



Centralized Reclaimed Water Program

FOURTH QUARTER FY20

Staff Contacts:

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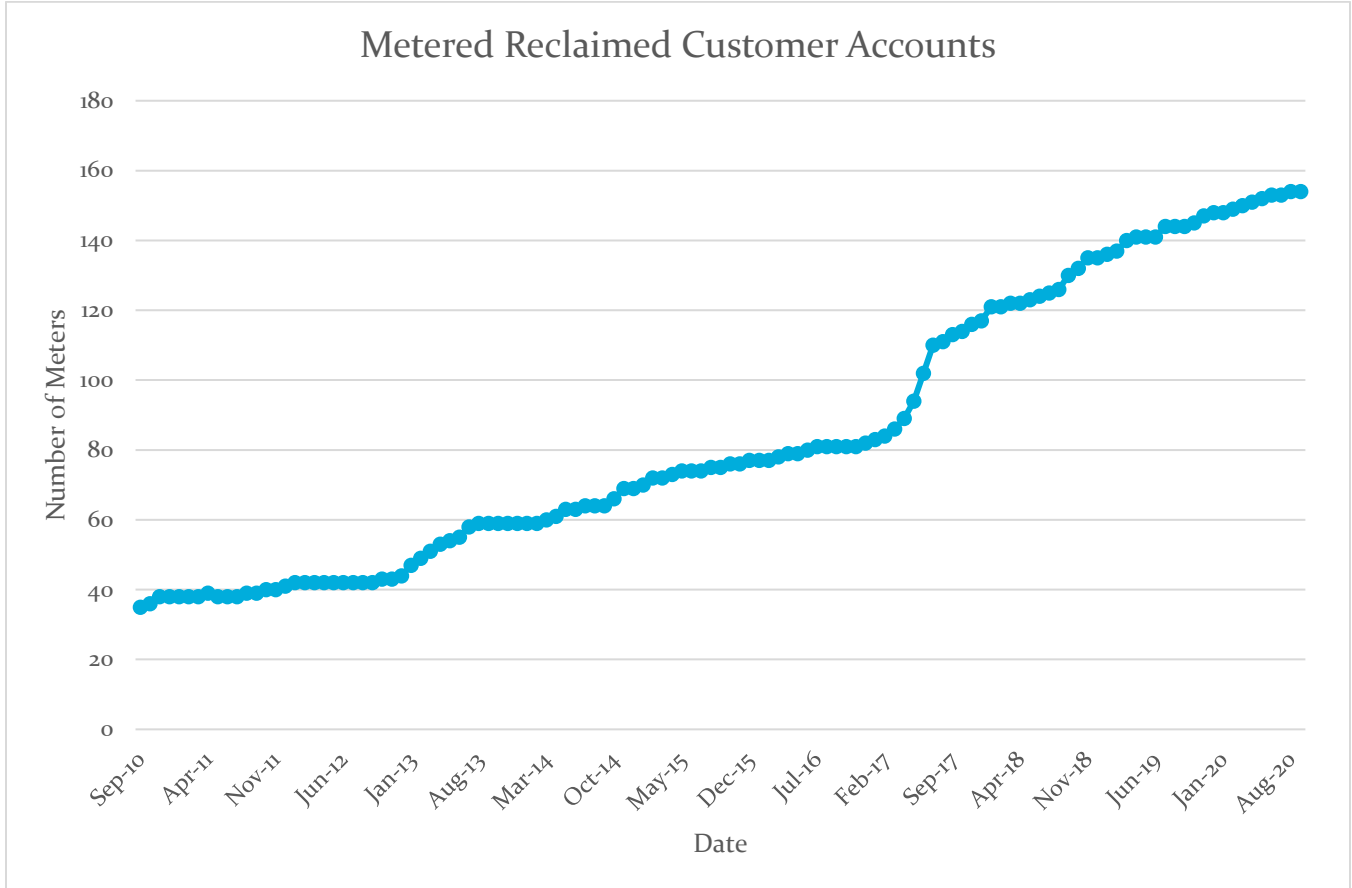
October 31, 2020





EXISTING CUSTOMERS

Metered Customer Accounts – Park 183 Phase 2 (RW000150) and 51 E Condo (RW000168) were recognized as metered customers during the quarter. There were 154 active metered customers as of the end of the quarter. The graph below shows metered customer growth over the past ten years.



