinator	21			
Grade Amendments	<ul style="list-style-type: none"> Created potential for salary growth Allows for competitive pay Watershed Title added to positions 	Title	Old Grade	New Grade	Filled	Vacant
		Construction/Maintenance Worker I	9	10	104	6
		Construction/Maintenance Worker II	13	14	49	13
		Water Distribution Operator I	13	14	2	0
		Water Distribution Operator II	14	15	10	0
		Water Distribution Operator III	15	16	2	5
		Wastewater Collection Operator I	13	14	2	0
		Wastewater Collection Operator II	14	15	19	0
		Wastewater Collection Operator III	15	16	2	10

*Includes individuals in On-Boarding Process

OLIO Core Career Path

(As of November 1, 2018)



Title (# of Employees)	Salary Increase	New Salary Range (Hourly Rate)	Old Salary Range	Duties	Requirements
Construction Maintenance Worker I (104)	\$0	\$27,100 - \$33,900 - \$40,700 (\$15.52 - \$20.37)	\$27,040- \$32,300- \$38,800	Works as part of a crew to inspect and repair water mains and sewers	<ul style="list-style-type: none"> • HS Diploma or GED
Construction Maintenance Worker II (49)	5 - 15%	\$33,000 - \$41,300 - \$49,600 (\$18.47-23.85)	\$31,400- \$39,300- \$47,200	Works as part of and/or leads a work crew to inspect and repair water and sewer mains. Drives trucks and operates equipment	<ul style="list-style-type: none"> • HS Diploma or GED • 2 yrs construction or water experience • CDL B
Water Distribution Operator I (2)	5%	\$33,000 - \$41,300 - \$49,600 (\$19.83-22.60)	\$31,400- \$39,300- \$47,200	Operates light, medium and heavy trucks and construction equipment	<ul style="list-style-type: none"> • HS Diploma or GED • 6 months light-heavy truck experience • CDL A
Water Distribution Operator II (10)	5%	\$34,700 - \$43,400 - \$52,100 (\$21.08-23.44)	\$33,000 - \$41,300 - \$49,600	Operates light, medium and heavy trucks and construction equipment	<ul style="list-style-type: none"> • HS Diploma or GED • 2 yrs light-heavy truck experience • CDL A
Water Distribution Operator III (2)	5%	\$36,500 - \$45,600 - \$54,700 (\$21.90-22.67)	\$34,700- \$43,400- \$52,100	Operates light, medium and heavy trucks and construction equipment	<ul style="list-style-type: none"> • HS Diploma or GED • 4 yrs heavy truck experience • CDL A

OLIO Core Career Path, cont'd



Title (# of Employees)	Salary Increase	New Salary Range (Hourly Rate)	Old Salary Range	Duties	Requirements
Wastewater Collection Operator I (2)	5%	\$33,000 – \$41,300 - \$49,600 (\$19.83)	\$31,400- \$39,300- \$47,200	Operates light, medium and heavy trucks and construction equipment	<ul style="list-style-type: none"> • HS Diploma or GED • 6 months light-heavy truck experience • CDL A
Wastewater Collection Operator II (19)	5%	\$34,700 - \$43,400 - \$52,100 (\$20.11-\$22.98)	\$33,000 - \$41,300 - \$49,600	Operates light, medium and heavy trucks and construction equipment	<ul style="list-style-type: none"> • HS Diploma or GED • 2 yrs light-heavy truck experience • CDL A
Wastewater Collection Operator III (2)	5%	\$36,500 - \$45,600 - \$54,700 (\$22.67-\$22.88)	\$34,700- \$43,400- \$52,100	Operates light, medium and heavy trucks and construction equipment	<ul style="list-style-type: none"> • HS Diploma or GED • 4 yrs heavy truck experience • CDL A
Watershed Crew Supervisor I (5)	10%	\$40,600 - \$50,800 - \$61,000 (\$22.50-\$25.98)	\$36,500- \$45,600- \$54,700	Supervises crew duties to include cleaning catch basins, landscaping and general roadway restoration	<ul style="list-style-type: none"> • HS Diploma or GED • 4 yrs construction or water experience • CDL A
Watershed Crew Supervisor II (51)	To \$60,806	\$44,000 - \$58,700 - \$73,400 (\$28.05-\$31.66)	\$36,500- \$45,600- \$54,700	Supervises assigned crew in the repair of sewer main breaks, installation of sewer clean-outs, prevention of sewer spills, and other linear operations duties. Documents order completion	<ul style="list-style-type: none"> • HS Diploma or GED • 4yrs construction or water experience • CDL A • State License
Area Superintendent (16 proposed)	TBD	\$50,900 - \$67,800 - \$84,800 (TBD)	N/A	Directs work of two or more crews, monitors work execution and ensures effective safe completion in compliance with established rules and regulations. Resolves issues. Schedules maintenance.	<ul style="list-style-type: none"> • College degree or equivalent experience • 5 yrs water or wastewater experience • 2 yrs supervision • State License

Additional Council Inquiries



Request	Response
Number of Laborers	104 employees are in the Construction Maintenance Worker I position
Salary Range for Laborers	<ul style="list-style-type: none">• Grade for Construction Maintenance Worker I position was increased from 9 to 10• New salary range is \$27,100 - \$33,900- \$40,700 or \$15.52/hr. to \$20.37/hr. to allow potential for salary growth
Claims of Salary Decreases	No salaries were decreased as a result of reorganization
Use of Contracts to Outsource Work	The Department augments its staff by using contractors to reduce backlog and handle specialized work/equipment
Addressing PACE Issues	Received written notice of employee concerns on November 8 th . Working with HR to address issues and schedule a meeting with PACE representatives.
Compensation of new hires versus incumbents	The Department raised its minimum salary to \$15/hr. and, as a result, some incumbents are paid comparable to new hires. Increasing the salary grades and training opportunities within the Department gives employees the ability to take advantage of career advancements.

Challenges and Opportunities

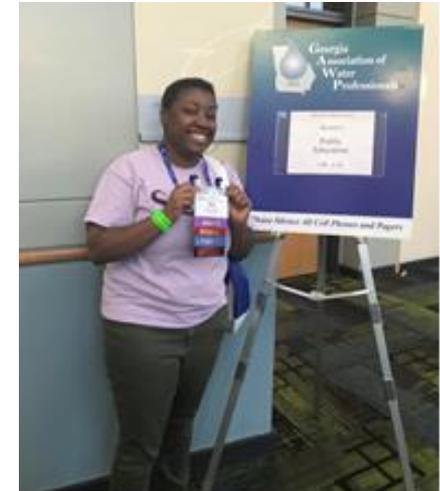


Challenges

- Salary compression due to raising minimum rate to \$15 an hour
- Compression across titles due to competitive pressure to raise starting salaries
- Budgetary restraints on timing and frequency of salary actions

Support for Career Advancement

- In-house classes on safety, professional effectiveness and leadership, and lunch and learns
- Tail gate training at the start of shifts
- Tuition reimbursement (\$2,000 per calendar year)
- DWM-sponsored class for state water license and CDL prep
- 10% incentive paid for earning certifications
- Promotion opportunities
- In the last two years, OLIO has had 164 internal promotions
- Internships and apprenticeships



Avenues for Inclusion and Expression

- Convocations
- Voluntary paid Saturday work sessions
- Open door policy
- Town hall meeting regarding reorganization
- Meeting with union reps
- Employee appreciation events
- Grievance process



2018 CUC Goals and Objectives



DWM Requested Items	Update
<p>Conduct follow-up reviews of previous Department audits, specifically on the water loss audit from April 2017</p>	<ul style="list-style-type: none"> • Water Loss Audit follow-up conducted and reported during April 24, 2018 Quarterly • Department has responded to and/or is responding to City Auditor's recommendations • Water Loss Audit Program is being developed
<p>Be fully engaged in MOST renewal discussions</p>	<ul style="list-style-type: none"> • Governor signed MOST reauthorization in May 2018 – extension of sales tax beyond 2020 • Voter approval required every four years with potential to extend until October 2032 • Update reported in April 24, 2018 Quarterly report
<p>CIP - Track budget and monitor cash flow and debt, taking into consideration the need to improve stormwater infrastructure maintenance and maintain water rates</p>	<ul style="list-style-type: none"> • Tracking and reporting to Council provided with each Quarterly report • Prepares monthly CIP Dashboards to track cash flow versus overall budget • Adopted new program information system (e-Builder) to track budget expenditures • Updating CIP prioritization • Secured funding for priority projects
<p>Continue to monitor water quality to ensure the City has ample and high quality water</p>	<ul style="list-style-type: none"> • Water Quality Testing Performance Audit 2018 presented in October 2018 • Provided water quality monitoring update during April 24, 2018 Quarterly • Providing Instream Water Quality Monitoring Report results during November 13, 2018 Quarterly
<p>Review end-to-end customer service process of ATL311, Public Works, and DWM to ensure seamless accountability and high customer satisfaction</p>	<ul style="list-style-type: none"> • Reporting process improvements during each Quarterly report (see ATL311 Update slide) • Discussions with ATL311 on-going to update MOU and improve workflow process
<p>Monitor Utilities Service Program</p>	<ul style="list-style-type: none"> • Solicitation package to Department of Procurement expected – November 2018 • Advertisement expected – December 2018

Instream Water Quality Monitoring Report



- Analysis of United States Geological Survey (“USGS”) data in the Instream Water Quality Monitoring Report generally shows a decrease in overall pollutant concentrations over the years, particularly after completion of large capital projects
 - **Utoy Creek:** Improvement in turbidity in comparison to average flow rate is seen in 2009, corresponding to the construction in Sewer Group 1 rehabilitation projects
 - **Proctor Creek:** In 2009, there is a noticeable decrease in turbidity in comparison to the average flow rate within the creek that continues for the duration of the monitoring period. This correlates to the completion of numerous projects in Proctor Creek in 2009
 - **Intrenchment Creek:** Improvement in turbidity in comparison to average flow rate is seen in 2007, corresponding to the sewer separation of the Stockade combined sewer basin
 - **South River:** Improvement in turbidity in comparison to average flow rate is first observed in 2009, corresponding to the construction of Sewer Group 1 rehabilitation
 - **Peachtree Creek:** After 2005, there is an overall decrease in average turbidity within the Peachtree Creek watershed, remaining low in 2013 even with an increase in overall flow
 - **Nancy Creek:** In 2008 there is an overall decrease in turbidity for the remainder of the monitoring period even as flows in the creek rise. This correlates to construction of Sewer Group 1 Rehabilitation which was completed in 2009
- USGS monitoring of water quality parameters included bacteria (E. coli, fecal), metals (lead, mercury, zinc, etc.), turbidity, etc. has been performed since 2003 at eleven sites in six basins (Peachtree, Nancy, Proctor, Utoy, South River & Intrenchment Creek)
- Additional monitoring is conducted by DWM to supplement monitoring by USGS and further reduce annual costs
- DWM reviews and monitors collected USGS data as needed
- Monitored parameters have been reduced over time to Turbidity, Conductivity, Dissolved Oxygen, pH and temperature. These parameters can be utilized as indicators of real-time occurrences that could threaten water quality such as sewer spills, illicit discharges, etc.

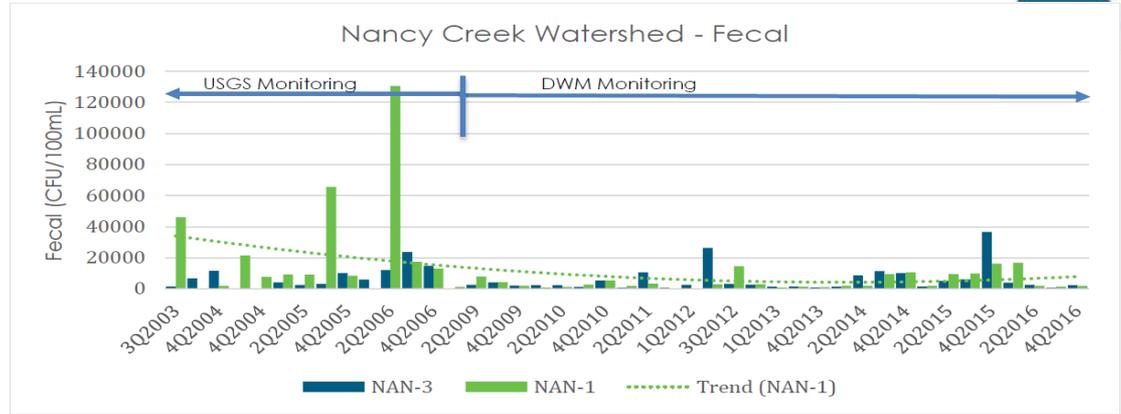
Instream Water Quality Monitoring Report



Completed Projects

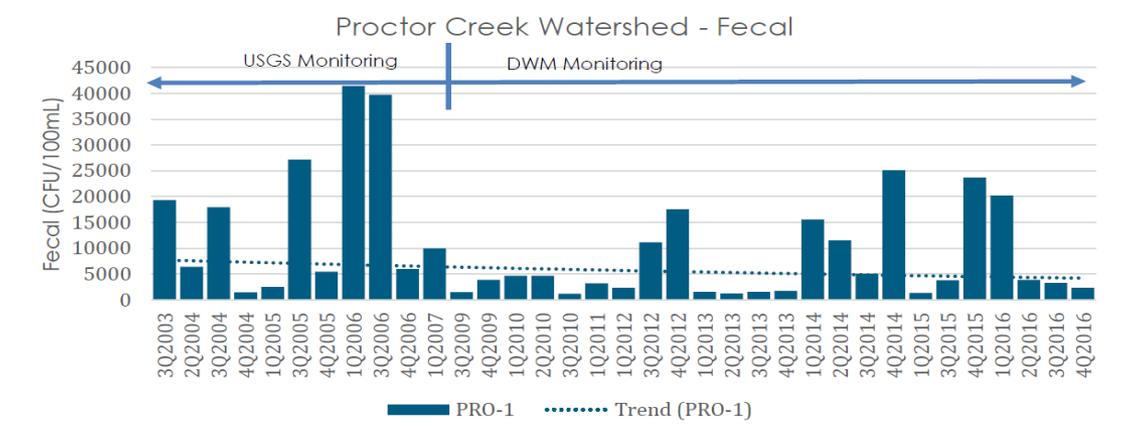
Nancy Creek

- 2005 Nancy Creek Tunnel
- 2009 Sewer Group 1 Rehab
- 2014 Sewer Group 2 Rehab



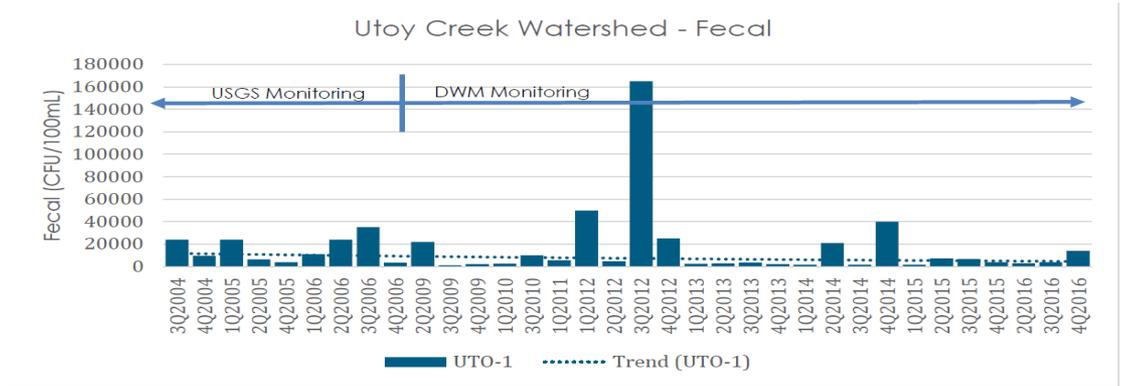
Proctor Creek

- 2007 – Greensferry Combined Sewer Separation
- 2007 – West Area Tunnel
- 2009 – Upper Proctor Creek Phase I
- 2009 – Terrell Creek Trunk Phase I
- 2009 – Riverside Outfall Relief
- 2009 – Sewer Group 1 Rehab
- 2013-2018 – Supplemental Greensferry Separations
- 2014 – Sewer Group 2 Rehab



