



Verdellis McMurty & Kelvin Watson
C&M Maintenance Workers

Public Works Committee Update

Damon Dequenne, Deputy Utilities Director

Agenda

**CITY/COUNTY UTILITY COMMISSION
OF THE
CITY OF WINSTON-SALEM AND FORSYTH COUNTY**

COMMISSION MEMBERS

Randall S. Tuttle, Chairman
L. Wesley Curtis, Jr.
Harold E. Day
Tom Griffin
Yvonne H. Hines
Duane Long
Paul S. McGill
David Neill
Chris Parker
James Ruffin
Donald Stewart

STAFF

Gregory M. Turner, P.E.
Assistant City Manager

Courtney Driver, P.E.
City/County Utilities Director

1

2

3

Lead and Copper Update

Water Main Breaks



Causes

- Environmental
 - Freezing/Rapid Temperature changes
- Manufacturer defects
- Installation Issues
- Operational Issues
- Damage during excavation

Water Main Breaks



Response

- Evaluate effects of the break
 - Weather conditions
 - Roadway conditions
 - General public safety
- Isolation
 - Medical facilities
 - Hair salons
 - Restaurants
- Best repair approach
 - Immediate or delay
 - Traffic control

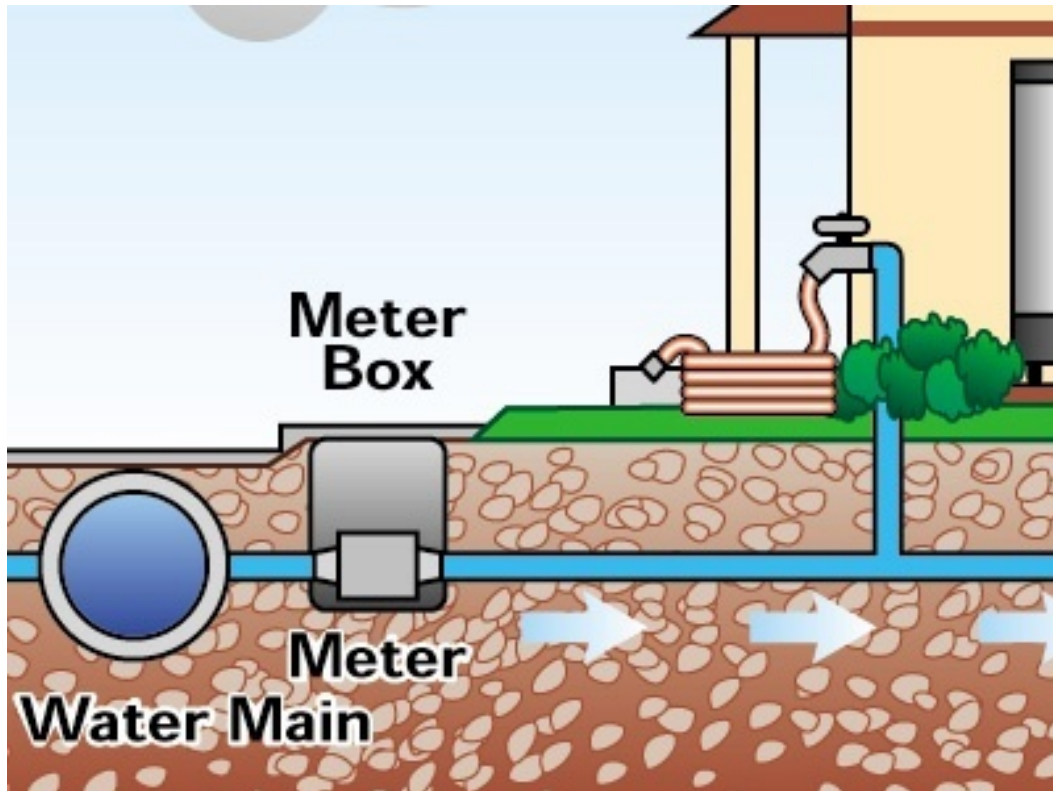
Water Main Breaks



Response

- Notifications
 - Citylink immediately
 - Minimum 24 hours for planned work (48 hours preferred)
 - Personal visits to businesses and medical facilities
 - Notices hand delivered to residences
 - City and County Fire Departments
- Press releases
 - Detours
 - Large scale/lengthy outages
 - Potential water quality concerns

