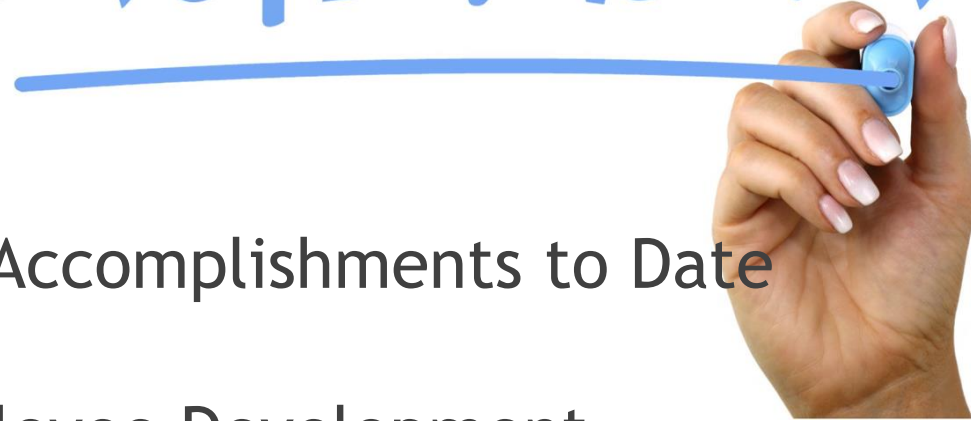


Alliance Water Resources, Inc. Operations Update

Martin County Water & Sanitation Districts

February 10, 2021

AGENDA



- ▶ Key Accomplishments to Date
- ▶ Employee Development
- ▶ Quarterly Goals
- ▶ Water Loss
- ▶ Discussion/Questions

Key Accomplishments to Date



- ▶ Conducting monthly meter audits
- ▶ Completed 2016, 2017, 2018, 2019 audits
- ▶ Created 90-day goals and accomplished 88% in the 1st quarter, 79% in the 2nd quarter, 89% in the 3rd quarter, and 92% in the 4th Quarter.
- ▶ New billing software purchased and implemented in July.
- ▶ Repaired both paddle wheels in the oxidation ditch
- ▶ Identified chemical pumping issues at Inez WWTP and corrected them.

Key Accomplishments to Date

- ▶ Repaired pump in Davis Branch (was being pumped daily)
- ▶ Have purchased critical operational equipment for regulatory compliance and leak detection
- ▶ Cleared blockage on Turkey Creek Sewer
- ▶ Developed Meter Reading and Billing SOP
- ▶ Repaired Crum Reservoir monument
- ▶ Installed 2nd pump at Turkey Booster Station
- ▶ 400ft of 4" main installed on Town Point Curve



Key Accomplishments to Date

- ▶ Purchased new lab equipment for both Wastewater plants
- ▶ New pump and float switches have been installed at the Inez Wastewater plant lift station allowing for redundancy and efficiency
- ▶ Tug Valley sludge canisters have been emptied
- ▶ Discharge line from Digester 1 at the Tug Valley plant has had a blockage removed
- ▶ **Installed New Booster Station Building at Cassell Branch**



Key Accomplishments to Date

- ▶ Installed eyewash station in chemical room of WTP
- ▶ 3 Newly Acquired Licenses in the District
- ▶ Developed and implemented a Theft of Water SOP
- ▶ Rebuilt Inez WWTP drying bed #1
- ▶ Installed a new valve on ST RT 2032 to isolate a problem area in Wolfcreek area
- ▶ Inventory Control Program
- ▶ Cleaned Chlorine Contact Chambers
- ▶ **Graveled Access Road for Clearwells**



Employee Development



- ▶ **PPE and Uniforms**
 - ▶ Fall protection
 - ▶ Electrical Protective Gear
 - ▶ Safety Glasses
 - ▶ Hard Hats
 - ▶ Reflective Vests
 - ▶ Uniforms/Steel Toed Boots
- ▶ **Training**
 - ▶ Valve and Hydrant Maintenance
 - ▶ Flagger
 - ▶ Electrical Hazards/Arc Flash
 - ▶ 3 New Licenses Among Staff
 - ▶ 5 Employees Applying for New Licensing

