

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**ELECTRONIC APPLICATION OF )  
KENTUCKY RURAL WATER )  
ASSOCIATION FOR ACCREDITATION ) CASE NO. 2024-00292  
APPROVAL OF COMMISSIONER )  
TRAINING AND CONTINUING )  
EDUCATION CREDIT )**

**APPLICATION**

Kentucky Rural Water Association (“KRWA” or the “Applicant”) applies for an Order from the Public Service Commission accrediting and approving a proposed water district commissioner training program for continuing education credit pursuant to KRS 74.020(6) and (7) and 807 KAR 5:070.

In support of its application, KRWA states:

1. KRWA is a non-profit corporation incorporated in the Commonwealth of Kentucky pursuant to KRS Chapter 273 on March 19, 1979 and is currently in good standing.
2. KRWA’s mailing address is: 1151 Old Porter Pike, Bowling Green, Kentucky 42103. Its email address is: [j.cole@krwa.org](mailto:j.cole@krwa.org).
3. KRWA was organized to foster professionalism in the water and wastewater industry through non-regulatory training, technical assistance programs, and advocacy. Its membership consists of water districts, water associations, municipalities

with populations of 10,000 persons or less, and other similar entities that provide water and wastewater utility services to rural Kentucky.

4. Pursuant to 807 KAR 5:001, Section 4(8),<sup>1</sup> copies of all orders, pleadings, and other communications related to this proceeding should be directed to:

Damon Talley  
Stoll Keenon Ogden PLLC  
112 North Lincoln Boulevard  
PO Box 150  
Hodgenville, Kentucky 42748  
Telephone: (270) 358-3187  
Fax: (270) 358-9560  
damon.talley@skofirm.com

Janet Cole  
Kentucky Rural Water Association  
1151 Old Porter Pike  
Bowling Green, KY 42103  
(270) 843-2291  
Fax: (270) 796-8623  
[j.cole@krwa.org](mailto:j.cole@krwa.org)

5. KRWA proposes to sponsor and conduct a water management training program on October 19, 2024, at the Purchase Area Development District, in Mayfield, Kentucky. The program is entitled “Water Commissioner Training.” A copy of the proposed agenda is attached to this Application at **Exhibit 1**. This program will be conducted in-person. The presenters, KRWA representatives, and all attendees will abide by the COVID-19 safety protocols and social distancing measures in place at the time of the training.

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<sup>1</sup> On September 4, 2024, KRWA gave notice pursuant to 807 KAR 5:001, Section 8, of its intent to file this application and of its use of electronic filing procedures.

6. As reflected at **Exhibit 1**, the proposed training program will include presentations on the following topics:

a. **Issues Facing Our Industry: Addressing Utility Needs.** This presentation aims to ensure water utilities across Kentucky are prepared to meet the demands of aging infrastructure, comply with stricter regulations, secure necessary funding, and address workforce shortages;

b. **It's a Sunshine Day: An Overview of Sunshine Laws in Kentucky**  
Water districts are public agencies. As such, knowledge and compliance with the Kentucky Open Records Act and Kentucky Open Meetings Act needs to be top of mind. Water districts must be prepared to deal with the array of legal questions that arise under those laws;

c. **Asset Management and Financing.** This presentation is focused on providing guidance for water district commissioners and managers to determine the current state of assets, managing maintenance, and long-term capital funding strategies;

d. **The Value of Water: A Commissioner's Guide to Water Accountability Success.** Emphasizes the importance of water by equipping decision-makers with tools to efficiently manage water accountability. This includes offering alternative methods for calculating lost water, ensuring consistent tracking of water usage, and reviewing collected data to identify and address water loss;

e. **What to Expect During a Rate Study.** This presentation is focused on the responsibilities of water district commissioners during a rate study. It defines a rate

study; describes the first steps of getting started with a rate study; describes three types of rate studies in some detail; provides lessons learned for water district commissioners to consider; and differentiates the water district Board of Commissioners' role from the PSC's role;

f. **GIS with Benefits: What Commissioners Need to Know.** Explains how GIS and GPS tools are often used together and will demonstrate how the two location-based tools can be used to improve operations of a utility; therefore, improving efficiency and reducing costs;

7. The proposed training program consists of six hours of instruction and should be accredited and approved as water management training satisfying the requirements set forth in KRS 74.020(7) to establish a water district commissioner's eligibility for a maximum annual salary of \$6,000. **KRWA is not requesting that the proposed training program be accredited as a program of instruction for newly appointed commissioners.**

8. A biographical statement containing the name and relevant qualifications and credentials for each presenter is attached at **Exhibit 2** of this application.

