

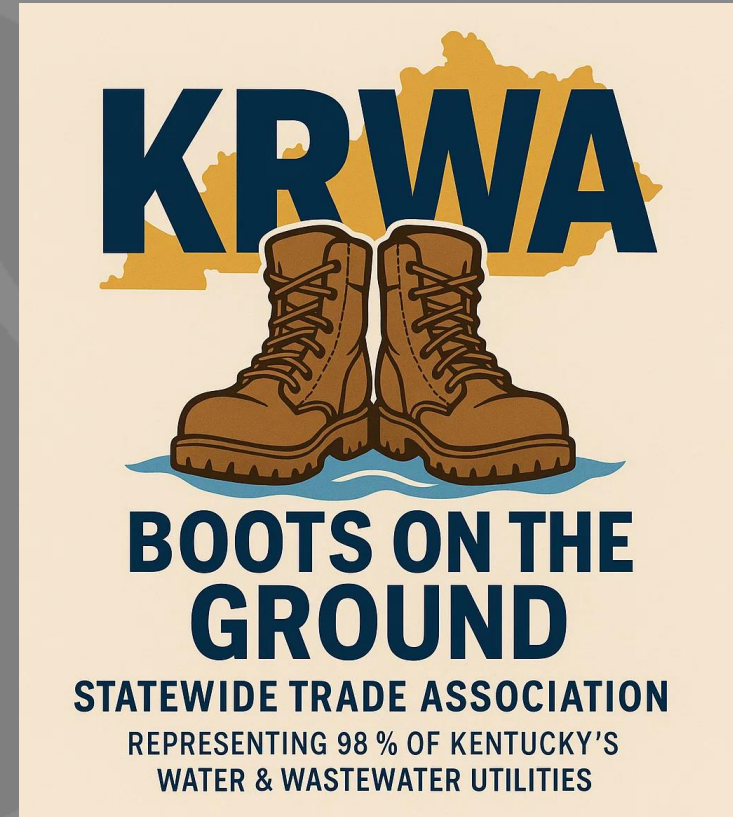
KENTUCKY RURAL WATER ASSOCIATION

"Helping Water and Wastewater Utilities Help Themselves"