Bulk Fill Station Accounts – One bulk fill station customer (Broadbanded Specialists, Inc.) was added during the 4th quarter bringing the total number of customers to 135. Reclaimed water staff has worked with Finance to implement a \$5.00 per year inactivity fee to be implemented in the upcoming fiscal year to recover costs associated with inactive accounts and to ultimately close them.

PROSPECTIVE CUSTOMERS

Marketing – Since the last quarterly report, reclaimed staff provided marketing and technical information to ACR Engineering, AT&T, Barton Springs Edwards Aquifer Conservation District, Tesla, Aquatech, Asakura Robinson, ATD, PARD, Civilitude, Garza EMC, Travis County, WGI, Bay & Associates, Dividend Finance, Pruneda Construction, GHD, Austin Permit, and CKLA. AW also applied for the Utility of the Future Today Recognition Program.

Potential Customers – The following table lists potential customers that staff is aware of or has been in contact with regarding connection to mains completed, in design, or under construction.





Prospective Customer	Location	Uses	Estimated Volume (gal/yr)	Status
208 Lamar PUD	208 S Lamar	Irr./toilets	500,000	PUD agrmt. being negotiated
211 Lamar PUD	211 S Lamar	Irr./toilets	500,000	PUD agrmt. being negotiated
425 PUD	425 Riverside	Irr./toilets	500,000	Under construction
6 th & Guadalupe	600 Guadalupe	Irr./toilets/cooling	2,000,000	Under construction
ABIA Maintenance Facility	10100 Golf Course	Irrigation	750,000	Meter applied for
ACC Rio Grande	1212 Rio Grande	Irr./toilets/cooling	4,500,000	Cooling meter applied for
Alta Trailhead	1105 Airport Blvd	Irrigation	400,000	Under construction
Auditorium Shores	Riverside	Irrigation	10,000,000	Awaiting PARD consideration
Burleson Retail Center	4829 S HWY 183	Irrigation	300,000	Under construction
Cambrian East Riverside MF	1806 Clubview	Irrigation	400,000	Under construction
Chow Plaza	5601 E Ben White	Irrigation	500,000	Under design
Colorado Creek Apts Lot 2	2900 Olivares	Irrigation	600,000	Under construction
Convenience Store	6320 E Stassney	Irrigation	200,000	Under design
Convenience Store Expansion	8318 Burleson Road	Irrigation	300,000	Site plan approved
Del Valle Gas Station	3132 E Hwy 71	Irrigation	500,000	Under construction
Dove Springs Health Center	5801 Ainez	Irrigation	500,000	Under design
Dove Springs Rec Center	5801 Ainez	Irrigation	2,000,000	Awaiting AW CIP
Duncan Park	900 W 9 th	Irrigation	750,000	Preliminary planning
Factory 512	6412 Old Burleson	Irrigation	500,000	Under construction
Flats on Shady	1125 Shady Lane	Irrigation	400,000	Preliminary planning
Goodnight Ranch Exp	8601 Nuckols Xing	Irrigation	70,000,000	SER under review
Govalle Ballfield	5350 Bolm	Irrigation	500,000	Awaiting PARD consideration
Grove Retail Center	5900 E Riverside	Irrigation	200,000	Under design
HHS Department	7201 Levander	Irrigation	500,000	Preliminary planning
Holiday Inn Express	3102 E Hwy 71	Irrigation	500,000	Under design
Karisha Community Center	4500 E 51 st	Irrigation/toilets	200,000	Under design
La Quinta	3080 E Hwy 71	Irrigation	500,000	Site plan approved
Montopolis Apartments	2601 Montopolis	Irrigation	600,000	Under design
The Republic	401 W 4th	Irrigation/toilets	2,000,000	Under design
Onion Creek Soccer Fields	5600 E William Cannon	Irrigation	19,000,000	Awaiting AW CIP
Perry Estates	4114 Red River	Irrigation	600,000	Under construction
Spanson	3200 Alvin Devane	Irrigation/Manufac.	5,000,000	Awaiting AW CIP
Stainless Steals	3637 Silver Dollar	Irrigation	200,000	Under design
Stillwater Apartments	2511 Montopolis	Irrigation	600,000	Under design
Tesla	12601 Harold Green	Cooling	400,000,000	Under design
TXDOT Property	6230 E Stassney	Irrigation	1,600,000	Under design
Travis Co. Jail Exp	3614 Bill Price	Irrigation/cooling	500,000	Under design
Travis Co. Softball Fields	3514 S FM 973	Irrigation	2,000,000	Awaiting AW CIP
Tokyo Electron America	2400 Grove	Irrigation	2,500,000	Awaiting AW CIP
UT LBJ Grounds	707 Clyde Littlefield	Irrigation	5,000,000	Awaiting UT consideration
Waterloo Park	500 E 12th	Irrigation/toilets	250,000	Under construction