Utoy Creek

- 2009 – Sewer Group 1 Rehab
- 2014 – Sewer Group 2 Rehab



Instream Water Quality Monitoring Report



Completed Projects

Peachtree

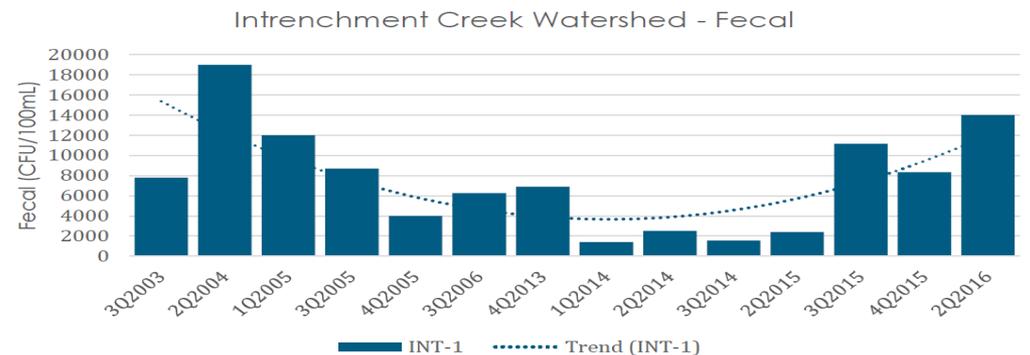
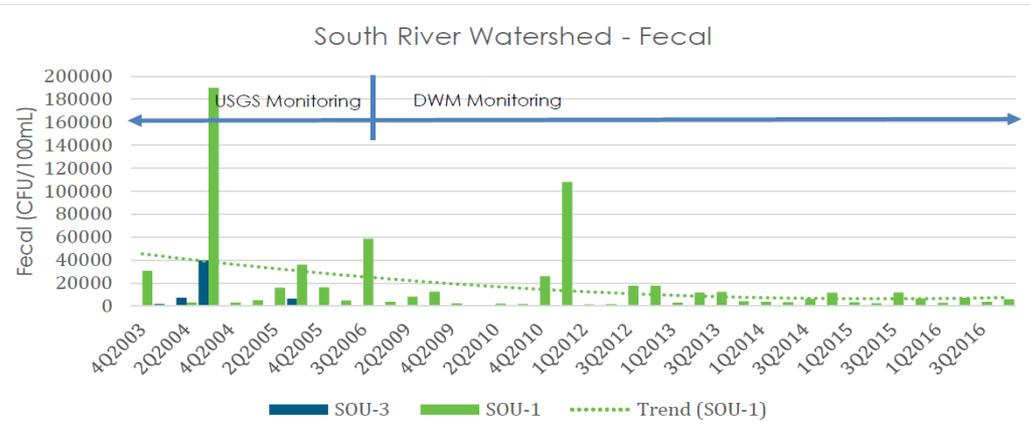
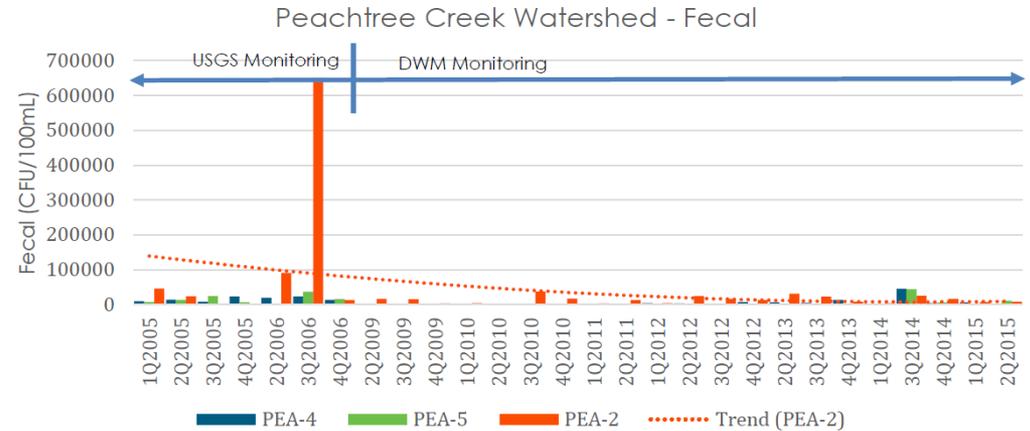
- 2008 West Area CSO Tunnel
- 2009 Sewer Group 1 Rehab
- 2011 Historic Fourth Ward Pond
- 2014 Sewer Group 2 Rehab
- 2014 Liddell Tank

South River

- 2007 Stockade Combined Sewer Separation
- 2009 Sewer Group 1 Rehab
- 2011 South River Tunnel
- 2013 East Point Trunk Replacement
- 2013 Jonesboro Trunk/Relief
- 2013 Forrest Park Rd Outfall
- 2014 Sewer Group 2 Rehab

Intrinchment Creek

- 2007 Stockade Combined Sewer Separation



Lead and Copper Rule Compliance Monitoring



Lead and Copper Rule (LCR)

- Lead and copper enter drinking water primarily through plumbing materials.
- The treatment technique for the rule requires systems to monitor drinking water at customer taps. If lead concentrations exceed an action level of 15 ppb or copper concentrations exceed an action level of 1,300 ppb in more than 10% of customer taps sampled, the system must undertake a number of additional actions to control corrosion.

LCR Sampling

- DWM collected 66 Samples between June 1st and Sept 30, 2018
- Required to submit at least 50 tap water samples from Tier 1 residences (single family with copper pipes/lead solder installed 1982-1989 or connected with lead service pipes)

2018 Sampling and Analytical Results

- Final official analytical results received for all samples
- 20 sites with detections of lead: **6 detections above the Lead Action Level (AL) of 15 ppb** (parts per billion) (23, 67, 110, 140, 210 and 440 ppb)
- **1 detection above the Copper AL of 1,300 ppb** (2,000 ppm) from bathtub faucet. Retest with 1 minute flush = within acceptable range of 73 ppb.

Environmental Compliance

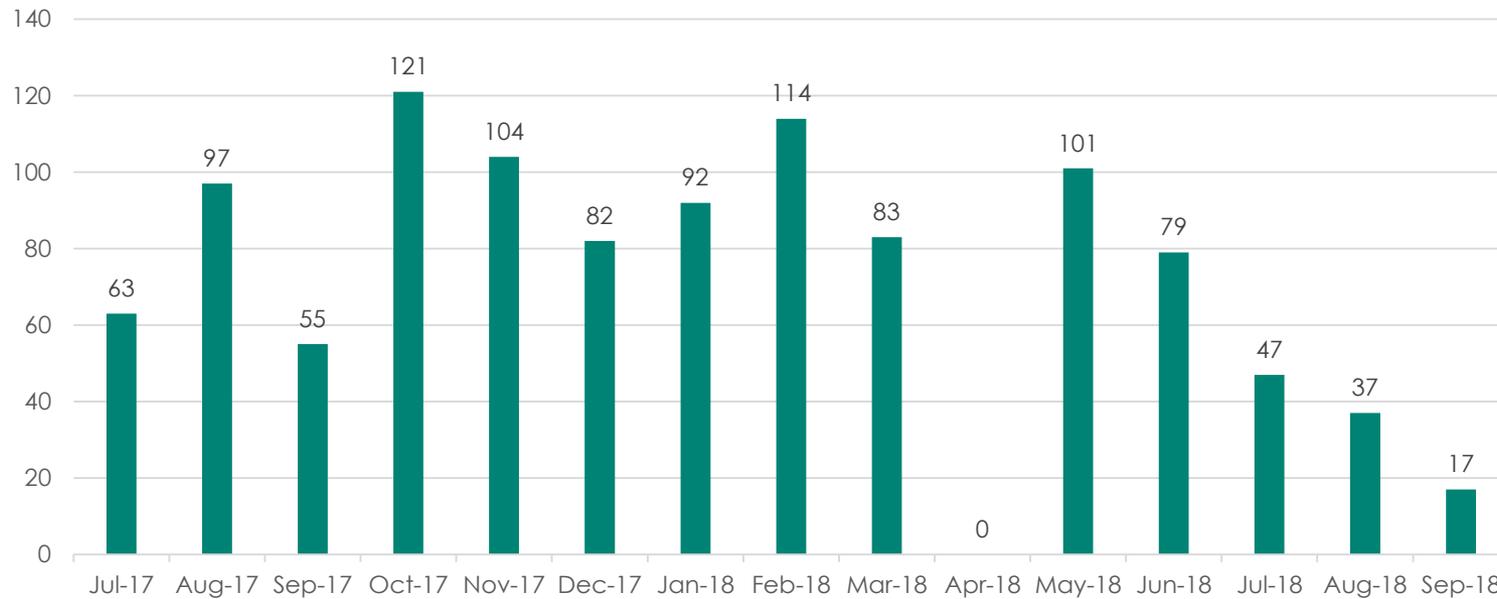
- DWM has called, hand delivered and/or sent via certified mail the required notification, sample results and public information to each of the 20 sites where lead was detected
- DWM is providing re-sampling of these locations
- An action plan summary has been provided to EPD summarizing steps to further investigate the sites that exceeded the Lead and Copper AL
- DWM will continue to monitor results and follow required protocols for notifications



Water Sewer Appeals Board



Completed Water Sewer Appeals Board Work Orders – July 2017 to September 2018



- The gap in April represents a loss of data due to cyber incident
- DWM referred nearly 1,100 cases to the Appeals Board July-Sept, 45% of those cases resulted in a bill adjustment
- Customers didn't appear for nearly 25% of cases
- Interviews have been completed to fill the new Board Liaison position
- DWM Staff member temporarily assigned to Liaison position until permanent hire is on-boarded
- Scheduling of hearings has resumed; hearings will start the third week in November

Resolution	Count	Pct.
Appeals Board Adjustment	489	45%
Failure to Appear	262	24%
Appeals Board Denial	178	16%
Satisfied W/O Hearing	148	14%
Undetermined	12	1%
Total	1,089	100%

Financings



Issue	Par Amount	Purpose	Status
Series 2018A	\$106,795,000	Refund Series 2008 Bonds saving \$2M in annual debt service	Closed – June
Series 2018B	\$289,730,000	Refund Commercial Paper and Secure Funds for Priority Projects	Closed – July
Series 2018C	\$328,000,000	Refund Series 2013 Bonds Projected savings of \$3M in annual debt service	Closed – Oct.
2018 EIB (Environmental Impact Bonds)	\$13,500,000	Secure Innovative Funding for Green Infrastructure Projects	Closing – Jan.

- Series 2018C financing was over subscribed eight times
- The transactions have a **projected annual savings of approximately \$5M**

Projected Senior/Subordinated Debt Service Coverage



Projected Senior and Subordinate Debt Coverage, FY 2019–2024¹

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Water & Wastewater Service Revenue	\$ 456.1	\$ 460.8	\$ 463.6	\$ 463.4	\$ 474.6	\$ 484.3
Other Service Revenue	16.9	17.0	17.4	17.5	17.5	17.6
MOST Revenue	125.0	125.0	125.0	125.0	125.0	125.0
Other Revenue	4.0	4.0	4.0	4.0	4.0	4.0
Non-Service Revenue	25.7	25.6	11.4	12.5	25.0	25.3
- IJ Capital Contributions ²	(15.4)	(15.4)	(5.1)	(12.5)	(25.0)	(25.3)
- Repayment from General Fund ²	(10.3)	(10.2)	(6.3)	-	-	-
- Fertilizer Sales Revenues ²	-	-	(0.4)	(0.4)	(0.4)	(0.4)
Total Operating Revenues	\$ 602.0	\$ 606.7	\$ 609.6	\$ 609.5	\$ 620.7	\$ 630.5
Operating Expenses	218.9	218.6	217.8	221.0	222.5	224.1
+ Direct and Indirect Charges	41.0	42.3	43.5	44.8	46.2	47.6
+ OPEB	16.4	17.2	18.1	19.0	19.9	20.9
- Capitalized Expense	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)
Total Operating Expense	\$ 256.3	\$ 258.1	\$ 259.4	\$ 264.8	\$ 268.6	\$ 272.6
Net Revenue Available for Debt Service	\$ 345.7	\$ 348.7	\$ 350.1	\$ 344.6	\$ 352.1	\$ 357.9
Existing Senior Debt Service ³	206.8	215.0	214.4	214.4	214.7	211.3
Series 2021 Debt Service ⁴	-	-	-	4.9	7.6	7.6
Total Senior Debt Service	\$ 206.8	\$ 215.0	\$ 214.4	\$ 219.3	\$ 222.3	\$ 218.9
Projected Senior Lien Coverage Ratio⁵	1.67	1.62	1.63	1.57	1.58	1.63
Revenue Available for Subordinate Debt	138.9	133.7	135.7	125.3	129.9	139.0
Total Subordinate Debt⁶	18.5	25.7	37.8	37.4	40.3	43.3
Projected Subordinate Coverage Ratio⁵	7.52	5.19	3.59	3.35	3.21	3.20

