

Interim Joint Committee on Appropriations and Revenue

August 2, 2023

Challenges Facing Kentucky's Water Systems: Addressing Rural Water Utility Needs



Kentucky Water Systems

Kentucky's Water Infrastructure

- 432 Public Water Systems
- 213 Water Treatment Plants
 - Average age 38 years
- Approx. 64,000 Miles of Water Mains
 - Average age 40 years
 - 20% over 50 years
- 40,207 Estimated Lead Service Lines

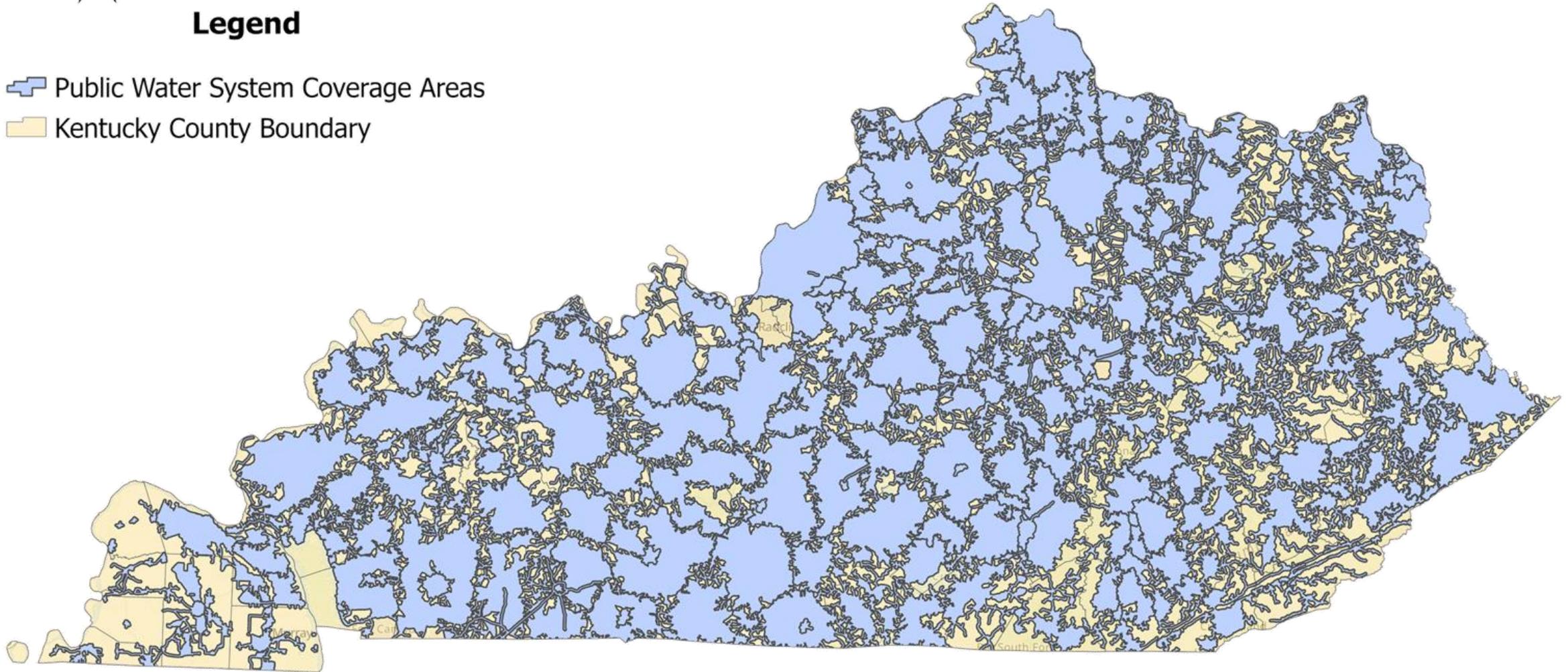




Public Water System Coverage Areas

Legend

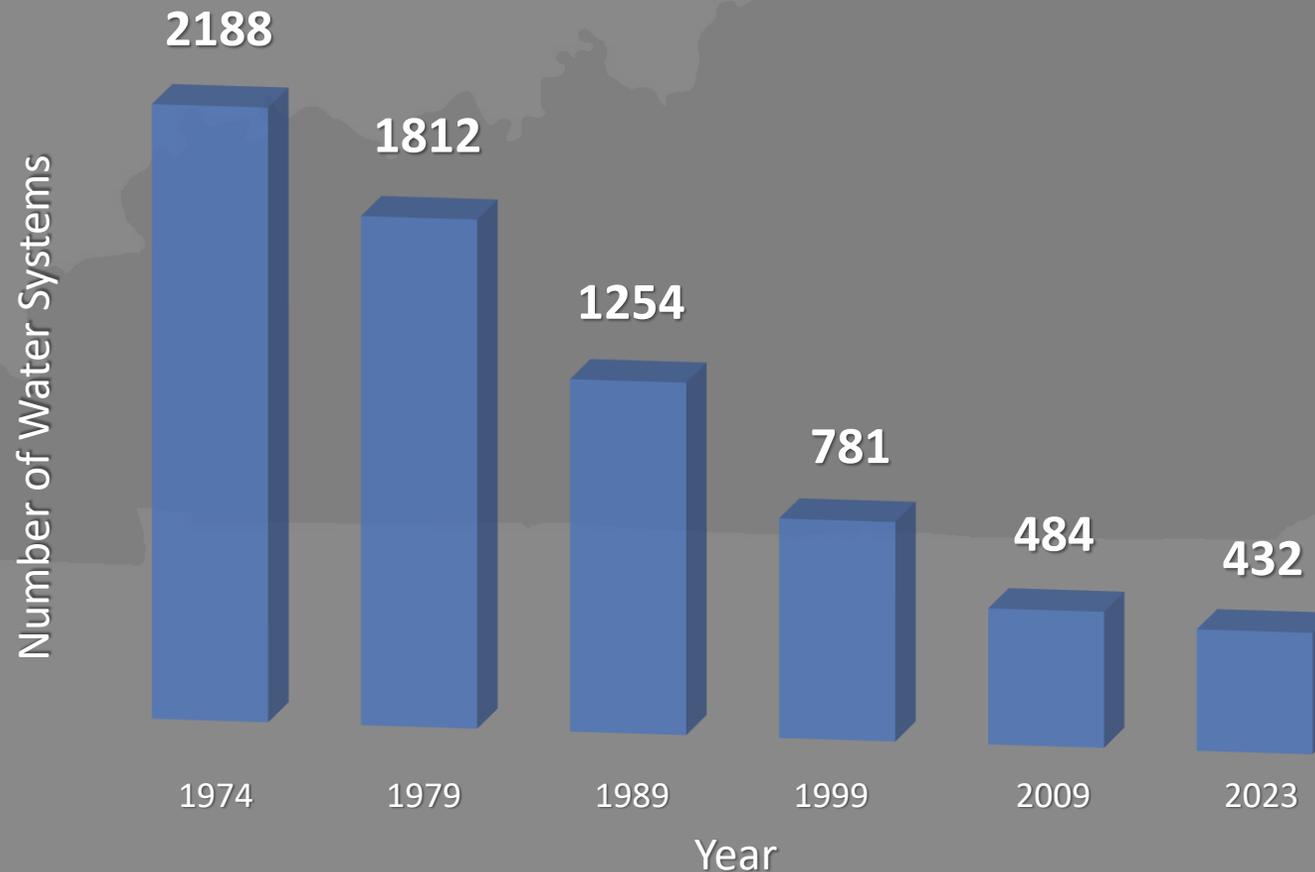
-  Public Water System Coverage Areas
-  Kentucky County Boundary



Kentucky Water Systems

Consolidation of Kentucky Water Systems

- 80% decline in number of water systems over the past 49 years.



Challenges Facing Kentucky's Rural Water Systems

- Aging Infrastructure
- Regulatory Compliance
- Funding and Financial Constraints
- Lack of Technical Expertise and Workforce



Challenges Facing Kentucky's Rural Water Systems

Aging Infrastructure

- Deterioration of Infrastructure
- Impacts on Water Quality
- Reliability and Service Interruptions
- Financial Constraints / Economic Impact
- Regulatory Compliance
- Deterrent to Economic Growth

USEPA's Drinking Water Infrastructure Needs Survey and Assessment, published April 2023, estimated Kentucky's 20-year infrastructure investment need at \$7,842,900,000.

www.epa.gov/system/files/documents/2023-04/Final_FAQ_DWINSAs_4.4.23.v1.pdf



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Rural Water Utility Needs

- Infrastructure Investment
- Technological Upgrades
- Asset Management and Planning
- Regional Cooperation and Consolidation

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Challenges Facing Kentucky's Rural 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



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Rural Water Utility Needs

- Technical Assistance
- Workforce Development
- Infrastructure Investment
- Technological Upgrades
- Asset Management and Planning
- Regional Cooperation and Consolidation



Challenges Facing Kentucky's Rural Water Systems

Funding and Financial Constraints

- Utility Financial Sustainability
 - Inadequate Rate Structures / Inability to Raise Rates
 - Small Customer Base