FIRST QUARTER GOALS - COMPLETED

- ▶ **New Billing Software purchased** - To be converted June 2020
- ▶ **Every Meter Read** - Staff has gone from 19% discrepancies to less than 1%
- ▶ Meter Reading and Billing SOP has been created and is pending board approval
- ▶ **Reconcile Billing for Meters** - All accounts have been corrected with proper customer information and information
- ▶ **2017 District Audit** - Complete
- ▶ **Security Deposits** - All security deposits have been identified and reconciled to the correct customers

FIRST QUARTER GOALS - COMPLETED

- ▶ **OXIDATION DITCH ROTORS** - Both rotors have been repaired and are operating
- ▶ **GRINDER PUMPS** - All grinder pumps have been caught up and staff are continuing to repair pumps as they fail
- ▶ **INEZ WWTP** - Influent pump has been installed creating redundancy
- ▶ Tank and Booster Station information was collected along with GPS coordinates and pictures
- ▶ All District owned vehicles have been inventoried with documentation
- ▶ Community project was identified but postponed due to COVID-19

SECOND QUARTER GOALS - COMPLETED

- ▶ **NEW OR HIGHER LICENSES** - Identify 4 (6) employees for new or higher licenses to meet or exceed requirements for the system
- ▶ **UPDATE FEE SCHEDULE** - Update the list of all costs associated with Service Taps and Fees on new installations.
- ▶ **CANNOT LOCATE METERS** - Locate and verify all meters that currently cannot or have not been located in some time
- ▶ **OPS AUDITS** - Visit each district owned site and conduct an audit
- ▶ Rebuild Drying Bed #2 at Inez WWTP
- ▶ **PUMPING TO THE PRISON** - Written Plan for maximizing what can be pumped to the prison

SECOND QUARTER GOALS - COMPLETED

- ▶ **INEZ WWTP** - Rebuild Drying Beds
- ▶ **MULTI-CUSTOMER METERS** - Get customers currently sharing a meter on their own tap
- ▶ **AREA METERS** - Have every customer associated with an area meter
- ▶ **BOARD MINUTES** - Organize and archive
- ▶ **Installed 8 new valves in strategic locations to improve distribution system**
- ▶ **TURKEY CREEK** - Installed 2 New Cleanouts on the Sanitary Sewer Line

THIRD QUARTER GOALS - COMPLETED

- ▶ **SOP** - Reviewed, Updated, and Created SOP's for Billing Office Procedures (Incode)
- ▶ **TUG VALLEY WWTP** - pH and DO probe calibration and replacement schedule
- ▶ **BLACKLOG LIFT STATION** - Both pumps repaired
- ▶ **HODE RD.** - 2" Water Line Eliminated
- ▶ **292 PUMP STATION** - Redundant Pump Installed and in Operation
- ▶ **HIGH SERVICE PUMP AIR RELEASE VALVE** - Replaced leaking valve on pump in treatment plant
- ▶ **SANITATION FILES** - Organized and filed properly

FOURTH QUARTER GOALS-COMPLETED

- ▶ **BILLING OFFICE** - Office Organized, Files Scanned to Server, Junk and Clutter Eliminated
- ▶ **BLACK LOG LIFT STATION** - Both Pumps Fully Operational
- ▶ **WINTER PREP** - Booster Stations and Lift Stations Inspected and Insulated for Winter
- ▶ **CASSELL BRANCH** - Booster Station Building Replaced with Insulated Building
- ▶ **BIG LICK BOOSTER** - Ordered Booster Station Replacement Building
- ▶ **WATER PLANT** - Plant Glass Doors Scheduled for Repair
- ▶ **WATER PLANT** - Plant Lab Cleaned and Inventoried and Heater Fixed
- ▶ **GRINDER PUMPS** - A Customer Agreement and SOP was Developed and Approved by the Board of Directors
- ▶ **WASTEWATER PLANTS** - Cleaned Exterior of Both Facilities and Organized Equipment

WATER LOSS REDUCTION

- ▶ GIS IMPLEMENTATION
 - ▶ District Master Meter Zones Established
 - ▶ Customer Meter Location
 - ▶ Leak Tracking
 - ▶ Reported Leaks
 - ▶ Active Leaks
 - ▶ Repaired Leaks
 - ▶ Trouble Zones For Replacement
- ▶ Water Loss SOP and M36 Manual
 - ▶ Strategic approach using GIS, PRV's, and District Meters for Leak Detection
 - ▶ Established Leak Detection Team
 - ▶ Water Meter Replacement