9. The PowerPoints for these presentations are attached at **Exhibit 3**. A copy of these presentations will be provided to each attendee. Should a presenter revise or amend his or her presentation prior to their scheduled session or provide additional written materials for the attendees, KRWA will include a copy of the revised presentation with its sworn statement and report regarding the instruction.

10. KRWA has sent notice of the proposed training program by electronic mail to the water districts, water associations, and municipal utilities that are under Commission jurisdiction as well as representatives of investor-owned utilities, county judge/executives, county attorneys and others located in the Purchase ADD, the Pennyrite ADD, and the Green River ADD who are believed to have an interest in the Proposed program's subject matter.

11. KRWA will retain a record of all water district commissioners attending the proposed training program.

12. Within the Ordered number of days of the proposed training program's completion, KRWA will file with the Public Service Commission a sworn statement:

- a. Attesting that the accredited instruction was performed;
- b. Describing any changes in the presenters or the proposed program curriculum that occurred after certification; and,
- c. Containing the name of each attending commissioner, their utility and the number of hours that he or she attended.

13. KRWA will include with the sworn statement documentary evidence of the program's certification by certifying authorities and a copy of any written material given to the attendees that has not been previously provided to the Public Service Commission.

14. KRWA will admit representatives of the Public Service Commission to the proposed training program at no charge to permit such representatives to assess

the quality of the program's instruction, monitor the program's compliance with the Public Service Commission directives, regulations, or other requirements, or perform any other supervisory functions that the Public Service Commission deems necessary.

**WHEREFORE**, KRWA requests that the Commission approve and accredit the proposed training program entitled "Water Commissioner Training" for six hours of water district management training.

Dated: September 11, 2024

Respectfully submitted,



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Hodgenville, Kentucky 42748  
Telephone: (270) 358-3187  
Fax: (270) 358-9560  
[damon.talley@skofirm.com](mailto:damon.talley@skofirm.com)

Counsel for Kentucky Rural Water  
Association and Stoll Keenon Ogden  
PLLC

## **CERTIFICATE OF SERVICE**

In accordance with 807 KAR 5:001, Section 8, I certify that this document was submitted electronically to the Public Service Commission on September 11, 2024, and that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding.

  
Damon R. Talley

# **EXHIBIT 1**



# WATER COMMISSIONER TRAINING

## Purchase Area Development District

1002 Medical Drive  
Mayfield, KY 42066

Presented by

## Kentucky Rural Water Association

Saturday, October 19, 2024

### AGENDA

**7:30** Coffee & Donuts

### Morning Sessions

**7:55 – 8:00** Welcome and Program Overview  
**Joe Burns, Kentucky Rural Water Association**

**8:00 – 9:00** Issues Facing Our Industry: Addressing Utility Needs  
**Scott Young, Kentucky Rural Water Association**

There are water utilities across Kentucky that are unprepared to meet the demands of aging infrastructure, stricter regulations, competitive funding, and workforce shortages. The goal of this presentation is to educate commissioners on these nationwide challenges and equip them with strategies and opportunities to ensure the future viability of their utility.

**9:00 – 9:10** Break

**9:10 – 10:10** It's a Sunshine Day: An Overview of Sunshine Laws in Kentucky  
**Glenn D. Denton, Denton Law Firm PLLC**

Water districts are public agencies. As such, knowledge and compliance with the Kentucky Open records Act and Kentucky Open Meetings Act needs to be top of mind. Water districts must be prepared to deal with the array of legal questions that arise under those laws. This presentation intends to refresh every board member's and employee's appreciation and understanding of these important laws.

