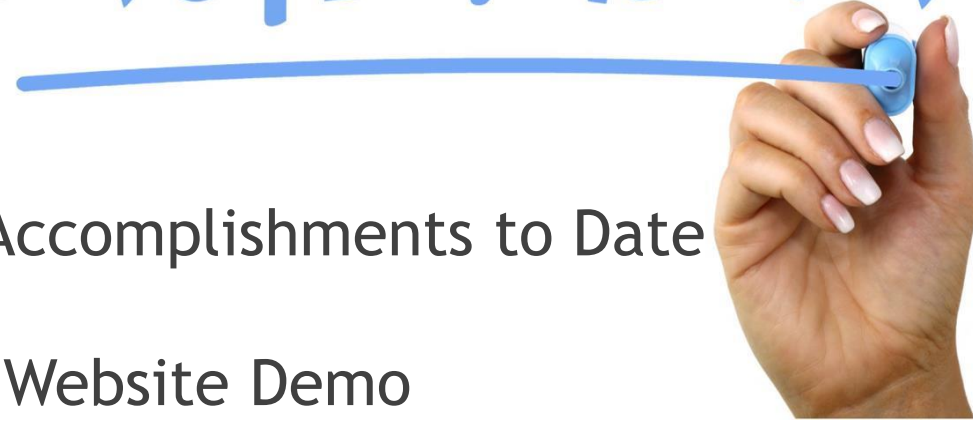


Alliance Water Resources, Inc. Operations Update

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

Martin County Water District Booster Pump Stations



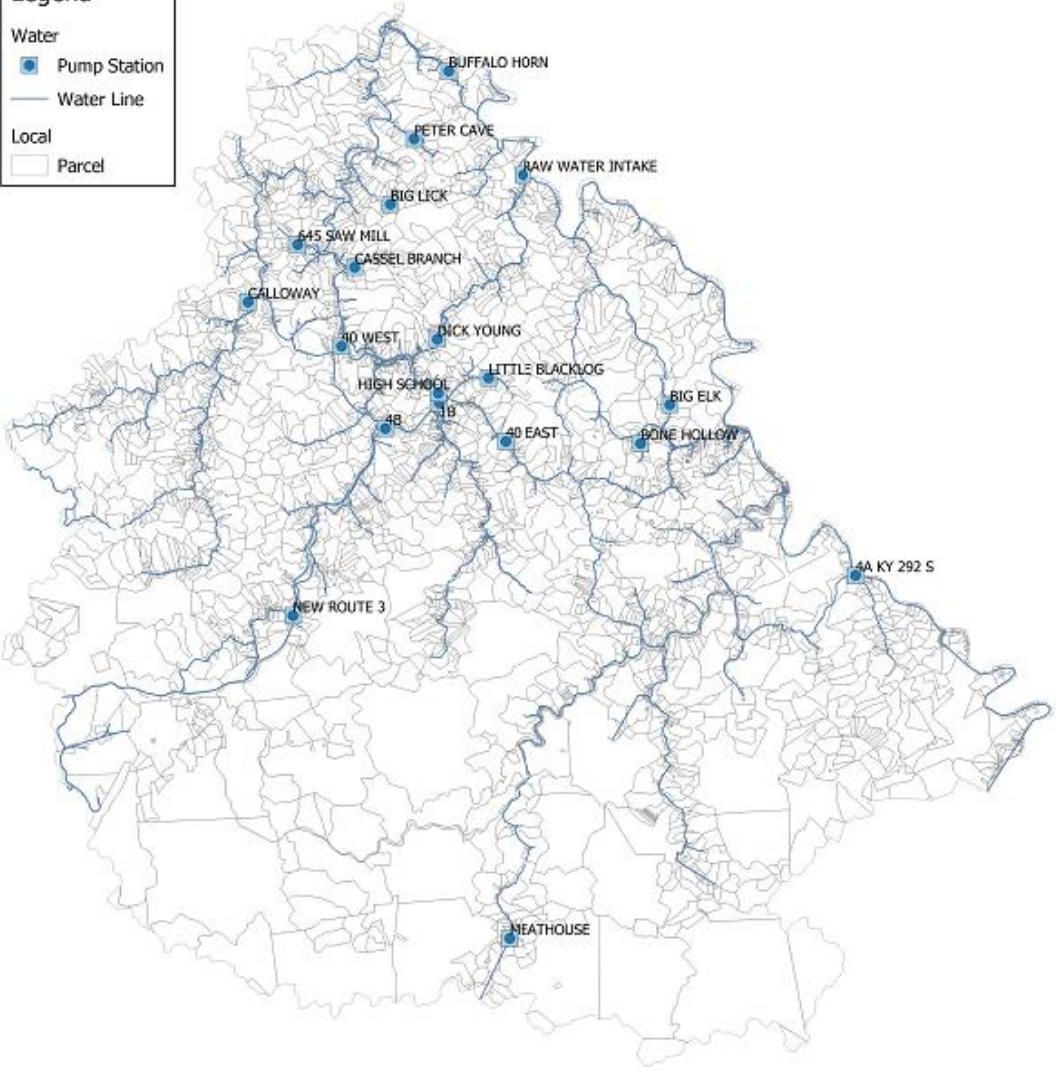
Legend

Water

- Pump Station
- Water Line

Local

- Parcel



Water System Improvements Project Status Update

Martin County Water District

December 8, 2021

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

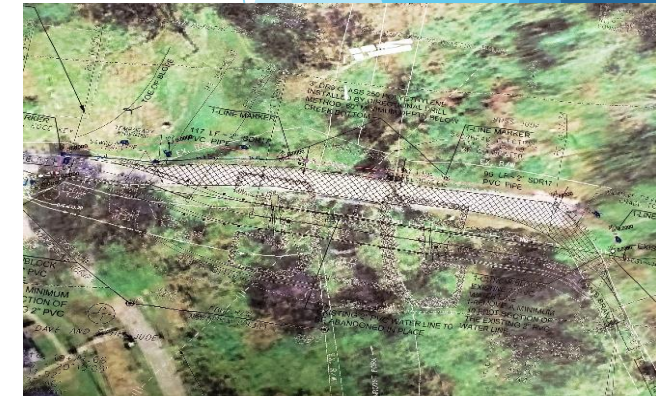
▶ High School Water Storage Tank & Booster Station Telemetry

- New telemetry at the Holly Bush Pump Station
- New telemetry at the High School Water Storage Tank



▶ Willis Dials / Dans Branch Road Utility Relocation

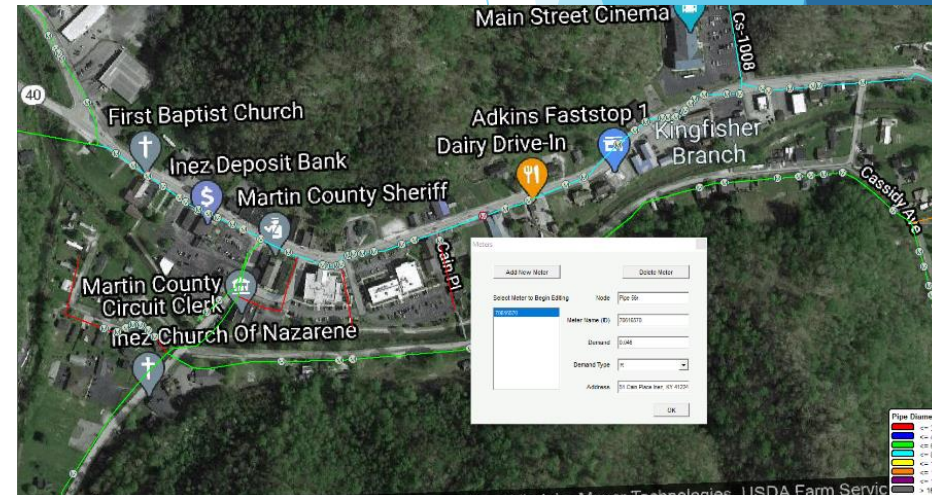
- Replaced Existing Waterline to Facilitate Construction of a new Bridge for the KYTC Bridging Kentucky Program



