CITY OF ATLANTA DEPARTMENT OF watershed management

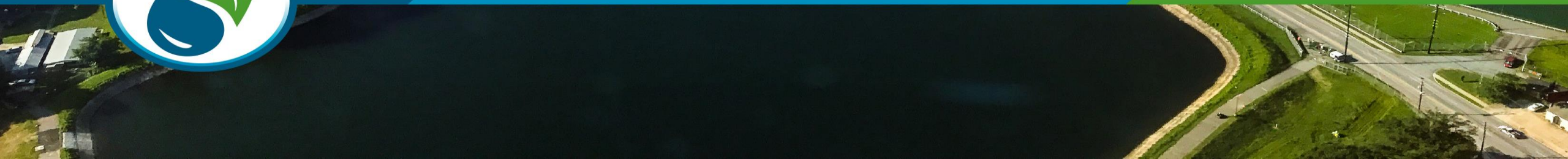
Keisha Lance Bottoms, Mayor
Kishia L. Powell, DWM Commissioner

Atlanta City Council | City Utilities Committee

Department Quarterly Report

FY2019 – 2nd Quarter

February 12, 2019



REPORTS TO COUNCIL

Peyton Center Pipe Yard Updates

2750 Peyton Rd., NW, Atlanta (Council District 9)

- **Hydrant & Valve Team Modular Units**
  - Installation and set-up complete, Certificate of Occupancy received - January 7, 2019
  - Relocation of Staff - January 19, 2019
  - Removal of existing modular unit - January 24, 2019
- **Shower Trailers**
  - Men's Locker Room Modular Unit
    - Delivered - January 7, 2019
    - Existing trailer removed - January 25, 2019
    - Projected start of installation – February 11, 2019
  - Women's Locker Room Modular Unit
    - Delivered – February 5, 2019
    - Projected start of installation – February 7, 2019
- **Employee Health Testing**
  - 65 employees had access to the building
  - Department of Human Resources notified those employees that free testing would be available
  - 12 employees have exercised the option for mold testing to-date; one employee is receiving treatment for mold exposure under Workman's Compensation

OLIO Organizational Improvements

Communications

- Conducting monthly meetings with entire staff – open-door policy
- Water Distribution Team conducts weekly meetings with cross-functional staff
- Wastewater Collection Team conducts weekly meetings with cross-functional staff
- Managers and Area Superintendents meet weekly
- Area Superintendents and Specialists had first meeting late January and will meet twice a month
- Crew Supervisors and Construction Maintenance Worker II's will meet with Directors and Deputy Commissioner in February and monthly thereafter
- Construction Maintenance Worker I's will meet with Directors and Deputy Commissioner in February and monthly thereafter
- Directors meeting monthly with union representatives (PACE & AFSCME)
- Developed conflict resolutions team (Director, Manager, Area Superintendent and Deputy Commissioner) – 100% resolution rate
- Monthly meetings with Human Resources to fill vacancies, review promotional opportunities for staff, develop licensing incentives, address employee concerns
- Directors using SharePoint to centralize information across the Office
- Developing staff Communications Plan with Office of Communications and Community Relations
- Developing monthly newsletter – feature Crew of the Month, positive customer feedback, birthdays, anniversaries, etc.

OLIO Organizational Improvements, cont'd

Resources

- Directors reviewing vehicle and equipment specifications and costs to ensure resources are available for crews
- New boots and uniforms distributed within two weeks
- Management Training - Effective Supervisory Practices, Crucial Conversations, Managing Conflict; Drive Cam Coaches
- Technical Training - Distribution/Collection Classes pending (90+ employees have signed); Force Main assessment class, Microsoft Excel for Data Reporting Analysts; Hansen CMMS Training for Area Superintendents; email access/retrieval training

Administrative

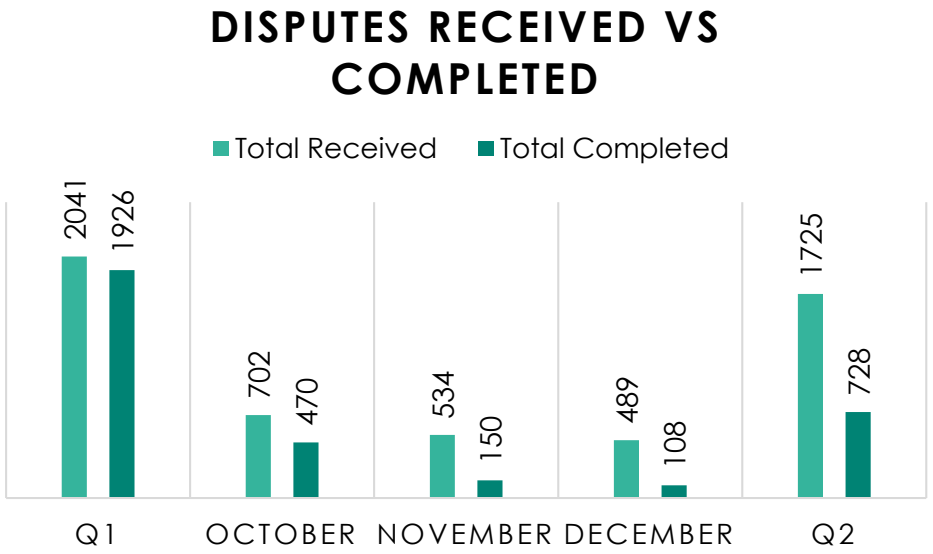
- Water Distribution Sub-stations improvements to efficiently distribute work geographically
- Wastewater Collections Team added additional crew and implemented reorganizational changes
- Developing performance metrics (KPIs) in conjunction with Office of Performance and Accountability
- Developing guidance documents, SOPs and Overtime policies
- No grievances noted since implementation of improvements

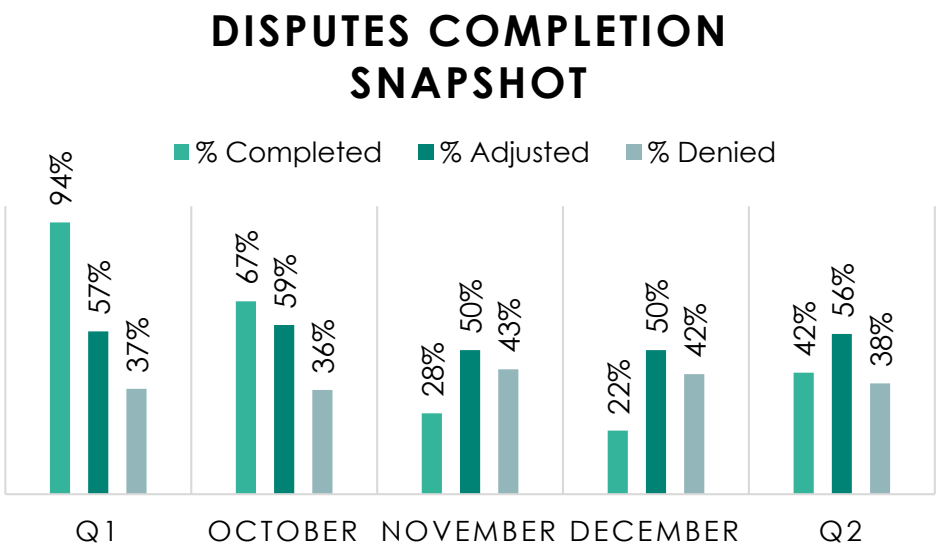
ADMINISTRATIVE HIGHLIGHTS

Federal Policy

Policy	Description	DWM Impact/Status
Water Infrastructure Improvement Act of 2018 House Resolution 7279 Rep. Bob Gibbs (R-OH)	• Amends the Clean Water Act to allow municipalities to develop a plan that integrates wastewater and stormwater management • An NPDES permit for a municipal discharge that incorporates an integrated plan may integrate all requirements under the Act addressed in the plan, such as requirements relating to combined sewer overflows, sanitary sewer collection systems, and total maximum daily loads • A plan that is incorporated into a permit may include the implementation of green infrastructure (GI) and projects to reclaim, recycle, or reuse water	• Promotes the use of GI to reduce flows to sewer systems or to surface waters • Bill provides crucial legislative certainty to DWM as it develops its Integrated Plan by enabling it to manage costs and prioritize clean water investments o Introduced – Dec. 12, 2018 o Passed the House – Dec. 19, 2018 o Passed the Senate – Dec. 22, 2018 o Signed by the President – Jan. 14, 2019
Preventing Pollution through Partnership (P3) Act House Resolution 7041 Derek Kilmer (D-WA)	• Aims to increase GI investment to improve water quality by providing a new financing tool for GI projects • Bill would amend federal tax code to include GI in the definition of eligible uses of private activity bonds (PABs), allowing for PABs to be issued for projects where 95 percent or more of bond proceeds will be used to develop, carry out, or certify GI projects	• Would provide potential financing opportunity for DWM's unfunded $545M Watershed Improvement Plans (WIPs) projects, which consistent of GI, stream restoration, retrofitting existing Stormwater Control Measures (SCMs)(detention/retention ponds) and new SCMs • Introduced Oct. 5, 2018

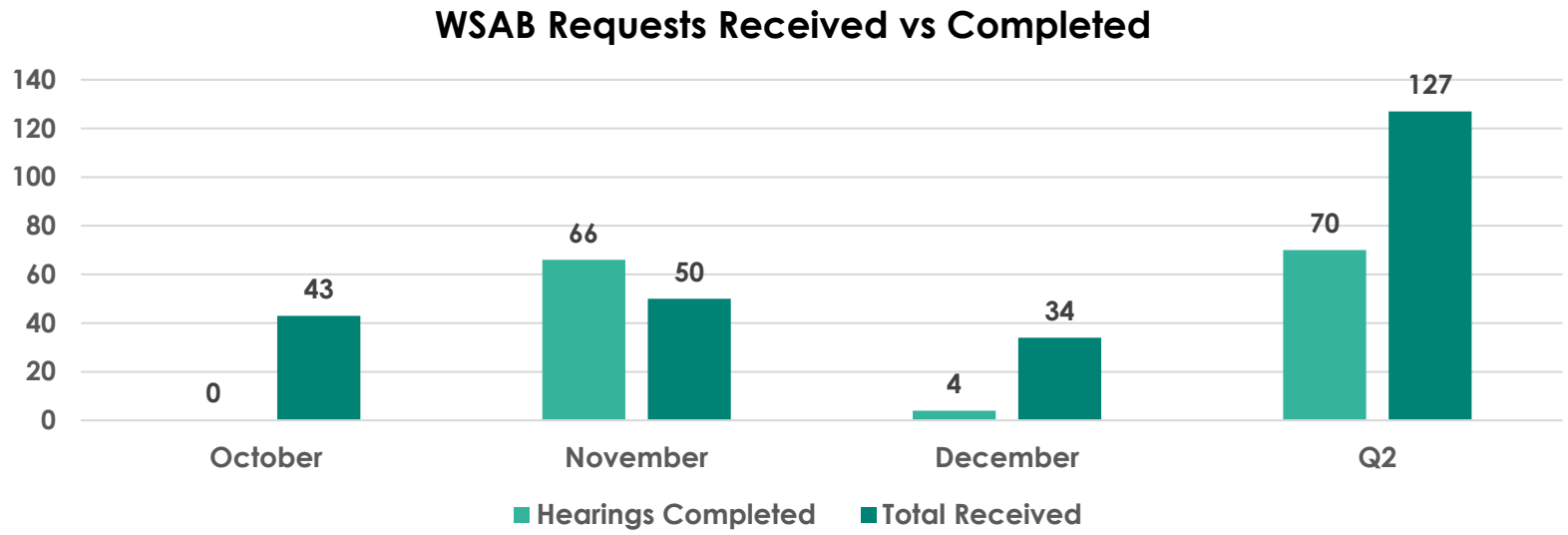
Bill Disputes





- OCCBS completed 42% of the Disputes received in Q2 (October – December 2018). The remaining 997 cases are still within the 90 day SLA.
- OCCBS is still working towards the goal of Dispute resolution within 60 days. However, this is impacted by the time to complete meter investigations and/or receive additional information from the customer.