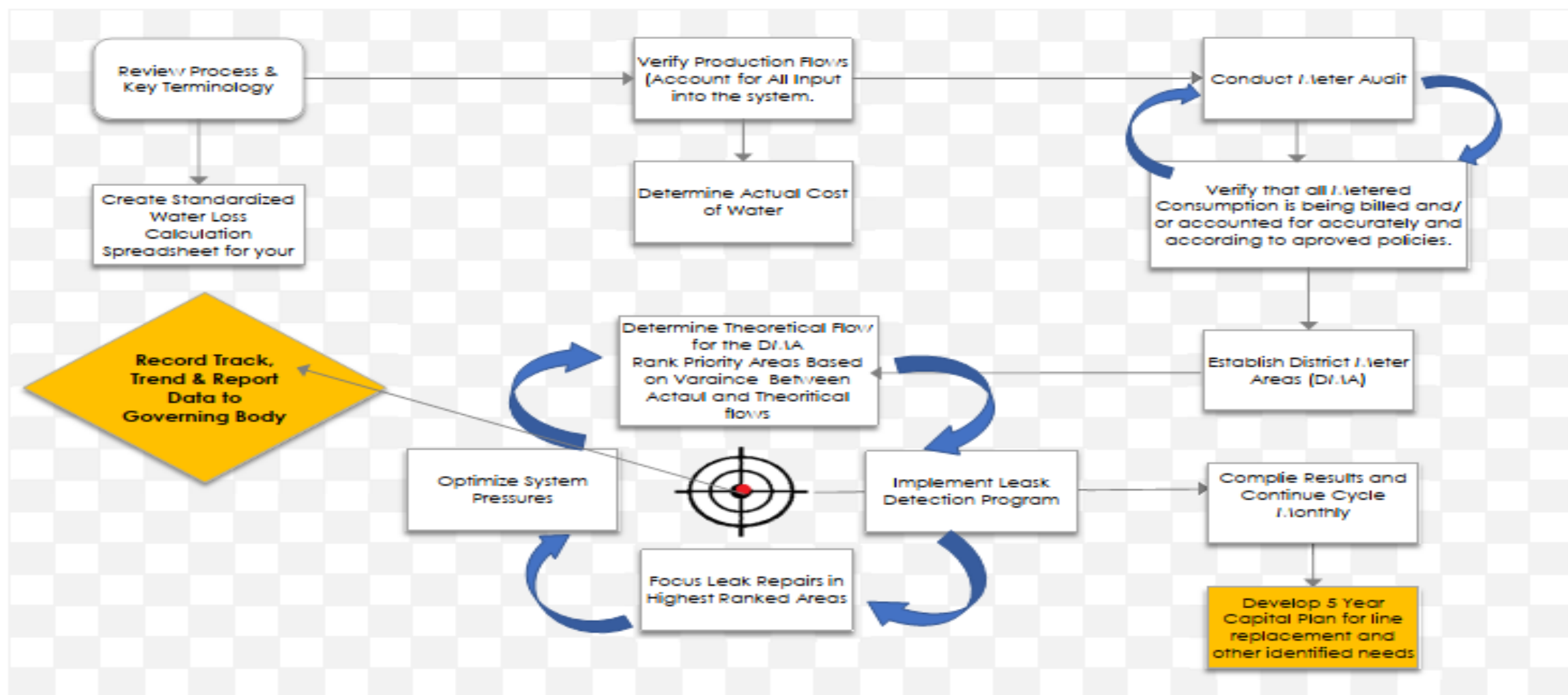
WATER LOSS CONTROL PROGRAM FLOW CHART (FC AWR 09-02)

PROCESS
P AWR 09-01

ANALYSIS COMPLETED BY
DOO (JAS)