**10:10 – 10:20** Break

**10:20 – 11:20** Asset Management and Financing  
**Daniel Reetzke, Kentucky Rural Water Association**

This presentation is focused on providing guidance for water district commissioners and managers to determine the current state of assets, managing maintenance, and long-term capital funding strategy. Commissioners will learn how the decisions that they make impact customer rates and the future viability of their utility

## **Afternoon Sessions**

### **12:30 – 1:15 p.m.      What to Expect During a Rate Study Daniel Reetzke, Kentucky Rural Water Association**

This presentation is focused on the responsibilities of water district commissioners during a rate study. It defines a rate study; describes the first steps of getting started with a rate study; describes three types of rate studies in some detail; provides lessons learned for water district commissioners to consider; and differentiates the water district Board of Commissioners' role from the PSC's role. This presentation is focused on the responsibilities of water district commissioners during a rate study. It defines a rate study; describes the first steps of getting started with a rate study; describes three types of rate studies in some detail; provides lessons learned for water district commissioners to consider; and differentiates the water district Board of Commissioners' role from the PSC's role.

### **1:15 – 1:25              Break**

### **1:25 – 2:10              The Value of Water: A Commissioner's Guide to Water Accountability Success Joe Burns, Kentucky Rural Water Association**

Excessive water loss is one of the most common regulatory problems among PSC-governed water utilities. This session aims to highlight the value of water and equip decision-makers with tools to manage it effectively. Topics will include water accountability, calculating the value of lost water, and utilizing reports for tracking water usage, such as monthly and annual reports. The discussion will also cover expected system demand and its implications for utilities, data collection, distribution management, and methods for identifying and addressing water loss.

### **2:10 – 2:15              Break**

### **2:15 – 3:45              GIS with Benefits: What Commissioners Need to Know Jasper Wyatt, Kentucky Rural Water Association**

Global Positioning Systems (GPS) and Geographic Information Systems (GIS) are both location-based tools that are often used together. GIS is a computer-based system that captures, stores, analyzes, and visualizes geospatial data. GIS can be used to create maps, show relationships between locations, and target marketing to specific demographics. GIS maps can show things that are above, underneath, and invisible, as well as historical information. GPS is a satellite-based navigation system that uses signals from satellites to determine a location on Earth. This presentation will demonstrate how GIS and GPS can be used to improve operations of a utility with the goal of improving the efficiency of operations, reducing costs, and providing better customer service outcomes. The discussion will delve into details of both types of systems and will conclude the session with an account of how water utilities throughout Kentucky have implemented these spatial tools to improve the operations at their utility.

# **EXHIBIT 2**



## **Joe Burns**

Joe has been with Kentucky Rural Water Association since April 1994. Prior to joining the KRWA staff, Mr. Burns was a Senior Groundwater Hydrologist for the Kentucky Division of Water beginning in July 1991 where he focused on water supply protection. Joe holds Bachelor of Science and Master of Science degrees in Geology from Eastern Kentucky University.

In his present position as Director of Programs and Operations. He is responsible for the administration and implementation of KRWA's technical assistance programs. These programs provide training, technical, financial, and managerial assistance to utilities throughout the Commonwealth. Joe also serves as the coordinator of the Kentucky Water/Wastewater Agency Response Network. KYWARN has played an integral role in disaster response and restoring water and wastewater services to communities since 2009.



## **GLENN D. DENTON**

### **PARTNER**

Glenn David Denton began his legal career on July 31, 1995. Graduating from Paducah Tilghman High School, Centre College, and Chase College of Law, he returned to Paducah to practice with his father and the staff that watched him grow up. After twenty-five years, a broad range of legal experiences, and more than fifteen trials to verdict, he enjoys providing legal services and advice to clients today more than ever. Glenn counsels with clients regularly on how to avoid litigation and solve their problems before ending up in court. He believes that ending up in a lawsuit is not the best option to resolve differences. He represents individuals, small business owners, corporations, cities, and counties on a regular basis. He takes his role as a counselor as seriously as his role as a litigator. He is licensed to practice before the United States Supreme Court as well as federal and state courts throughout Kentucky and Illinois. He frequently serves as local counsel to out-of-state attorneys practicing in the region. From the purchase of a home, to a will contest, to courtroom litigation between competitors, to economic development projects. Glenn has developed a high profile and respected reputation to handle all types of legal matters in western Kentucky and Southern Illinois. In 2005, he was awarded the Chase Alumni Association's Outstanding Recent Alumnus award.