Water Sewer Appeals Board



- Appeals hearings resumed November 27, 2018, and hearings are scheduled for the next several months
- DWM has been targeting an average of 10-12 customers for hearing dates
- DWM hosted another QA/QC training for the Board members on January 9, 2019 to discuss case scenarios, respond to questions, and review adjustments to confirm supported by the Code.
- New Liaison will start on January 24, 2019

Resolution	Count	Pct.
Appeals Board Adjustment	38	54%
Failure to Appear	12	17%
Appeals Board Denial	6	9%
Satisfied W/O Hearing	5	4%

Customer Assurance & Satisfaction Team (CAST)

- **Escalations Group:**
  - Handles escalations and non-escalations
    - **Escalations –** Opened: 147 Closed: 85
    - **Non-escalations –** Opened: 36 Closed: 17
  - Escalations are issues outside of Service Level Agreement (SLA); non-escalations are issues that have never been reported to ATL 311 or are within SLA.
  - Requests are received via ATL 311, DWM Commissioner's office, Office of Constituent Services, City Council, NPU Ambassadors, other DWM Offices, other COA Departments.
- **New Service Group:**
  - **New Service:** 4,777 **Disconnect Service:** 4,382
  - Requests from Walk-in Centers, online portal and fax
- **Proactive Calls Group:**
  - Call to Inspection: 995
  - Inspection to Completion: 333
  - Calls made to customers after a reported issue is inspected (Call to Inspection) and completed (Inspection to Completion). These calls allow DWM to set expectations for customers and to ensure customer satisfaction with the service.
  - Robo Calls: 2,677 – Robo calls are a proactive measure to contact customers when there is a significant increase in consumption; calls made Monday – Friday based upon a report generated when consumption increases by more than 50% of historic monthly use.
  - CAST reviews accounts to compare historical and seasonal use to determine if the increase is significant and warrants customer contact.

Customer Assurance & Satisfaction Team (CAST)

- **High/Low Bill Calls Group: 3,077**

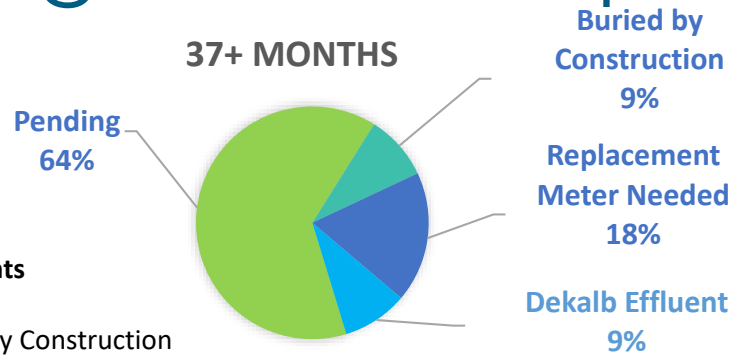
  Customers contacting DWM to inquire about a high or low bill, account analysis conducted and customer contacted to thoroughly discuss billing inquiry. All customers from October – December have been contacted and resolution has been reached or in progress.

Council District	High/Low Bill Calls Received	Closed and Resolved	Customers awaiting meter investigation or account review
1	142	82	60
2	97	57	40
3	117	71	46
4	113	46	67
5	165	90	75
6	137	75	62
7	136	73	63
8	226	101	125
9	159	79	80
10	236	119	118
11	144	85	59
12	162	94	68
Outside City	1243	797	445
Grand Total	3077	1769	1308

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

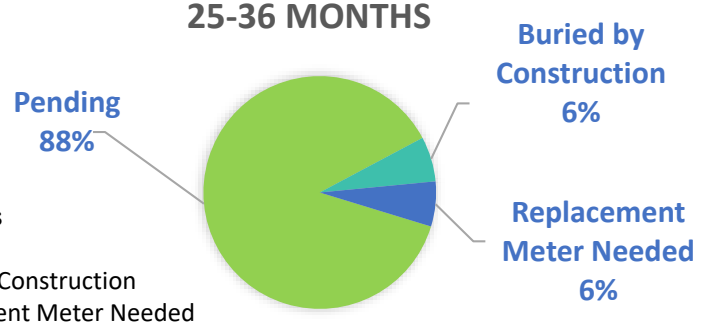
Large Meter Repairs

37+ MONTHS



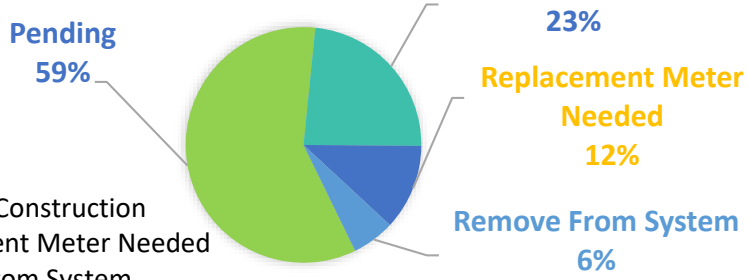
11 Accounts
7 Pending
1 Buried by Construction
2 Replacement Meter Needed

25-36 MONTHS



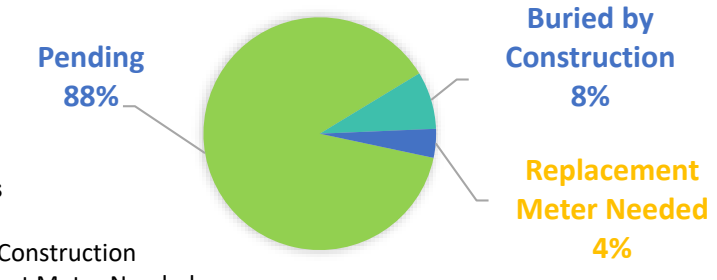
16 Accounts
14 Pending
1 Buried by Construction
1 Replacement Meter Needed

19-24 MONTHS



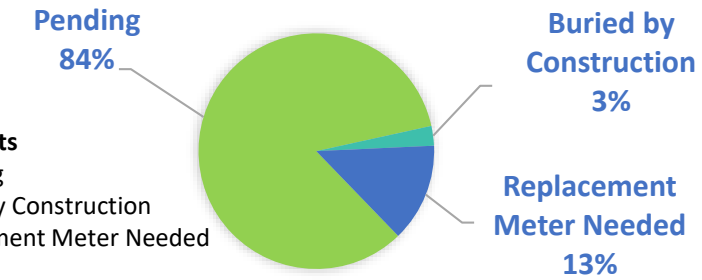
17 Accounts
10 Pending
4 Buried by Construction
2 Replacement Meter Needed
1 Remove From System

13-18 MONTHS



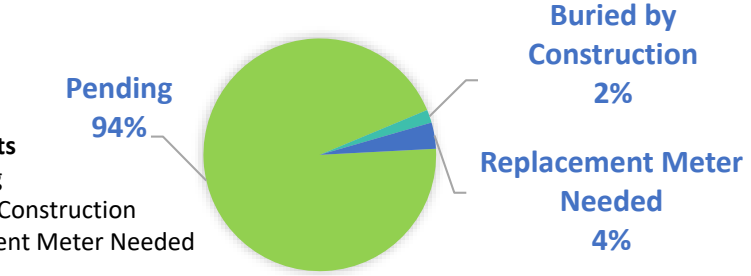
25 Accounts
22 Pending
2 Buried by Construction
1 Replacement Meter Needed

7-12 MONTHS



37 Accounts
31 Pending
1 Buried by Construction
5 Replacement Meter Needed

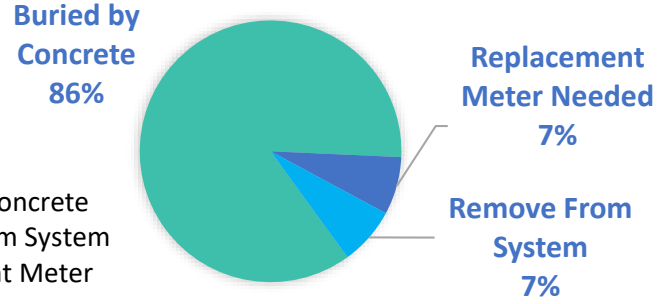
3-6 MONTHS



110 Accounts
104 Pending
2 Buried by Construction
4 Replacement Meter Needed

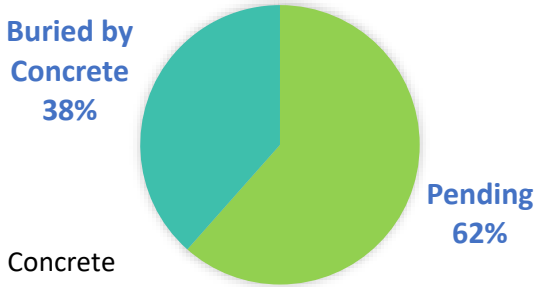
Small Meter Repairs

37+ MONTHS



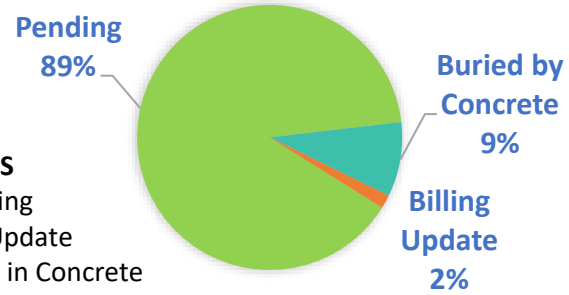
14 ACCTS
12 Buried in concrete
1 Remove from System
1 Replacement Meter Needed

19-24 MONTHS



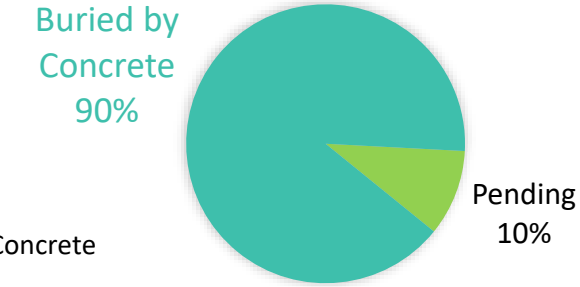
13 ACCTS
8 Pending
5 Buried in Concrete

7-12 MONTHS



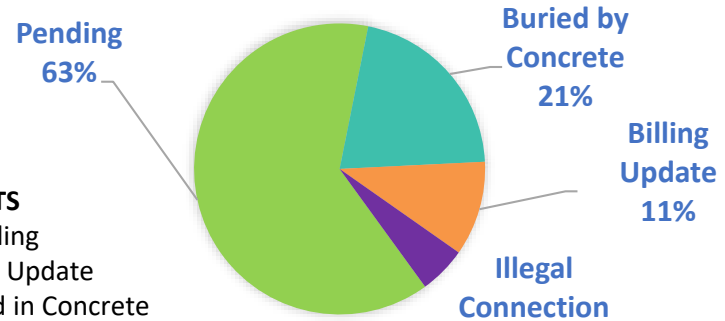
121 ACCTS
108 Pending
2 Billing Update
11 Buried in Concrete