DEPARTMENT(S)
OPS

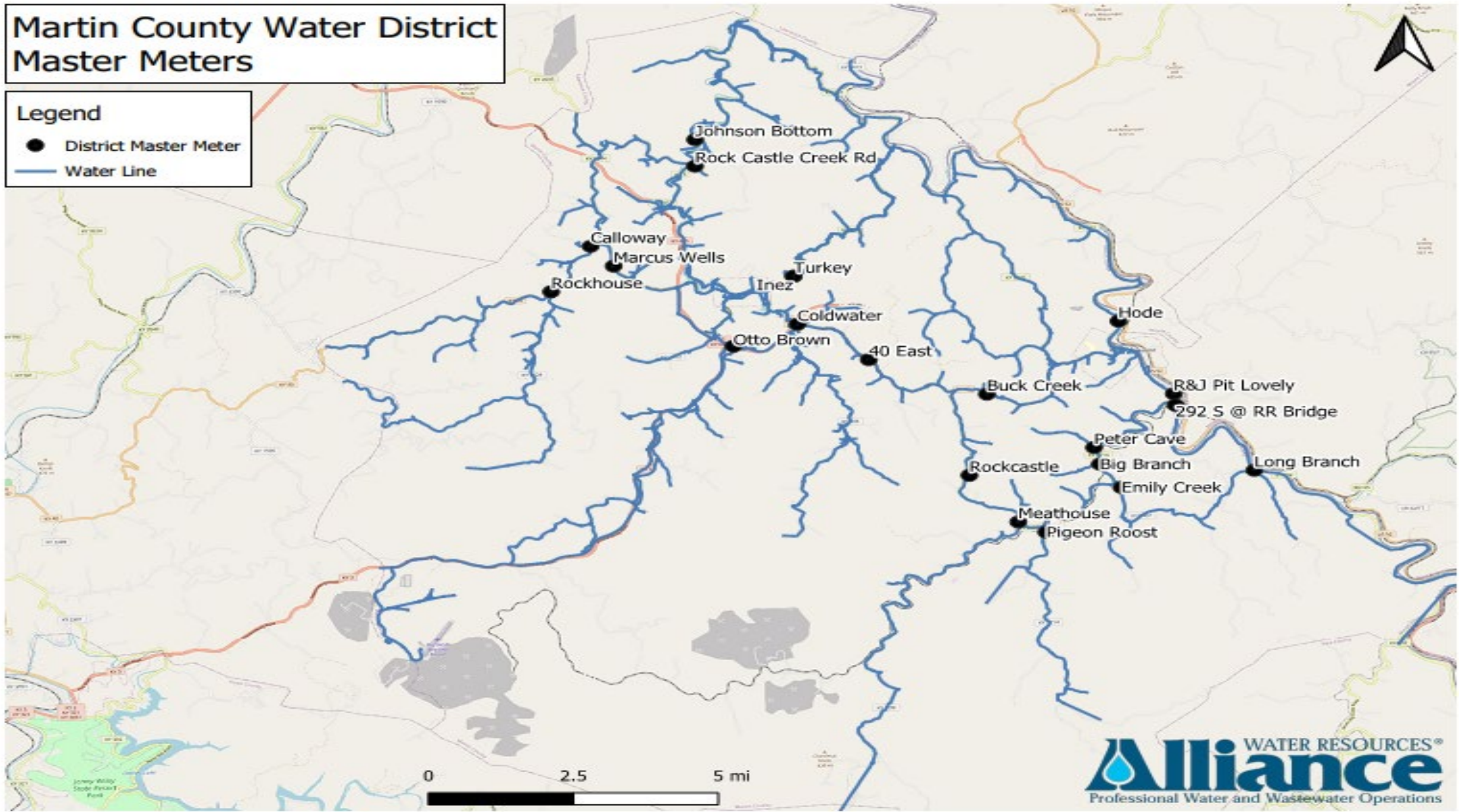
DATE COMPLETED
03/07/2020



Martin County Water District Master Meters

Legend

- District Master Meter
- Water Line



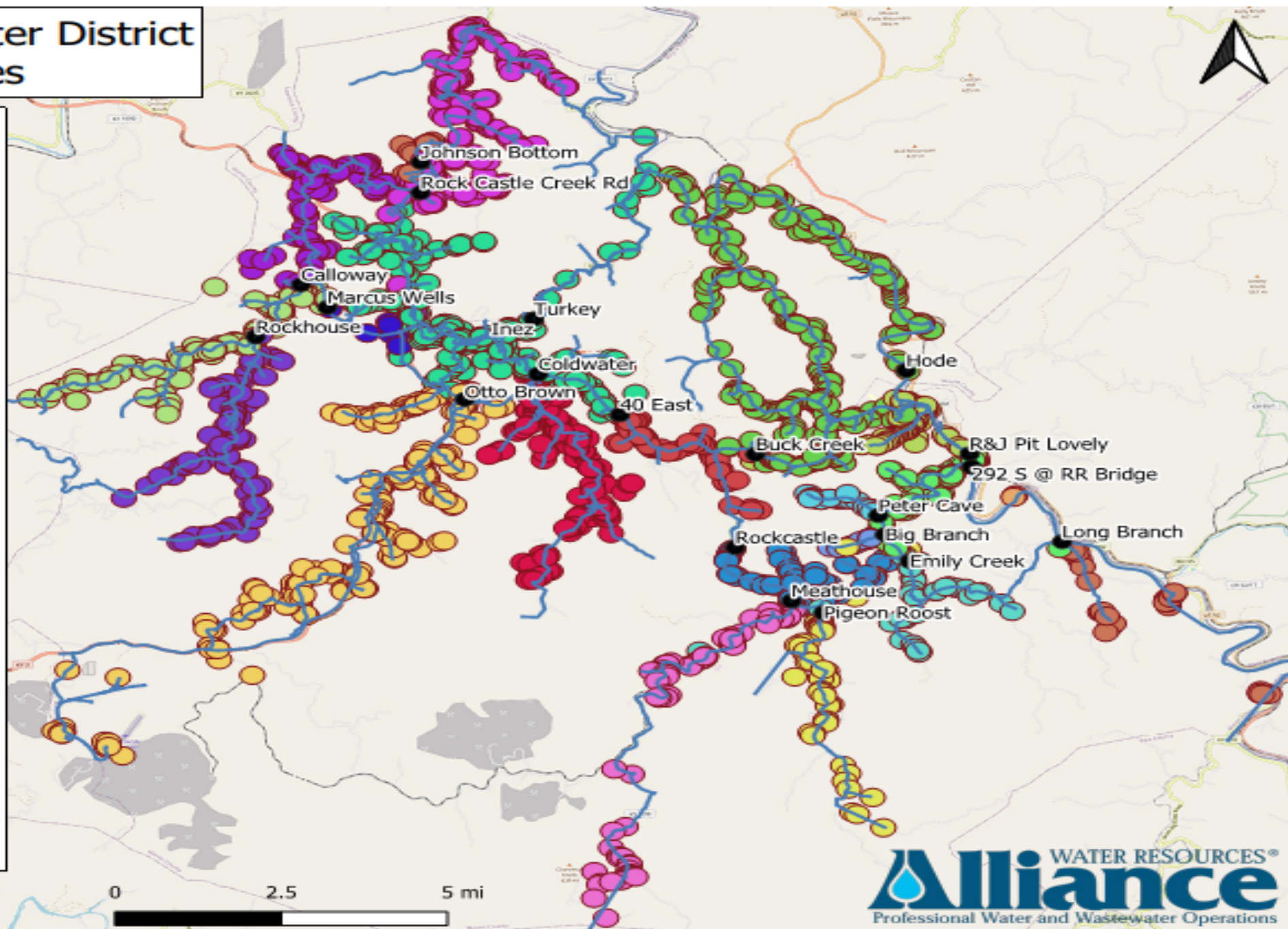
Martin County Water District Master Meter Zones

Legend

- District Master Meter
- Water Line

Addresses by Master Meter Zone

- Inez
- R&J Pit
- Rockcastle on 2032
- 40 W Pump Station
- Calloway
- Hode
- Rockhouse
- Meathouse
- Old Rt 3
- Pigeon Roost
- Peter Cave of Wolf Crk
- Otto Brown
- Coldwater
- 40 E Pump Station
- Long Branch (292)
- Johnson Bottom
- 292 S @ RR Bridge
- Emily Creek
- Big Branch
- Buck Creek
- Marcus Wells