What is Kentucky Rural Water Association

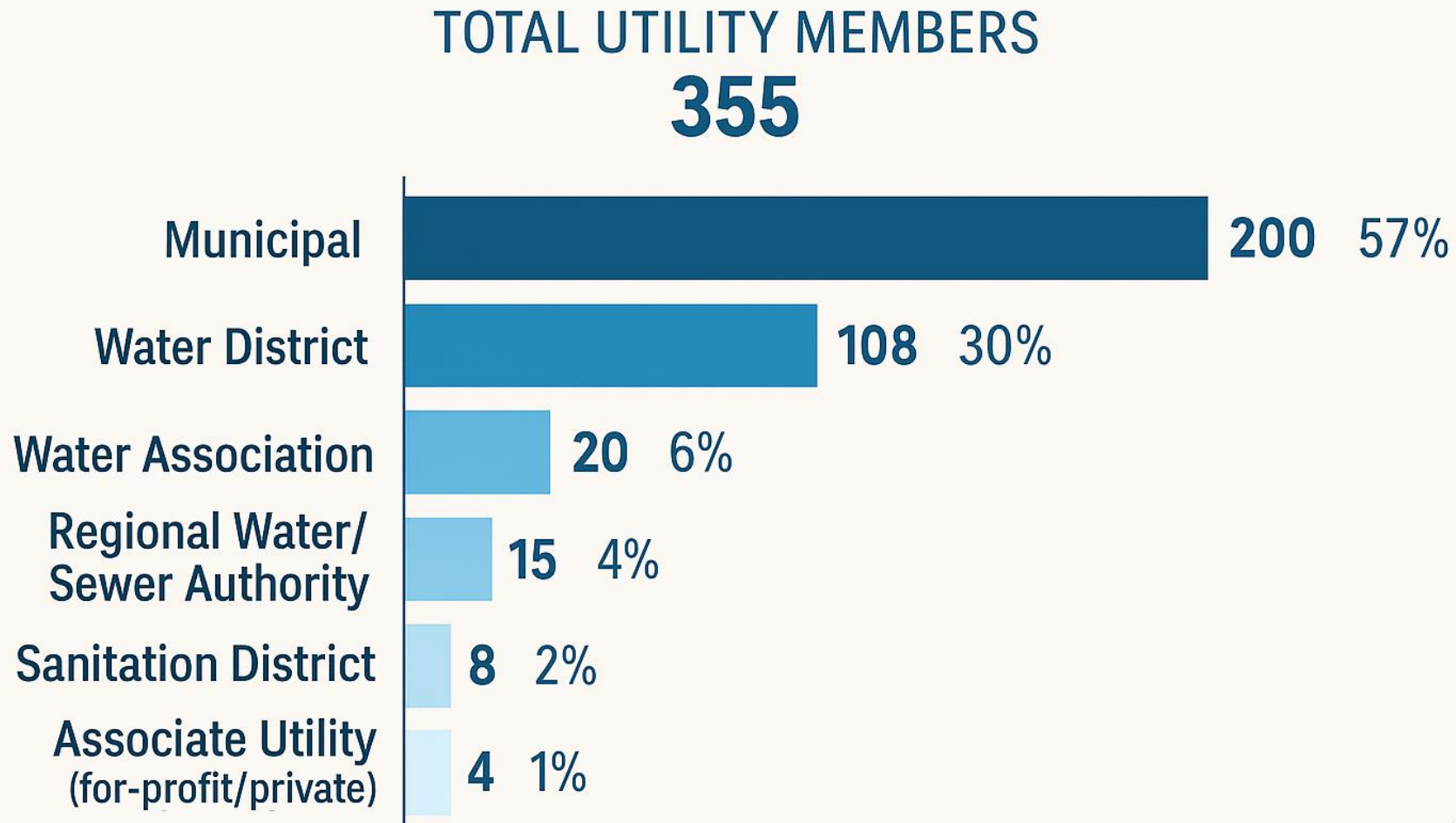
KRWA is a statewide “Boots on the Ground” trade association with an active membership representing 355 utilities – accounting for 98% of all Kentucky’s water and wastewater utilities, along with more than 240 industry stakeholders and associate members.



"Helping Water and Wastewater Utilities Help Themselves"



Utility Membership by Organization Type



DIRECTORS



Christina O'Bryan
Daviss Co Water Dist



Daren Thompson
Lebanon Water



David Peterson
Cavland Environmental



Bob Pack
Paintsville Utilities



Russ Rose
Oldham Co Water Dist



William Ballard
East Clark Co Water



Stephen Whitaker
McCreary Co Water



Jon Blalock
South Hopkins Water



Clay Kelly
Strand Associates



Damon Talley
Stoll Keenon Ogden

KRWA TEAM



Scott Young
Executive Director



Joe Burns
Director of Operations



Daniel Reetzke
Director of Finance



Bryan Burns
Director of Technology



Randall Kelley
Dir of Education



Heather Stevenson
Dir of Workforce



George Haynes
Dir Professional



Clem Wethington
Compliance Specialist



Arianna Lageman
Compliance Specialist



Todd Ritter
Compliance Specialist



Jason Pennell Compliance
Specialist



Pete Conrad
Compliance Specialist



Cheyne McCoy Compliance
Specialist



Nathan Gassaway
Circuit Rider



Danny Stinson
Circuit Rider



David Flowers
Circuit Rider



Chris Klotter
Wastewater Specialist



Brittany Dittmer
Wastewater Specialist



Jasper Wyatt
GIS Coordinator



Whitney Denney
GIS Specialist



Tim Blanton
ARC Circuit Rider



Matt Glass
Energy Efficiency



Chloe Brantley
Source Water Protection



Savannah Goad
Business Development



Bobbie Shanahan
Member Services



Janet Cole
Education Coordinator



Mason Hawthorne
Disaster Recovery



Bob Miller
Rate Study Program



Pam Byrd
Accounting



Donna Meador
Accounting

"Helping Water and Wastewater Utilities Help Themselves"



"Helping Water and Wastewater Utilities Help Themselves"