25-36 MONTHS



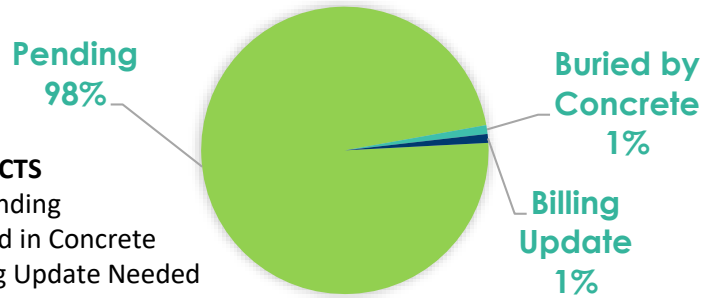
11 ACCTS
2 Pending
9 Buried Concrete

13-18 MONTHS



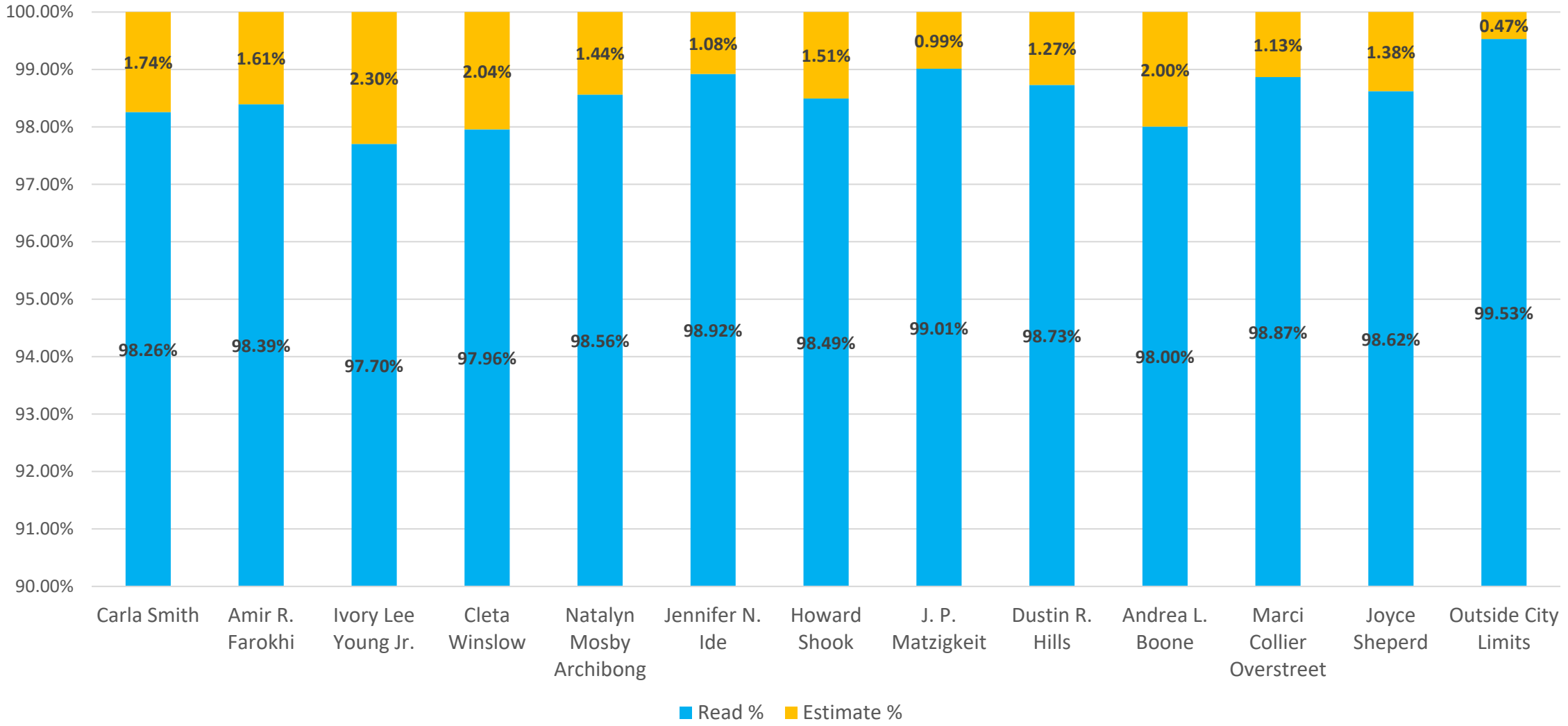
19 ACCTS
12 Pending
2 Billing Update
4 Buried in Concrete
1 Illegal Connection

3-6 MONTHS



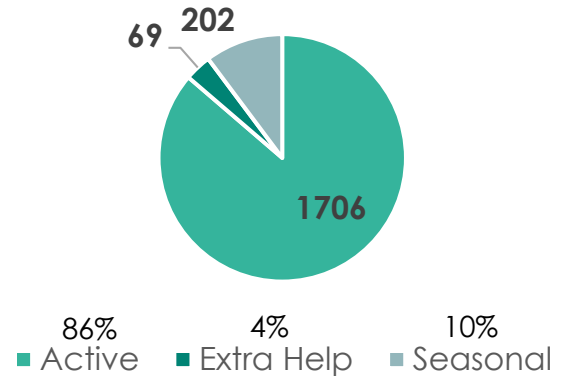
1310 ACCTS
1284 Pending
13 Buried in Concrete
13 Billing Update Needed

Large and Small On-Time Meter Reads
(October – December 2018)

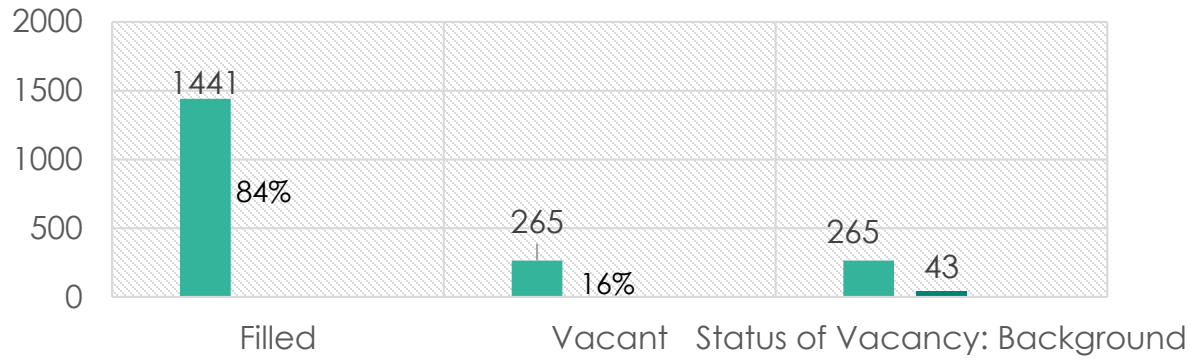


Positions: Filled & Vacancy Report

of Positions: 1977



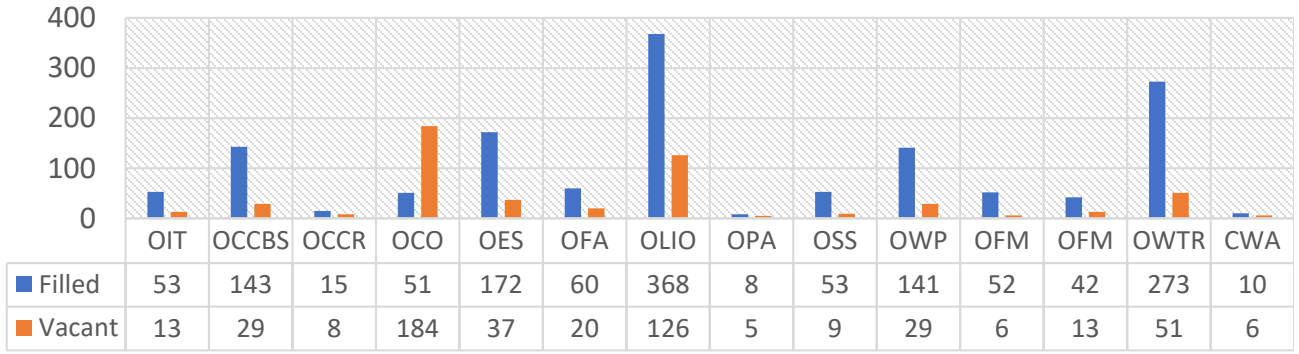
Filled & Vacancy Status of Active Positions



Notes:

- Of the 265 Vacant Positions, 43 (16%) are in the background check phase
- Internship interviews underway
  - 329 applications received
  - 65 interviewed
- Sr. leadership recruiting for:
  - Assistant Commissioner
  - DC OCCBS
  - DC OLIO

Filled & Vacancy by Office



	OIT	OCCBS	OCCR	OCO	OES	OFA	OLIO	OPA	OSS	OWP	OFM	OFM	OWTR	CWA
Filled	53	143	15	51	172	60	368	8	53	141	52	42	273	10
Vacant	13	29	8	184	37	20	126	5	9	29	6	13	51	6

Key for Offices: OIT = DWM Information Technology; OCCBS = Customer Care / Billing Servs; OCCR = Communications / Community Relations; OCO = Commissioner's Office; OES = Engineering Servs; OFA = Financial Administration; OLIO = Linear Infrastructure Operations; OPA = Performance / Accountability; OSS = Safety / Security / Emergency Management; OWP = Watershed Protection; OFM = Facilities Management; OWTR = Water Treatment and Reclamation; CWA = Clean Water Atlanta

FINANCIAL HIGHLIGHTS

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	**Closed – Jan.**

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

Fiscal Year 2019 – Key Figures

Historical Operational Results

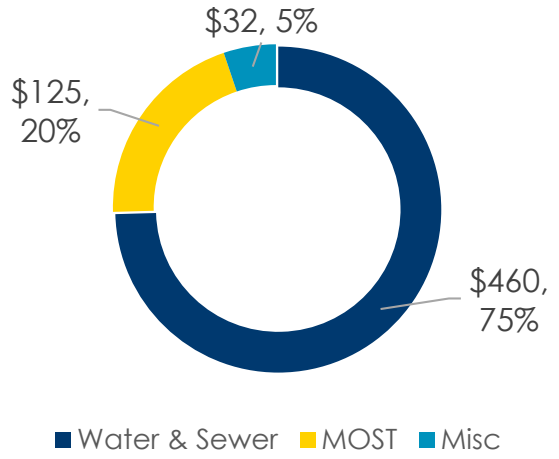
	FY19 YTD*	FY18	FY17
Operating Revenues	**$331.4**	**$627.7**	**$621.9**
Water/Sewer	240.5	451.4	462.6
MOST	74.8	144.5	131.7
Other	16.1	19.7	27.6
Operation and Maintenance Expenses	**$109.9**	**$239.4**	**$224.9**
Debt Service	**$101.5**	**$202.6**	**$203.2**
Coverage Ratio	**2.18**	**1.92**	**1.93**
Contributions to Capital Budget	**$132**	**$135.8**	**$129.2**
Capital Budget	**$230.9**	**$121.8**	**$324.6**