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

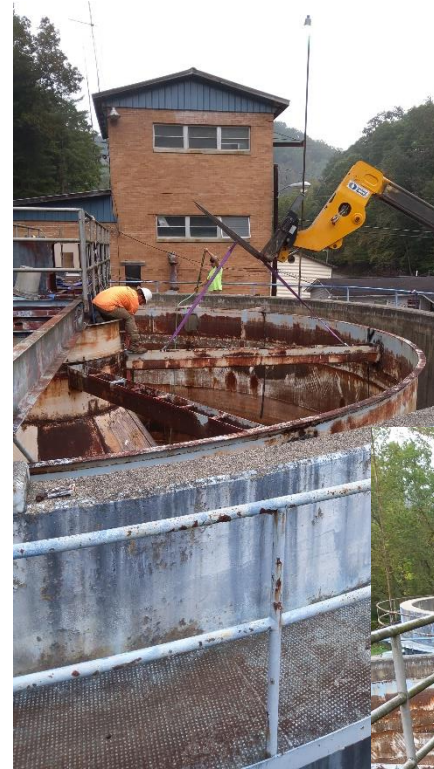
▶ Status:

- 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

Martin County Water and Wastewater Projects

No.	WRIS	Project Description	Amount
1	WX21159013	Meter Replacement	\$ 1,716,000.00
2		Fixed/Portable Generator Project for RWI, 40E & 40W Booster Stations 60 HP Motor Duplex Stations	\$ 429,000.00
3		Telemetry/booster station upgrade at Route 292	\$ 358,000.00
4	WX21159009	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	\$ 1,324,000.00
5	WX21159020	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	\$ 36,428,000.00
6		Inez Sewer Line Replacement/lining/smoke testing	\$ 14,915,000.00
7		WTP High Service Pump Replacement	\$ 750,000.00
		TOTAL	\$ 55,920,000.00



Questions?