Through his civic work, Glenn knows the Jackson Purchase region and the Commonwealth of Kentucky well. Early in his career, he taught real estate law as an adjunct professor at the local community college. Glenn is a past chairman of the Paducah Area Chamber of Commerce and current chairman of the Paducah-McCracken County Convention and Visitors Board serving a second tour of duty. He serves on the board of directors for Paducah Bank and Trust Company which has over \$500 million in assets. He serves on the Mercy Health Lourdes Board and is past chair of the Mercy Health Foundation-Lourdes Board. He also serves as treasurer and audit and finance committee chairman for the board for Lawyers Mutual Insurance Company of Kentucky which provides legal malpractice insurance to lawyers throughout Kentucky. In 2008, Kentucky Governor Steve Beshear appointed Glenn to the Kentucky Council on Postsecondary Education which is responsible for coordinating higher education in the Commonwealth. He was re-appointed to the Kentucky Council on Postsecondary Education in 2012 and confirmed both times by the Kentucky General Assembly. He served on Council Postsecondary Education for almost nine (9) years and as chair from 2015-2017.

Glenn is also a member of the International Association of Defense Counsel. IADC is an invitation-only professional association for corporate and insurance defense attorneys throughout the world. Members are distinguished partners in large and small law firms, senior counsel in corporate and insurance law departments, and insurance executives.

### **Education**

- Centre College (B.A., 1992)
- Salmon P. Chase College of Law (J.D., 1995)

## **Admitted to Practice**

- U.S. Supreme Court
- U.S. Court of Appeals, Sixth Circuit
- U.S. District Court, Western District of Kentucky
- U.S. District Court, Eastern District of Kentucky
- U.S. District Court, Southern District of Illinois
- Admitted to Practice in Kentucky
- Admitted to Practice in Illinois

## **Representative Assignments and Cases**

- Successfully represented a family-owned gun shop when the Bureau of Alcohol, Tobacco & Firearms attempted to revoke its license to sell guns
- Secured a defense verdict for a small business owner when her competitor brought suit on claims pertaining to business torts in an attempt to halt the start-up of her new business
- Obtained dismissals and summary judgments on behalf of various cities pertaining to personal injury claims brought against them
- Successfully argued before the Kentucky Court of Appeals when a state licensing board tried to revoke a health professional's license to do business
- Represented a nationally-based, interactive marketing company in its sale to a Silicon Valley- based venture capital company
- Guided a local client with a multi-state presence to the successful conclusion of trademark litigation brought against it, including hiring an out-of-state law firm for litigation services
- Tried a mobile home fire case to jury verdict and mitigated the damages sought from his client
- Tried three real estate cases to verdict involving issues pertaining to a boundary line, an easement and a farm lease, respectively
- Successfully settled an employment case brought directly by the Equal Employment Opportunity Commission against a local employer
- Served as local counsel for large corporations in an alleged benzene personal injury case brought in state court ending with summary judgment being granted to all defendants
- Successfully defended a will contest case and obtained a judgment on a counter-claim for defamation
- Completed a land transfer involving the United States Army Corps of Engineers
- Provided services for the completion of an economic development project involving a city, a county, purchaser, bond holders and lease holder

### **Professional Memberships and Affiliations**

- McCracken County Bar Association
- Kentucky Bar Association
- Illinois Bar Association
- Chase College of Law Alumni Association

### **Professional/Personal Achievements**

- Chairman and member, Lourdes Foundation Board, 2014-2023
- Board member-Mercy Health Lourdes Board, 2019-Present
- Treasurer and board member, Lawyers Mutual Insurance Company of Kentucky, 2006-present
- Past Chairman and member, Kentucky Council on Postsecondary Education, 2008-2017
- Past Chairman, American Red Cross Heroes Campaign
- Past Chairman, McCracken County Democratic Party Executive Committee
- Past Chairman, Paducah Area Chamber of Commerce
- Past Chairman, and current chairman, Paducah-McCracken County Convention and Visitors Bureau
- Past Chairman, Paducah Summer Festival Committee
- Adjunct Professor of Real Estate, Paducah Community College, 1999-2002

### **Articles**

- Closing a Kentucky Law Office: A Guide for After the Death of a Kentucky Sole Practitioner
- ECU Ensuring a Brighter Future For All Kentuckians
- A Guide to Protecting Nonprofit Board Members
- Doing One More Thing to Prevent Fraud Guarding Against the Fake Check With Positive Pay



**Daniel Reetzke**

Daniel Reetzke is a dedicated Certified Public Accountant (CPA) with a passion for finance and accounting. He graduated from Western Kentucky University, where he earned a degree in Accounting and Finance.