**TECHNICAL
ASSISTANCE**






**PROFESSIONAL
DEVELOPMENT
AND TRAINING**



**REGULATORY
AND LEGISLATIVE
ADVOCACY**

"Helping Water and Wastewater Utilities Help Themselves"

TECHNICAL ASSISTANCE

-  Emergency/Disaster Response
-  Circuit Riders
-  Wastewater Technicians
-  Energy Efficiency
-  Source Water Protection
-  Treatment Optimization
-  Leak Detection
-  GIS and Asset Management
-  Pipeline Video Inspection
-  Collection System Assessment
-  Rate Analysis

KRWA

PROFESSIONAL DEVELOPMENT

-  Apprenticeship Program
-  Workforce Development
-  Utility Management Institute (UMI)

TRAINING

-  Annual Conference
-  Equipment EXPO
-  Utility Board Training
-  Operator Certification School



KRWA Compliance Program



COMPLIANCE ASSISTANCE

15th
Program Year



209 Utility
System
Participants

(representing 62% of Kentucky's
Public Water Utilities)



\$1.27M
Estimated Utility
Savings - Current Year



\$12.2M
Total Program
Savings to date

KRWA GIS - Asset Management Program

GIS – ASSET MANAGEMENT PROGRAM

The GIS–Asset Management Program is a utility Geographic Information System (GIS).

ArcGIS Online Platform/GPS Collection



Asset Inventory



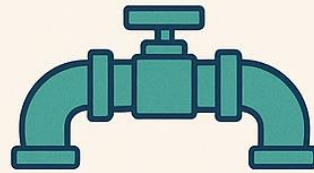
Web and Mobile Maps



Operational Surveys



Analytical Dashboards



GIS–AM Projects Developed

121
Utilities

(33 ARC, 82 USEPA
DOW, 8 Contract)

Over \$880k
saved in utility
development costs

Benefits



Utility owns and
maintains their data



Maps and data can
easily be shared
(DOW, KIA, and engineers)



Scalable ArcGIS
platform to fit utility's
needs



Cloud based

KRWA Professional Development

REGISTERED APPRENTICESHIP PROGRAM



The Apprenticeship Program provides on-the-job training for water and wastewater operator certification. 4,000 hours of on-the-job training and 288 hours of related technical instruction over a two-year period.

 **25** Active Apprentices



31 Graduates
(since program inception - Fall 2019)



19 Participating Utility Employers



To date over **735,000**
On-the-Job Training Hours Logged



To date over **11,899** 
Related Technical Instruction Hours Conducted

KRWA Professional Development



utility management institute



863
Student
Participants



208
Utilities
Represented



593
Utility Management
Professional Graduates

The Utility Management Institute offers a six-course, progressive management training program designed for utility managers and key personnel. This comprehensive curriculum delivers deep insights into utility operations, leadership, and strategic learning.

Graduates proudly earn the designation of Utility Management Professional (UMP).