1 - Slight calculation discrepancies may exist due to rounding, numbers in millions

2 - Non-Service Revenues are excluded from Operating Revenues in order to establish the projected debt service coverage ratio

3 - Reflects the anticipated debt service of the Series 2018C Bonds; the executed termination of the swap associated with the Series 2013A Bonds; and the refunding of the Series 2013A Bonds

4 - Anticipated debt service associated with \$110.0 million repayment of 2018 Commercial Paper Program obligations in FY 2022

5 - Debt service coverage metrics rounded down to the second significant digit

6 - Includes GEFA interest and principal payments; interest payments on the 2018 Commercial Paper Program; and debt service associated with the FY 2019 issuance of a \$12.5 million Environmental Impact Bond (EIB)



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Administrative Highlights

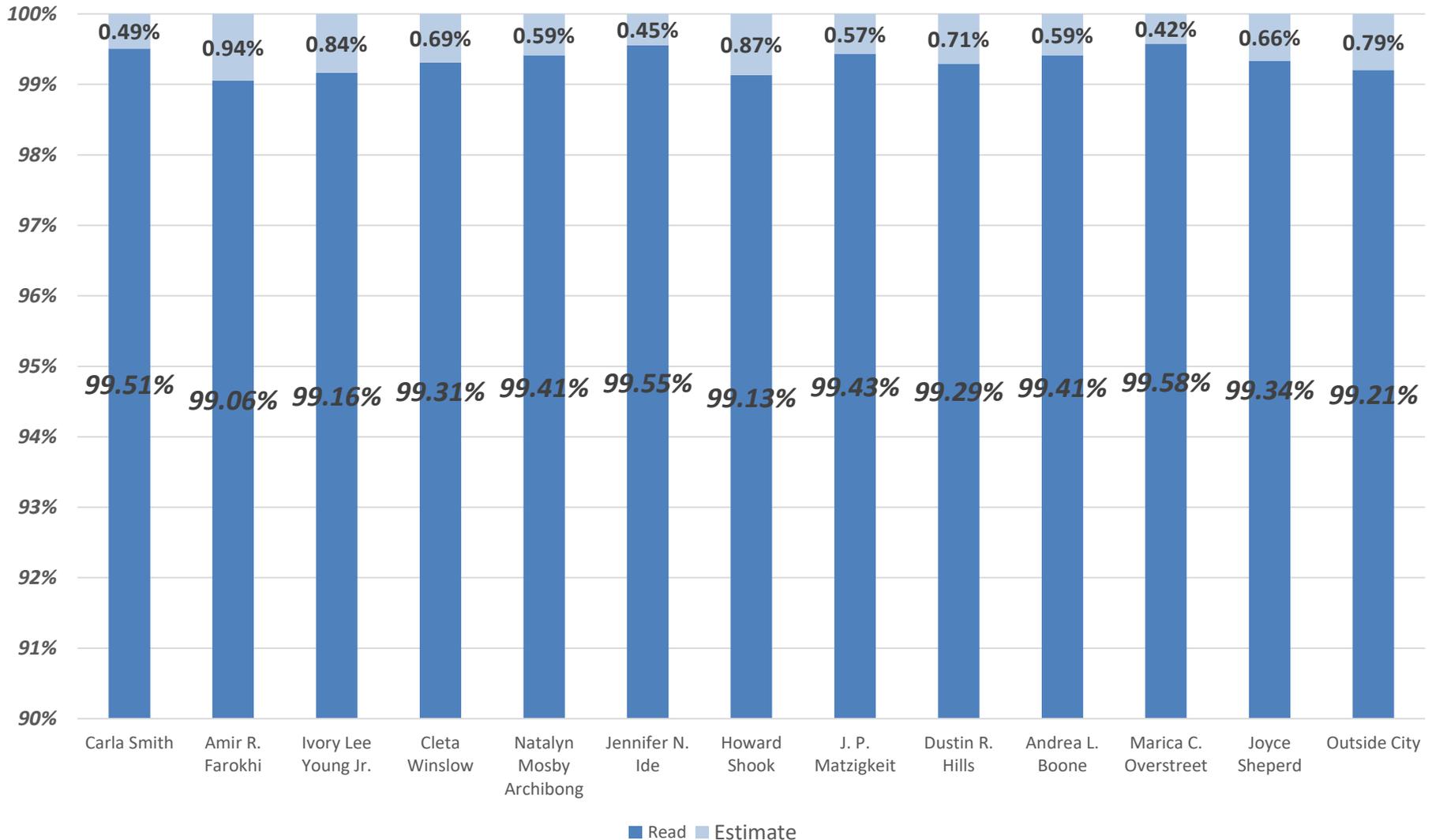


Policy	Description	DWM Impact/Status
<p>Water Resources Development Act (WRDA) House Resolution 8 Bill Shuster (R-PA) Senate Bill 2800 John Barrasso (R-WY)</p>	<ul style="list-style-type: none"> • Authorizes water resource studies and projects and sets Army Corps of Engineers policies for water supply • Provides a two year extension to the EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program 	<ul style="list-style-type: none"> • Passed on October 10; Signed into law on October 23, 2018 • Included language of Senate Water Workforce Bill 2346 (sponsored by Cory Booker (D-NJ)) creating framework for water utility workforce development grant
<p>Low-Income Water Customer Assistance Programs Act of 2018 Senate Bill 3564 Benjamin Cardin (D-MD) Roger Wicker (R-MS)</p>	<ul style="list-style-type: none"> • Establishes 5-year pilot program providing federal assistance to low-income water/wastewater customers • EPA will offer pilot grants to drinking water/wastewater utilities, and will report on the results of the pilots 	<ul style="list-style-type: none"> • Introduced on October 10, 2018 • 1 pilot program for drinking water • 1 pilot program for wastewater • Priority given to utilities with consent decrees
<p>Water Infrastructure Finance and Innovation Act (WIFIA)</p>	<p>Accelerates investment in water infrastructure with long-term, low-cost supplemental loans for regionally/nationally significant projects. Funds a maximum of 49% of eligible project costs.</p>	<ul style="list-style-type: none"> • DWM was invited by EPA to apply for funding for the North Fork Storage Tank Project to reduce flooding in Peachtree Basin • Funds \$55M of total project costs

Large and Small On-Time Meter Reads – October 2018



99.33% of Meters Receive Regular Monthly Reads

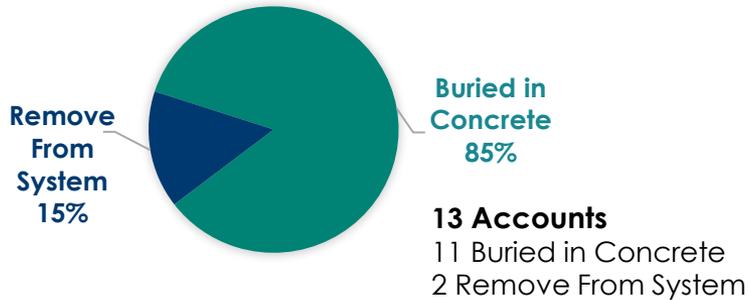


- Less than one percent (.66%) of all large and small meters have been estimated for three months or more
- American Water Works Association's industry standard is 3% of monthly register reads will not be received

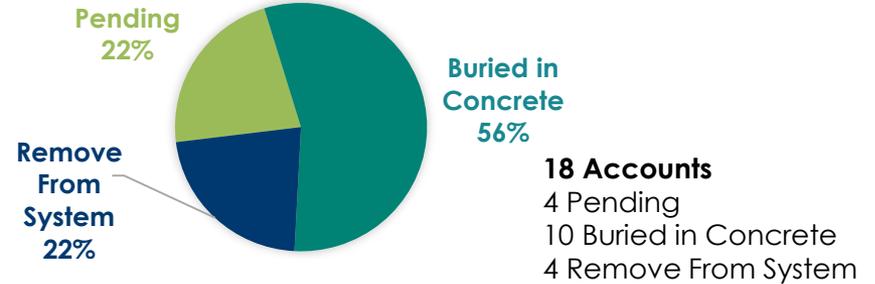
Small Meter Estimated Reads (1" or smaller) - Aging Report



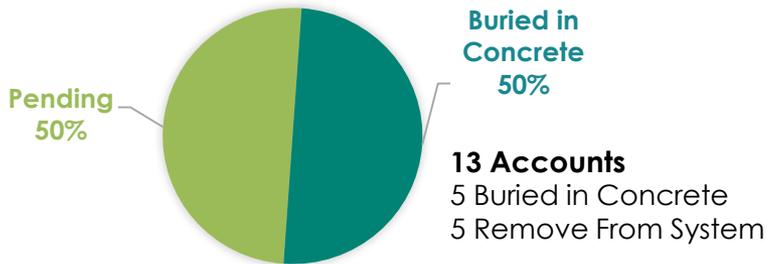
37+ MONTHS



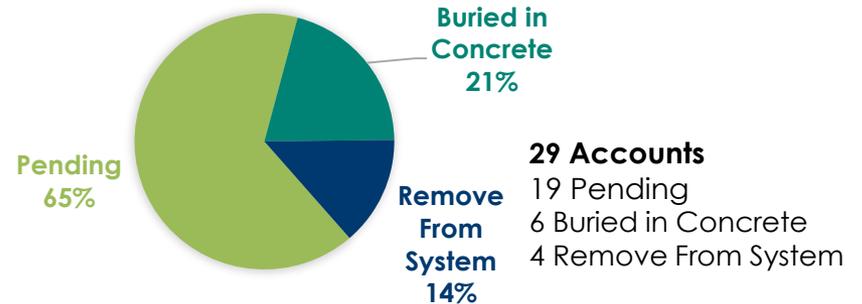
25-36 MONTHS



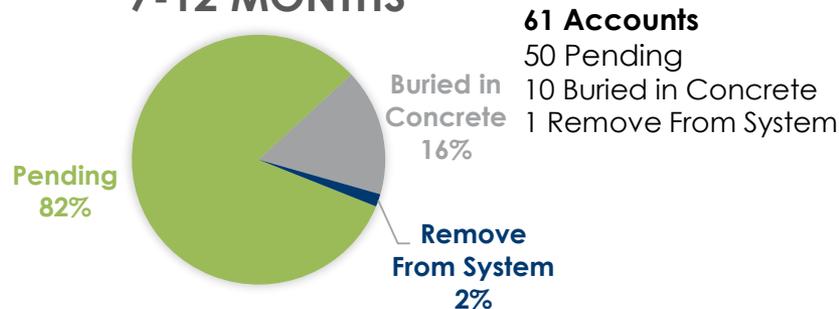
19-24 MONTHS



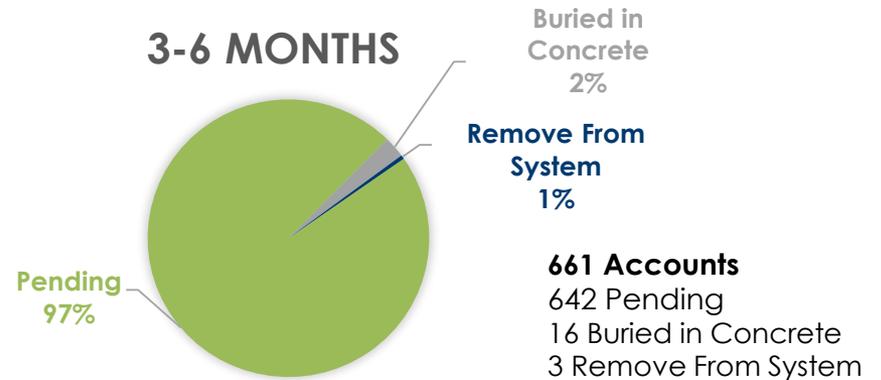
13-18 MONTHS



7-12 MONTHS



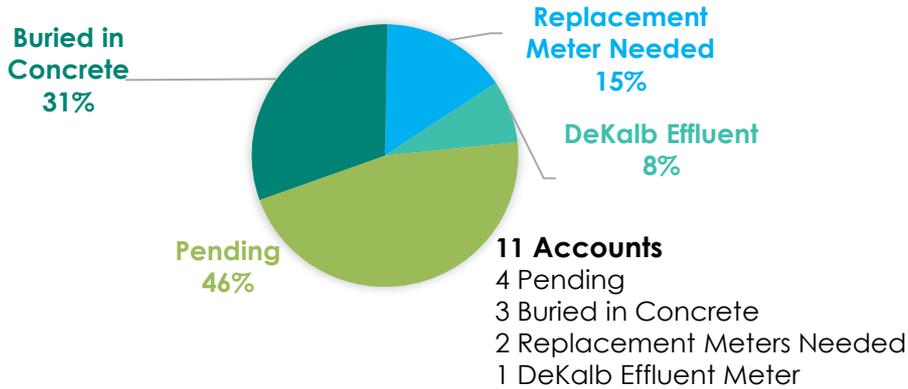
3-6 MONTHS



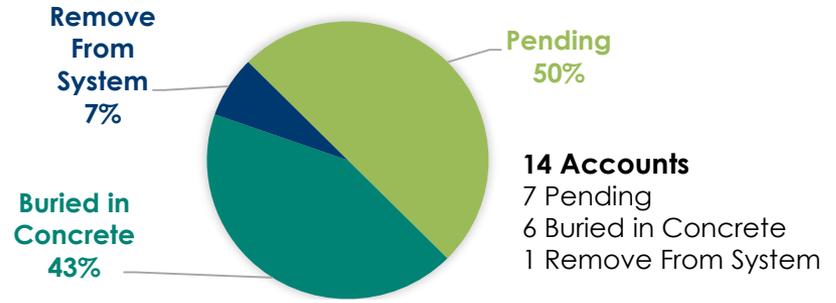
Large Meter Estimated Reads (1-1/2" or larger) - Aging Report