After graduation, Daniel began his professional journey at the City of Franklin, where he rose through the ranks from Tax Collector to Assistant Finance Director. In these roles, Daniel played a vital role in the city's financial operations.

Following his tenure at the City of Franklin, Daniel transitioned to the Kentucky Rural Water Association, where he assumed the role of Director of Finance & Administration.





**Jasper Wyatt**

Jasper Wyatt has been with Kentucky Rural Water Association since March 2022. Jasper currently assists utilities with GIS/Mapping and asset management along with providing utilities technical and managerial assistance. Prior to joining the KRWA staff, Mr. Wyatt was employed at Dexter Almo Heights Water District (2002-2009; 2013-2022), becoming the System Manager in 2013 where he was responsible for the distribution operations and the managerial operations of the district. He also was a Water Management Coordinator for the Purchase Area Development District (2011-2013), with experience in assisting utilities in securing funding, project planning and GIS. Jasper holds a Bachelor of Science degree in Civil Engineering Technology from Murray State University.

## Scott Young

### Professional Bio - 2024

Scott Young is a water and wastewater professional with nearly three decades of industry experience. Scott serves as the Executive Director of the Kentucky Rural Water Association, where he leads a team of 30 professionals dedicated to providing technical assistance, training, and legislative advocacy to over 350 utility members across Kentucky. As Executive Director, Scott oversees the efficient management of all Association functions and serves as the primary representative with the board of directors, membership, National Rural Water Association, regulatory and funding agencies, and other outside organizations. He also serves as the Secretary/Treasurer of the Rural Water Financing Agency, which has provided over \$1.6 billion in interim and long-term financing to utilities throughout the United States.



Before joining Rural Water, Scott spent 17 years as the General Manager of Glasgow Water Company. This municipal utility provides service to approximately 21,000 water connections, 7,500 wastewater connections, and five regional water utilities. During his tenure, Scott managed over \$48 million dollars in capital improvement projects and led the utility to receive several recognitions. These include the 2014 Kentucky Rural Water Association's Wooden Bucket Award, the 2018 Excellence in Energy Leadership Award by the Kentucky Energy and Environment Cabinet, the 2019 Kentucky/Tennessee American Water Works Association's Best of the Best Taste Test Award, and Rural Water's Best Tasting Drinking Water Award in 2012, 2018 and 2020.

Other achievements include recognition from the USEPA Area Wide Optimization Program (AWOP) for excellence in exceeding minimum drinking water standards for 17 consecutive years, the 2018 and 2019 Microbial AWOP Champion Award, and 2020 and 2021 AWOP Disinfectants and Disinfection By-Products program recognition. Scott served as a three-year American Council of Engineering Companies (ACEC) - National Engineering Excellence Awards Judge from 2017 to 2019 and received a Gubernatorial appointment to the Kentucky Geographic Information Advisory Council in 2019. In 2021, Scott was inducted into the Barren County Alumni Distinguished Hall of Honor.

Scott graduated from Western Kentucky University in 1996 with a degree in Civil Engineering and was honored with the university's Summit Award in 2012. He also earned his Executive Leadership Program Certification from Cornell University in 2021.

