Alliance Water Resources, Inc. Operations Update

Martin County Water District

December 8, 2021
AGENDA

- Key Accomplishments to Date
- New Website Demo
- GIS
- Project Updates
- Immediate Needs
- Discussion/Questions
Key Accomplishments to Date

- RFQ’S were received and 2 engineering firms were selected by the Water and Sanitation Districts. Fishbeck on the water side and Prime on the Sanitation side.
- Peracetic Acid has been approved for use at both WWTP’s and is being fed
- New billing software purchased and implemented
- QGIS and GEOSYNC CLOUD Implementation.
- 1500 meters GIS Mapped
- Leak Mapping on GIS
- Kept reservoir levels up while battling pump issues
Key Accomplishments to Date

- Master Meter Zones Identified
- Water Loss Control Implementation
- Critical Operational Equipment for Regulatory Compliance and Leak Detection
- Developed Meter Reading and Billing SOP
- Developed WTP and WWTP SOP’s
- Installed 2nd pump at Turkey Booster Station
- Purchased New Trench Box for Safe Excavation
- New Pump at Meathouse Booster Station
- Repaired broken valve
Key Accomplishments to Date

- Replaced Ceiling Tile and Lighting in Plant Lab
- Installed New Booster Station Building at Cassell Branch
- Purchased New Booster Station Building for Meathouse Booster Station
- 6 Trucks brought from Alliance Water Resources and Provided for District Use
- Repaired the District Excavator and Purchased New Tracks
- AWR purchased a Dump Trailer for use
- AWR Purchasing a New Excavator for use in Martin County
Key Accomplishments to Date

- Fixing Hydraulic and System Issues the Right Way
- 2 Newly Acquired Licenses in the District
- Installed a new valve on ST RT 2032 to isolate a problem area in Wolfcreek area
- Inventory Control Program
- Graveled Access Road for Clearwells
- Pump Redundancy at 292 Booster Station
- New Pump at Buffalo Horn Booster Station
NEW WEBSITE DEMO

https://mcub.myruralwater.com/home

- Online Bill Payment Access
- Customer Alerts and Notifications
- Customer Complaints and Requests
- Board Meeting Agendas and Packets
- Tariff Information
- Rate Tables
- News and Information
- FAQ
GIS MAPPING
Completed Projects (5)
Pump Purchase & Lovely Line/Meter Replacement Project

- **RWI Improvements - Pump Purchase Only**
  - New 2 MG Raw Water Intake Pump with Variable Speed Drive
  - New 4 MG Raw Water Intake Pump with Variable Speed Drive
  - New 4,000 GPM River Screen

- **Lovely Mainline, Service Line & Meter Replacement Project**
  - 22,629 LF of Mainline/Service Line Replaced
  - 61 Meters Replaced
Telemetry & Utility Relocation Projects

- **High School Water Storage Tank & Booster Station Telemetry**
  - New telemetry at the Holly Bush Pump Station
  - New telemetry at the High School Water Storage Tank

- **Willis Dials / Dans Branch Road Utility Relocation**
  - Replaced Existing Waterline to Facilitate Construction of a new Bridge for the KYTC Bridging Kentucky Program
Hydraulic Model

**Status:**

- Lines, Tanks and PRVs have been input into the Model and Location Field Verified.
- Line Sizes have been Verified.
- Pressure Zones have been Analyzed.
- Usage Data has been entered into the Model.
- Model has been Calibrated with Field Collected Data.
- Model has been Checked against Field Observations.
- Bell Model has been shared with University of Kentucky.
- UK has shared their model with Bell.
- Bell and UK Continue to adjust the Respective Models to reflect Modifications to the system.
Projects Under Construction
(1)
RWI & WTP Improvements

- **Raw Water Intake Improvements:**
  - Concrete Ramp & Winch System for Moving Raw Water Pumps Up & Down Slope
  - Electrical Building Upgrade, Telemetry, Line Reactors and Instrumentation

- **Water Treatment Plant Improvements:**
  - Rehabilitation of Clarifiers 1 & 3 with New Valve Vault for Clarifier 1
  - Replace Outside Chlorine Chemical Feed Piping
  - Replace Master Meter

- **Status:**
  - Project Construction Began: October 4, 2021
  - Scheduled Construction Completion Date: July 31, 2022
  - Contractor Performing Work: Pace Contracting, LLC of Louisville Kentucky
WTP Improvements