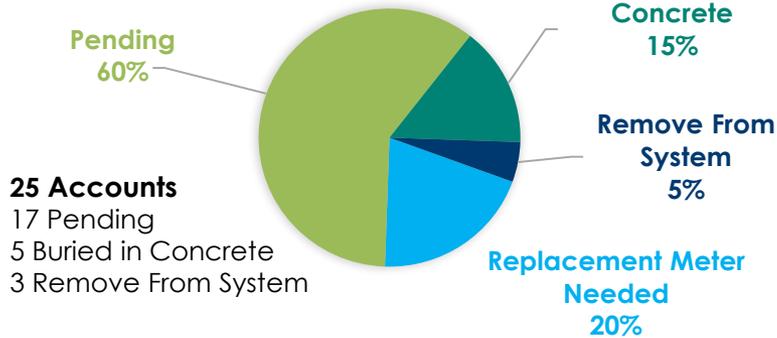
37+ MONTHS



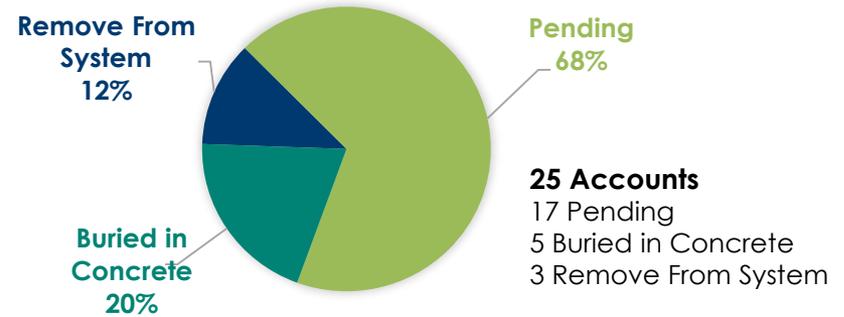
25-36 MONTHS



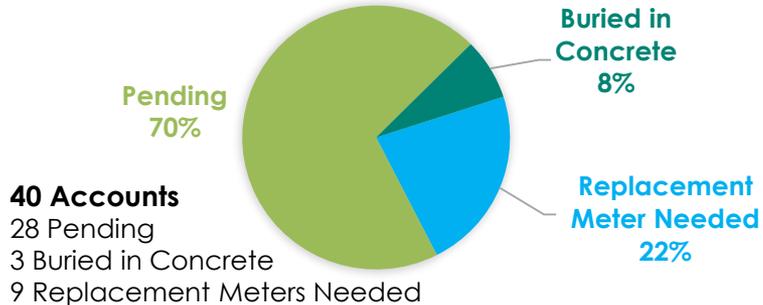
19-24 MONTHS



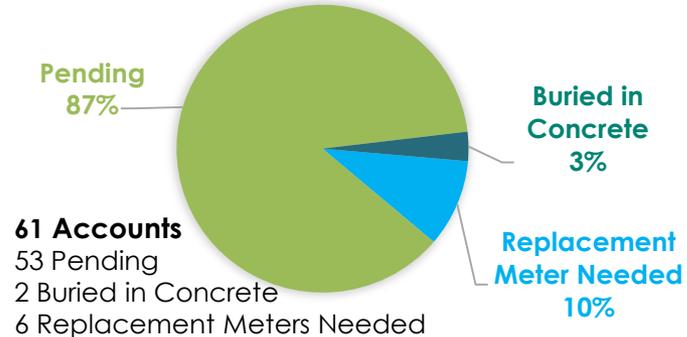
13-18 MONTHS



7-12 MONTHS



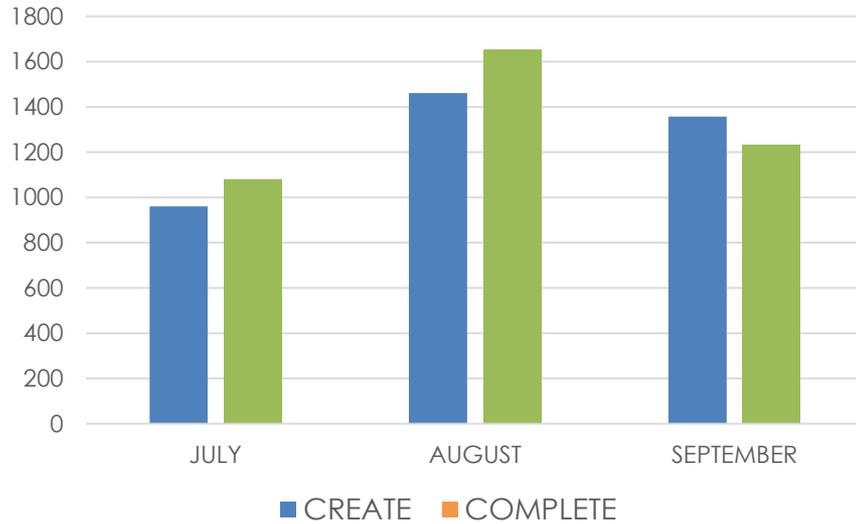
3-6 MONTHS



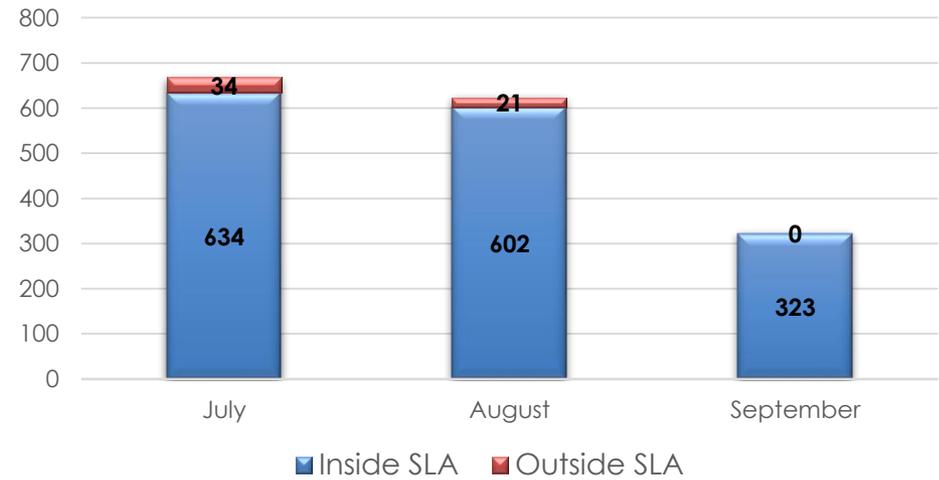
Bill Disputes



Bill Disputes Work Orders



Disputes Completed Inside SLA and Outside SLA



- OCCBS has placed focus on decreasing the number of Disputes out of SLA
- Over 96% of work orders were completed within the 90-day SLA

Customer Assurance & Satisfaction Team (CAST)

July – September 2018



- **Escalations:** Issues that are outside of SLA and are sent to CAST for handling
 - Opened: 207
 - Closed: 116

Escalations are received via ATL311, DWM Commissioner's Office, Office of Constituent Services, City Council, NPU Ambassadors, other DWM Offices and other City Departments

- **Robo Calls:** 1,008

Proactive calls to contact residential customers when there is a 50% or more increase in consumption. Calls resumed in September

- **New Service:** 5,519 **Disconnect Service:** 2,889
Requests from Walk-in Centers, the online portal and fax

- **Proactive Calls:** 603

- Call to Inspection: 439
- Inspection to Completion: 164

Calls made to customers after a reported issue is inspected (Call to Inspection) and completed (Inspection to Completion). Call to Inspections calls are made when a customer contacts DWM regarding OLIO-related concerns (i.e., check for leaks) to let customers know that an inspection was performed and to set repair expectations. Inspection to Completion calls are made when repair work has been completed to ensure customer satisfaction with the service. Calls resumed in September.

CAST, Cont'd



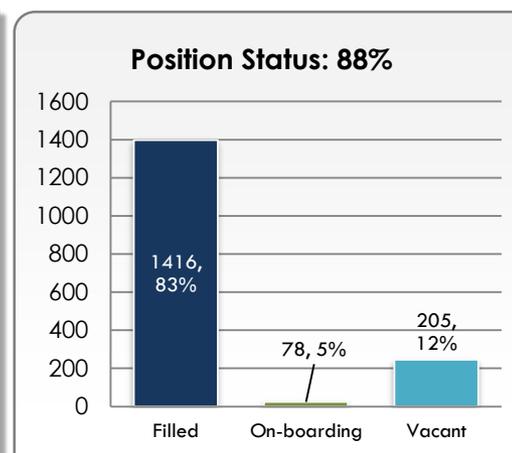
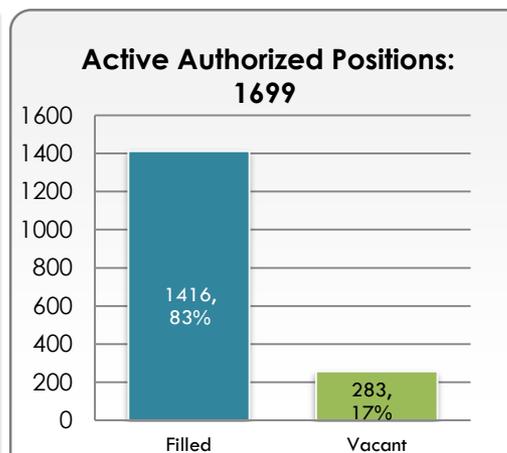
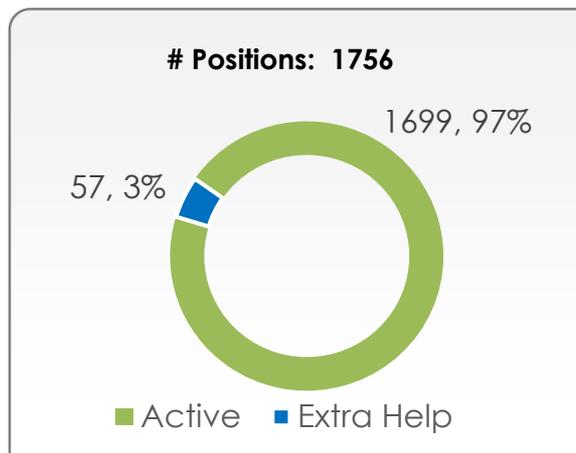
- High/Low Bill Calls: 4,909**

Customers contacting DWM to inquire about a high or low bill, account analysis conducted and customer contacted to thoroughly discuss billing inquiry. All customers from July – September have been contacted and resolution has been reached or is in progress.

Council District	High/Low Bill Calls Received	Closed and Resolved	Customers Awaiting Meter Investigation or Account Review
1	270	172	98
2	194	113	81
3	195	111	84
4	201	133	68
5	253	152	101
6	248	166	82
7	208	125	83
8	329	185	144
9	264	188	76
10	323	204	119
11	304	220	84
12	239	149	90
Outside City	1881	1274	607
Grand Total	4,909	3,192	1,717

- 183 accounts had one time spikes in consumption
- 107 accounts had increased consumption caused by a register change
- 58 accounts had a work order for a leak repair on the City's side

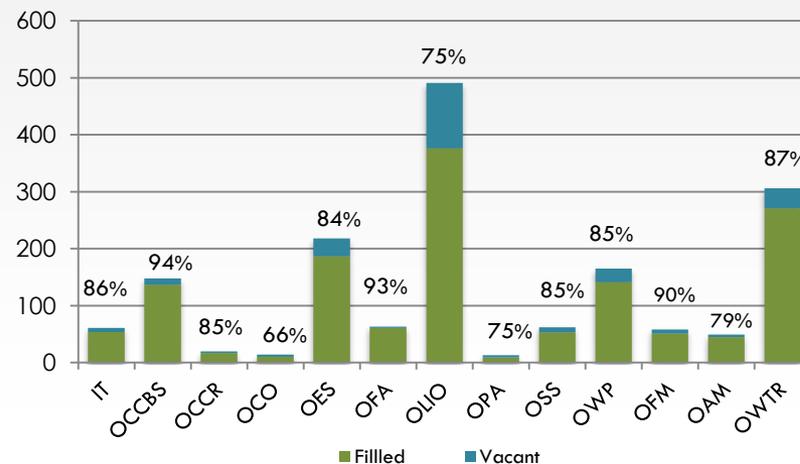
Positions: Filled & Vacancy Report



Notes

- 88% of positions filled w/on-boarding (candidate identified/selected)
 - 20 classifications posted
 - Interns are not included in this report
- Recruitment Improvements:
- Strengthened recruiting team, processes and marketing materials
 - Dedicated a resource to source candidates
 - 1,000 letters/800 emails to GA certified operators in Distribution, Collections and Treatment
 - Established partnerships w/APS, GA DOL, ATL Tech College, other workforce development entities
 - Provided interviewing guides to Department staff

Filled/Vacancy by Office % = Filled by Office



Key for Offices: IT=DWM Info Mgmt; OCCBS=Customer Care/Billing Servs; OCCR=Communications/Community Relations; OCO= Commissioner's Office; OES=Engineering Servs; OFA=Financial Admin.; OLIO=Linear Infrastructure Operations; OPA=Performance /Accountability; OSS=Safety/Security/Emergency Mgmt; OWP=Watershed Protection; OFM=Facilities Mgmt; OAM=Asset Accountability Mgmt; OWTR=Water Treatment/Reclamation



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Financial Highlights

Environmental Impact Bond (EIB) for Green Infrastructure in Proctor Creek



Authorized Budget (6 Projects): \$13.5 M

Anticipated Water and Wastewater System Subordinate Lien Revenue Bonds, Series 2018D Closing: January 31, 2019

Project Status: 30% Design, Construction to begin in 2019

Overview:

- Announced in March 2018: DWM awarded opportunity to pioneer first publicly offered EIBs targeting impact-investors
- 100 Resilient Cities partnership
- The Upper Proctor Creek watershed project area consists of:
 - Combined and separate sewer areas
 - A mix of ecosystem restoration and urban stormwater best management practices (BMPs) to improve the health and resilience of Westside communities
- Multiple environmental and social benefits
- Pay-for-Success Model
- Expected to provide a total of 6.4 million gallons of stormwater storage capacity, resulting in 56 MG reduction in annual stormwater runoff





Green Infrastructure Projects:

- English Avenue Neighborhood Green Streets: Vegetated Stormwater Planter Bump-outs in the ROW
- Constructed Wetlands in the Combined Sewer Area
- Bioretention practices, such as rain gardens, in two City Parks
- Stream and floodplain restoration along two reaches of Proctor Creek



Primary Drivers:

