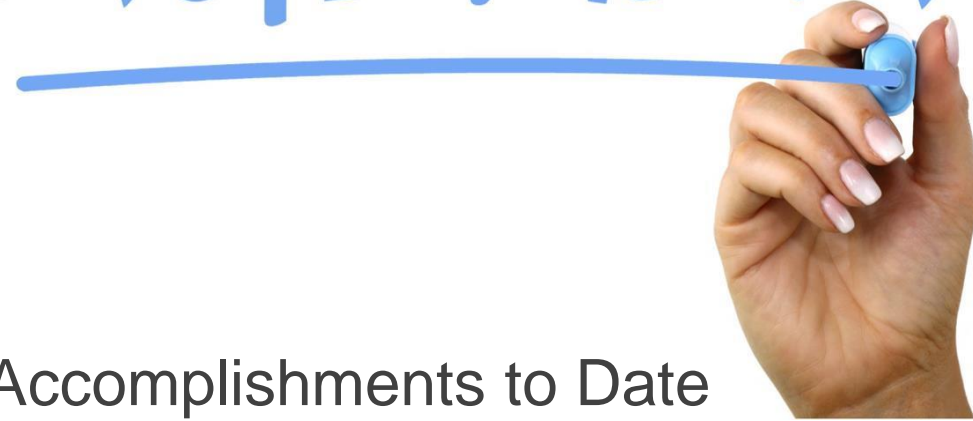


# Alliance Water Resources, Inc. Operations Update

**Martin County Water District**

December 7, 2022

# AGENDA

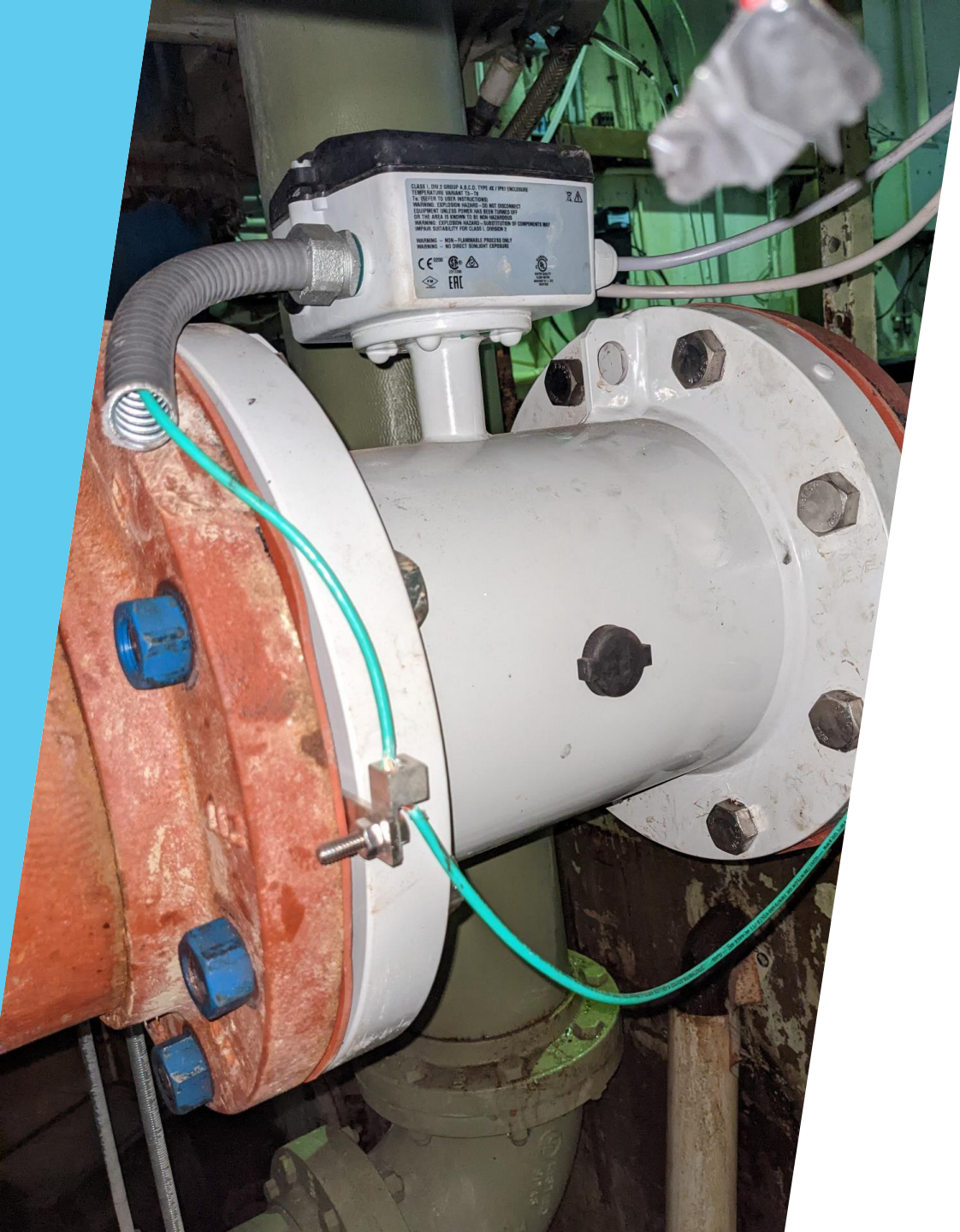


- ▶ Key Accomplishments to Date
- ▶ Water Loss Update
- ▶ Critical Needs and CIP
- ▶ Project Updates
- ▶ Discussion/Questions



## Key Accomplishments to Date

- ▶ **13 Acquired Licenses in the District**
- ▶ **51 Theft of Water since January**
- ▶ **Inventory Control Program**
- ▶ **Pump Redundancy at 292 Booster Station**
- ▶ **New Pump at Buffalo Horn Booster Station**
- ▶ **Corrosion Study Completed at Water Plant Through CITGO Water with a Coupon Rack - Minimal Corrosion Shown with exception of Steel**