Water Service Leaks



Causes

- Environmental
- Installation Issues/Aging Materials
 - Driveways
 - Depth
- Plumbing concerns
 - Faucets
 - Toilets
- City/Owner Responsibilities

Water Service Leaks



General

- Approximately 128,000 meters
 - Residential – 124,000
 - Commercial/Industrial – 4,000
- Read 110,000 manually
 - Residential Bi-monthly
 - Comm./Ind. Monthly
- Read 18,000 electronically
 - Drive by

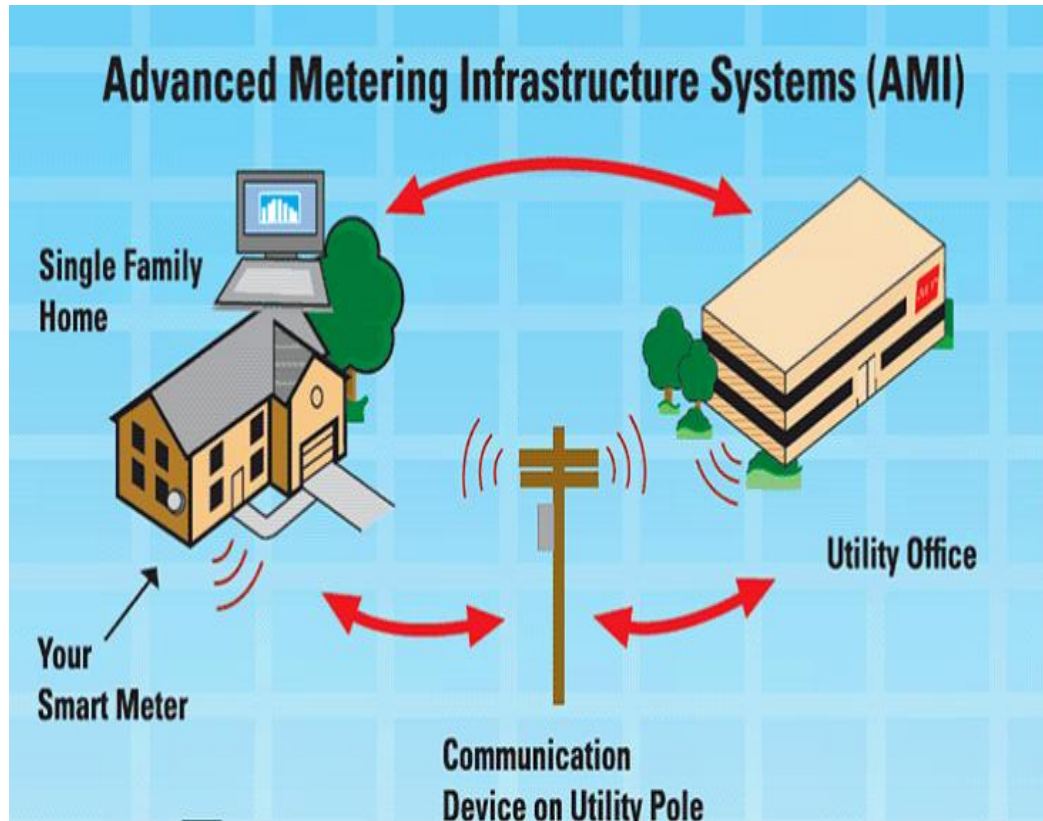
Water Service Leaks



Response

- Investigations
 - Inspect/report/advise
- Notifications
 - High Bill alerts/Reread meters
- Education
 - Self perform leak checks
- Policies
 - Provide relief