*As of 12/31/18

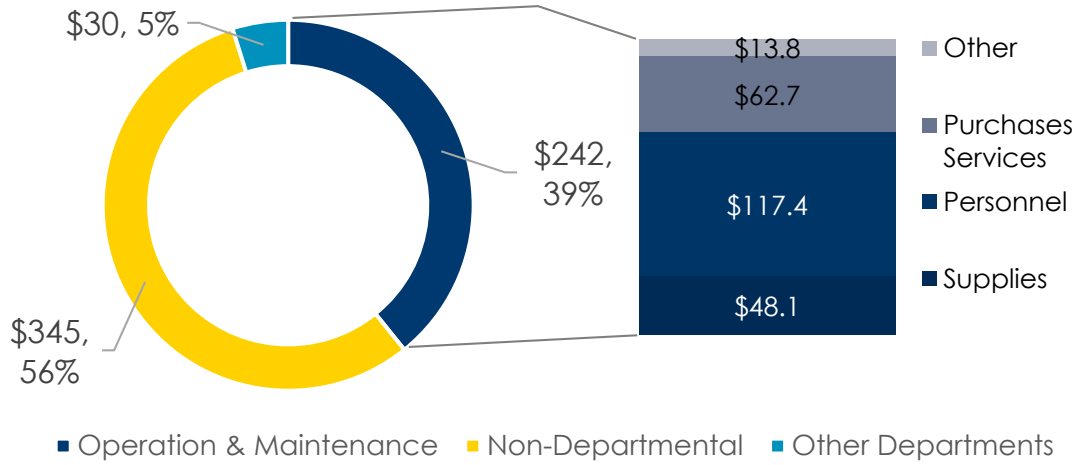
FY 2019 Budget

Operation & Maintenance

Revenue Sources ($617M)



Appropriations ($617M)

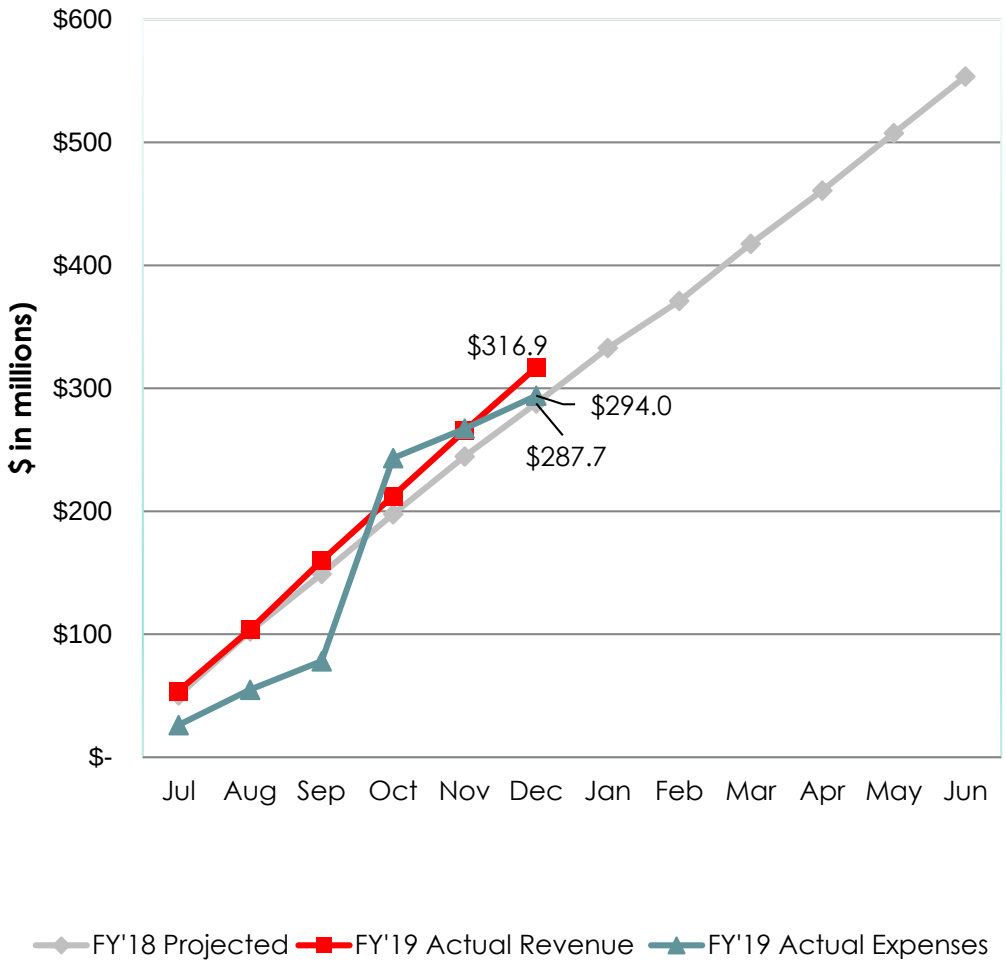


- Miscellaneous: IJ Revenue, tap meter sales, stormwater charges, interest earnings, administrative services
- Non-Departmental (Debt Service, indirect costs, PILOT/franchise fees, OPEB, GEFA payments/reserve, bad debt reserve, fund-wide reserve)

	OPERATION & MAINTENANCE (O&M)	
	Personnel	**Non-Personnel**
FY19 Budget	$117.4	$124.3
Through 1st QTR of FY19	$58.8	$44.4
% Spent	50%	36%

October 1, 2018 through December 31, 2018

FY19 Operational Results



Fiscal Year 2019			
Month	Revenues (M)*		Expenses
	Projected	Actual	Actual
Jul '18	$53.1	$53.8	$26.2
Aug '18	$108.2	$103.7	$54.9
Sep '18	$157.5	$159.7	$78.0
Oct '18	$208.8	$212.6	$243.2
Nov '18	$258.4	$265.5	$267.2
Dec '18	$304.0	$316.9	$294.0
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

Commercial Accounts

- **$7,617,526.51** collected
- 3,235 delinquent payments collected

Next Steps

- Continue shut-off efforts with 50 accounts per week
- Maximize collection efforts with site visits by collections staff for larger commercial water users

Vacant Accounts

Commercial

- **$972,357.70** collected
- 160 new service accounts enforcement

Residential

- **$75,607.86** collected
- 929 new service accounts enforcement

Next Steps

- Continue new service enforcement and collection action against commercial and residential accounts

Multi-Family Accounts

- **$4,724,707.195** collected
- 2,875 delinquent payments collected
- Top 25 delinquent accounts isolated for collection efforts

Next Steps

- Continue working with Multi-Family customers to resolve past due receivables on Top 25 delinquent accounts
- Work with Law Department on suggested code changes to enhance City's legal position and collection abilities

October 1, 2018 through December 31, 2018

OPERATIONAL HIGHLIGHTS

FORAtlanta Metrics

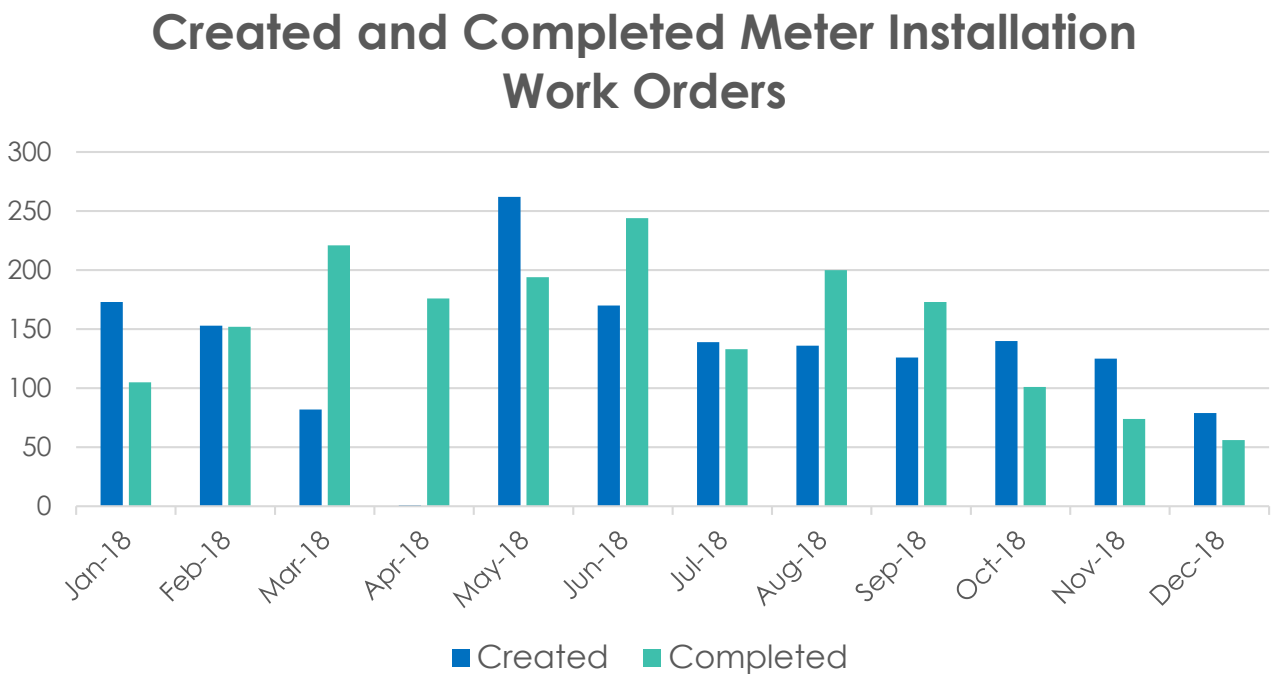
Metric Description	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Call volume per 1,000 accounts	135.33	167.75	136.54	140.21	90.75	116.01
Customer Service Complaints per 1,000 accounts	8.5	12.5	10.1	9.9	6.2	7.6
Technical Service Complaints per 1,000 accounts	16.4	17.5	15.9	18	10.7	16.7
Estimated Bills as a percent of Bills Issued	2.36%	2.57%	2.45%	2.23%	2.60%	3.07%
12-month O&M cost per million gallons of drinking water treated	539.77	540.58	546.81	553.63	552.17	557.75
12-month O&M cost per million gallons of wastewater treated	872.58	896.92	925.12	934.35	900.27	880.88
12-month Purchased power per million gallons of water treated (drinking water)	2,176	2,170	2,173	2,172	2,183	2,193
12-month Purchased power per million gallons of water treated (wastewater)	2,977	2,940	2,917	2,902	2,858	2,790
Drinking Water Compliance Rate as a percent of prior 365 days in compliance	100%	100%	100%	100%	100%	100%
Wastewater Treatment Compliance Rate as a percent of prior 365 days in compliance	99%	96%	95%	92%	91%	**89%**
# of Sewer Spills per 100 miles of sewer pipe (Annual)	6.8	6.7	6.4	6.3	6.1	**7.7**
# of Main Breaks per 100 miles of drinking water pipe (Annual)	16.20	16.51	16.80	16.69	16.16	15.10
# of Completed Bill Adjustment work orders	510	479	212	202	243	225
# of Delinquent Accounts	31,245	30,837	29,098	29,270	29,371	29,906
12-month New Leak Work Orders per 100 miles of drinking pipe	78.36	77.58	75.67	74.29	70.83	70.65
% of Total Hydrants Functional	99.33%	99.18%	99.18%	99.16%	98.63%	98.60%

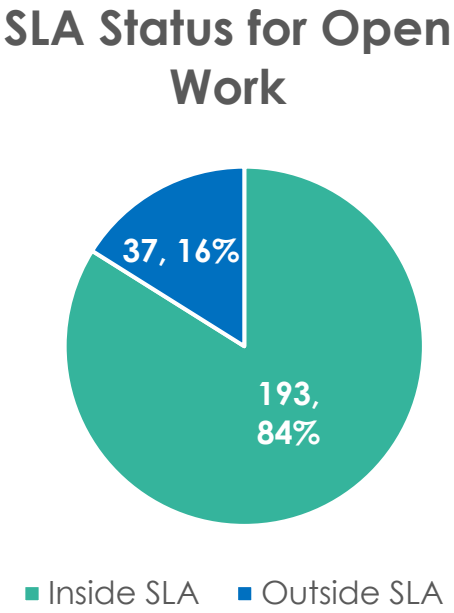
- Annual number of main breaks per 100 miles of drinking water pipe decreased across the second quarter in fiscal year 2019.