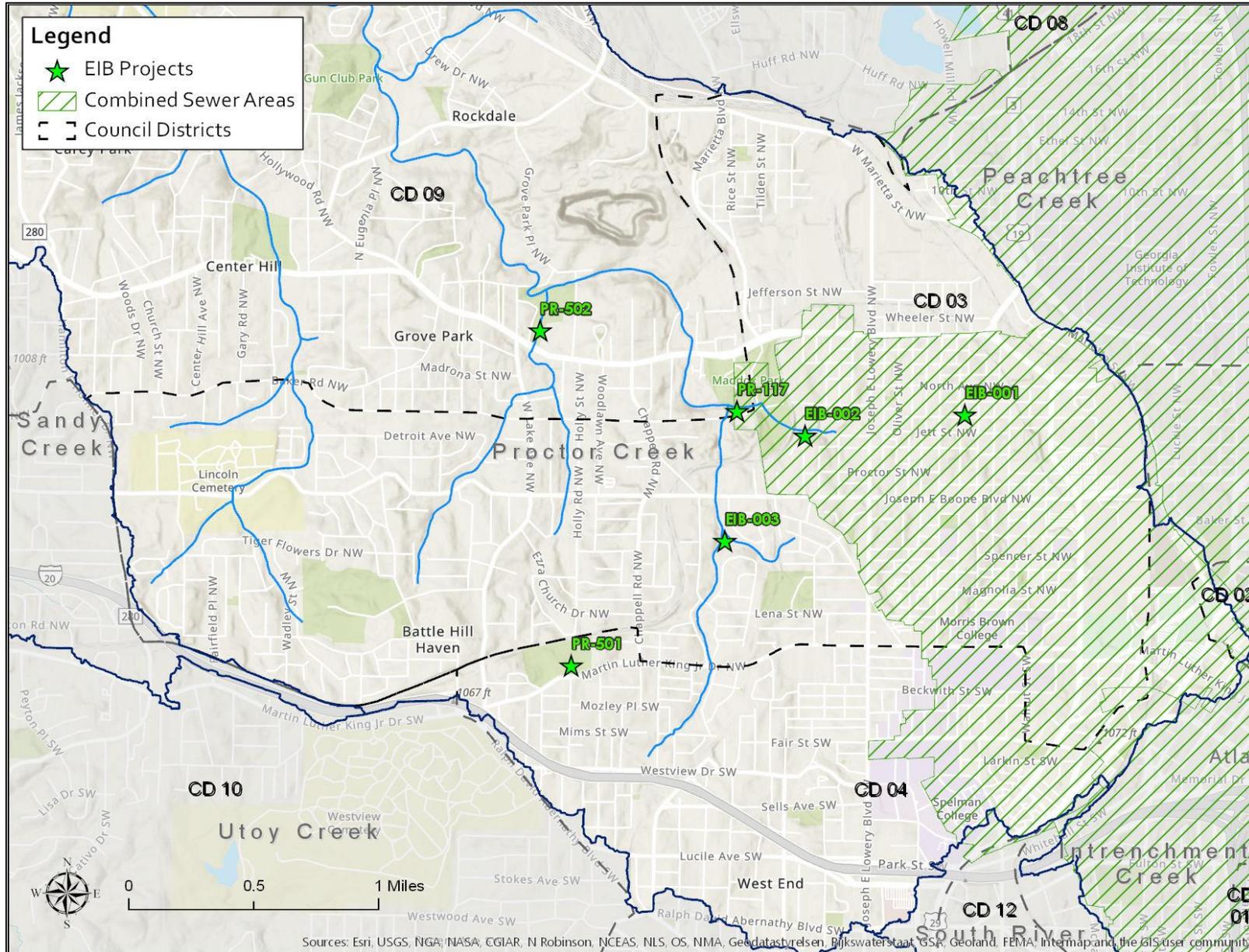
- *Water Quality Improvement*
- *Flood Mitigation*

Co-Benefits:

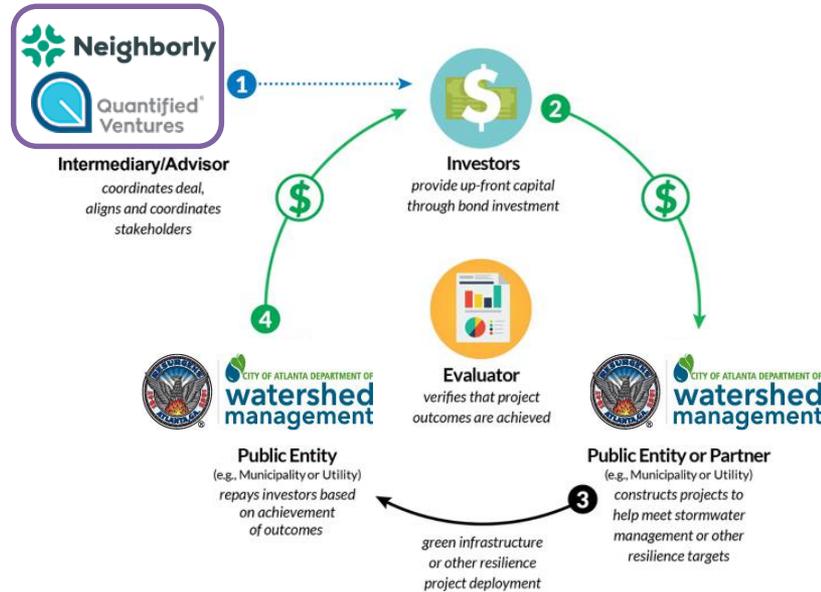
- *Environmental:* Air quality improvement, reduced urban heat island, improved biodiversity and wildlife habitat
- *Social:* Public health, recreation and education, access to green space, job creation, equity and environmental justice
- *Economic:*
 - To community: Employment, increased property values, avoided flood damages
 - To DWM: Flood storage, sediment removal, capacity relief, protection of downstream sewer infrastructure



Six EIP Project Locations – Districts 3, 4 and 9



Current Project Highlights

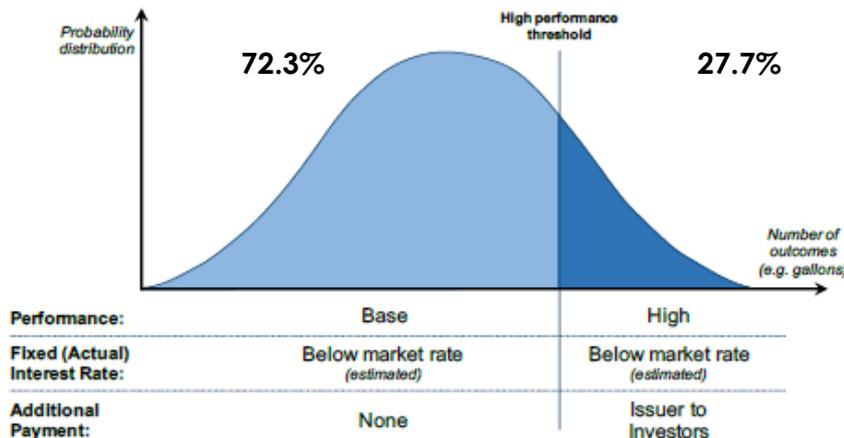


Advantages

- Access to new source of investment capital: unique, community-oriented investors
 - Focused on environmental impact
- Shared success model = Alignment of incentives
- Opportunity to implement transformative stormwater management and watershed improvement projects at scale
- Innovation and leadership
- Workforce development goals

Pay-for-Success Model and Financing Structure

- Two-tiered Performance Structure: Base Case and High Performance
- Below market interest rate and risk transfer in base case
- The volume of stormwater captured by the GI projects is the outcome metric for determining project performance
- If projects exceed performance threshold (>6,520,000 gallons), investors receive a one-time supplemental performance payment, i.e., share of operational savings



EIB Proposed Performance Pricing Terms



Transaction Size	\$13,500,000
Term	10 years
Interest Rate	3.36% (vs. 3.70% market rate)*
Performance Payment	\$1,000,000**
Year Performance Payment Made (Completion of Evaluation)	6 (November 1, 2024), if High Performance Outcome is achieved
Performance Threshold (% Probability)	27.74%
Performance Threshold (Gallons)	6,520,000
Value of Benefits at Threshold	\$21,674, 098 or greater

Expected Tangible Benefits of Projects (as Designed)	
Flood mitigation	\$2,426,199
Water quality improvement	\$13,265,246
Employment	\$3,137,805
Air quality improvement	\$147,852
Reduced urban heat island	\$69,710
TOTAL	\$19,046,812

*Estimated Market Rate for January closing

**Expected cost of Performance Payment (amount x probability) offset by interest savings

Fiscal Year 2019 – Key Figures



Historical Operational Results

	FY19 YTD*	FY18	FY17
Operating Revenues	\$627.7	\$627.7	\$621.9
Water/Sewer	451.4	451.4	462.6
MOST	144.5	144.5	131.7
Other	19.7	19.7	27.6
Operation and Maintenance Expenses	\$239.4	\$239.4	\$224.9
Debt Service	\$202.6	\$202.6	\$203.2
Coverage Ratio	1.92	1.92	1.93
Contributions to Capital Budget	\$132.0	\$135.8	\$129.2
Capital Budget	\$168.0	\$121.8	\$324.6

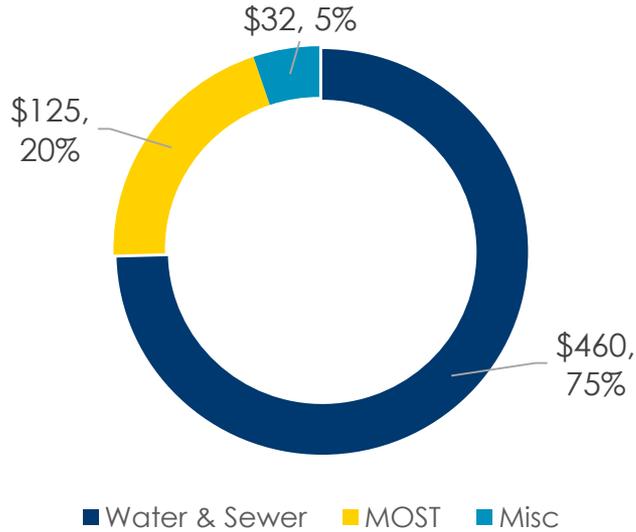


*As of 9/30/18

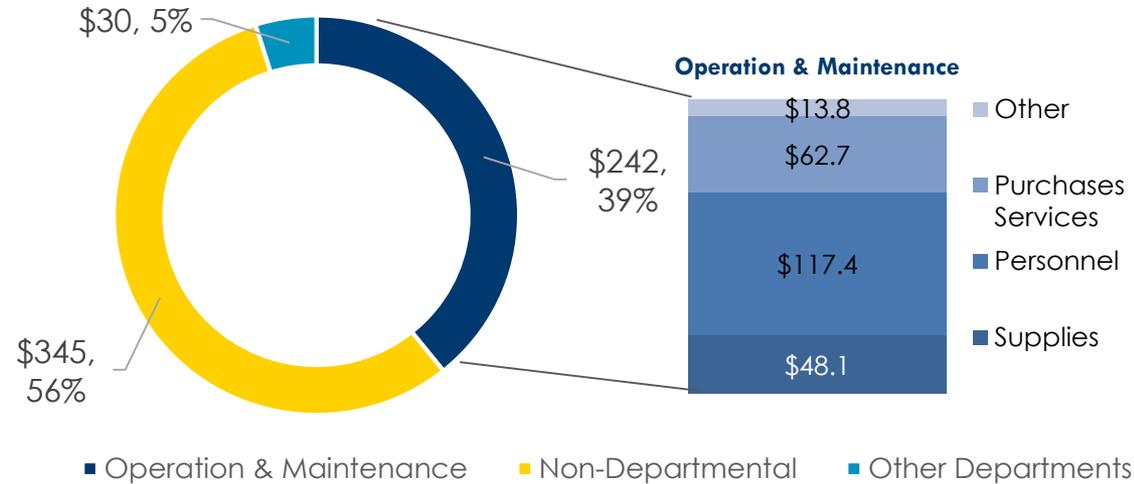


FY 2019 Budget

Revenue Sources (\$617M)



Appropriations (\$617M)



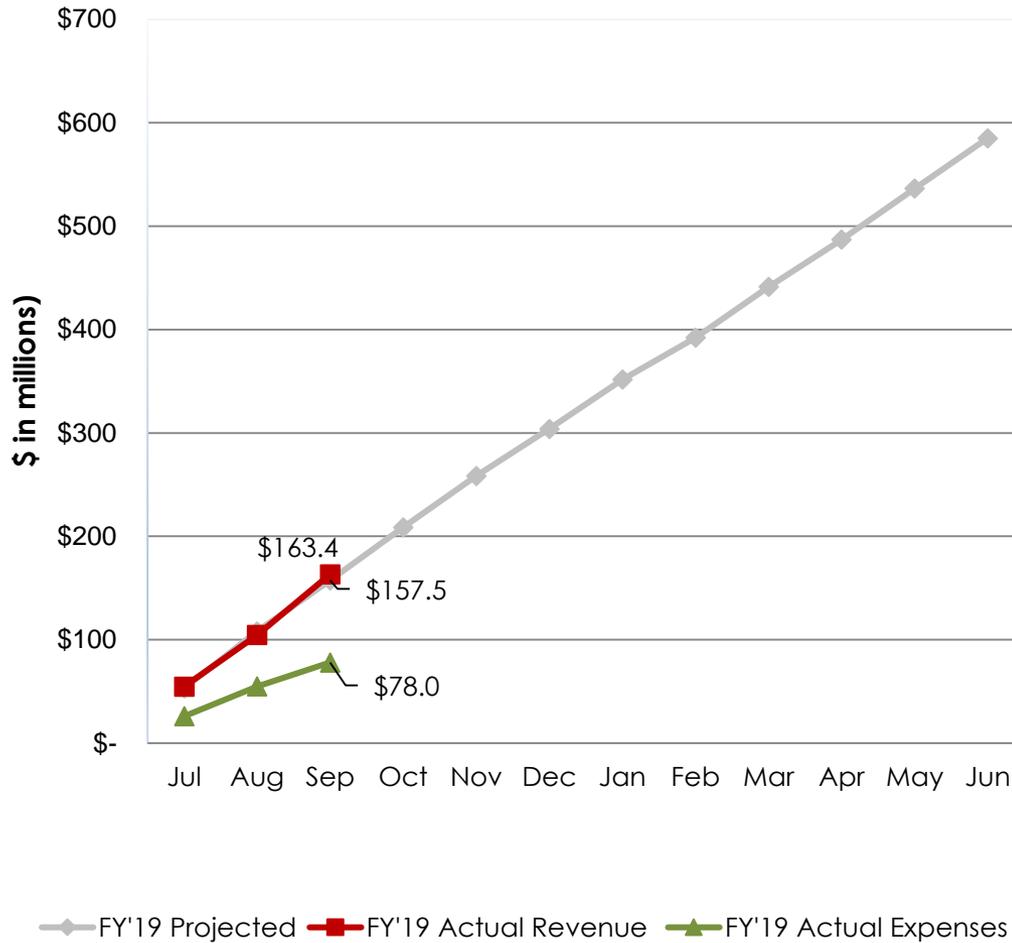
• Miscellaneous: IJ Revenue, tap meter sales, stormwater charges, interest earnings, administrative services

• Non-Departmental (Debt Service, indirect costs, PILOT/franchise fees, OPEB, GEFA payments/reserve, bad debt reserve, fund-wide reserve)