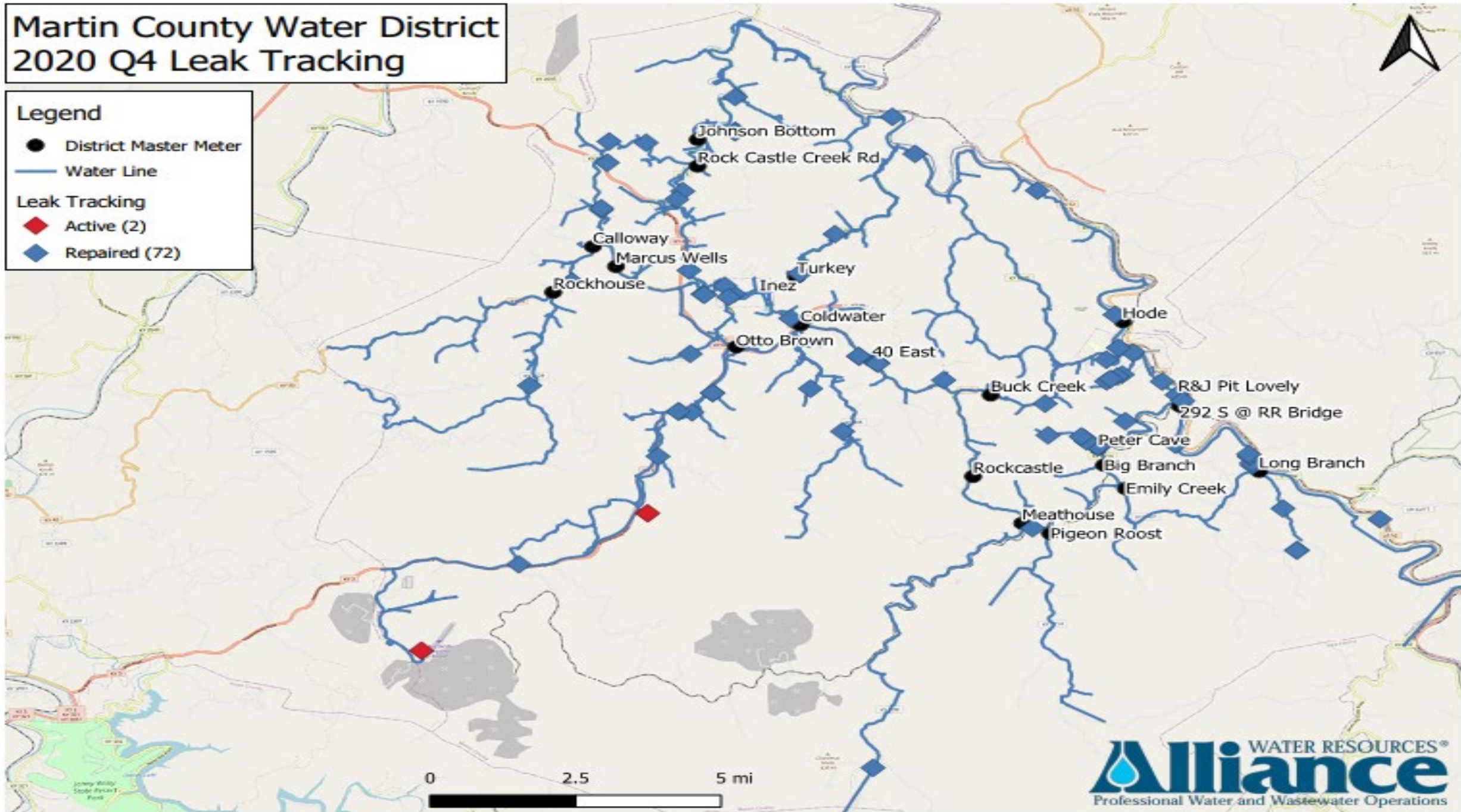
IMPORTANT WATER LOSS NOTES

- ▶ **Estimated 23 Million Gallons Recovered In the Month of December From Repaired Leaks**
- ▶ **Average of 24 Leaks Per Month**
- ▶ **A Fixed Leak May Present a New Leak**
- ▶ **Water Loss is Occurring Due to 72 Leaks over a 3 Month Period**
- ▶ **Leaks are a Symptom of an Infrastructure Issue**
- ▶ **Finding Weakest Areas and Establishing a Plan for Line Replacement**
- ▶ **Meter Replacement with an AMR/AMI System Would Capture More Accuracy and Free Staff for Leak Repair and Line Replacement**