Challenges Facing Kentucky's Water Systems



Kentucky Water Systems

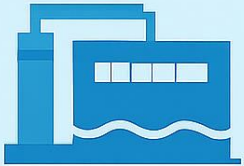
Kentucky's Water Infrastructure

427 Public Water System
(PWS) Permits



managed by roughly 330 public utilities

The average age of Kentucky's water infrastructure



44 years
old
Treatment plants



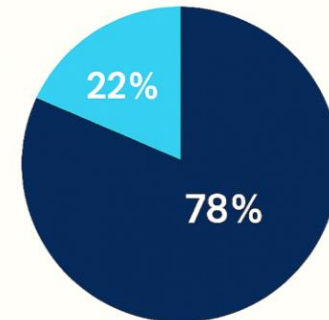
32 years
old
Water tanks

27%



of Kentucky's water
distribution lines are
over 50 years old

Public Water Systems by Population Served



Less than 10,000

332 water systems
Total population served:
1,062,241



Greater than 10,000

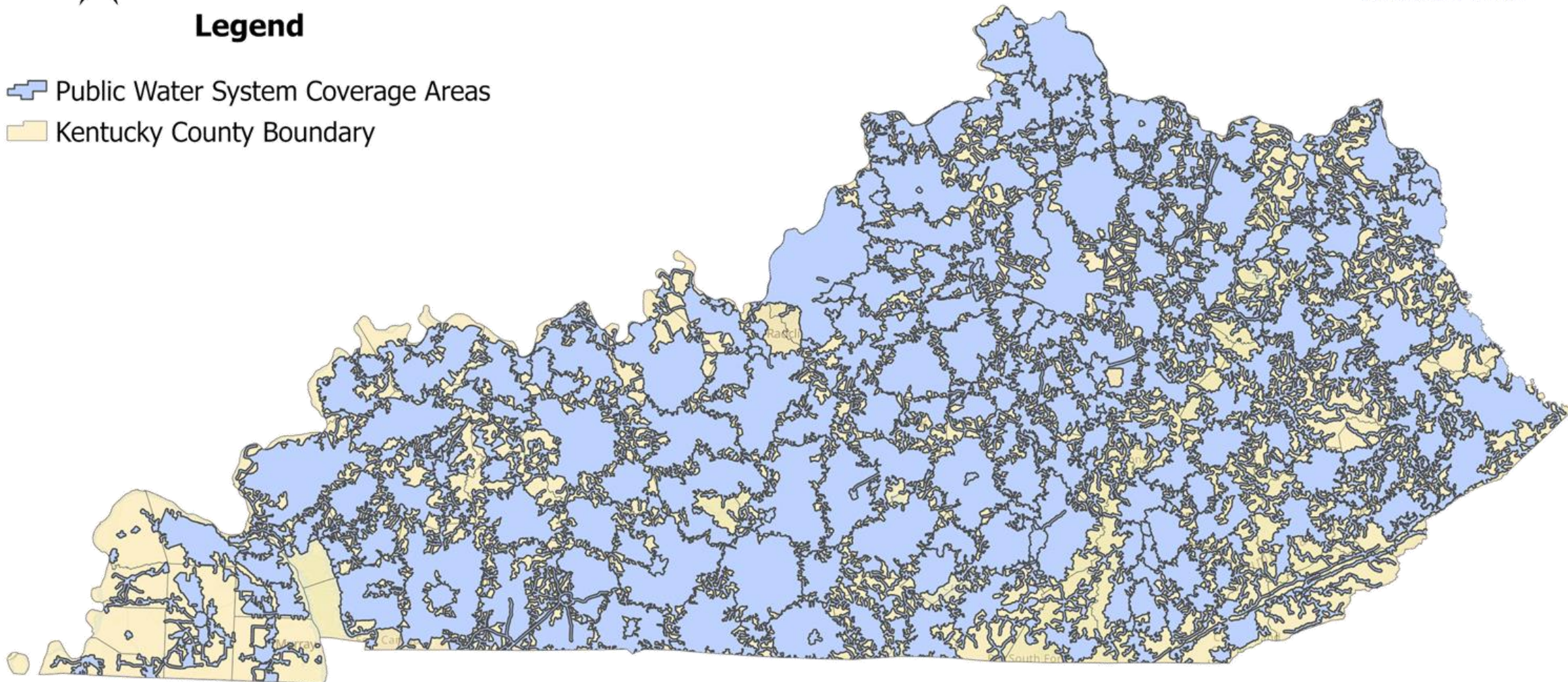
95 water systems
Total population served:
3,446,082