	OPERATION & MAINTENANCE (O&M)	
	Personnel	Non-Personnel
FY19 Budget	\$117.4	\$124.3
Through 1st QTR of FY19	\$28.9	\$17.4
% Spent	24.6%	14.0%

July 1, 2018 through September 30, 2018

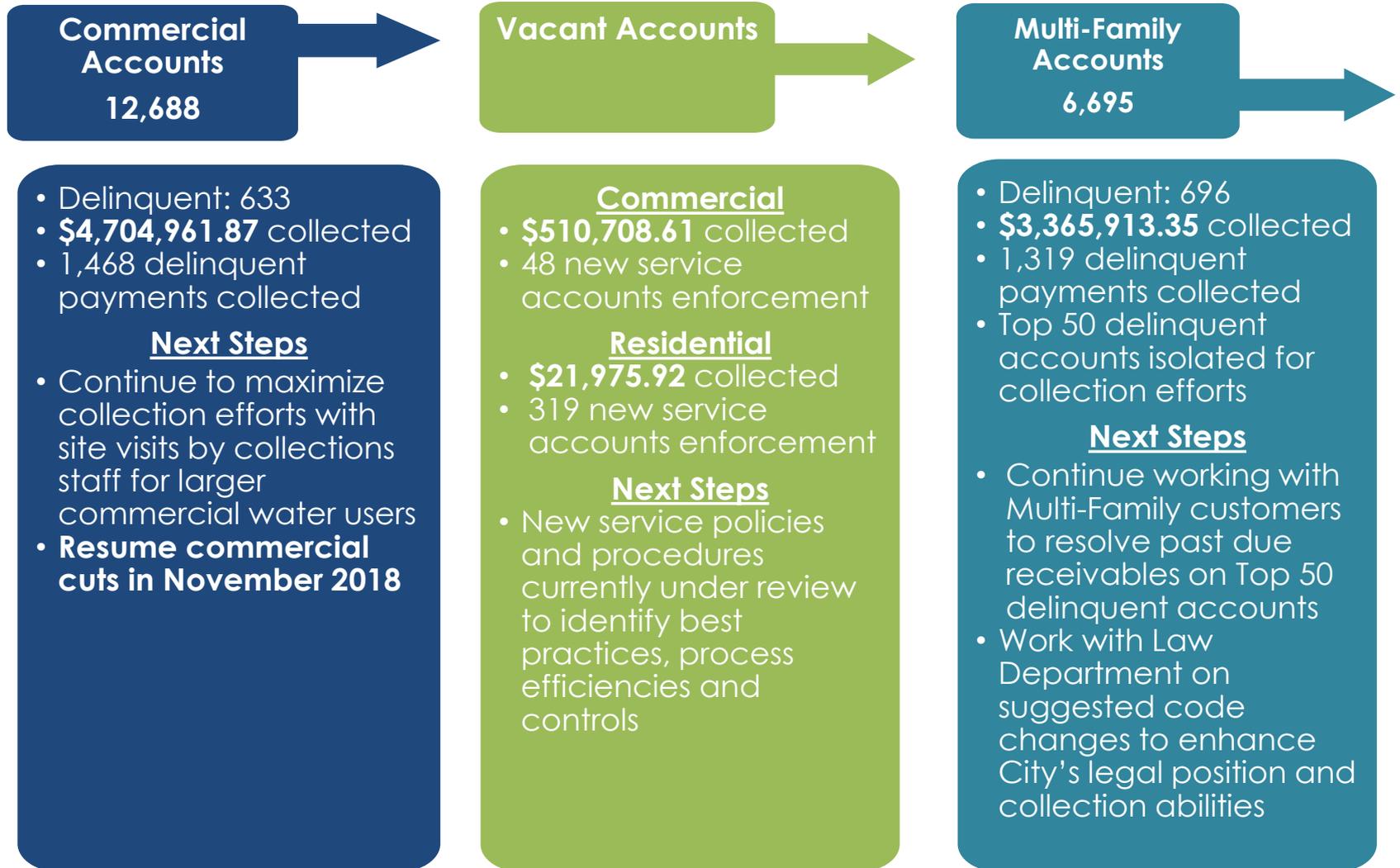
FY19 Operational Results



Fiscal Year 2019			
Month	Revenues (M)*		Expenses
	Projected	Actual	Actual
Jul '18	\$53.1	\$54.8	\$26.2
Aug '18	\$108.2	\$104.7	\$54.9
Sep '18	\$157.5	\$163.4	\$78.0
Oct '18	\$208.8		
Nov '18	\$258.4		
Dec '18	\$304.0		
Jan '19	\$351.6		
Feb '19	\$392.1		
Mar '19	\$441.2		
Apr '19	\$487.0		
May '19	\$536.3		
Jun '19	\$585.0		

* Does not include other revenues

Collections Efforts



July 1, 2018 through September 30, 2018



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Operational Highlights

CSTAT Performance



Office	SR-WO Type	SLA	% On-Time Jul-18	% On-Time Aug-18	% On-Time Sep-18
OCCBS	Pay Bill/Request Turn On	24 hours within scheduled date	n/a	n/a	n/a
OCCBS	Burst Pipe (Private) - Turn Off Request	1 Business Day	100.0	100.0	100.0
OCCBS	Close Account - Vacant - Turn Off	24 hours within scheduled date	100.0	100.0	100.0
OCCBS	Meter Reset	5 business days	100.0	100.0	100.0
OCCBS	Missing/Damaged DW Meter Lid	2 Business Days	100.0	100.0	100.0
OCCBS	New Account Request - Not Vacant (Move In / Move Out)	24 hours within scheduled date	100.0	100.0	100.0
OCCBS	New Account Request - Vacant	24 hours within scheduled date	100.0	100.0	100.0
OLIO	Possible Sewer Overflow/Spill	8 hours (call to inspection)	97.1	93.5	100.0
OLIO	Low Water Pressure	24 hours (call to inspection)	100.0	89.7	96.1
OLIO	Sewer Odor	8 hours (call to inspection)	90.0	91.7	95.8
OLIO	Water visible in street, sidewalk, etc. / Check for leak or break	8 hours (call to inspection)	88.5	88.5	95.4
OLIO	Hydrant Complaint (Leaky Hydrant, Hydrant Knocked Off / Damaged)	24 hours (call to inspection)	94.1	94.1	94.9
OLIO	Clear Storm Drain/Catch Basin	45 days (inspection to resolution)	n/a	100.0	93.8
OLIO	Possible Sewer Main Back Up / Blockage	8 hours (call to inspection)	90.6	90.0	92.1
OLIO	No Water - Infrastructure Related	24 hours (call to inspection)	95.2	93.1	90.7
OLIO	Possible Sewer Cave In	8 hours (call to inspection)	88.7	90.4	89.5
OLIO	Street Flooding during or after a rain event / Storm Sewer Back Up	8 hours (call to inspection)	91.4	90.9	83.1
OLIO	Missing/Damaged WW Manhole Lid/Cover	24 hours (call to resolution)	67.9	55.3	80.0
OLIO	Water Main Break Repair	2 days (inspection to resolution)	n/a	66.7	80.0
OLIO	Broken Sewer Line Repair	45 days (inspection to resolution)	n/a	75.0	73.2
OLIO	Readjust/Replace Street Plate	24 hours (call to resolution)	91.7	60.7	73.1
OLIO	Hydrant Repair/Replace	20 days (inspection to resolution)	n/a	49.0	60.0
OLIO	Hydrant Leak Repair	10 days (inspection to resolution)	n/a	50.0	34.6
OLIO	Broken Drinking Water Service Line Repair	45 days (inspection to resolution)	n/a	31.2	33.6
OLIO	Valve (or appurtenance) Leak Repair	45 days (inspection to resolution)	n/a	24.6	25.8
OLIO	Meter Leak Repair	7 days (inspection to resolution)	n/a	6.7	16.7
OWP	DW Quality Complaint	36 hours (call to inspection)	n/a	n/a	n/a
OWP	New Facility Grease Trap Inspection	7 bus days (call to resolution)	n/a	n/a	n/a
OWP	Erosion Complaint	7 bus days (call to resolution)	100.0	98.0	100.0
OWP	Erosion Control Pre-Construction Inspection (Commercial)	7 bus days (call to resolution)	100.0	93.8	100.0
OWP	Existing Grease Trap Inspection	10 bus days (call to resolution)	100.0	84.6	100.0
OWP	Illegal Grease Dumping	1 bus day (call to inspection)	100.0	100.0	100.0
OWP	Sewer Overflow/Spill Clean Up	3 bus days (WO Initiation to WO Start Date)	n/a	100.0	95.7
OWP	Erosion Control Final Inspection (Residential)	4 bus days (call to resolution)	79.7	90.8	91.9
OWP	Erosion Control Pre-Construction Inspection (Residential)	4 bus days (call to resolution)	85.5	84.1	91.9
OWP	Erosion Control Final Inspection (Commercial)	4 bus days (call to resolution)	66.7	94.1	88.9
Total DWM Overall SLA Performance			97%	89%	89%

FOR Atlanta Metrics



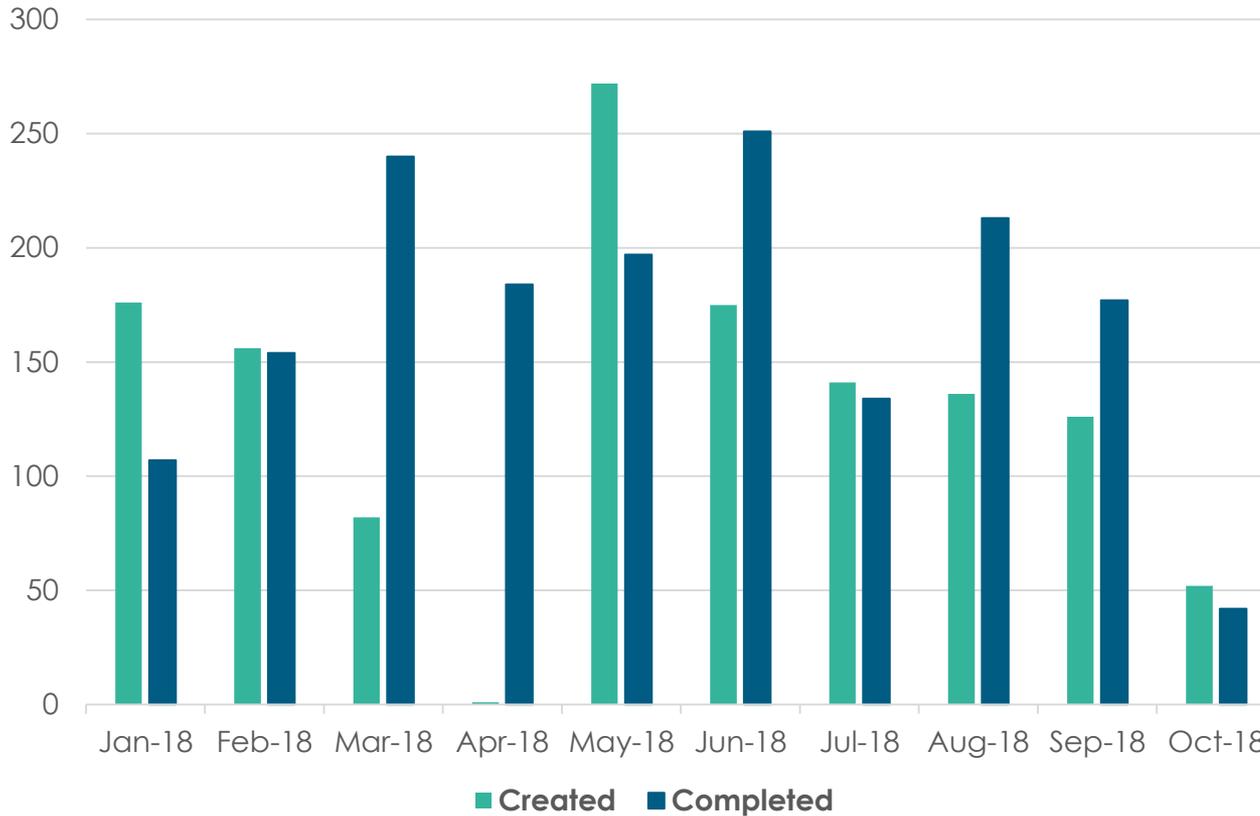
Metric Description	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Call volume per 1,000 accounts	94.56	111.81	135.33	167.75	136.54
Customer Service Complaints per 1,000 accounts	4.2	4.1	8.5	12.5	10.1
Technical Service Complaints per 1,000 accounts	14.6	15.1	16.4	17.5	15.9
Estimated Bills as a percent of Bills Issued	2.28%	3.14%	2.36%	2.57%	2.45%
12-month O&M cost per million gallons of drinking water treated	530.77	540.06	539.77	540.58	546.81
12-month O&M cost per million gallons of wastewater treated	869.62	884.96	872.58	896.92	925.12
12-month Purchased power per million gallons of water treated (drinking water)	2,187	2,190	2,176	2,170	2,173
12-month Purchased power per million gallons of water treated (wastewater)	2,990	2,994	2,977	2,940	2,917
Drinking Water Compliance Rate as a percent of prior 365 days in compliance	100%	100%	100%	100%	100%
Wastewater Treatment Compliance Rate as a percent of prior 365 days in compliance	99%	99%	99%	96%	95%
# of Sewer Spills per 100 miles of sewer pipe (Annual)	7.1	6.7	6.8	6.7	6.4
# of Main Breaks per 100 miles of drinking water pipe (Annual)	15.70	16.02	16.20	16.51	16.80
# of Completed Bill Adjustment work orders	51	73	391	415	181
# of Delinquent Accounts	31,118	31,579	31,245	30,837	29,098
12-month New Leak Work Orders per 100 miles of drinking pipe	80.30	80.09	78.36	77.58	75.67
% of Total Hydrants Functional	99.07%	99.03%	99.33%	99.18%	99.18%