Advanced Metering Infrastructure



Program

- Meter reading via fixed network
 - Improved accuracy
 - Real time data
- Assessment Phase substantially complete
- Procurement to begin fall of 2018
- Full implementation 2-3 years

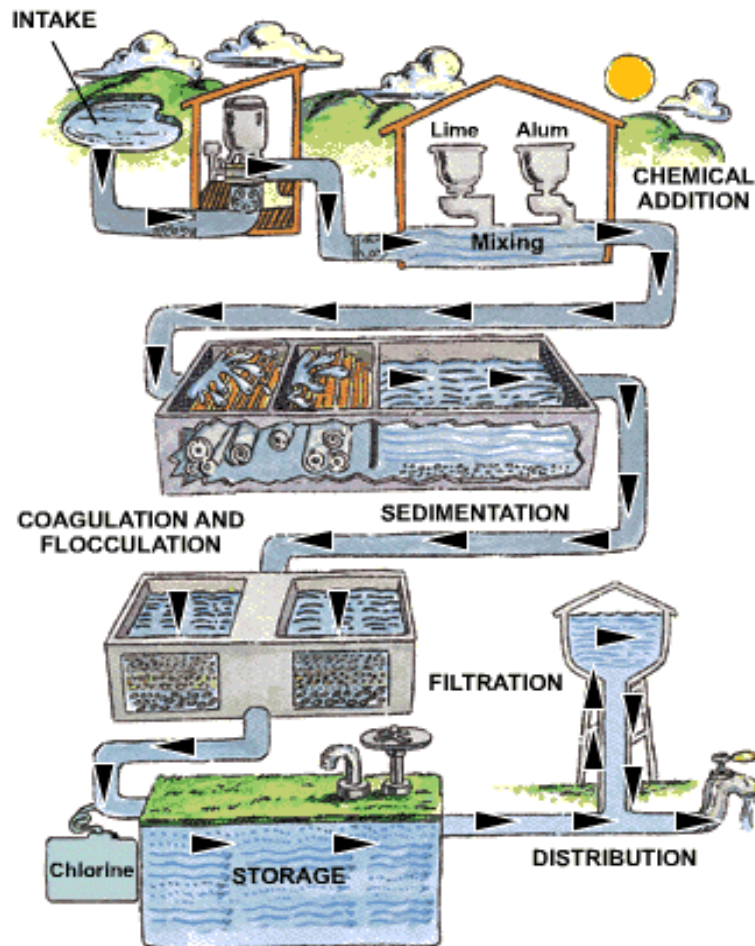
Advanced Metering Infrastructure

Customer Service



- Desired customer service offerings
 - Monthly billing in gallons
 - Leak detection and alert
 - Web account access
 - High consumption notice
 - Custom Billing
 - Prepay
 - Pick date to pay
 - Balanced Budget Billing

Lead and Copper



History

- EPA establishes program in 1991
- Treatment Technique Rule
- Corrosion Control
 - Caustic Soda
 - pH control
 - Zinc Orthophosphate
 - “Coating”
- Limits
 - Lead – 15 parts per billion (ppb)
 - Copper - 1,300 ppb