Public Water System Coverage Areas

Legend

-  Public Water System Coverage Areas
-  Kentucky County Boundary

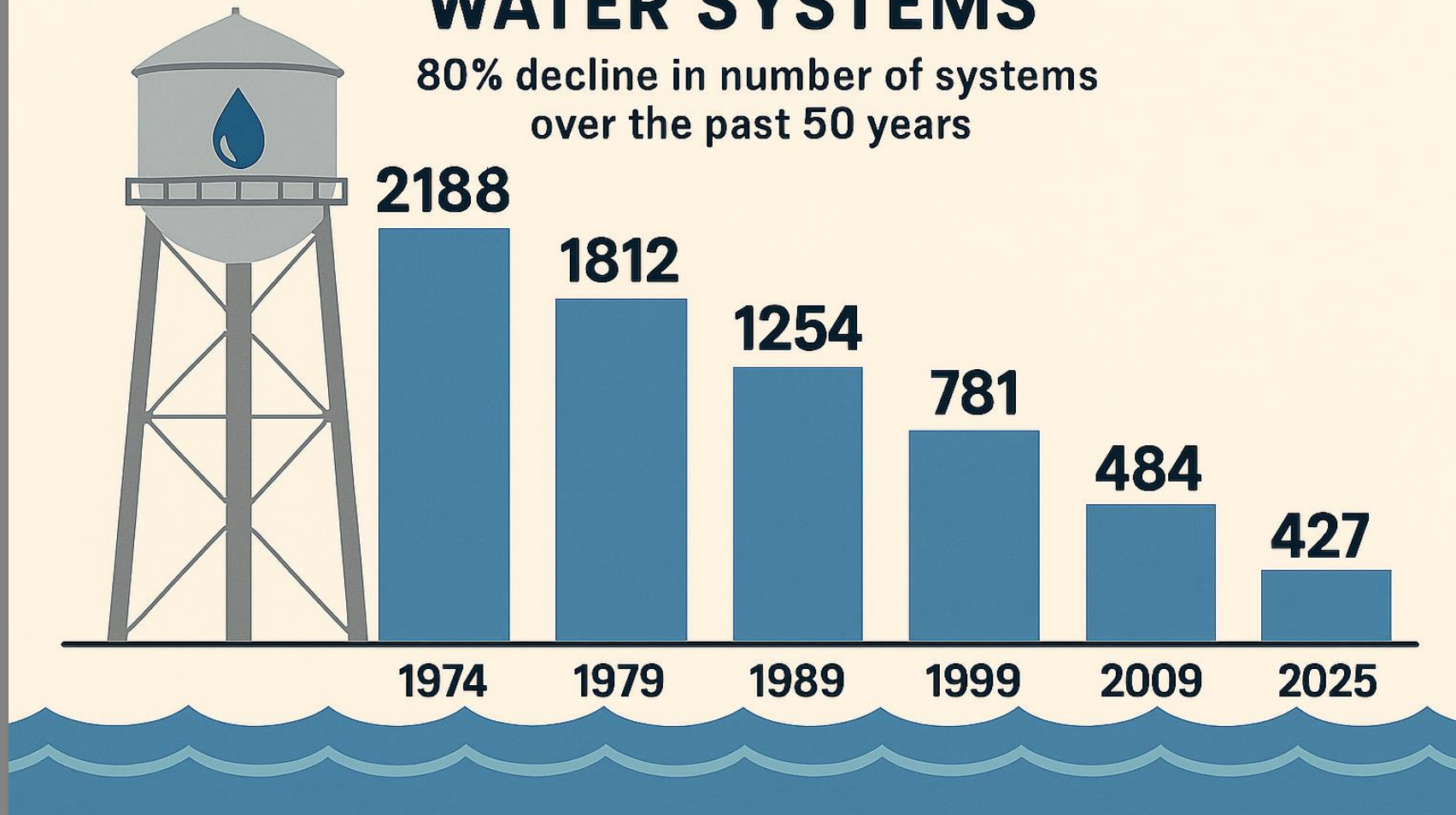


0 15 30 60 Miles

Kentucky Water Systems

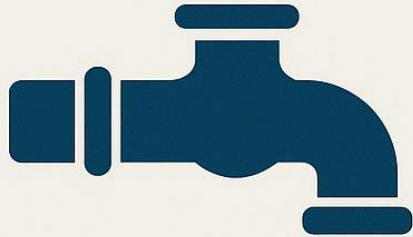
CONSOLIDATION OF KENTUCKY'S WATER SYSTEMS