Martin County Water District 2020 Q4 Leak Tracking

Legend

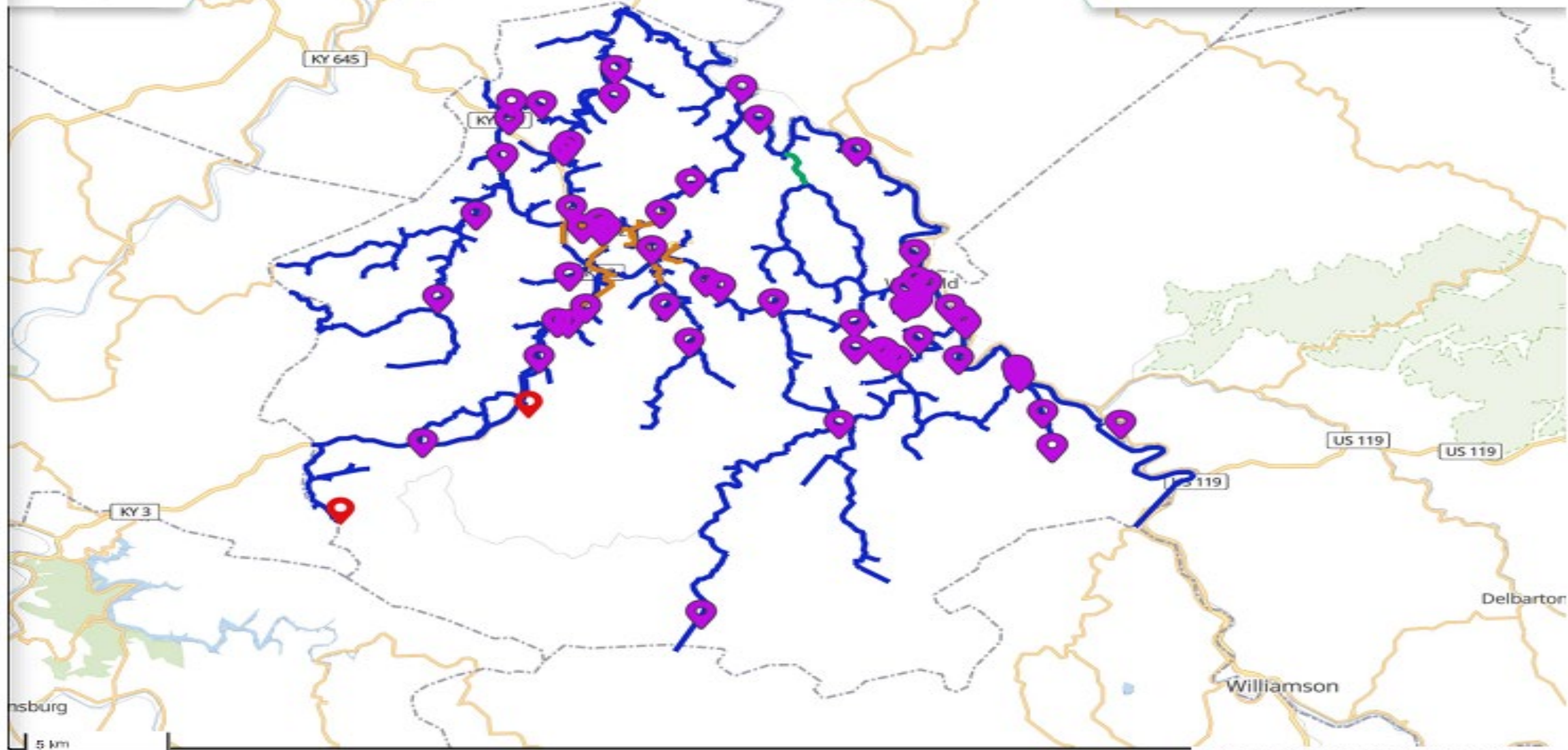
- District Master Meter
- Water Line
- Leak Tracking**
 - ◆ Active (2)
 - ◆ Repaired (72)





10

6





Questions?