- Call volume and complaints have decreased from August to September

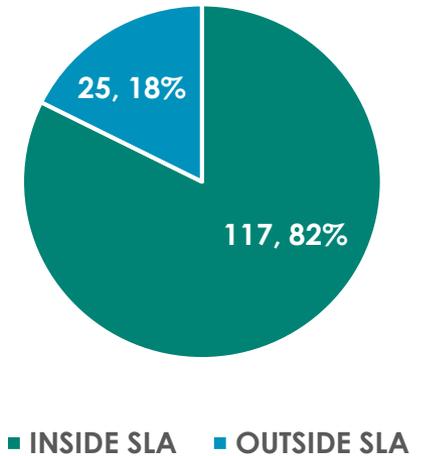
Meter Installations



Created and Completed Meter Installation Work Orders



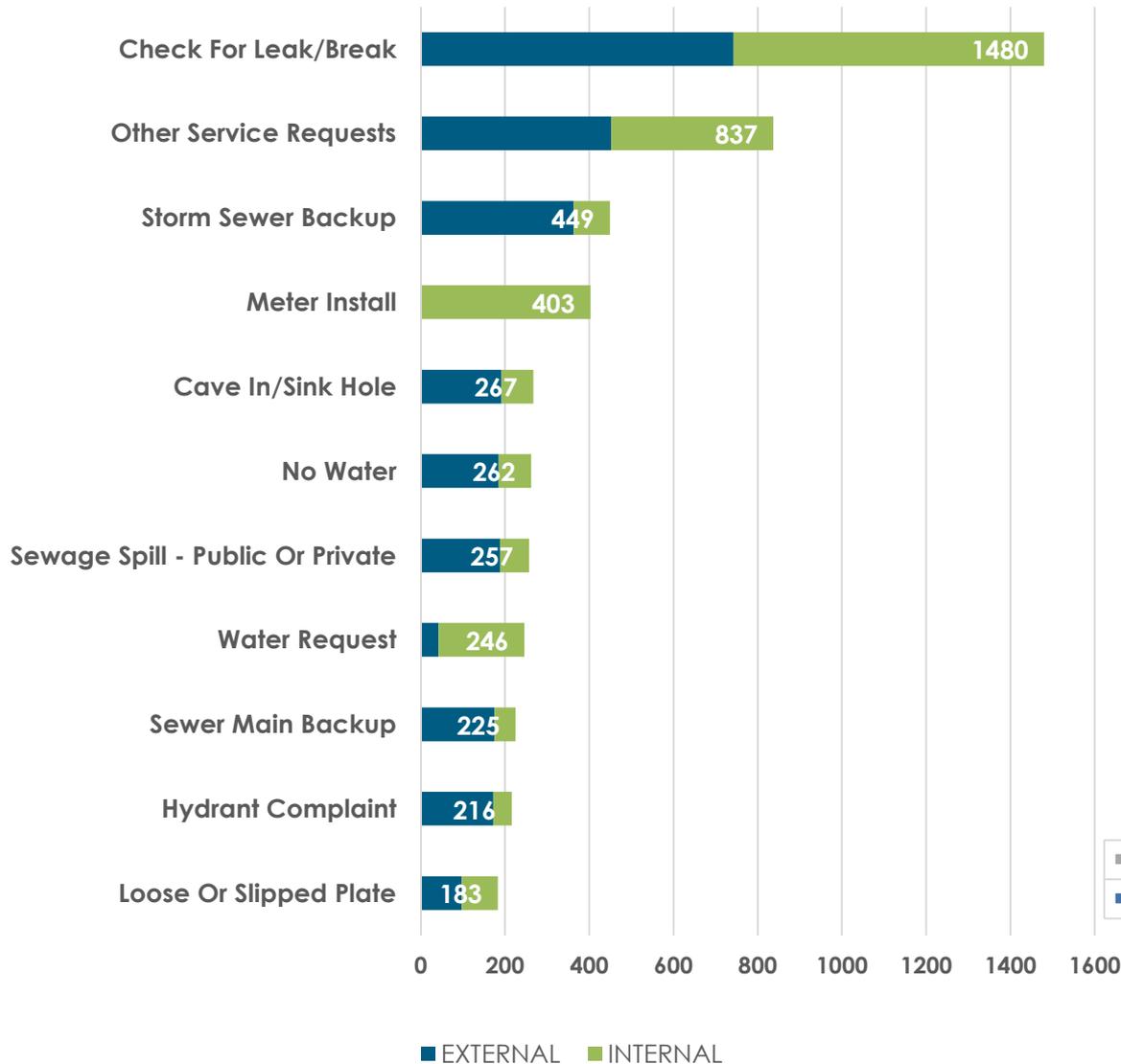
SLA Status for Open Work



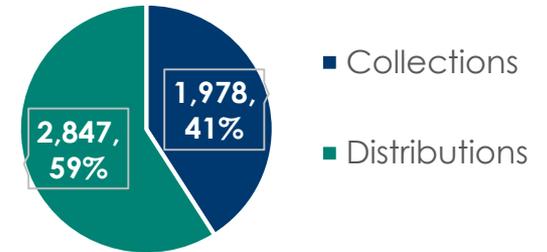
The Department has continued to reduce the number of outstanding meter installations. Currently 82% of meters waiting to be installed are within SLA



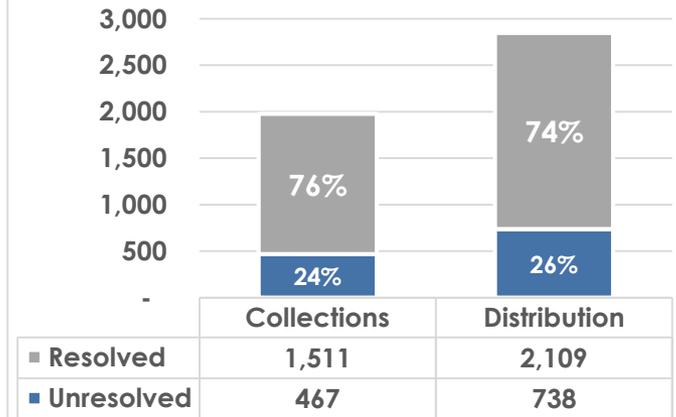
OLIO Recorded Service Requests: July 2018 - Sept 2018



Service Request by Division

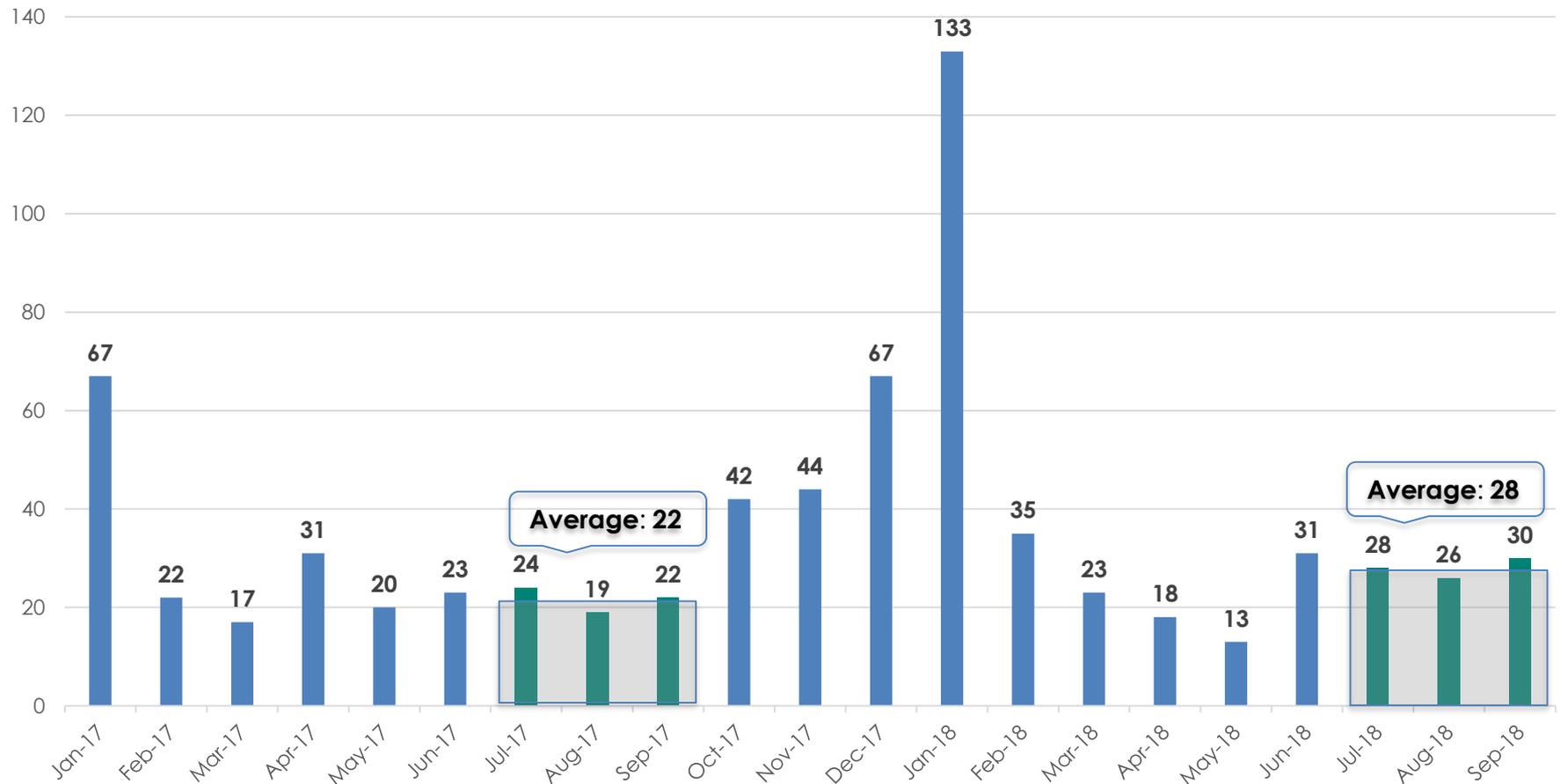


Resolution of Service Requests





Main Breaks by Month

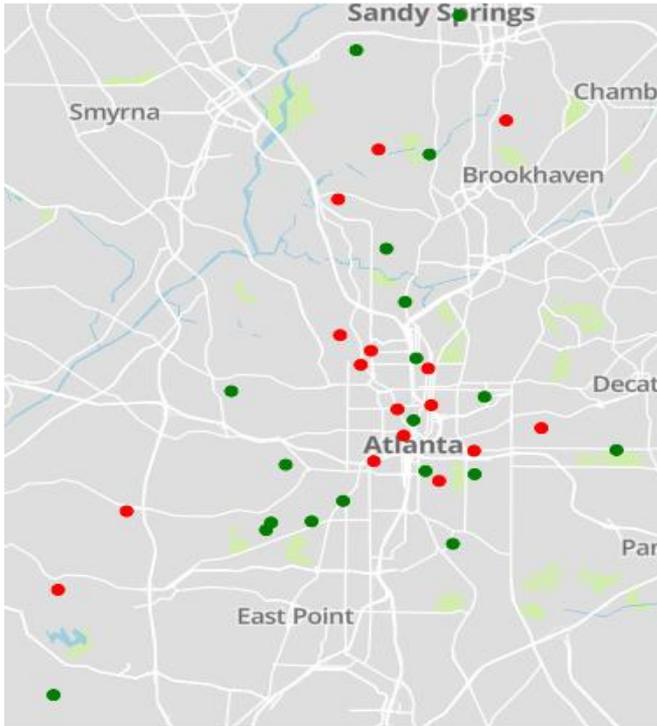


- Main Breaks are 30% higher for the first quarter of fiscal year 2019 as compared to the same time period in fiscal year 2018
- Utility contractors pose a threat to mains and may be reflected in the most recent increase in breaks

Metal Plate Tracker



Number of Plates in Place (Nov 2, 2018): 50
Average Age of Current Plates: 34 Days



District	Plate Count	Average Age	Oldest
01	6	31.25	72
02	8	23.8	53
03	2	49	62
04	8	38.67	77
05	3	37	50
06	2	6	6
07	1	76	76
08	6	44.25	76
09	2	28	43
10	1	24	24
11	5	61	61
12	1	26	26



Red – plate down longer than 30 days
Green – plate down less than 30 days

Improvements

- DWM-marked plates
 - Easily identify DWM plates
- Plate border system
 - Prevents plate shifting
 - Easier installation and removal





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Compliance

Spill Data



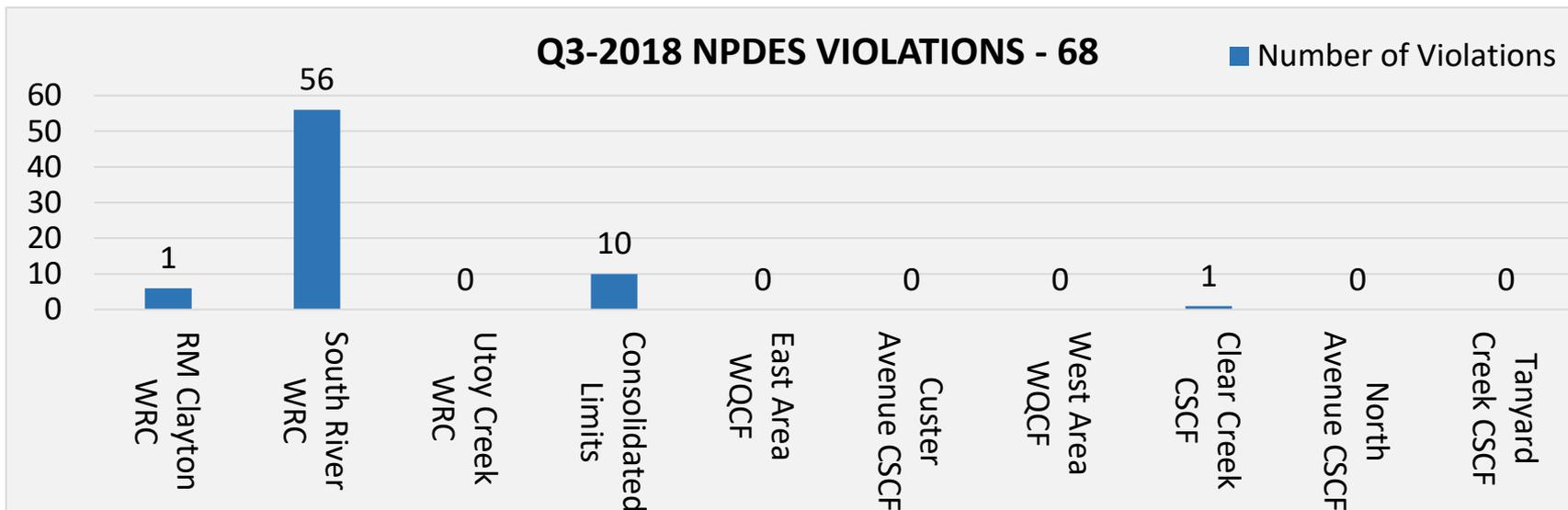
All Public Spills

Quarter*	2015	2016	2017	2018
Q4 (Oct-Dec)	76	32	35	-
Q3 (July –Sept)	39	28	28	45
Q2 (April – June)	47	41	58	42
Q1 (Jan – Mar)	32	88	56	37
Total	194	189	179	124
YTD Major Spills (> 10,000 Gallons)	17	9	15	3
YTD Spills Prevented (Flow Monitoring Alert Program)	14	21	21	33