80% decline in number of systems
over the past 50 years



Kentucky Water Systems

Challenges Facing Kentucky's Water Systems



**Aging and Inadequate
infrastructure**



**Regulatory
compliance**



**Funding and
financial
constraints**

**Lack of
technical
expertise
and workforce**



Challenges Facing Kentucky's Water Systems

Aging and Inadequate Infrastructure



Challenges Facing Kentucky's Water Systems

Aging and Inadequate Infrastructure

DETERIORATION OF INFRASTRUCTURE



RELIABILITY AND SERVICE INTERRUPTIONS



FINANCIAL CONSTRAINTS / ECONOMIC IMPACT



IMPACTS ON WATER QUALITY / REGULATORY COMPLIANCE



DETERRENT TO ECONOMIC GROWTH

Challenges Facing Kentucky's Water Systems

Aging and Inadequate Infrastructure



USEPA

**20-YEAR INFRASTRUCTURE
INVESTMENT AMOUNT NEEDED**



DRINKING WATER

\$7,842,900,000

REPORTED 2023

CLEAN WATER
\$7,483,000,000

REPORTED 2022



Challenges Facing Kentucky's Water Systems

Regulatory Compliance



Complexity of Regulations



Emerging Contaminants / New Regulations

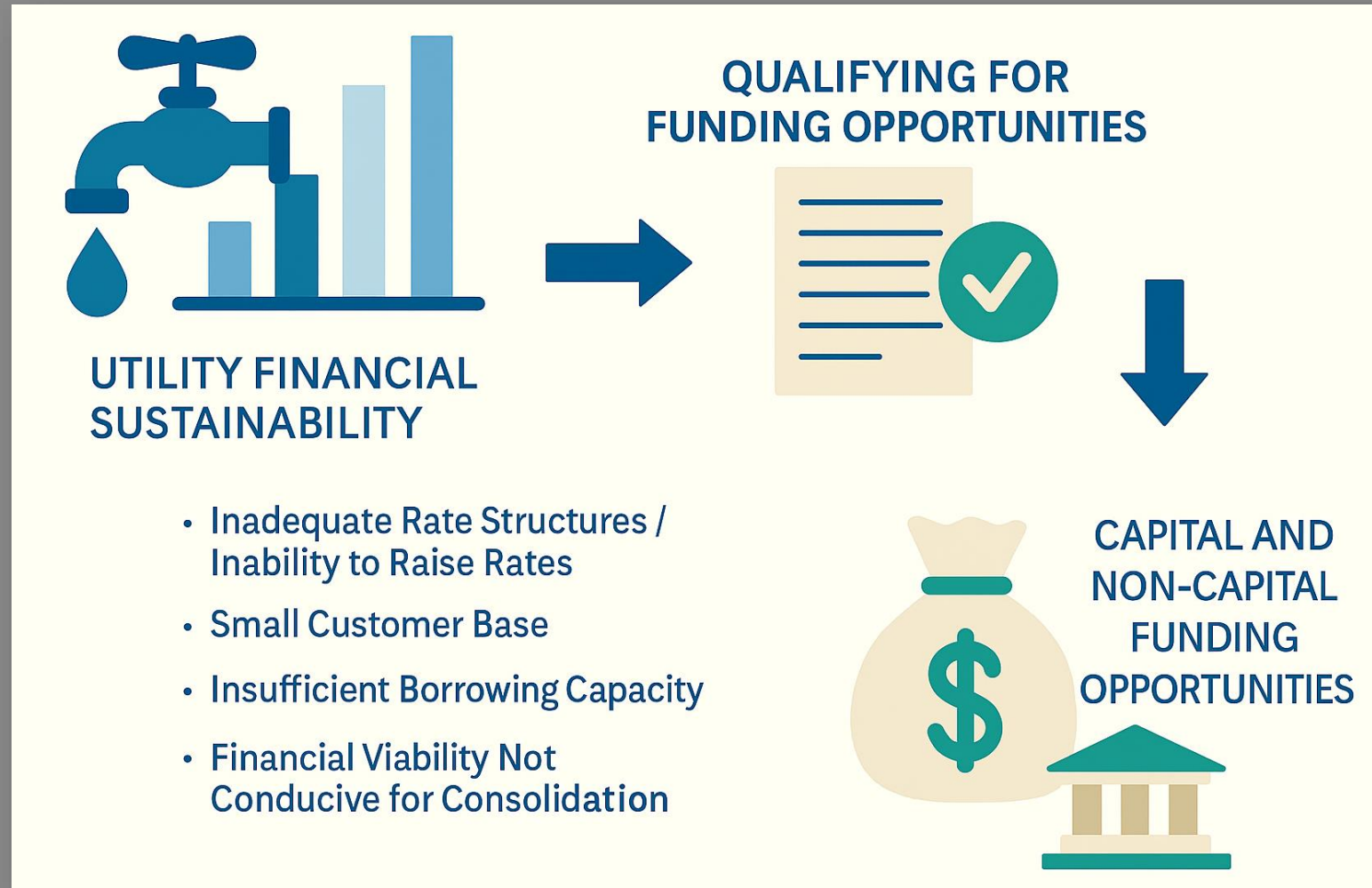
- USEPA Lead and Copper Rule Revisions (LCRR)
- Microbial and Disinfection By-Product Rules
- Cybersecurity Resiliency
- Per and Polyfluoroalkyl Substances (PFAS)