CSTAT Metrics

Office	SR-WO Type	SLA	Oct 18 % On-Time	Nov 18 % On-Time	Dec 18 % On-Time
OCCBS	Burst Pipe (Private) - Turn Off Request	1 Business Day	100	100	100
OCCBS	Close Account - Vacant - Turn Off	24 hours within scheduled date	100	100	100
OCCBS	Meter Reset	5 business days	100	100	100
OCCBS	Missing/Damaged DW Meter Lid	2 Business Days	100	100	100
OCCBS	New Account Request - Not Vacant (Move In / Move Out)	24 hours within scheduled date	100	100	100
OCCBS	New Account Request - Vacant	24 hours within scheduled date	100	100	100
OLIO	Broken Drinking Water Service Line Repair	45 days (inspection to resolution)	44	52	61
OLIO	Broken Sewer Line Repair	45 days (inspection to resolution)	85	84	90
OLIO	Clear Storm Drain/Catch Basin	45 days (inspection to resolution)	94	90	77
OLIO	Hydrant Complaint (Leaky Hydrant, Hydrant Knocked Off / Damaged)	24 hours (call to inspection)	93	100	98
OLIO	Hydrant Leak Repair	10 days (inspection to resolution)	81	23	17
OLIO	Hydrant Repair/Replace	20 days (inspection to resolution)	83	32	43
OLIO	Low Water Pressure	24 hours (call to inspection)	95	97	98
OLIO	Meter Leak Repair	7 days (inspection to resolution)	22	50	33
OLIO	Missing/Damaged WW Manhole Lid/Cover	24 hours (call to resolution)	95	100	93
OLIO	No Water - Infrastructure Related	24 hours (call to inspection)	96	100	89
OLIO	Possible Sewer Cave In	8 hours (call to inspection)	98	97	98
OLIO	Possible Sewer Main Back Up / Blockage	8 hours (call to inspection)	97	100	95
OLIO	Possible Sewer Overflow/Spill	8 hours (call to inspection)	95	100	99
OLIO	Readjust/Replace Street Plate	24 hours (call to resolution)	51	64	77
OLIO	Sewer Odor	8 hours (call to inspection)	100	100	89
OLIO	Street Flooding during or after a rain event / Storm Sewer Back Up	8 hours (call to inspection)	95	97	71
OLIO	Valve (or appurtenance) Leak Repair	45 days (inspection to resolution)	42	40	30
OLIO	Water Main Break Repair	2 days (inspection to resolution)	100	100	100
OLIO	Water visible in street, sidewalk, etc. / Check for leak or break	8 hours (call to inspection)	88	97	95
OWP	Erosion Complaint	7 bus days (call to resolution)	87	87	100
OWP	Erosion Control Final Inspection (Commercial)	4 bus days (call to resolution)	83	82	86
OWP	Erosion Control Final Inspection (Residential)	4 bus days (call to resolution)	82	81	98
OWP	Erosion Control Pre-Construction Inspection (Commercial)	7 bus days (call to resolution)	96	90	100
OWP	Erosion Control Pre-Construction Inspection (Residential)	4 bus days (call to resolution)	82	86	82
OWP	Existing Grease Trap Inspection	10 bus days (call to resolution)	100	100	100
OWP	Illegal Grease Dumping	1 bus day (call to inspection)	100	100	n/a
OWP	New Facility Grease Trap Inspection	7 bus days (call to resolution)	100	100	n/a
OWP	Sewer Overflow/Spill Clean Up	3 bus days (WO Initiation to WO Start Date)	100	100	93
	DWM OVERALL		90	92	91

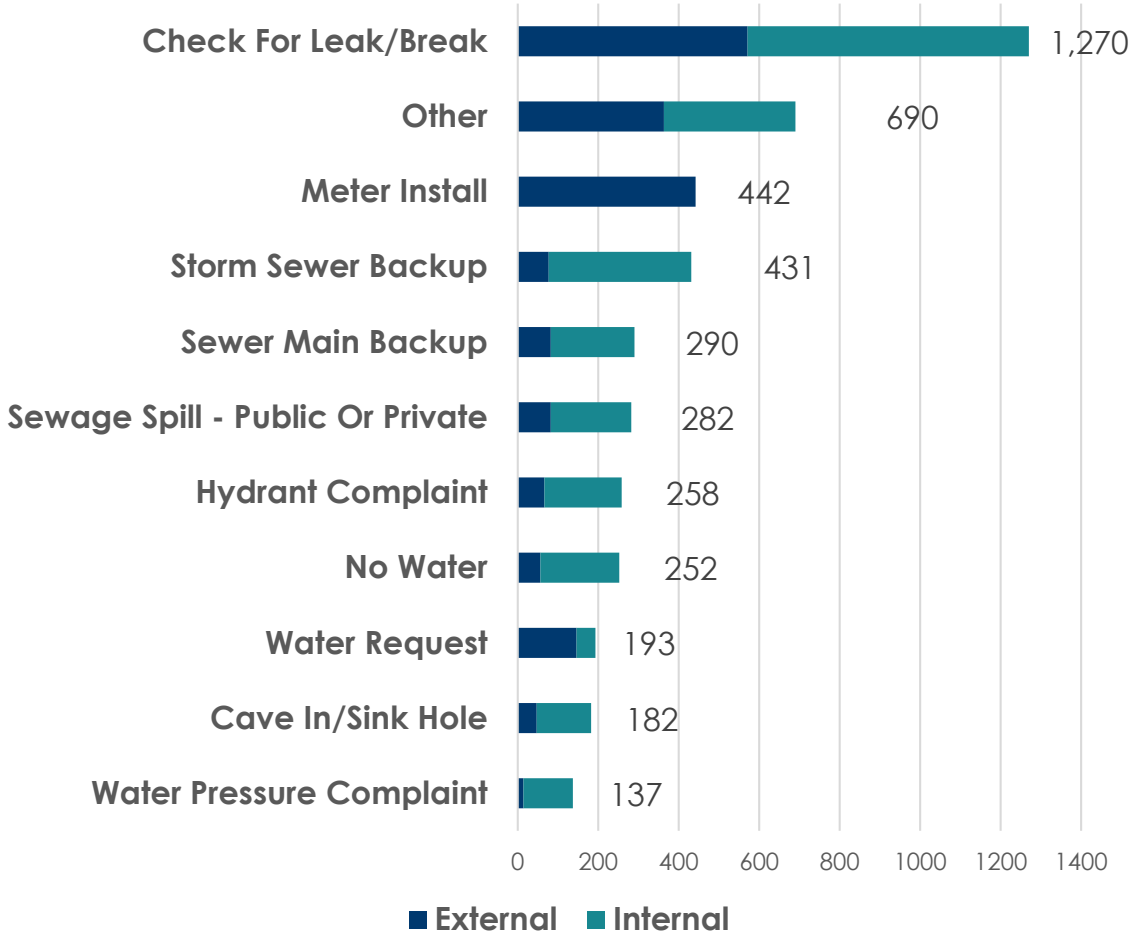
Meter Installations



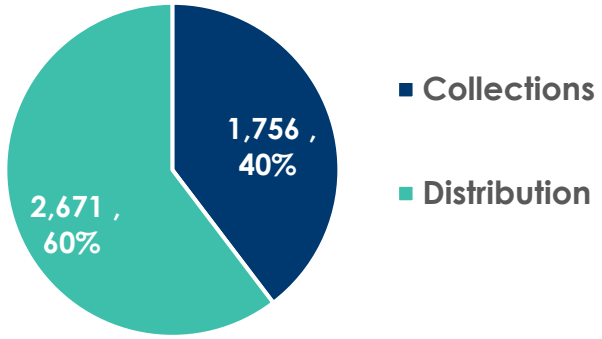


84% of meters requested prior to January 1st are still within SLA.

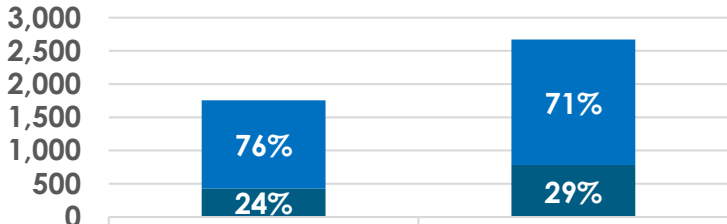
OLIO Recorded Service Requests
(October - December 2018)