# **EXHIBIT 3**

# Issues Facing Our Industry: Addressing Utility Needs

Water Commissioner Training

KRWVA

## Kentucky Rural Water Association



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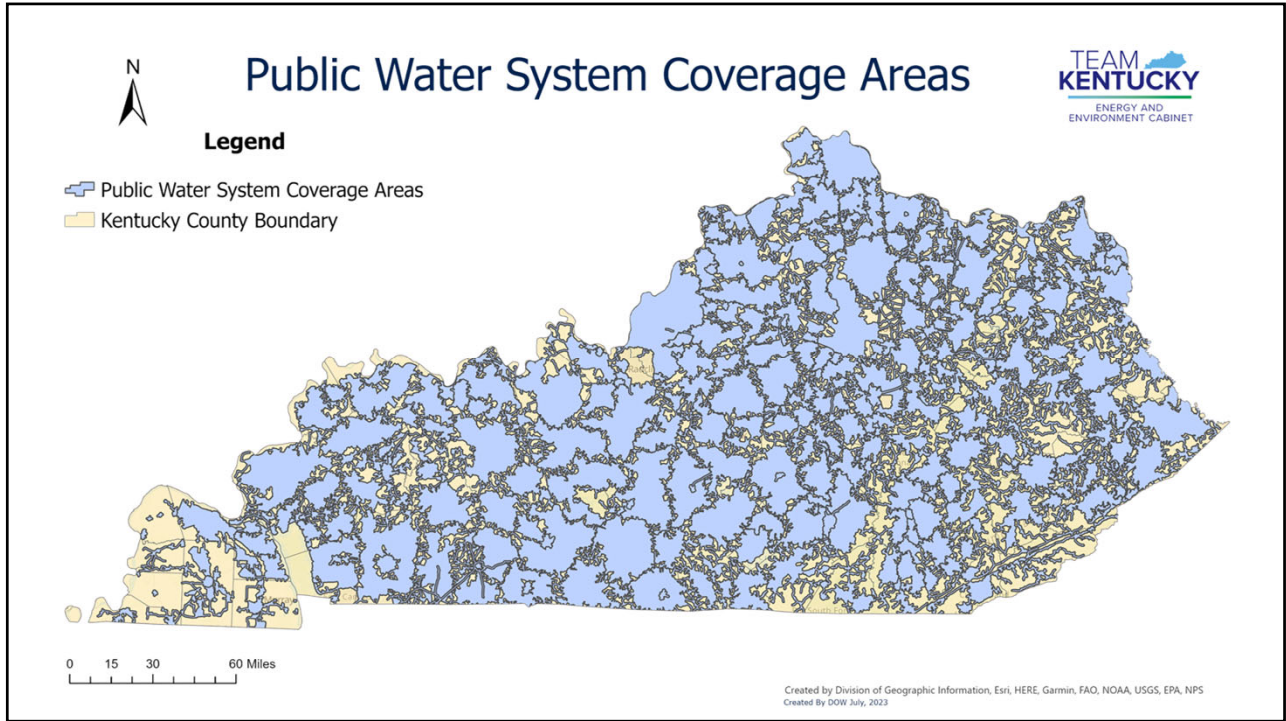
## Kentucky Water Systems

### Kentucky's Water Infrastructure

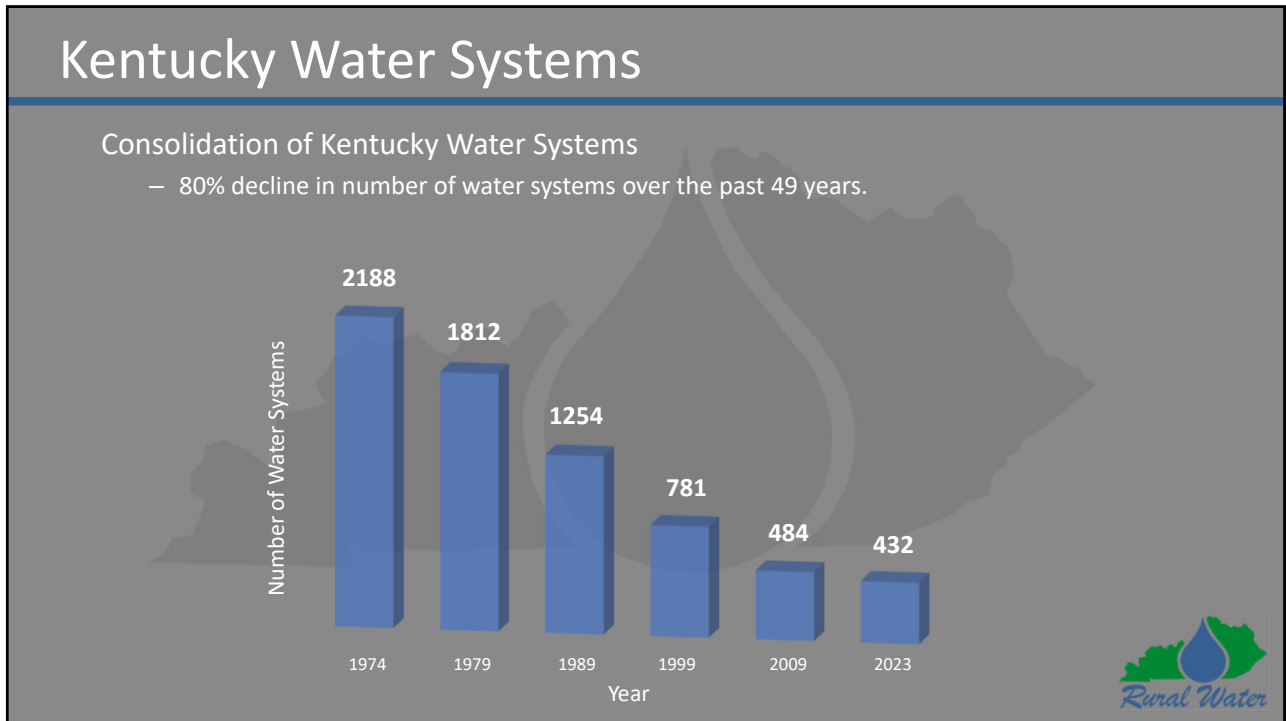
- 432 Public Water System ID (PWSID) Permits
- 336 Public Water Utilities
- 213 Water Treatment Plants
  - Average age 38 years
- Approx. 64,000 Miles of Water Mains
  - Average age 40 years
  - 20% over 50 years
- 40,207 Estimated Lead Service Lines