Inadequate Treatment Methods and Technologies

Challenges Facing Kentucky's Water Systems

Funding and Financial Constraints



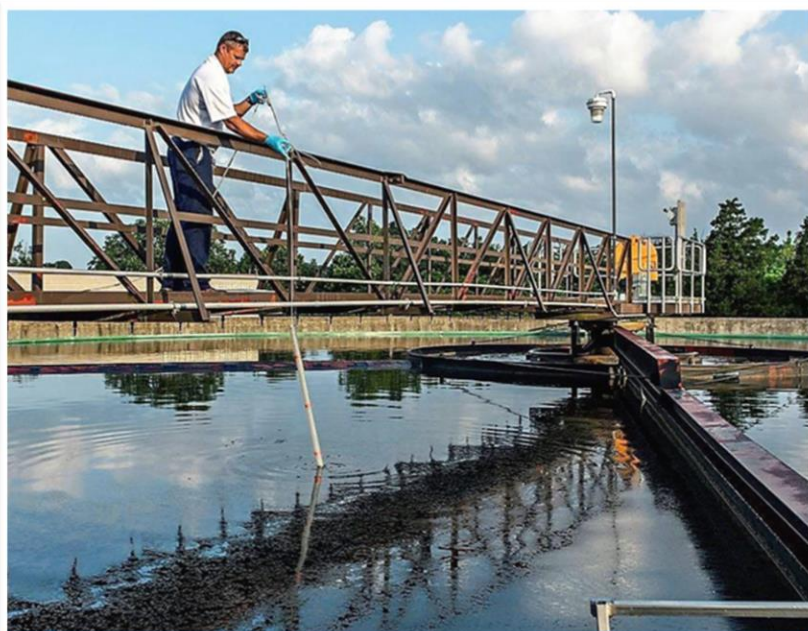
Challenges Facing Kentucky's Water Systems

Technical Expertise and Workforce



Challenges Facing Kentucky's Water Systems

Technical Expertise and Workforce



KENTUCKY WATER WORKFORCE SURVEY 2022

AUGUST 2022

 Kentucky Water
Resources Research Institute



20%

of survey respondents
were less than
35 years old
2% were less than
25 years old



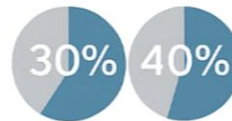
56%

of utilities do not have
enough certified
water operators



72%

of utilities indicated
that operators left the
job for better pay in
another field or were
recruited by
other utilities



30% of operators
and **40%** of utility
managers plan to
retire within the next
6 years