Major Spills for the Quarter = None

* Reported on Calendar Year Basis

National Pollutant Discharge Elimination System (NPDES) Permit Compliance Status



Facility	Cause	Mitigation
RM Clayton WRC	<u>Operational – 1</u> <ul style="list-style-type: none"> Phosphorous Limits – 1 	RM Clayton has had no additional TSS permit effluent exceedances since the sand filter media was replaced in June 2018.
Consolidated Limits	<u>Operational – 10</u> <ul style="list-style-type: none"> Ammonia - 5 Phosphorous – 5 	
South River WRC	<u>Operational – 56</u> <ul style="list-style-type: none"> Dissolved Oxygen – 26 Phosphorus – 7 Ammonia – 9 TSS – 5 Fecal Coliform - 9 	<p>South River has an accumulation of biosolids in the clarifiers. When these are removed, permit effluent concentrations should return to below permit limits.</p> <p>Team is assessing need for flow paced chemical feed</p>
Clear Creek CSCF	<u>Operational – 1</u> <ul style="list-style-type: none"> Fecal Coliform – 1 	

Reported on Calendar Year Basis



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Capital Improvement Plan Updates



DWM Capital Improvement Plan Program/Summary Report

5-YR Total: \$1.258B; 76 Projects (8 Planning, 10 Design, 10 Procurement, 25 Construction, 12 Complete, 6 Inactive, 5 On-Hold)



\$9.3 M
Water Facilities
Projects: 2



\$344.7 M
Water Supply
Program
Projects: 3



\$126.1 M
Water
Distribution
Projects: 8



\$56.0 M
Green
Infrastructure
Projects: 6



\$355.6 M
Wastewater
Facilities
Projects: 28



\$45.6 M
Upper Proctor
Creek
Projects: 3



\$168.5 M
Wastewater
Collection
Projects: 14



\$31.0 M
Watershed
Protection
Projects: 2

\$121.4 M in GENERAL Capital Improvements (10 Projects)

DWM Capital Improvement Plan Program/Summary Report



Construction (25-Projects)

- Facility Structural and Site Improvements
- GDOT/Intragovernmental Agreements Utility Relocation (Design & Construction)
- Fleet Replacement
- Sanitary Sewer Repairs - Annual Contract
- Field Inspection & Verification Services (OLIO Support)
- Peachtree Creek Trunk Sewer Stabilization
- SG4 Pipe Rehabilitation
- RM Clayton WRC - Instrumentation & Controls Reliability Restoration
- Clear Creek Combined Sewer Control Facility (Bid Package 1, Chemical System Improvements and Flow Monitoring) Construction (FC-8556)
- Large Diameter Water System Rehabilitation & Replacement
- Large Meter - Testing Replacement & Installation
- Annual Contract for Testing & Analysis of Large Water Meters (FC-5499)
- Small Meters - Testing, Replacement & Installation
- Water Supply Program - Quarry/Chattahoochee
- Hemphill Reservoir Embankment #1
- Upper Proctor Creek- Boone Boulevard Green Infrastructure
- SG3 Contract B Small Diameter Rehabilitation
- SG3 Contract C Small Diameter Rehabilitation
- Hartsfield Jackson Manifold Improvements
- Linear Asset Maintenance and Management Support
- RM Clayton Nutrient Recovery
- Clear Creek West Sewer Improvements - Civic Center Vault
- Upper Proctor Creek Sewer Capacity Relief - Rodney Cook Sr Park
- Utoy Creek WRC - Aeration Tanks/Slide Gates
- Small Diameter Distribution System Rehabilitation & Replacement (FC-7791)

Procurement (10-Projects)

- Geotechnical Testing & Investigation
- SG4 Advanced Sewer Capacity Relief - Collier Road Outfall
- SG3 Contract D Small Diameter Rehabilitation
- Intrenchment Creek WRC Decommissioning/South River WRC Primary Clarifiers Replacement
- West Area Water Quality Control Facility Improvements (BP3) Construction
- RM Clayton Anaerobic Digesters Improvements
- Green Infrastructure Design Challenge
- Peyton Center
- Plant Capital Maintenance - Small Capital

Inactive (6-Projects)

- Asphaltic Concrete Pavement Milling & Resurfacing
- Hemphill/Chattahoochee WTP - Instrumentation & Controls System
- Green Infrastructure Maintenance
- Utoy Creek WRC Improvements-Group 1
- Raising Valve and Manhole Covers
- Distribution System Appurtenances

Planning (8-Projects)

- Program Management
- Flint River Sewage Pump Station Replacement
- Small Business Development Program T.O. No. 3
- Bolton Road Philip- Lee Pump Station Rehabilitation
- Pump Stations Improvement: Phillip Lee, Rebel Forest, Woodward Way 1 and 2, Cascade, Niskey Lake #1, Highlands, SR Industrial, Rivermeade, Bell South, Paul Ave. and Hanover West
- Water Main Assessment and Modeling Support
- Asset Management Implementation & Planning
- Master Planning and Hydraulic Modeling Support – HJIA

Design (10-Projects)

- Intrenchment Creek Viaduct Rehabilitation Testing & Investigation
- West Area Water Quality Control Facility - Outfall Repair
- Chattahoochee WTP Compliance Improvements
- Clear Creek West Green Infrastructure Initiative
- South Atlanta Green Infrastructure Initiative (SAGII) - Capacity Relief Ponds
- Stormwater Design, Maintenance and Construction Projects (MOST-funded projects)
- SG3 Capacity Relief Projects - Ashby-Jett, Lower Proctor Trunk, Terrell Creek Trunk, Niles Ave. Sewer Improvements
- Downtown Water Storage Tank & Pump Station & Upgrades at Hemphill Pump Station
- Hemphill WTP Compliance Improvements
- Combined Sewer System Repair & Rehabilitation

Complete (12-Projects)

- Nancy Creek Tunnel Shafts Odor Control
- RM Clayton Thickener Waste Activated Sludge Centrifuge
- RM Clayton Belt Filter Presses
- RM Clayton Emergency Dewatering and Hauling
- RM Clayton WRC - Headworks
- South River WRC Filter Refurbishment
- Randall Hall Sewer Improvements
- Water Quality Control Facilities Improvements
- RM Clayton WRC Sand Filter Media Change out & Refurbishment
- Southeast Atlanta Green Infrastructure Initiative (SAGII) - Permeable Pavers
- RM Clayton Supplemental Turblex Blower System
- Emergency Sewer Repairs

On-hold (5-Projects)

- RM Clayton Plant Entrance
- Peachtree Creek - South Fork Green Infrastructure - Cheshire Bridge Road
- Upper Proctor Creek Water Quality Facility
- South River WRC Various Projects Group 1
- Custer Avenue Water Quality Control Facility - Additional Screens

Current Project Highlights



Quarry Pump Stations



Quarry Flow Shaft Raise Bore Drilling



Water Supply Program

Authorized Budget: \$342M

Economic Impact: 5,301 jobs

Highlights: Securing Atlanta's water future. Increasing water supply from 3 days to 30 days. Protecting \$100M in daily economic activity.

Updates

- Quarry and Hemphill Pump Stations (PS) – Completion by June 30, 2019
- Conveyance tunnel: 10' dia.; 23,942 feet excavation completed by Driller Mike on October 4, 2018
- Drill and blast tunnel from Chattahoochee construction shaft to the proposed River Intake PS shaft – 400 feet of 2,000 feet completed
- 2 Raised Bore flow shafts at Quarry – Bottom concrete liner completed in September 2018
- 90 MGD Chattahoochee PS design – Procurement documents for construction services began development in September 2018

Current Project Highlights



Sewer Group Three (SG3) Rehabilitation Contract B

Cost: \$17.9M

Economic Impact: 277 jobs

Highlights: Rehabilitate small diameter sanitary sewers identified under the Sewer System Evaluation Survey (SSES), required by the FACD. Sewers will be rehabilitated utilizing both trenchless and conventional excavation methods, as well as manhole rehabilitation and pre-cleaning of sewers. The specific scope of work will consist of: 26,846 LF of CIPP, 5,563 LF of pipe-burst, 4,514 LF open-cut/replacement, and 29 point repairs.

Council Districts: 3, 4, 8, 9, and 10

Project Start: June 2018

Project Completion: December 2019

Updates:

- 52,478 LF of CCTV completed
- 42,670 LF of cleaning completed.
- 690 LF of clearing completed for access.
- 307 LF of Cured In Place Pipe completed
- 56 VF of Manhole Sealing and Patching completed

Environmental & Asset Impacts:

- Reduce inflow/infiltration from entering sewer thru defects
- Reduce the number of sanitary sewer overflows (SSOs)

Current Project Highlights – Atlanta Memorial Park



Peachtree Creek Trunk Sewer Stabilization

Cost: \$36.9M

Economic Impact: 571 jobs

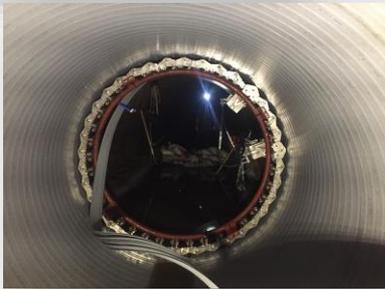
Highlights: Cleaning and trenchless rehabilitation of approx. 11,000 LF 90" diameter 80 year old sewer to reduce inflow and infiltration, safeguard against future breaches, and ensure long-term structural integrity of sewer

Project Start: May 2018

Project Completion: November 2019

Updates:

- 743.14 Tons have been removed
- 3,542 LF of cleaning has been completed
- 68 LF of profile material has been installed and 40 LF grouted



Howell Mill Rd. & Oldfield Outfalls – Sewer Realignments and Aerials Elimination

Cost: \$7.7M

Economic Impact: 120 jobs

Highlights: The scope of work for the Howell Mill Outfall will consist of the realignment and construction of roughly 1,500 linear feet of a 4-inch forcemain and 8-inch diameter gravity sewer, as well as a new duplex pump station. The Oldfield Outfall sewer will consist of the construction of roughly 2,000 linear feet of 8-inch diameter gravity sewer. Both projects will eliminate existing aerials sewers and sewer overflows, while safeguarding against future breaches to ensure the long-term structural integrity.

Projected Start: January 2019

Projected Completion: December 2019



Current Project Highlights



Rodney Cook Sr. Park-Historic Vine City

Cost: \$22M

Economic Impact: 341 jobs

Highlights: Collection of innovative stormwater practices designed to redirect surface runoff away from the combined sewer system

Updates

- Completed installation of 96" Combined Sewer trunkline
- Project completion scheduled March 2019 pending Council approval of Change Order



Current Project Highlights



Upper Proctor Creek Boone Boulevard Green Infrastructure & Capacity Relief Project

Authorized Budget (Projects): \$16M

Highlights: The project will provide capacity relief to the North Avenue Combined Sewer Area as well as water quality improvements through the use of green infrastructure. Additionally, the project will implement the Connect Atlanta Plan and Proctor-North Avenue Green Infrastructure Vision to make Boone Boulevard a complete street. The project will also replace a 12" and 30" water main from Northside Drive and Lowery Boulevard, as well as upgrade of a 12" water main to a 16" water main from Lowery Boulevard to Mayson Turner Road.

Updates:

- Demolition of sidewalks commenced on September 10, 2018
 - Demolition stopped short of Northside Drive. Conduits have been installed on the southern side of Boone Boulevard
- Water main installation commenced on September 19, 2018 between Sunset Avenue and Vine Street approximately 160 linear feet of pipe out of 11,630 has been installed
- Planter box excavation commenced on September 25, 2018 between Sunset Avenue and Vine Street



RM Clayton Nutrient Recovery Project

Authorized Budget (Projects): \$11.6 M

NTP: May 9, 2018

Substantial Completion: July 15, 2019

90% Design – Pending Construction

Highlights:

Installing Ostara's Pearl® Nutrient Recovery process, a patented process designed to selectively extract Phosphorus and Nitrogen from wastewaters and convert these into a slow release fertilizer that can be used in a variety of agricultural applications. Application will reduce the amount of Phosphorous and Nitrogen treated in the RM Clayton WRC reducing chemical usage and biosolids production.

Updates:

- Land Disturbance Permit and Building Permit have been approved
- Designed to include reuse of abandoned digester tank for centrate storage and equalization
- Micro-piling work initiated

MOST - Stormwater Asset Management Project



Phase 2

- ❖ Completed in October 2018
- ❖ 12 projects - \$2,458,144
- ❖ Council Districts 4, 5, 6, 7, 8, 9, 11 & 12



Phase 3 Citywide

- ❖ **All Council Districts have projects**
- ❖ Engineering ongoing for +/-100 projects estimated at \$24M
 - Three Consultant Firms under contract
 - Concept Planning
 - Construction Documents
 - Hydrology Studies



FC-10244 A & B Annual Contracts

- ❖ Stormwater Upgrade and Repair Services
 - NTP projected to be issued Nov 2018
 - Two contractors (A&B)
 - Three year contract
- ❖ **Construction to start in First Quarter 2019**



COA Department & GDOT Team Work

❖ Parks and Recreation

- Green and Grey Infrastructure Projects
- In and Adjacent to the City Parks

❖ Public Works

- Citywide Curb Restoration (Overlay Reductions)
- DPW roadway/DWM drainage
- RENEW ATL

❖ GDOT

- DWM is responsible for storm sewer maintenance



Phase 3 Citywide Project Types

- ❖ Culvert Restorations
- ❖ Major Restorations
 - Oakridge Avenue SE including Hosea L. Williams Drive NE
 - Wieuca and West Wieuca Road NE Intersection
- ❖ Minor Restorations
 - Pipe and Inlet Restorations
- ❖ Pilot Project – Dean Rusk Park Retention Pond
 - Continuous Monitoring and Adaptive Control
- ❖ Storm Water Asset Management Program (SWAMP)
 - Cleaning and Assessment
 - Repairs within the SWAMP
- ❖ Stream Restorations

DWM Team Work

❖ Office of Communications/Community Relations

- Public Information
- Pre Construction Information
- Easement / Right of Entry Liaison
- Construction Liaison

❖ Office of Engineering Services

- CPD - Project Management
- DCM - Construction Management
- Easement / Right of Entry Documents

❖ Office of Linear Infrastructure and Operations

- Stormwater Maintenance
- On-Call Emergency Contracting

❖ Office of Watershed Protection

- Green Infrastructure
- Sponsorship
- Stormwater Management

❖ Clean Water Atlanta

- Lateral Corrections
- Modeling Assessments



CITY OF ATLANTA DEPARTMENT OF
**watershed
management**



Questions &
Answers