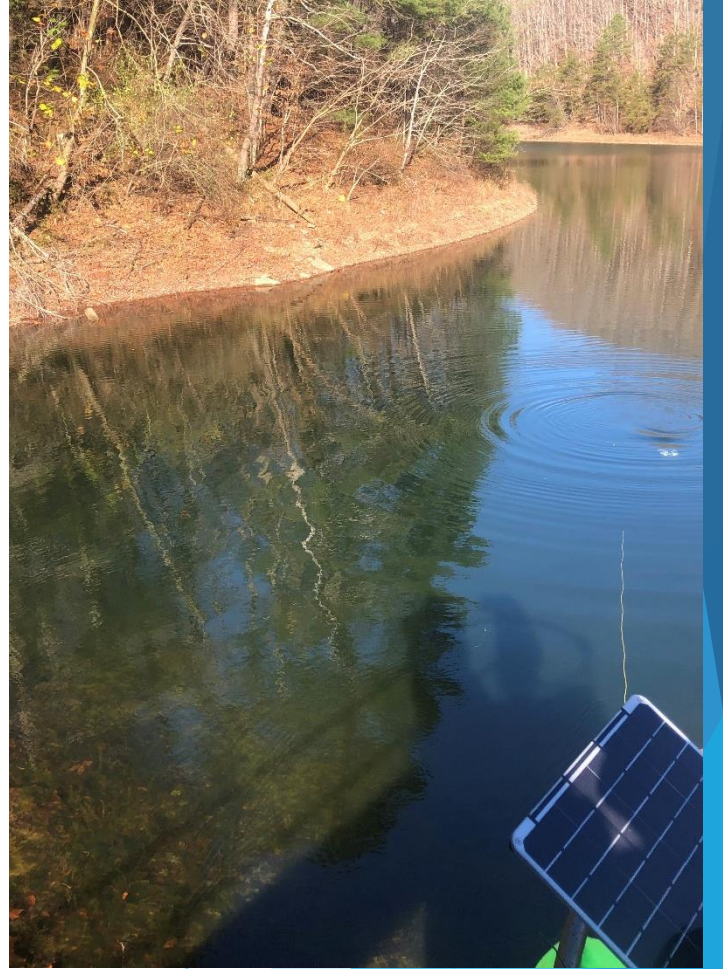


## Key Accomplishments to Date

- ▶ Billing office desk manuals have been created for each role in the office.
- ▶ New phone system has been purchased for ease of customer service including a selection for payment over the phone
- ▶ **New Production Meter Installed**
- ▶ QGIS and GEOSYNC CLOUD Implementation.
- ▶ 3200 GIS Points Mapped
- ▶ Leak Mapping on GIS continues

# Key Accomplishments to Date

- ▶ **Reservoir intake wet well and associated valving inspected**
- ▶ **Inspected Reservoir Intake Screens and Cleaned**
- ▶ **New Clearwell Submersible Level Indicator Installed**
- ▶ **Development of Lab Practice SOP's at Water Plant**
- ▶ **Development of Manual Operation of Water Plant SOP Created**
- ▶ **Multiple Hydraulic Restrictions Repaired – Muddy Branch, Cassell Branch, Big Lick, Little Blacklog**



# Key Accomplishments to Date



- ▶ **Tank inspection of Turkey Tank Completed**
- ▶ New PRV's installed at Turkey and Buck Creek
- ▶ Interior of Water Plant Painting is 90% complete
- ▶ Redundancy in 40E and 40W Booster Stations Complete



# Water Loss Update

- ▶ **175 Leaks Repaired**
- ▶ Calibration of Raw meter, filter meters and verification of new meter flows planned. Quotes are being gathered
- ▶ Water Loss sits at 72% for November
- ▶ Line Replacement Projects Necessary for improvement
- ▶ Total Meter Replacement Project Necessary for improvement



<u>Water System Improvements</u>		
Clarifier/Filter Unit 1 Refurbishment	\$ 450,000	AML
Filter Repair Unit 3	\$ 250,000	AML
Tank Inspections	\$ 7,000	Funded From Cash if Available
Project 113-19-02	\$ 2,393,860	AML & USACE
Concrete Ramp & Winch System, Electrical Building Upgrade, Telemetry, Line Reactors & Instrumentation @ RWI. New Valve Vault for Clarifier 1, Replace Master & Replace Chlorine Feed system @ WTP		
Project 113-19-03	\$ 1,260,658	AML & USACE
Replace Existing Mainline, Water Meters, Service Line, Valves & Hydrants in the Warfield Area		
Projects 113-19-05 & 113-19-06	\$ 750,000	AML
Construction of 250,000 gallon water storage tank, new 400 gpm pump station, telemetry, master meter, booster chlorination and upgrade Davella Pump Station (Note 1)		
Contracts 113-20-02 & 113-20-03	TBD	KYTC
Hunters Lane & Rockhouse Creek Utility Relocations		
40E Service Line Replacement and 6" Line Abandonment	\$ 760,000	TBD
Turkey Water Line Replacement	\$ 6,822,000	TBD
Coldwater Line Replacement	\$ 8,419,000	TBD
Old Route 3 Line Replacement	\$ 5,066,000	TBD
Turkey Storage Tank Replacement	\$ 681,000	TBD
<b>Sub-Total Water System Improvements \$ 26,859,518</b>		

# CRITICAL NEEDS AND CIP

<b>Building and Land Improvements</b>		
Doors for Valve Vaults	\$ 10,000	Funded From Cash if Available
Booster Stations - Building Repairs and/or Replacements	\$ 10,000	Funded From Cash if Available
<b>Sub-Total Building and Land Improvements</b>	<b>\$ 20,000</b>	