RECLAIMED PROGRAM ACTIVITY

Bulk Fill Stations – Hornsby saw higher use this quarter due to several construction projects on Hwy 130. Use at Hergotz and Walnut is increasing steadily after reopening for service last quarter from repairs completed earlier this year. (Heavy use at the stations had resulted in damage to the fill arms and fill arm supports). Although year



over year use did increase for the quarter, it was moderated as a result of shelter in place limitations on residential and commercial construction from Covid-19.

Station	4QFY20 Use (gal)	4QFY19 Use (gal)	FY20 Use (gal)	FY19 Use (gal)
Hergotz	774,689	1,470,995	2,490,814	1,865,475
Hornsby	1,865,853	116,995	3,515,533	289,596
Walnut	89,850	1,291,839	1,833,814	2,640,821
Total	2,730,392	2,879,829	7,840,161	4,795,892

Completing the Core

- *Oltorf Phase 1:* The design engineer, CAS Consulting & Services, Inc. (CAS), is working toward a 60% design. There is some drinking water main work associated with this project and a special specification handling connection to asbestos cement (AC) pipe is currently in the works. Potential reclaimed customers along the alignment will be contacted shortly regarding their options for connecting. With no easements to acquire, the engineer anticipates the project will be advertised for bid earlier than expected.
- *Oltorf Phase 2:* Designed by K Friese + Associates (KFA), Phase 2 is getting closer to 60% design. The design of Phase 2 is expected to take longer than Phase 1 as it involves a complex crossing I-35 as well as acquiring easements across private properties and staging areas. After discussions with KFA and their geotechnical subconsultant, micro-tunneling is standing out as the most likely alternative for crossing I-35. Potential customers along the alignment will be contacted shortly regarding their options for connecting.
- *Travis Heights:* The streets in the vicinity of South Congress are narrow and filled with underground utilities. The design engineer, CAS, developed three potential pipeline alignments in this area. These alignments are being evaluated with respect to utility conflicts, traffic impacts, and tree preservation. An alignment selection will be made early in the next quarter.
- *Barton SoCo:* The Barton SoCo main will connect to the Travis Heights main along South Congress. Once the alignment of the *Travis Heights* main is identified, KFA will finalized their design contract for the *Barton SoCo* main.

Erosion at Krieg Fields – Watershed Protection is the sponsoring department for the project addressing erosion at Krieg Fields, which has exposed a reclaimed water main and a 54-inch sanitary sewer. Watershed’s design consultant recommended that the replacement reclaimed main not be attached to a pedestrian bridge but be installed via open cut 5 feet below the restored stream bed elevation. This elevation is not below the erosion hazard zone and is at the same elevation as the 54-inch sanitary sewer. (A \$1.0 million emergency project placed concrete encasement and 3-foot diameter rip rap to protect the sewer). As the reclaimed main has been damaged once by flooding and the proposed new elevation will not guarantee the reclaimed main will not be damaged again, reclaimed staff decided to remove the reclaimed main from the larger Watershed project and place the reclaimed main beneath the erosion hazard zone through a horizontal directional drill.

