Centralized Reclaimed Water Program
FIRST QUARTER FY21

Staff Contacts:
Dan W. Pedersen, PE | Javier Ramirez, PE | Brent Crawford, EIT | Oystein Moen, EIT

January 31, 2021
EXISTING CUSTOMERS

**Metered Customer Accounts** – River Stone HOA (RW000119), Perry Estates (RW000137), Mueller 20 (RW000157), PARD Govalle (RW000159), and Onion Creek Metro Park 2 (RW000162) were recognized as metered customers during the quarter. There were 159 active metered customers as of the end of the quarter. The graph below shows metered customer growth over the past ten years.

![Metered Reclaimed Customer Accounts](chart)

**Bulk Fill Station Accounts** – Reclaimed water staff implemented a $5.00 per year inactivity fee, which went into effect the first quarter of fiscal year 2021. The fee is intended to recover software costs associated with inactive accounts and to ultimately close them. Five inactive accounts were closed and four bulk fill station customers (Yeniel Camejo, JPI Utility Services, Inc., Macias Specialty Contracting, and Ohana Bin Wash) were opened during the quarter, bringing the total number of customers to 134.

PROSPECTIVE CUSTOMERS

**Marketing** – Since the last quarterly report, reclaimed staff provided marketing and technical information to COA Urban Forestry, Kimley-Horn, Dove Springs Public Health Facility, Bay & Assoc., Benchmark TX, Colorado River Constructors, PARD Fiesta Gardens, Consort Inc., SE Construction, COA Economic Development, COA Community Gardens, City of Laredo, Garza EMC, Public Works Project Management, an Alicante Townhomes HOA.
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.