Work to Date:
- Completed Demolition of Existing Treatment Unit 1
- Removed Media from Filters in Treatment Unit 1
- Removed Underdrains from Treatment Unit 1
RWI Improvements

- Work to Date:
  - Installed silt fence
  - Performed Excavation for the Concrete Ramp
  - Removed Existing Gabion Baskets
  - Poured New Valve Vault Walls
  - Poured Concrete Pump Ramp
RWI Improvements

Work to Date:
- Poured the Concrete Steps Adjacent the Concrete Ramp
- Began Demolition for the new Concrete Landing around the RWI Building
- Began Excavation for the Concrete Landing Columns.
Designed Projects Awaiting Funding
(1)
Mainline, Service Line, Meter Replacement In the Warfield Area

- Project will Replace the following in the Warfield Area:
  - Existing Mainline
  - Existing Meters & Service Line
  - Existing Valves & Hydrants

- Status:
  - Due to overage on the RWI/WTP Project, the District deferred construction of this project to a later date in order to use the funds associated with this project for construction of the RWI/WTP Project.
  - The District is submitting funding requests in an effort to obtain funding to construct this project as soon as possible.
  - Permits and Approvals (DOW, KYTC, Floodplain Management, Corps of Engineers, AML, etc.) required for construction have been obtained.
Projects in Design (1)
USP Big Sandy, Eastern Kentucky Business Park & Big Sandy Airport Water Improvements

► Original Upgrades Include:
  - Construction of 250,000 Gallon Water Storage Tank, New 400 GPM Pump Station and telemetry
  - Upgrade of the Existing Davella Pump Station
  - Master Meter & Booster Chlorination

► Status:
  - A previously selected tank site could not be used.
  - Project Design temporarily paused. Bell, Alliance and the MCWD Evaluating two options for best use of the funds. One option is this project while the second option is a Tank/Waterline Project elsewhere in the Martin County system.
  - Evaluation should be completed in early 2022.
KYTC Utility Projects Awaiting Funding (3)
Hunters Lane/Rockhouse Creek Utility Relocations & KY 908 Guardrail Projects

- **Hunters Lane / Rockhouse Creek Utility Relocations:**
  - Relocation of existing waterline to facilitate construction of two new bridges for the KYTC Bridging Kentucky Program

- **KY 908 Guardrail:**
  - Relocation of existing 14” waterline along Route 908 to facilitate installation of new guardrail.

- **Status:**
  - Awaiting Funding
IMMEDIATE NEEDS LIST FOR MARTIN COUNTY

- AMI/AMR METER READING SYSTEM
- GENERATORS FOR ALL CRITICAL INFRASTRUCTURE - FEMA GRANT APPROVED
- PUMP REDUNDENCY
- SCADA AND TELEMETRY UPGRADES FOR PLANT AND REMOTE SITES
- WATER LINE REPLACEMENT AT MULTIPLE LOCATIONS
- HIGH SERVICE PUMP REPAIRS/UPGRADES IN PLANT
- EQUIPMENT AND TRANSPORTATION
- INEZ WWTP REHABILITATION
- SAVE-A-LOT LIFT STATION REHABILITATION
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<th>No.</th>
<th>WRIS</th>
<th>Project Description</th>
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<td>1</td>
<td>WX21159013</td>
<td>Meter Replacement</td>
<td>$ 1,716,000.00</td>
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<td>2</td>
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<td>Fixed/Portable Generator Project for RWI, 40E &amp; 40W Booster Stations 60 HP Motor Duplex Stations</td>
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<td>Telemetry/booster station upgrade at Route 292</td>
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<td>4</td>
<td>WX21159009</td>
<td>SCADA upgrade at WTP with VTScada and Allen Bradley PLC's, System wide Telemetry upgrade, plant equipment/online turbidity meters, CL17, online fluoride meter bench top meter and high service pump VFD replacement</td>
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<td>WX21159020</td>
<td>Water line replacement at City of Inez, Blacklog Road Line Replacement from Turkey Creek 40E Booser Station, WTP to Turkey Creek, Old Route 3 from Inez to Milo, Coldwater Line Replacement</td>
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<td>Inez Sewer Line Replacement/lining/smoke testing</td>
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<td>WTP High Service Pump Replacement</td>
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<td>TOTAL</td>
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<td>$ 55,920,000.00</td>
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Questions?