Goodnight Ranch – The Goodnight Ranch Development has three meters connected to AW’s reclaimed water system and uses 18 MG in a typical year. The Onion Creek District Park uses an additional 15 MG per year. Goodnight Ranch is looking to expand their use of reclaimed water to irrigate up to 40 additional acres of right-of-way and parks. (The development is similar in size to the Mueller development and may have an ultimate demand as high as 70 MG/year). The developer has a Service Extension Request pending.





Mandatory Connections – To meet long-term Water Forward goals, the reclaimed mandatory connection distance will increase from 250 feet to 500 feet for the very largest of developments (>250,000 sf). The change was incorporated into the Land Development Code rewrite. Litigation and a judicial order slowed the adoption of the rewritten Land Development Code. City staff are reviewing options on the best way to move forward.

Montopolis Tank / Burleson Road / South System Changes – The Montopolis Tank contractor continued to address outstanding punch list items in order to close out the project and is ready for startup. Startup of the pump station is anticipated to occur in late 2020 once the Burleson Phase 2 pipeline is complete. The Burleson Phase 2 contractor has encountered alignment issues again on the second bore. Project staff is working with the contractor and City safety staff to salvage the second bore. The completion of these projects will improve the reliability of the reclaimed distribution system on the south side of the Colorado River by providing additional pumping and storage capacity. These system improvements will extend the existing Central Service Area to the south side of the river and free up capacity for development around ABIA.

Northern Distribution System Issues – Austin Water has provided reclaimed water for toilet flushing since 2009 without complaints from customers or issues raised. Existing toilet flushing customers are moderately sized commercial buildings in the Mueller area. In October 2017 the Central Library and the Google Building connected to the reclaimed system for toilet flushing. These are high-rise buildings with annual demand up to 1.6 million gallons per year. Within a year, owners of the Google Building raised concerns over a number of issues with the use of reclaimed water for toilet flushing. Issues relating to color, oily water, annual cross-connection testing, and pressure reducing valves have resolutions. Austin Water developed and is circulating a brochure with design recommendations for toilet flushing customers so that they can avoid these issues.

South Austin Regional WWTP – Work to remove two pipe constrictions on the distribution system is in progress. These two pipe constrictions are located near the front gate of SAR. The Montopolis Tank will be used to serve external customers during the shutdowns to remove the pipe constrictions. A meeting between SAR, Pumping Division, and Reclaimed staff will be held in the next quarter to discuss further integration of the SAR pumps and Montopolis tank.

Long-Range Plan Status – The reclaimed water long-range plan is undergoing its first major update since 2011. Changes will reflect customers, pipelines, tanks, and pump stations added to the centralized reclaimed system since then. Major work is complete and is summarized in a draft report. Systems Planning staff has provided comments that are being incorporated. A separate but related effort led by Systems Planning staff will develop a strategy for the growth of decentralized reclaimed systems served from smaller WWTP plants.

Tesla – Tesla is in the process of building a manufacturing facility on approximately 2,200 acres of land on the north side of the Colorado River near the SAR WWTP. They have asked to use reclaimed water for fire protection while the building is under construction. Additionally, they are interested in using reclaimed water for cooling and process water.

Variance Requests – A proposed apartment complex at 827 W 12th was granted a variance for both internal use of reclaimed water and irrigation. They will be harvesting rainwater and AC condensate for their small irrigation needs.