<table>
<thead>
<tr>
<th>Prospective Customer</th>
<th>Location</th>
<th>Uses</th>
<th>Estimated Volume (gal/yr)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>208 Lamar PUD</td>
<td>208 S Lamar</td>
<td>Irr./toilets</td>
<td>500,000</td>
<td>PUD agrmt. being negotiated</td>
</tr>
<tr>
<td>211 Lamar PUD</td>
<td>211 S Lamar</td>
<td>Irr./toilets</td>
<td>500,000</td>
<td>PUD agrmt. being negotiated</td>
</tr>
<tr>
<td>425 PUD</td>
<td>425 Riverside</td>
<td>Irr./toilets</td>
<td>500,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>6th &amp; Guadalupe</td>
<td>600 Guadalupe</td>
<td>Irr./toilets/cooling</td>
<td>2,000,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>ABIA Maintenance Facility</td>
<td>10100 Golf Course</td>
<td>Irrigation</td>
<td>750,000</td>
<td>Meter applied for</td>
</tr>
<tr>
<td>Alta Trailhead</td>
<td>1105 Airport Blvd</td>
<td>Irrigation</td>
<td>400,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Auditorium Shores</td>
<td>Riverside</td>
<td>Irrigation</td>
<td>10,000,000</td>
<td>Awaiting PARD consideration</td>
</tr>
<tr>
<td>Burleson Retail Center</td>
<td>4829 S HWY 183</td>
<td>Irrigation</td>
<td>300,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Cambrian East Riverside MF</td>
<td>1806 Clubview</td>
<td>Irrigation</td>
<td>400,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Central Health</td>
<td>Red River &amp; 15th</td>
<td>Irr./toilets/cooling</td>
<td>5,000,000</td>
<td>ILA and PUD negotiations</td>
</tr>
<tr>
<td>Chow Plaza</td>
<td>5601 E Ben White</td>
<td>Irrigation</td>
<td>500,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Colorado Creek Apts Lot 2</td>
<td>2900 Olivares</td>
<td>Irrigation</td>
<td>600,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Convenience Store</td>
<td>6320 E Stassney</td>
<td>Irrigation</td>
<td>200,000</td>
<td>Under design</td>
</tr>
<tr>
<td>Convenience Store Expansion</td>
<td>8318 Burleson Road</td>
<td>Irrigation</td>
<td>300,000</td>
<td>Site plan approved</td>
</tr>
<tr>
<td>Del Valle Gas Station</td>
<td>3132 E Hwy 71</td>
<td>Irrigation</td>
<td>500,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Dove Springs Health Center</td>
<td>5801 Ainez</td>
<td>Irrigation</td>
<td>500,000</td>
<td>Awaiting AW CIP</td>
</tr>
<tr>
<td>Dove Springs Rec Center</td>
<td>5801 Ainez</td>
<td>Irrigation</td>
<td>2,000,000</td>
<td>Awaiting AW CIP</td>
</tr>
<tr>
<td>Duncan Park</td>
<td>900 W 9th</td>
<td>Irrigation</td>
<td>750,000</td>
<td>Preliminary planning</td>
</tr>
<tr>
<td>Factory 512</td>
<td>6412 Old Burleson</td>
<td>Irrigation</td>
<td>500,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Flats on Shady</td>
<td>1125 Shady Lane</td>
<td>Irrigation</td>
<td>400,000</td>
<td>Preliminary planning</td>
</tr>
<tr>
<td>Goodnight Ranch Exp</td>
<td>8601 Nuckols Xing</td>
<td>Irrigation</td>
<td>70,000,000</td>
<td>SER under review</td>
</tr>
<tr>
<td>Grove Retail Center</td>
<td>5900 E Riverside</td>
<td>Irrigation</td>
<td>200,000</td>
<td>Under design</td>
</tr>
<tr>
<td>Holiday Inn Express</td>
<td>3102 E Hwy 71</td>
<td>Irrigation</td>
<td>500,000</td>
<td>Under design</td>
</tr>
<tr>
<td>Karisha Community Center</td>
<td>4500 E 51st</td>
<td>Irrigation/toilets</td>
<td>200,000</td>
<td>Under design</td>
</tr>
<tr>
<td>La Quinta</td>
<td>3080 E Hwy 71</td>
<td>Irrigation</td>
<td>500,000</td>
<td>Site plan approved</td>
</tr>
<tr>
<td>Montopolis Apartments</td>
<td>2601 Montopolis</td>
<td>Irrigation</td>
<td>600,000</td>
<td>Under design</td>
</tr>
<tr>
<td>The Republic</td>
<td>401 W 4th</td>
<td>Irrigation/toilets</td>
<td>2,000,000</td>
<td>Under design</td>
</tr>
<tr>
<td>Onion Creek Soccer Fields</td>
<td>5600 E William Cannon</td>
<td>Irrigation</td>
<td>19,000,000</td>
<td>Awaiting AW CIP</td>
</tr>
<tr>
<td>Spanision</td>
<td>3200 Alvin Devane</td>
<td>Irrigation/Manufac.</td>
<td>5,000,000</td>
<td>Awaiting AW CIP</td>
</tr>
<tr>
<td>Stainless Steals</td>
<td>3637 Silver Dollar</td>
<td>Irrigation</td>
<td>200,000</td>
<td>Under design</td>
</tr>
<tr>
<td>Stillwater Apartments</td>
<td>2511 Montopolis</td>
<td>Irrigation</td>
<td>600,000</td>
<td>Under design</td>
</tr>
<tr>
<td>Tesla</td>
<td>12601 Harold Green</td>
<td>Cooling</td>
<td>400,000,000</td>
<td>SER under negotiation</td>
</tr>
<tr>
<td>TXDOT Property</td>
<td>6230 E Stassney</td>
<td>Irrigation</td>
<td>1,600,000</td>
<td>Meters applied for</td>
</tr>
<tr>
<td>Travis Co. Jail Exp</td>
<td>3614 Bill Price</td>
<td>Irrigation/cooling</td>
<td>500,000</td>
<td>Unders construction</td>
</tr>
<tr>
<td>Travis Co. Softball Fields</td>
<td>3514 S FM 973</td>
<td>Irrigation</td>
<td>2,000,000</td>
<td>Awaiting AW CIP</td>
</tr>
<tr>
<td>UT LBJ Grounds</td>
<td>707 Clyde Littlefield</td>
<td>Irrigation</td>
<td>5,000,000</td>
<td>Awaiting UT consideration</td>
</tr>
<tr>
<td>Waterloo Park</td>
<td>500 E 12th</td>
<td>Irrigation/toilets</td>
<td>250,000</td>
<td>Meter applied for</td>
</tr>
</tbody>
</table>

RECLAIMED PROGRAM ACTIVITY

Bulk Fill Stations – Hornsby maintained higher use this quarter compared to Hergotz and Walnut due to the ongoing construction projects for Hwy 130. The use at Hergotz, although much lower in part to low seasonal demands and shelter in place recommendations for Covid-19 is making a slow come back from the station fill arm repairs that were completed in the later end of the last fiscal year 2020. Similarly, the Walnut station usage is lower year over year but has maintained a steady climb since undergoing previous fill arm repairs as well.
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. 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. A public meeting is scheduled for 1/21/21.

- **Oltorf Phase 2**: Designed by K Friese + Associates (KFA), Phase 2 is working toward a 90% 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. There is some drinking water main work associated with this project. 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. A public meeting is scheduled for 1/21/21.

- **Travis Heights**: The design engineer, CAS, completed the pipeline alignment study. CAS evaluated four alignments with respect to utility conflicts, traffic impacts, and tree preservation and recommended a final alignment with input from AW staff. CAS is proceeding to design services and preparing a scope and fee for approval.

- **Barton SoCo**: The Barton SoCo main will connect to the Travis Heights main along South Congress. With the alignment of the Travis Heights main selected, KFA has proceeded with finalizing 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.