Service Requests by Division



Resolution of Service Requests

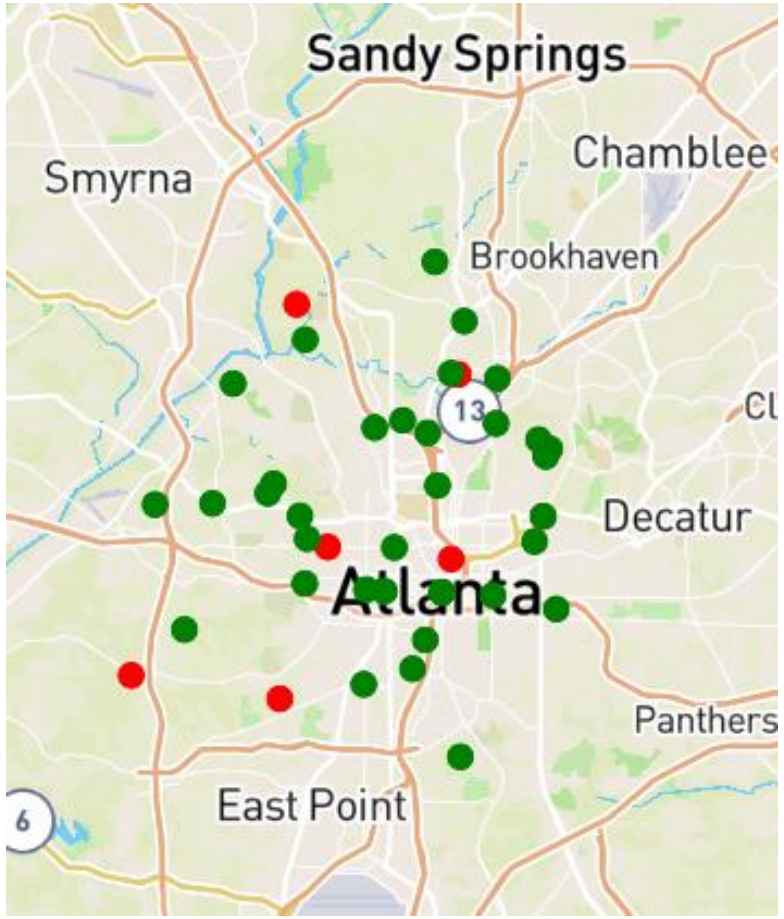


	Collections	Distribution
Resolved	1,328	1,889
Unresolved	428	782

Metal Plate Tracker

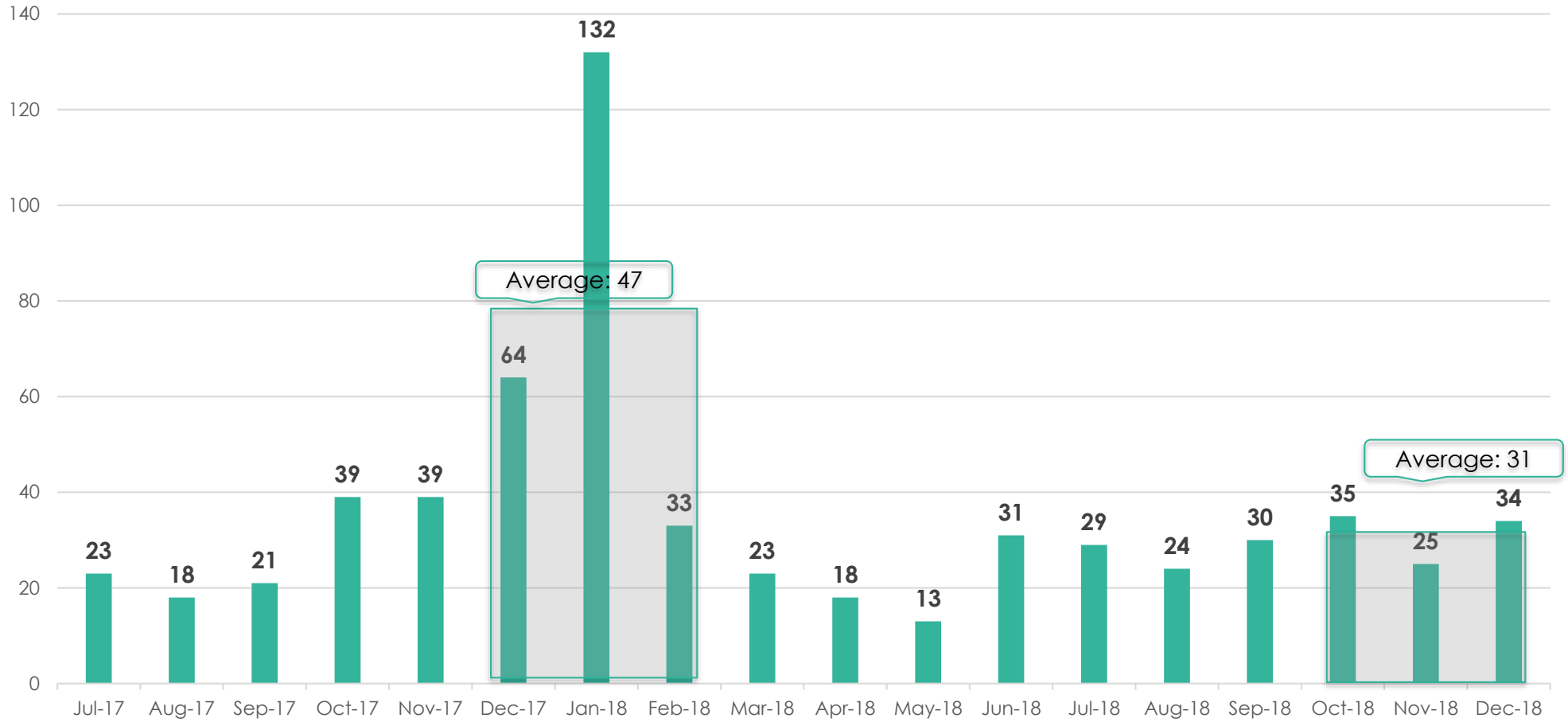
Number of Plates in Place (February 1, 2019): 51 | **Average Age of Current Plates: 24 Days**

District	Plate Count	Average Age	Oldest
01	1	22	22
02	3	19	23
03	3	23	46
04	7	14	24
05	3	30	52
06	8	18	62
07	4	37	79
08	6	20	37
09	9	13	24
10	2	8	10
11	0		
12	3	42	113
Outside City	2	137	137



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

Main Breaks by Month

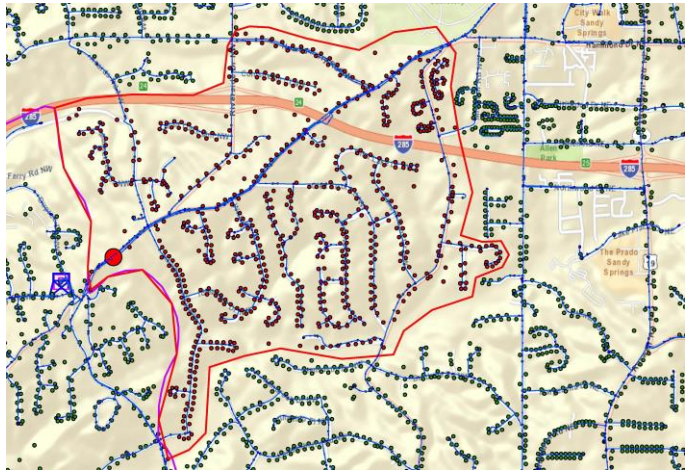


Main Breaks are 33% lower for the second quarter of fiscal year 2019 as compared to the same time period in fiscal year 2018.

COMPLIANCE

Drinking Water Quality Exceedence - TTHMs

- **US EPA Disinfection Byproducts Rule (DBPR) - 2006**
  - Requires monitoring for chemicals that can occur from the breakdown of disinfection chemicals used to remove harmful bacteria from drinking water
  - DWM monitors for a group of five (5) chemicals known as Haloacetic Acids (HAA5)
  - TTHM Maximum Contaminant Level (MCL) = 60 micrograms per liter (ug/L) based on a 4 quarter average
- DWM monitors 12 US EPA-approved sites throughout the distribution system
- Sampling Site 509 – 850 Mount Vernon Road in the northern portion Fulton County
  - 2018 four (4) quarter average: 62 ug/L > 60 ug/L MCL
  - Potentially affected 1,050 customer connections downstream
- Received Georgia EPD Notice of Violation on January 2, 2019 (dated December 18, 2018)
  - Required "Tier 2" customer notifications of exceedance within 30 days
  - Precautionary notification of potential health effects from long term exposure to HHA5s (70 years)
  - Notifications issued:
    - Explanatory letters sent to potentially affected customers on January 16, 2019
    - Public notice published in the AJC on January 16, 2019
- **Corrective Actions**
  - Review of enhanced flushing program and updating standard operating procedures (SOP) for flushing procedures.
  - Corrosion control study is being conducted, and this issue is being reviewed as part of this study.
  - Implementation of monitoring instrumentation



Sampling Site 509 – 850 Mount Vernon Road

Spill Data

All Public Spills

Quarter*	2015	2016	2017	2018
Q4 (Oct-Dec)	76	32	35	84
Q3 (July –Sept)	39	28	28	44
Q2 (April – June)	47	41	58	47
Q1 (Jan – Mar)	32	88	56	70
Total	**194**	**189**	**179**	**245**
YTD Major Spills (> 10,000 Gallons)	17	9	15	18
YTD Spills Prevented (Flow Monitoring Alert Program)	14	21	21	33
Major Rain Induced Spills	7	0	5	12

Major Spills for the Quarter = 15

* Reported on Calendar Year Basis

Major Spills

No	Date/Location/Receiving Water	Details
1	NOVEMBER 12TH 424 LINDBERGH DR NE PEACHTREE CREEK	• Volume: 42,000 gallons • Cause: Rain induced • Self-contained following storm event
2	DECEMBER 5th 3125 PARROTT AVE NW PROCTOR CREEK	• Volume: 375,000 gallons • Cause: Collapsed main line • Repair completed by contractors
3	DECEMBER 9th 757 WOODWARD WAY NW PEACHTREE CREEK	• Volume: 74,250 gallons • Cause: Rain induced • Self-contained following storm event
4	DECEMBER 11th 2300 DANIEL RD SW CAMP CREEK	• Volume: 12,570 gallons • Cause: Unknown • Spill contained with bypass pump, inaccessible manhole
5	DECEMBER 11th 1450 HARBIN RD SW UTOY CREEK	• Volume: 103,200 gallons • Cause: Collapse in creek crossing • Repair completed
6	DECEMBER 28TH 757 WOODWARD WAY NW PEACHTREE CREEK	• Volume: 207,300 gallons • Cause: Rain induced • Self-contained following storm event
7	DECEMBER 28TH 424 LINDBERGH DR NE PEACHTREE CREEK	• Volume: 168,850 gallons • Cause: Rain induced • Self-contained following storm event
8	DECEMBER 28TH 757 WOODWARD WAY NW PEACHTREE CREEK	• Volume: 147,500 gallons • Cause: Rain induced • Self-contained following storm event

Major Spills, cont'd

No	Date/Location/Receiving Water	Details
9	DECEMBER 28TH 740 WESLEY DR NW PEACHTREE CREEK	• Volume: 159,775 gallons • Cause: Rain induced • Self-contained following storm event
10	DECEMBER 28TH 1380 BATTLEVIEW DR NW PEACHTREE CREEK	• Volume: 14,850 gallons • Cause: Rain induced • Self-contained following storm event
11	DECEMBER 28TH 644 WESLEY DR NW PEACHTREE CREEK	• Volume: 166,600 gallons • Cause: Rain induced • Self-contained following storm event
12	DECEMBER 28TH I-75 SOUTHBOUND @ CLEVELAND AVE PEACHTREE CREEK	• Volume: 39,800 gallons • Cause: Rain induced • Self-contained following storm event
13	DECEMBER 28TH 1450 HARBIN RD SW UTOY CREEK	• Volume: 32,700 gallons • Cause: Rain induced • Self-contained following storm event
14	DECEMBER 28TH 2851 RIDGEWOOD CIR NW NANCY CREEK	• Volume: 72,250 gallons • Cause: Rain induced • Self-contained following storm event
15	DECEMBER 30TH 2205 NORTHSIDE DR NW PEACHTREE CREEK	• Volume: 72,250 gallons • Cause: Rain induced • Self-contained following storm event

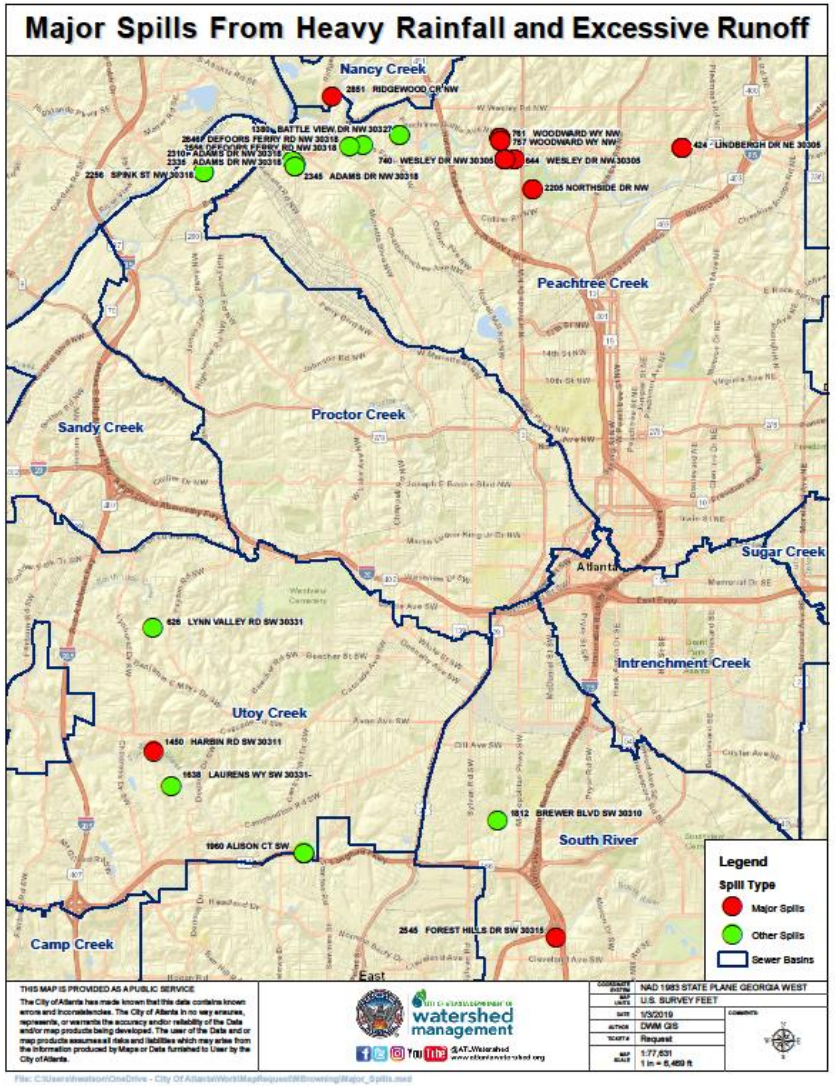
December 28, 2018 Rain Event

- Recorded rainfall – Nearly 5 inches over 18 hours; peak intensity 1.44 inches/hour
  - 4.56 inches recorded at Atlanta Memorial Park
- Storm event was significant and estimated to be between a 5 - 10 year recurrence event. System can accommodate 2 yr., 3 hour storm
- Resulted in flooding from most local creeks and streams
  - Of (12) largest storms tracked, the storm event caused Peachtree Creek to reach its 2nd highest flood elevation (Elev. 783; 9 ft above top of bank). The highest recorded elevation was during the 2009 historical event.
- Creek flooding inundated low lying manholes and resulted in manholes being underwater and direct creek flow entering the sewer system
- Such conditions occurred throughout the City and system and contributed to significant peak flow observed at respective treatment facilities
- A total of nineteen (19) rain-induced spills occurred -(9) out of (19) incidents were confirmed major spills, the remaining 10 were confirmed below the threshold