OTHER

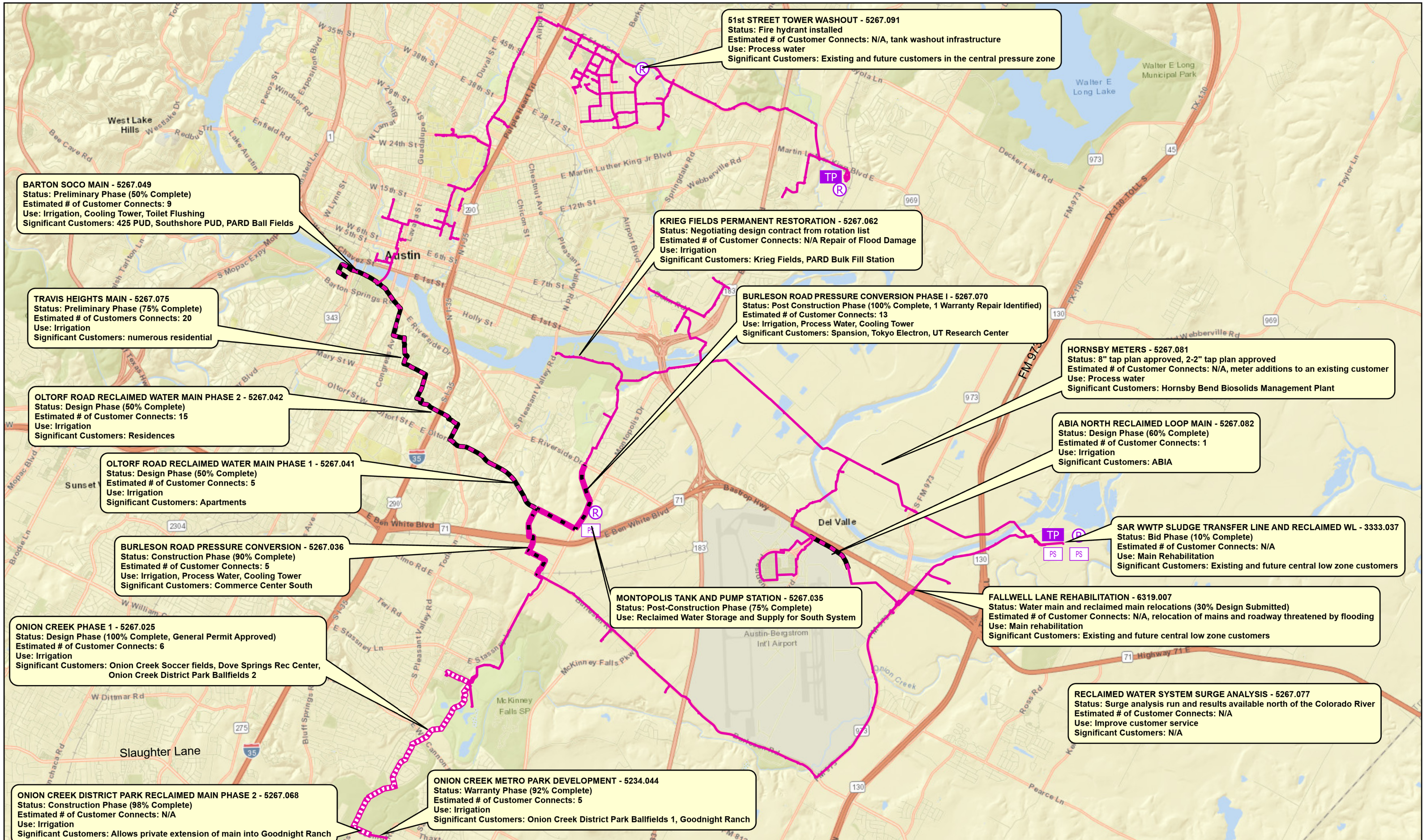
Use – Fourth Quarter and full Fiscal Year 2020 reclaimed water use is listed in the table below. Use is down year over year due to cooler and wetter weather during the quarter as compared to last year. For the fiscal year, use is up compared to Fiscal Year 2019 and exceeds the 2020 Water Forward goal of 1,322.9 MG.



Time Period	Centralized Use
4 th Quarter FY20	451.97 MG
4 th Quarter FY19	567.23 MG
FY2020	1,423.36 MG
FY2019	1,348.81 MG

CONSTRUCTION

See the following graphic for information on reclaimed water projects in the planning, design, construction, and warranty phases.