<b>Machinery and Equipment</b>		
AMR Meters and Reading Equipment	\$ 1,200,000	Funded From Cash if Available
Excavator w/Trailer (Mini w/attachments)	\$ 70,000	Funded From Cash if Available
3/4 ton 4x4 tool truck with Hoist, Generator, and Compressor	\$ 120,000	Funded From Cash if Available
Passenger Truck 4x4	\$ 60,000	Funded From Cash if Available
Road Bore Machine	\$ 15,000	Funded From Cash if Available
Radio Read Meters & Transmitters, New & Replacements	\$ 15,000	Funded From Cash if Available
VFD 40E Booster Station	\$ 7,500	Funded From Cash if Available
Online Turbidimeters and Controller	\$ 22,626	Funded From Cash if Available
Level Probes for Filter 4 and 5	\$ 11,480	Funded From Cash if Available
<b>Sub-Total Machinery and Equipment</b>	<b>\$ 1,521,606</b>	

<b>2023 Improvements from External Sources</b>	<b>\$ 26,859,518</b>
<b>2023 Improvements Funded From Cash</b>	<b>\$ 1,541,606</b>
<b>Grand Total for 2023 Capital Improvements</b>	<b>\$ 28,401,124</b>

# CRITICAL NEEDS AND CIP

# Water System Improvements Project Status Update

**Martin County Water District**

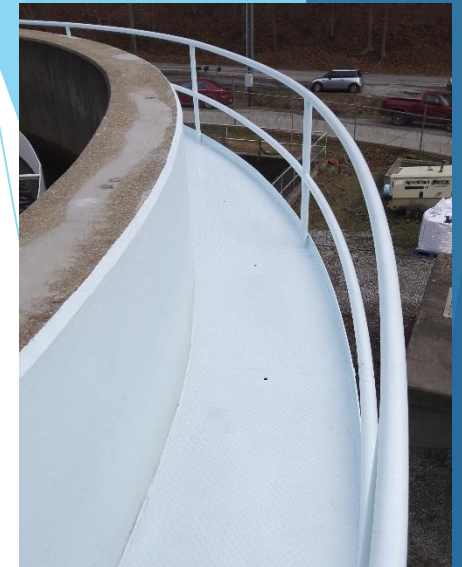
December 7, 2022

# Projects Under Construction

# WTP Improvements

## ► Work This Quarter:

- Completed Treatment Unit 1 Touch Up Paint
- Installed Treatment Unit 1 Filter Media
- Installed Main Panel at Treatment Plant
- Installed Overload Torque Panel for Treatment Unit 1
- Paved at Water Treatment Plant
- Installed Generator and Transfer Switch
- Installed Mud Valves for Treatment Unit 1
- Completed Stairway and Railing to Treatment Units 1 and 2



# RWI Improvements

## ► Work this Quarter:

- Installed Fence and Gate
- Installed Electrical Equipment
- Completed Ramp Extension