**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 early 2021 once the Burleson Phase 2 pipeline is complete. The Burleson Phase 2 contractor is currently working on completing the bore across Highway 71. 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. 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. 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 located near the front gate of SAR was completed. Subsequent testing revealed an improvement in the ability to move reclaimed water out of the plant.

Long-Range Plan Status – The reclaimed water long-range plan is undergoing its first major update since 2011. It has been reviewed by Systems Planning staff and their comments were incorporated into the plan. A separate but related effort led by Systems Planning staff will develop a strategy for the growth of a 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. An SER for reclaimed water use is being negotiated.

Variance Requests – A planned dental office at 4100 E 51st Street requested, and was denied, a variance from the mandatory connection ordinance.

OTHER

Use – First Quarter Fiscal Year 2020 and 2021 centralized reclaimed water use is listed in the table below. While use is down year over year, that is due to FY2020 having an extremely dry autumn.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Centralized Reclaimed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Quarter FY21</td>
<td>341.04 MG</td>
</tr>
<tr>
<td>1st Quarter FY20</td>
<td>367.44 MG</td>
</tr>
</tbody>
</table>

CONSTRUCTION

See the following graphic for information on reclaimed water projects in the planning, design, construction, and warranty phases.
BARTON SOCO MAIN - 5267.049
Status: Preliminary Phase (90% Complete)
Estimated # of Customer Connects: 9
Use: Irrigation, Cooling Tower, Toilet Flushing
Significant Customers: 429 PUD, Southshore PUD, PARD Ball Fields

WAXAHCHEE MAIN - 5267.075
Status: Preliminary Phase (100% Complete)
Estimated # of Customers Connects: 20
Use: Irrigation
Significant Customers: numerouse residential

TRAVIS HEIGHTS MAIN - 5267.075
Status: Preliminary Phase (100% Complete)
Estimated # of Customer Connects: 15
Use: Irrigation
Significant Customers: Onion Creek Soccer fields, Dove Springs Rec Center, Onion Creek District Park Ballfields 2

OLTFORD ROAD RECLAIMED WATER MAIN PHASE 2 - 5267.040
Status: Design Phase (60% Complete)
Estimated # of Customer Connects: 5
Use: Irrigation
Significant Customers: Apartments

OLTFORD ROAD RECLAIMED WATER MAIN PHASE 1 - 5267.041
Status: Design Phase (60% Complete)
Estimated # of Customer Connects: 5
Use: Irrigation
Significant Customers: Onion Creek Soccer fields, Dove Springs Rec Center, Onion Creek District Park Ballfields 2

BURLESON ROAD PRESSURE CONVERSION PHASE 1 - 5267.070
Status: Construction Phase (92% Complete, Hwy 71 Bore Remedied)
Use: Irrigation, Process Water, Cooling Tower
Significant Customers: Commerce Center South

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

ONION CREEK DISTRICT PARK RECLAIMED MAIN PHASE 2 - 5267.068
Status: Construction Phase (100% Complete)
Estimated # of Customer Connects: N/A
Use: Irrigation
Significant Customers: Allows private extension of main into Goodnight Ranch

DOWNSTREAM TOWER WASHOUT - 5267.091
Status: Hydrant installed
Estimated # of Customer Connects: N/A
Use: Process water
Significant Customers: Existing and future customers in the central pressure zone

KREG FIELD PERMANENT RESTORATION - 5267.082
Status: Negotiating design contract from rotation list
Estimated # of Customer Connects: N/A
Repair of Flood Damage
Use: Irrigation
Significant Customers: Kreg Fields, PARD Bulk Filtration Station

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

BURLINGTON ROAD PRESSURE CONVERSION PHASE 2 - 5267.070
Status: Construction Phase (100% Complete, 1 Warrant Repair Identified)
Estimated # of Customer Connects: 13
Use: Irrigation, Process Water, Cooling Tower
Significant Customers: Spansion, Tokyo Electron, UT Research Center

HORNBY METERS - 5267.081
Status: 0.8" 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: Hornby Bend Biosolids Management Plant

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

FALLMONT LANE REHABILITATION - 5319.027
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

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

SAR WTP SLUDGE TRANSFER LINE AND RECLAIMED WA - 5333.037
Status: Bid Phase (10% Complete)
Estimated # of Customer Connects: N/A
Use: Main Rehabilitation
Significant Customers: Existing and future central low zone customers

ONION CREEK METRO PARK DEVELOPMENT - 5234.044
Status: Warrant Phase (90% Complete)
Estimated # of Customer Connects: 5
Use: Irrigation
Significant Customers: Onion Creek District Park Ballfields 1, Goodnight Ranch

SAR WTP SLUDGE TRANSFER LINE AND RECLAIMED WA - 5333.037
Status: Bid Phase (10% Complete)
Estimated # of Customer Connects: N/A
Use: Main Rehabilitation
Significant Customers: Existing and future central low zone customers