Lead and Copper

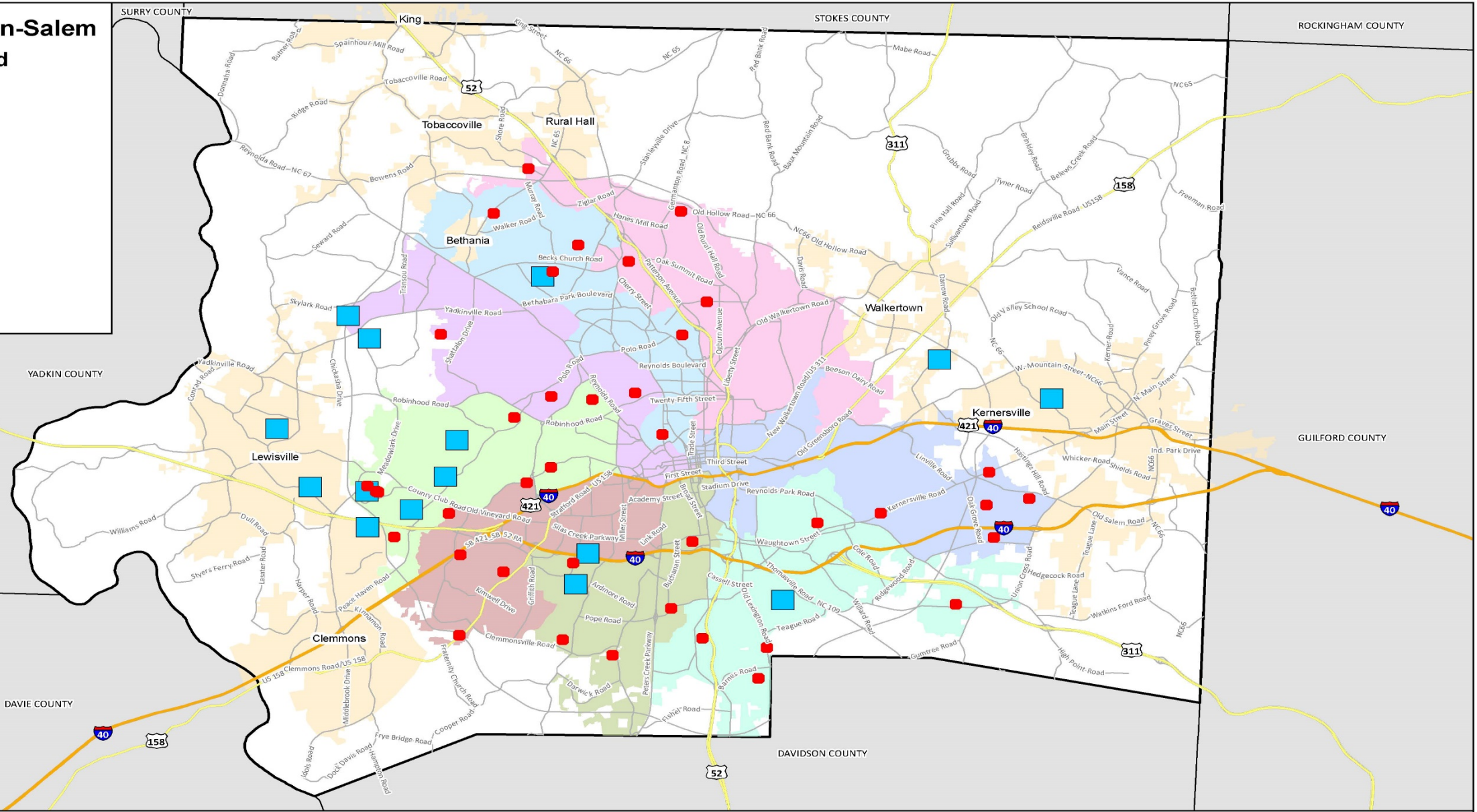
Sampling

- Reduced Triennial schedule (every 3 years)
 - 50 sites approved by the state
 - Selection was based on tiered criteria
 - Residential 1983 – 1985 Tier I
 - The only samples collected by consumers
- Additional Sampling 2017
 - Council Wards
 - Winston-Salem/ Forsyth County Schools
- No exceedances at any sample points



City of Winston-Salem By Council Ward

- East
- North
- Northeast
- Northwest
- South
- Southeast
- Southwest
- West



Water Sampling Sites: Lead and Copper Testing

1 in = 2.25 miles

- Lead and Copper Sampling Sites
- Triennial Sample Areas
- Highways
- Interstates
- Major Roads
- Other Municipalities
- Forsyth County
- Adjacent Counties

Figure 1.



Thank you