51st STREET TOWER WASHOUT - 5267.091
 Status: Fire hydrant installed
 Estimated # of Customer Connects: N/A, tank washout infrastructure
 Use: Process water
 Significant Customers: Existing and future customers in the central pressure zone

BARTON SOCO MAIN - 5267.049
 Status: Preliminary Phase (50% Complete)
 Estimated # of Customer Connects: 9
 Use: Irrigation, Cooling Tower, Toilet Flushing
 Significant Customers: 425 PUD, Southshore PUD, PARD Ball Fields

KRIEG FIELDS PERMANENT RESTORATION - 5267.062
 Status: Negotiating design contract from rotation list
 Estimated # of Customer Connects: N/A Repair of Flood Damage
 Use: Irrigation
 Significant Customers: Krieg Fields, PARD Bulk Fill Station

TRAVIS HEIGHTS MAIN - 5267.075
 Status: Preliminary Phase (75% Complete)
 Estimated # of Customers Connects: 20
 Use: Irrigation
 Significant Customers: numerous residential

BURLESON ROAD PRESSURE CONVERSION PHASE I - 5267.070
 Status: Post Construction Phase (100% Complete, 1 Warranty Repair Identified)
 Estimated # of Customer Connects: 13
 Use: Irrigation, Process Water, Cooling Tower
 Significant Customers: Spansion, Tokyo Electron, UT Research Center

HORNSBY METERS - 5267.081
 Status: 8" tap plan approved, 2-2" tap plan approved
 Estimated # of Customer Connects: N/A, meter additions to an existing customer
 Use: Process water
 Significant Customers: Hornsby Bend Biosolids Management Plant

OLTORF ROAD RECLAIMED WATER MAIN PHASE 2 - 5267.042
 Status: Design Phase (50% Complete)
 Estimated # of Customer Connects: 15
 Use: Irrigation
 Significant Customers: Residences

ABIA NORTH RECLAIMED LOOP MAIN - 5267.082
 Status: Design Phase (60% Complete)
 Estimated # of Customer Connects: 1
 Use: Irrigation
 Significant Customers: ABIA

OLTORF ROAD RECLAIMED WATER MAIN PHASE 1 - 5267.041
 Status: Design Phase (50% Complete)
 Estimated # of Customer Connects: 5
 Use: Irrigation
 Significant Customers: Apartments

SAR WWTP SLUDGE TRANSFER LINE AND RECLAIMED WL - 3333.037
 Status: Bid Phase (10% Complete)
 Estimated # of Customer Connects: N/A
 Use: Main Rehabilitation
 Significant Customers: Existing and future central low zone customers

BURLESON ROAD PRESSURE CONVERSION - 5267.036
 Status: Construction Phase (90% Complete)
 Estimated # of Customer Connects: 5
 Use: Irrigation, Process Water, Cooling Tower
 Significant Customers: Commerce Center South

MONTOPOLIS TANK AND PUMP STATION - 5267.035
 Status: Post-Construction Phase (75% Complete)
 Use: Reclaimed Water Storage and Supply for South System

FALLWELL LANE REHABILITATION - 6319.007
 Status: Water main and reclaimed main relocations (30% Design Submitted)
 Estimated # of Customer Connects: N/A, relocation of mains and roadway threatened by flooding
 Use: Main rehabilitation
 Significant Customers: Existing and future central low zone customers

ONION CREEK PHASE 1 - 5267.025
 Status: Design Phase (100% Complete, General Permit Approved)
 Estimated # of Customer Connects: 6
 Use: Irrigation
 Significant Customers: Onion Creek Soccer fields, Dove Springs Rec Center, Onion Creek District Park Ballfields 2

RECLAIMED WATER SYSTEM SURGE ANALYSIS - 5267.077
 Status: Surge analysis run and results available north of the Colorado River
 Estimated # of Customer Connects: N/A
 Use: Improve customer service
 Significant Customers: N/A

ONION CREEK DISTRICT PARK RECLAIMED MAIN PHASE 2 - 5267.068
 Status: Construction Phase (98% Complete)
 Estimated # of Customer Connects: N/A
 Use: Irrigation
 Significant Customers: Allows private extension of main into Goodnight Ranch

ONION CREEK METRO PARK DEVELOPMENT - 5234.044
 Status: Warranty Phase (92% Complete)
 Estimated # of Customer Connects: 5
 Use: Irrigation
 Significant Customers: Onion Creek District Park Ballfields 1, Goodnight Ranch