65%

do not have enough
certified wastewater
operators

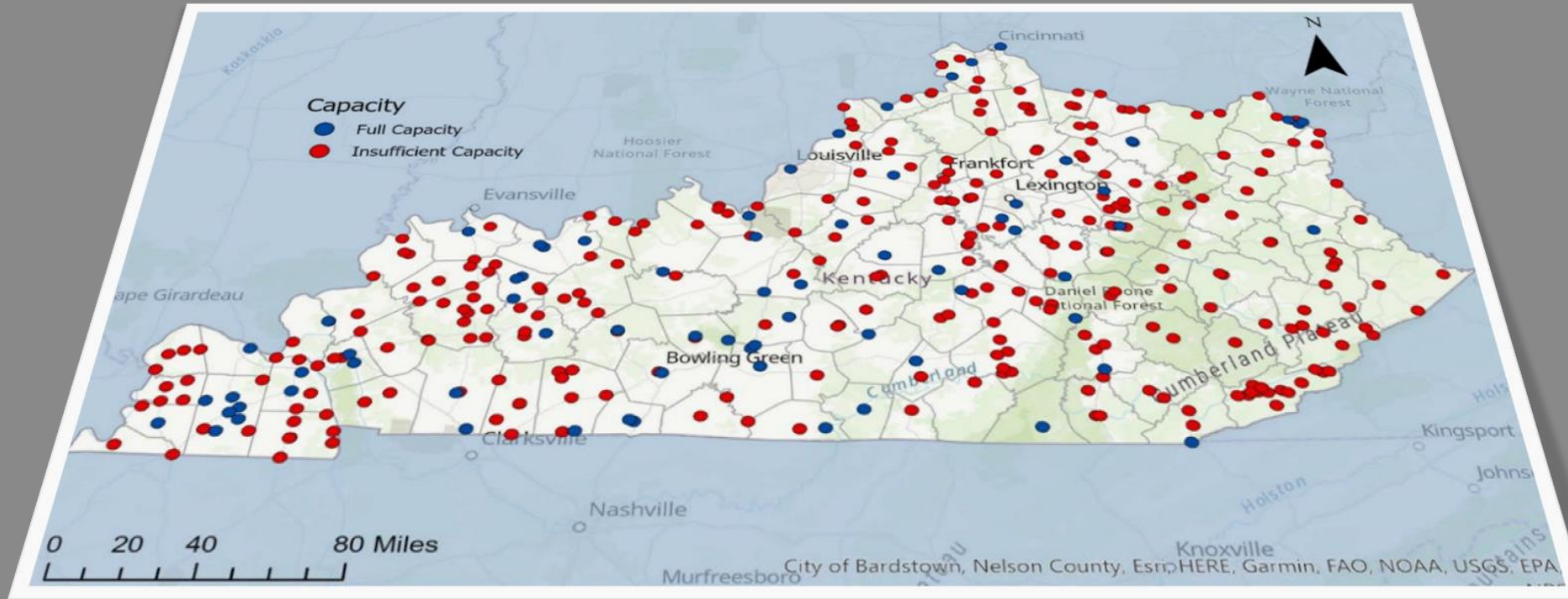


45%

of utilities do not have a
succession plan if the
current manager leaves
or retires

Challenges Facing Kentucky's Water Systems

Public Water Systems Technical, Managerial, and Financial Capacity



Drinking Water Capacity Development Program for Kentucky Public Drinking Water Systems - 2023

epa.gov/system/files/documents/2023-11/ky-capacity-development-triennial-report-2023.pdf



Challenges Facing Kentucky's Water Systems

Challenges Facing Kentucky's Water Systems



**Aging and Inadequate
infrastructure**



**Regulatory
compliance**



**Funding and
financial
constraints**

**Lack of
technical
expertise
and workforce**



Challenges Facing Kentucky's Water Systems

Utility Needs

COMMON WATER UTILITY NEEDS



Technological Upgrades



Technical Assistance



Asset Management and Capital Improvement Planning



Regional Cooperation and Consolidation



Workforce and Professional Development



Capital and Non-capital Investment

Challenges Facing Kentucky's Water Systems

Utility Needs

Capital and Non-capital Investment

Water Management Assistance Fund

A \$10 million assistance fund was created to support the capital and non-capital expenses of governmental water and wastewater utilities.

2022 KY General Assembly – HB 758

Kentucky Water and Wastewater Assistance for Troubled or Economically Restrained Systems (KYWWATERS) Program

A \$150 million assistance fund was created to support troubled or economically restrained water and wastewater utilities – \$75 million for FY25 and \$75 million for FY26.

2024 KY General Assembly – HB 563

HJR 30 authorized the release of \$65,673,500 of the \$75 Million appropriated for the KYWWATERS Program FY25. KIA evaluated 162 applications, collectively requesting over \$733 million in funding. Application amounts ranged from \$82,250 to \$52.7 million.

2025 KY General Assembly – HJR 30



Questions and Comments



Thank You

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Kentucky Rural Water Association
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