 - Insufficient Borrowing Capacity
 - Utility Revenue Subsidizing Municipal Functions
 - Financial Viability Not Conducive for Consolidation
- Qualifying for Funding Opportunities
- Non-capital Funding Opportunities



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Rural Water Utility Needs

- Technical Assistance
- Workforce Development
- Infrastructure Investment
- Asset Management and Planning
- Regional Cooperation and Consolidation
- Non-capital Utility Investment
 - Water Management Assistance Fund

2022 KY General Assembly – HB 758



Challenges Facing Kentucky's Rural Water Systems

Technical Expertise and Workforce

- Limited Availability of Qualified Personnel
- Lack of Succession Planning
- Lack of Effective Recruitment Strategies for the Water Industry



Challenges Facing Kentucky's Rural Water Systems

Technical Expertise and Workforce



KENTUCKY WATER WORKFORCE SURVEY 2022

AUGUST 2022

 Kentucky Water
Resources Research Institute

- 55% of utilities reported an increase in job vacancies over the last 2 years.
- 56% of utilities do not have enough certified water operators and 65% do not have enough certified wastewater 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.
- 45% of utilities do not have a succession plan if the current manager leaves or retires.
- 20% of the survey respondents were less than 35 years old, 2% were less than 25 years old.

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Rural Water Utility Needs

- Technical Assistance
- Workforce Development
 - Financial Investment in Workforce Development
 - Water and Wastewater Apprenticeship Program
 - Succession Planning and Leadership Development
- Regional Cooperation and Consolidation



Kentucky's Rural Water Utility Needs

- Infrastructure Investment
- Technological Upgrades
- Technical Assistance
- Asset Management and Planning
- Regional Cooperation and Consolidation
- Workforce Development

Financial Investment in Workforce Development

Water and Wastewater Apprenticeship Program

Succession Planning and Leadership Development

– Non-capital Utility 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

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Questions ?

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