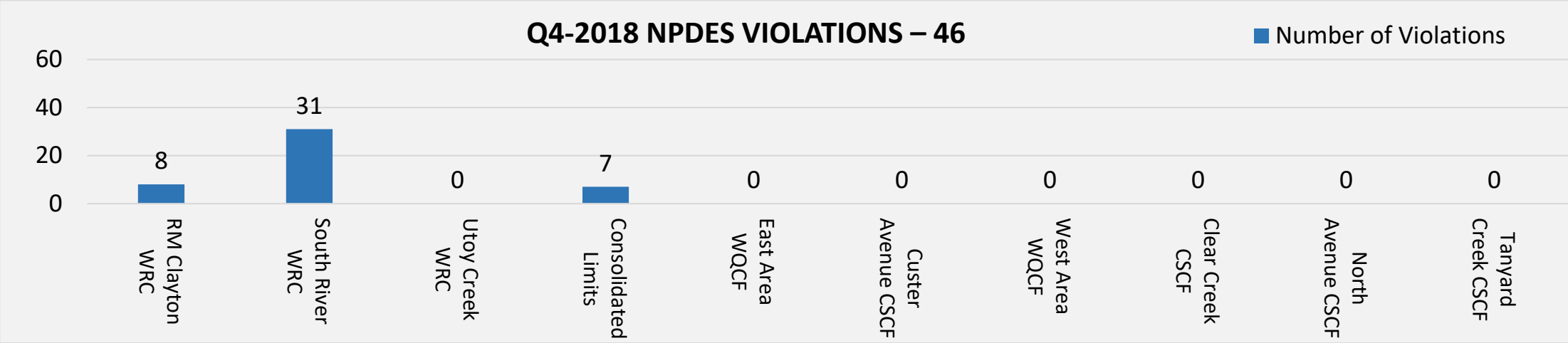
December 28, 2018 Rain Event, cont'd

REMEDIAL MEASURES:

- Evaluate feasibility to raise strategic manholes near creeks and stream to offer protection from future flood conditions and direct inflow
  - Pending results of hydraulic analysis
- Commence construction for projects that have been awarded for locations prone to rain-induced spills
- Consider advancing planned projects for locations that are prone to rain-induced spills and where major spills occurred
- Complete further investigation to determine the root-cause for all remaining locations prone to rain-induced spills and determine appropriate measures to remedy spill occurrences
- Continue progress in implementing capacity relief projects to ensure adequate system capacity, and effective measures to provide flood protection and foster system resiliency
- Continue commitment to reduce spill occurrences city-wide and protect the quality of local creeks and streams



National Pollutant Discharge Elimination System (NPDES) Permit Compliance Status



Facility	Cause	Mitigation
RM Clayton WRC	Operational – 7 • Total Suspended Solids (TSS) – 4 • Phosphorus – 1 • Flow – 1 • % Removal of Solids – 1	All RM Clayton violations are due to the excessive amount of rainfall during the month of December, which culminated around December 29. Consolidated violations were from a major spill on October 11 (RM Clayton – Total Phosphorus), and South River violations (ammonia).
Consolidated Limits	Operational – 4 • Ammonia - 3 • Phosphorous – 1	
South River WRC	Operational – 31 • Dissolved Oxygen – 12 • Phosphorus – 4 • Ammonia – 4 • TSS – 3 • Fecal Coliform – 8	South River had an accumulation of biosolids in the clarifiers. A portion of the biosolids were removed and stored in trailers. There were no violations in December.

Reported on Calendar Year Basis

CAPITAL IMPROVEMENT PLAN UPDATES

Capital Improvement Plan Program Summary

$9.3 M
Water Facilities Projects: 2

$344.7 M
Water Supply Program Projects: 3

$126.4 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

$30.9 M
Watershed Protection Projects: 2

5-YR Total: $1.258B; 76 Projects (7 Planning, 11 Design, 13 Procurement, 23 Construction, 12 Complete, 5 Inactive, 5 On-Hold)

$121.4 M in GENERAL Capital Improvements (10 Projects)

Current Project Highlights

RM Clayton Headworks Improvements

Authorized Budget (Projects): $53.98 M
Schedule: 24 mos. (design & construction)
Economic Impact: 249 jobs
Substantial Completion: November 9, 2017
Constructed on Budget and on Schedule

Highlights:
The new high efficiency Headworks removes grit that improved overall plant performance and reduced equipment maintenance. No outages or permit violations due to construction. Achieved 30% AABE and FBE Participation. 100% of entry level positions hired through City of Atlanta's First Source jobs program. Accident free.

Awards:
- DBIA's National Excellence Award for Water/Wastewater projects for 2018
- ACEC Georgia Engineering Excellence Honor Award Winner for 2018
- CMAA South Atlantic Chapter award for 2018

Current Project Highlights

FC-8047A-1 Noresco Project

Authorized Budget (Projects): $77.9 M
NTP: December 28, 2017
Substantial Completion: November 28, 2020

Highlights:
The DWM has entered into a GESPC with Noresco-SG, LLC which allows the Department to implement comprehensive energy efficiency and sustainability projects, all funded through ESCO-guaranteed energy and operational cost savings. Project scope includes Water Distribution System Optimization, Biosolids Beneficial Reuse, and UV System Upgrades at RM Clayton WRC.

Updates:
- Land Disturbance Permit, Building Permit, and Air Permit have been approved for Biosolids Building at RM Clayton WRC
- Twenty of fifty-three support piers completed
- Trojan UV Signa equipment received on site
- Installation of five of twelve pressure sensors for Water Distribution System Optimization completed

Current Project Highlights

FC-8047A-2 Schneider Project

Authorized Budget (Projects): $36.2 M
NTP: January 31, 2018
Substantial Completion: July 31, 2019

Highlights:
The DWM has entered into a GESPC with Schneider-ME^3 which allows the Department to implement comprehensive energy efficiency and sustainability projects, all funded through ESCO-guaranteed energy and operational cost savings. Project scope includes SR WRC Digester Upgrades, UC WRC Low Energy Thickening, UC WRC Low-Energy Channel Mixing, DWM Facility Lighting Upgrades, UC WRC and SR WRC UV System Upgrades,

Updates:
- SR WRC Digester #5 Cleanout Complete; Existing Equipment Removal in Progress
- UC WRC Envelope Repair in Progress
- Lighting Upgrades at Hemphill WTP, Chattahoochee WTP, and 14th St. Admin Center in Progress

Current Project Highlights

Centrate Storage Tank

Chemical Tanks Delivered

RM Clayton Nutrient Recovery Project

Authorized Budget (Projects): $11.6 M
NTP: May 9, 2018
Substantial Completion: July 31, 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 completed
- Foundation is being formed and poured
- Chemical tanks have been received

Current Project Highlights

Quarry Pump Station – East Elevation

Quarry Pump Station – South Elevation

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 $250M in daily economic activity.

Updates

- Quarry and Hemphill Pump Stations (PS) – Completion by June 30, 2019
- Conveyance tunnel: 10' dia.; tunnel excavation completed in October 2018.
- Conveyance tunnel; concrete lining: 1,400 feet of 15,830 feet completed.
- Drill and blast tunnel from Chattahoochee construction shaft to the proposed Chattahoochee River Intake PS – 400 feet of 2,000 feet completed.
- 2 Raised Bore flow shafts at Quarry – Bottom concrete liner completed in September 2018. Concrete lining for the top part is underway.
- 90 MGD Chattahoochee PS – Bid advertisement scheduled for February 2019

Current Project Highlights

Upper Proctor Creek Capacity Relief: Rodney Cook, Sr. Park in Historic Vine City

Cost: $23M
Economic Impact: 341 jobs

Highlights: The Upper Proctor Creek Capacity Relief Project: Rodney Cook, Sr. Park in Historic Vine City is a collection of innovative stormwater practices designed to redirect surface runoff away from the combined sewer system. This project is a multi-phase effort to reduce flooding and combined sewer flows in the surrounding area. The components of this project will be a wet pond, green infrastructure (bioretention, stormwater planters, rainwater harvesting cisterns, and soil restoration), aerating water features, separated storm drain pipelines, new sidewalks and roadway improvements.

Updates

- Completed installation and testing of rerouted 96" Combined Sewer trunkline
- Completed installation and backfilling of cistern
- Current work includes construction of retaining walls and footings for aerating fountain; storm and sewer pipe installation; and, grading of wet pond
- Coordination between the Trust for Public Land, the Parks Department, Boone Boulevard project, and the National Monuments Foundation continues
- Project completion scheduled April 2019 pending issuance of Change Order #1

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:

- Sidewalks and ADA ramps between Elm Street and Sunset Avenue have been installed at Hairston Street and Sciple Terrace.
- Water main installation commenced on Sept. 19, 2018. Approximately 1,000 linear feet of pipe has been installed out of 11,630 linear feet of pipe between Lowery Boulevard & Northside Drive on the Southside of Boone Boulevard.
- Approximately 40% of the planter boxes have been installed between Lowery Boulevard & Northside Drive on the Southside of Boone Boulevard.
- Superbowl Moratorium Impact
  - Pedestrian fencing installation - Jan. 17, 2019
  - All construction activities suspended Jan. 21 until Feb. 5, 2019

Current Project Highlights

Hartsfield-Jackson Manifold Improvements Project

Authorized Budget (Projects): $5.4M
Highlights: This project rehabilitates the existing water distribution yard piping system at the Hartsfield-Atlanta International Airport's pumping station and located on South Loop Road. The pipe and valve network system connected to the pumping station have experienced frequent leakage and repairs. It has been determined that these failures were due to several factors such as unsuitable saturated soil foundation, dynamic load due to pump operations and the weights of the existing fittings, valves, poor surface and subsurface drainage, possible wet well leakage and the dynamic effects of the sonic vibrations on the soil and pipes

Updates:

- Current Field Activities:
  - Preparing slab area for geopier (foundation system) installation
  - Clearing has commenced at the detention pond area; and
  - Installation of RCV-9A (valve)
- Near Term Field Activities:
  - Form work, rebar, and concrete placement at the slab will commence after the geopiers have been installed
  - Grading for the bioswale and installation of the storm pipe at the detention pond
  - Replacement of valves DV-34 thru DV-37

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:
- 72,335 LF of CCTV completed
- 54,594 LF of cleaning completed.
- 560 LF of Pipe-burst completed.
- 6,188 LF of Cured In Place Pipe completed
- 349 LF Open-cut/replacement completed

Environmental & Asset Impacts:
- Reduce inflow/infiltration from entering sewer thru defects
- Reduce the number of sanitary sewer overflows (SSOs)

Current Project Highlights

Sewer Group Three (SG3) Rehabilitation Contract C

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: 126 Point Repairs, 8,022 linear feet of Pipe-burst, 4,671 linear feet of Open-cut/Replacement, and 32,433 linear feet of CIPP.