# Project to Utilize Remaining ARC Funds

# Kentucky 292 South Pumping Station & 292 South Tank Telemetry

## ► Need for the Project:

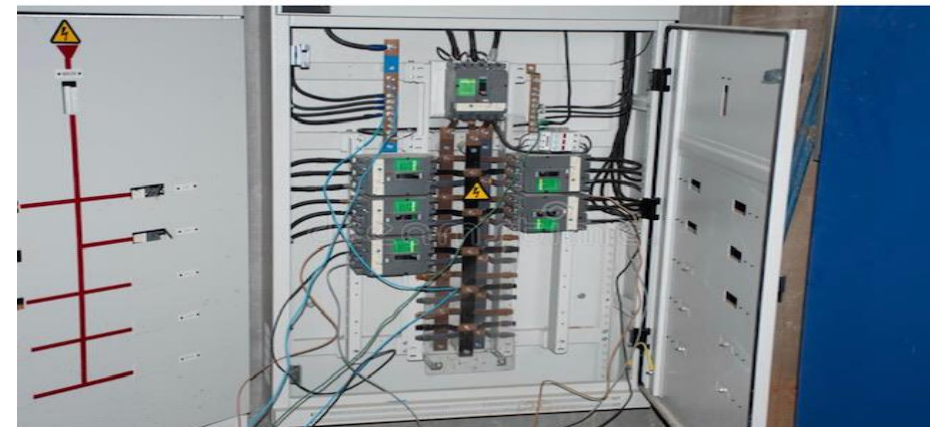
- ARC project has \$85,832 in unspent funds.
- Neither the Pumping Station nor Water Storage Tank it pumps to have operating telemetry.

## ► Major Items of Work:

- A solar powered tank site PLC-RTU with panel, coax & antenna
- A pump station PLC-RTU with panel, coax & antenna
- Level sensor for monitoring tank level
- Mechanical/Electrical Improvements to the Pumping Station

## ► Project Status:

- Awaiting signed Agreement from ARC.





# Designed Projects Awaiting Funding

# 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.
- Permits and Approvals (DOW, KYTC, Floodplain Management, Corps of Engineers, AML, etc.) required for construction were previously obtained.
- \$1.5M in Additional Project Funding through the Corps of Engineers is now available. Anticipate Rebidding the Project in Q1 2023.



# Projects in Design

# USP Big Sandy, Eastern Kentucky Business Park & Big Sandy Airport Water Improvements

- ▶ **Submittal to Revise Scope has been Approved by AML**
- ▶ **Components Remaining in Project from Original Scope**
  - Upgrade of the Existing Davella Pump Station. Construct Master Meter & Booster Chlorination.
- ▶ **Proposed Revised Scope Components:**
  - Relocate the proposed Pump Station so that it replaces the existing Otto Brown Station. This station is beyond its useful life and subject to confined space constraints.
  - Replace existing waterline in the vicinity of the Otto Brown Station that is subject to leaks.
  - Provide Modifications to the Middle Fork Tank rather than construct a new tank.
- ▶ **Project Status:**
  - Project is Under Design. Anticipate Completing Design in Q1 2023.



# High School Pump Station/Tank Piping Modifications

## ▶ Construct Valve Vault and Check Valve

- Install Valve Vault and Check Valve to allow District to feed additional service areas with the High School Water Storage Tank.

## ▶ Project Status

- Design will be reviewed by the District and Constructed when Funding is Available.

# Projects Seeking Funding

# FEMA Backup Generator Project

## ▶ Project includes the following:

- One Generator to operate 750-HP VFD Controlled RWI Pump
- Two Generators to operate 60-HP VFD Controlled Pumping Stations



## ▶ Project Status:

- The Kentucky Division of Emergency Management requested Hazard Mitigation Grant Program Approval for the Project from FEMA Region IV on April 25<sup>th</sup>. The total proposed budget for the project is \$1,320,000.



# KYTC Utility Projects Awaiting Funding



# Hunters Lane Utility Relocation & KY 908 Guardrail Project

## ▶ Hunters Lane Utility Relocation:

- Relocation of existing waterline to facilitate construction of a new bridge for the KYTC Bridging Kentucky Program

## ▶ KY 908 Guardrail:

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



# Projects in Planning

# Opinions of Probable Project Cost Prepared

- ▶ 40 East Water Improvement Project
- ▶ Coldwater Water Improvement Project
- ▶ Old Route 3 Water Improvement Project
- ▶ Water Treatment Plant to Turkey Tank Water Improvement Project
- ▶ Meter Replacement Project
- ▶ Turkey Water Storage Tank Rehabilitation/Painting
- ▶ Spicy Mountain Booster Pump Station and Water Line Extension Project





Questions?