Council Districts: 4 and 11
Project Start: June 21, 2018
Project Completion: June 21, 2019

Updates:

- 102,555 LF of CCTV completed
- 64,624 LF of cleaning completed.
- 79 Point Repairs completed
- 13,186 LF of Cured In Place Pipe completed
- 470 LF of Pipe-burst

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:

- 1,850 Tons of debris has been removed
- 6,329 LF of cleaning has been completed
- 2,253 LF of profile material has been installed and 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.
Project Start: January 2019
Project Completion: December 2019

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 was issued Nov 2018
  - Two contractors (A&B)
  - Three year contract
- **Construction to start in late January 2019**

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

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

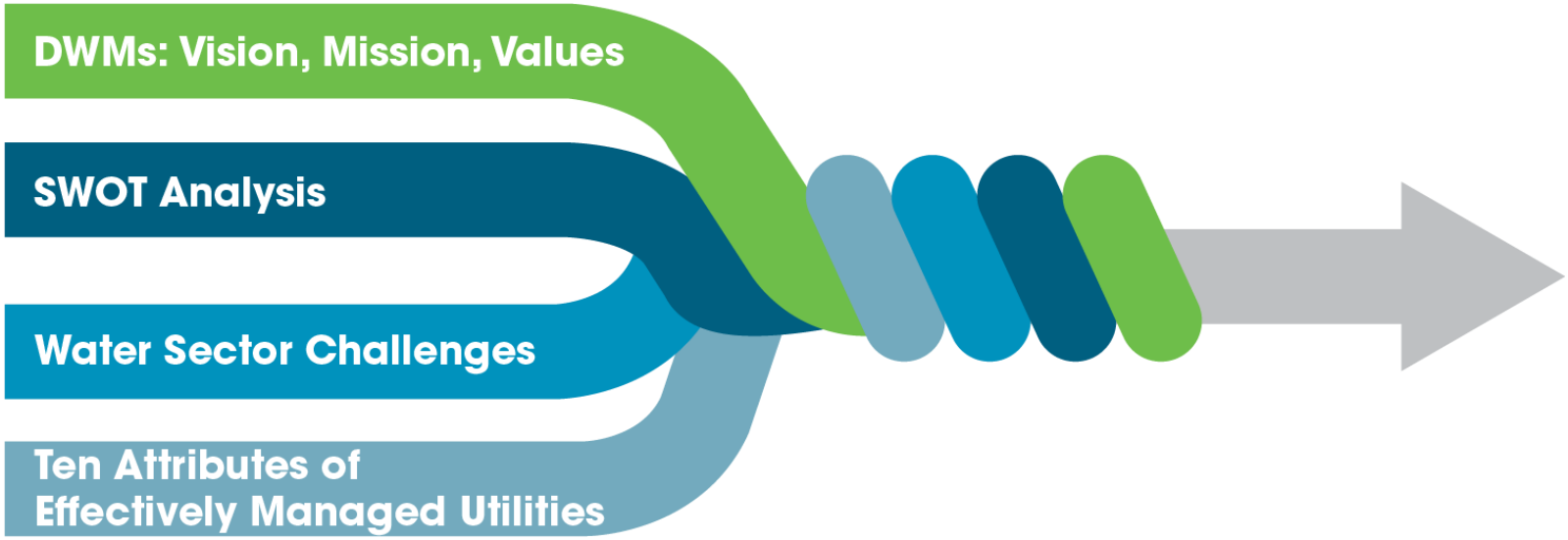
381 Lawson Road

483 Monument Avenue SW

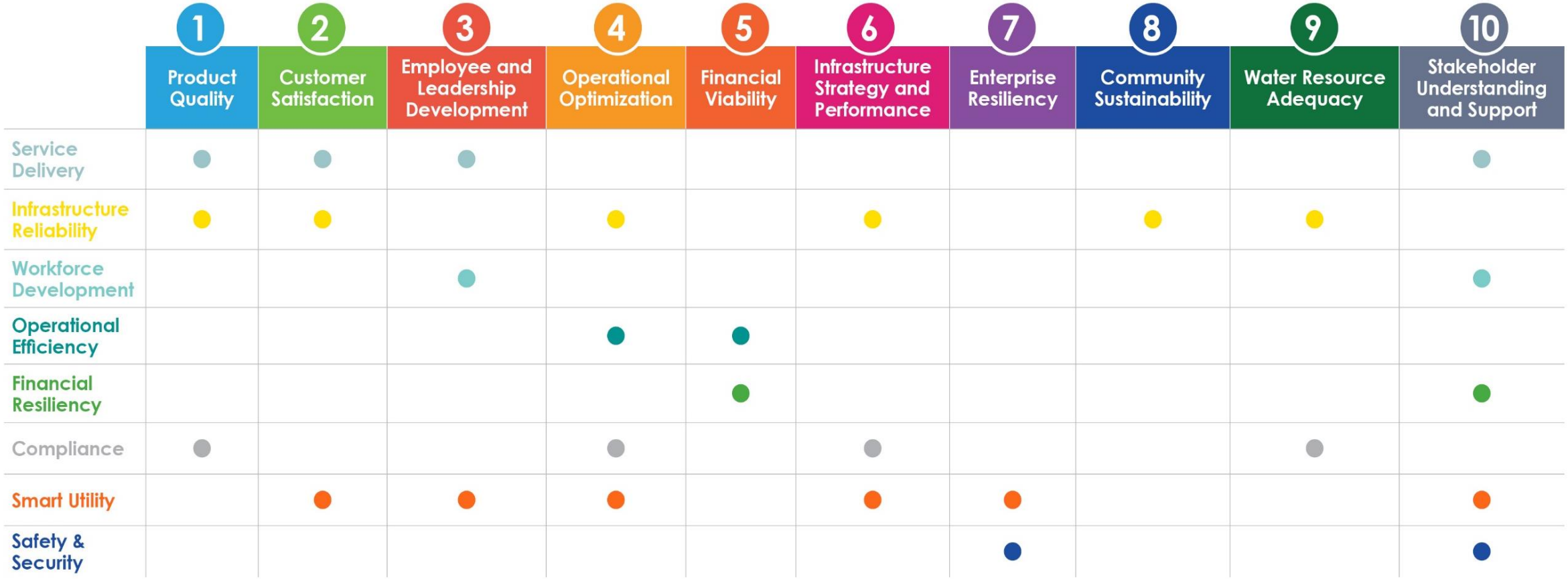
647 East Paces Ferry Rd NE

DWM STRATEGIC PLAN UPDATE

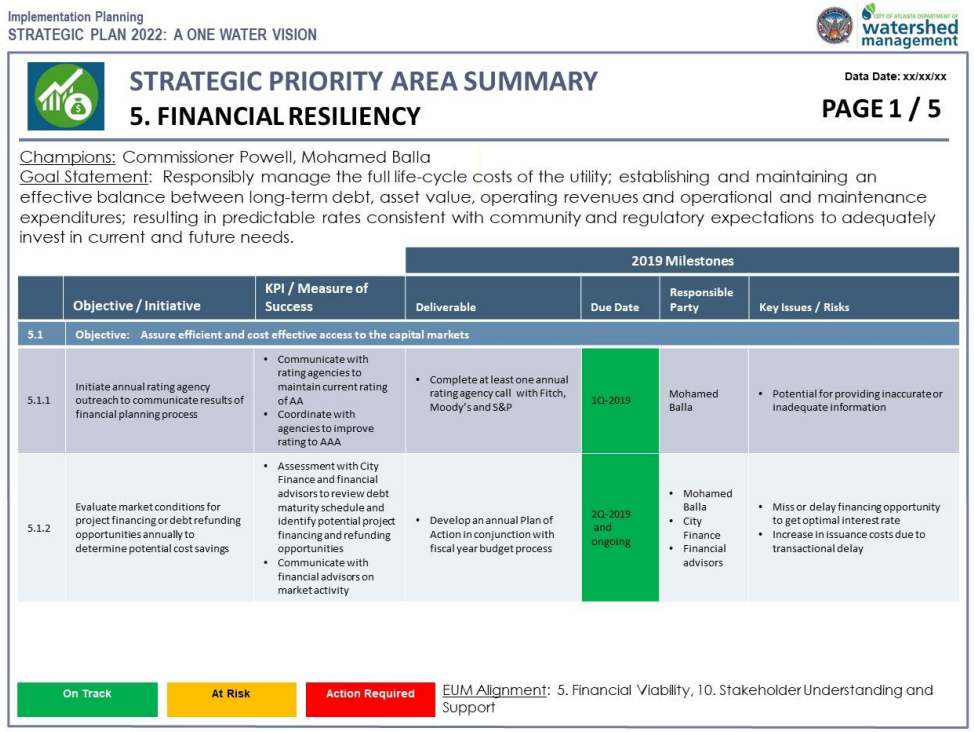
DWM Strategic Plan 2022: A One Water Vision



10 Attributes of an Effectively Managed Utility



Strategic Plan 2022 Overview



Implementation Planning
STRATEGIC PLAN 2022: A ONE WATER VISION

watershed management

STRATEGIC PRIORITY AREA SUMMARY
5. FINANCIAL RESILIENCY

Data Date: xx/xx/xx
PAGE 1 / 5

Champions: Commissioner Powell, Mohamed Balla
Goal Statement: Responsibly manage the full life-cycle costs of the utility; establishing and maintaining an effective balance between long-term debt, asset value, operating revenues and operational and maintenance expenditures; resulting in predictable rates consistent with community and regulatory expectations to adequately invest in current and future needs.

			2019 Milestones			
	Objective / Initiative	KPI / Measure of Success	Deliverable	Due Date	Responsible Party	Key Issues / Risks
5.1	Objective: Assure efficient and cost effective access to the capital markets					
5.1.1	Initiate annual rating agency outreach to communicate results of financial planning process	• Communicate with rating agencies to maintain current rating of AA • Coordinate with agencies to improve rating to AAA	• Complete at least one annual rating agency call with Fitch, Moody's and S&P	1Q-2019	Mohamed Balla	• Potential for providing inaccurate or inadequate information
5.1.2	Evaluate market conditions for project financing or debt refunding opportunities annually to determine potential cost savings	• Assessment with City Finance and financial advisors to review debt maturity schedule and identify potential project financing and refunding opportunities • Communicate with financial advisors on market activity	• Develop an annual Plan of Action in conjunction with fiscal year budget process	2Q-2019 and ongoing	• Mohamed Balla • City Finance • Financial advisors	• Miss or delay financing opportunity to get optimal interest rate • Increase in issuance costs due to transactional delay

On Track | At Risk | Action Required

EUM Alignment: 5. Financial Viability, 10. Stakeholder Understanding and Support

Purpose

- Expresses our vision, mission and core values
- Serves as a roadmap to become a leading public water utility
- **Eight priorities** serve as key drivers in achieving the goals and objectives of the utility
- **Prioritizes the allocation of funding**
- Informs a course of action for disciplined decision making and implementation of critical programs and initiatives that shape the future of DWM

SP2022 Roll-Out

DWM Strategic Plan Kick-Off Meeting
December 2016

Strategic Priority Planning Workshops
January 2017-December 2018

Executive & Management Team Work Session
January 2019

CUC Quarterly Presentation
February 2019

All Staff Convocation
March 2019

Internal Roadshows
March 2019-December 2019

SP2022 External Release
March 2019

CITY OF ATLANTA DEPARTMENT OF watershed management

Questions & Answers