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## Issues Facing Kentucky's Water Systems

What Issues?



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## Issues Facing Kentucky's Water Systems

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



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# Issues Facing Kentucky's Water Systems

## Aging Infrastructure



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# Issues Facing Kentucky's 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\\_DWINSA\\_4.4.23.v1.pdf](http://www.epa.gov/system/files/documents/2023-04/Final_FAQ_DWINSA_4.4.23.v1.pdf)



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## Issues Facing Kentucky's 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

### Water Utility Needs

- Infrastructure Investment
- Technological Upgrades
- Asset Management and Planning

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](http://www.epa.gov/system/files/documents/2023-04/Final_FAQ_DWINSAs_4.4.23.v1.pdf)



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## Issues Facing Kentucky's Water Systems

### Regulatory Compliance

- Complexity of Regulations
- Emerging Contaminants/New Regulations
  - USEPA Lead and Copper Rule
    - Lead and Copper Revisions (LCRR) / Lead and Copper Rule Improvements (LCRI)
  - Microbial and Disinfection By-Product Rules
  - Cybersecurity Resiliency
  - Per and Polyfluoroalkyl Substances (PFAS)
- Inadequate Treatment Methods and Technologies



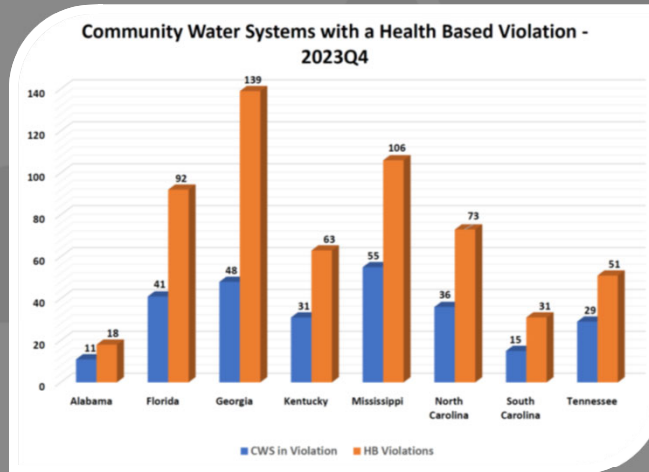
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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

USEPA Region 4 Drinking Water Performance Measures - 2023 Q4

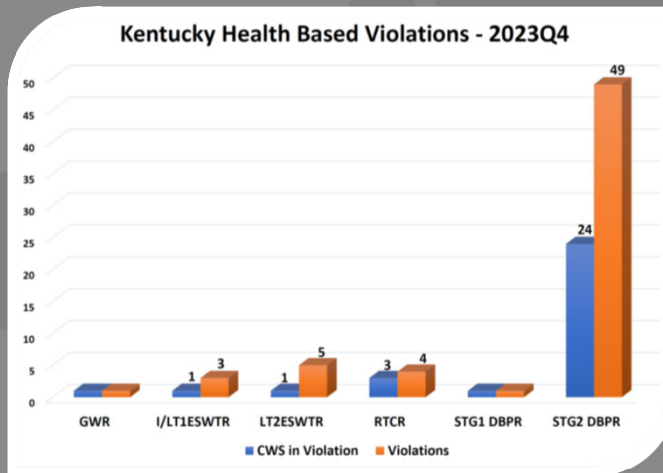


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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

USEPA Region 4 Drinking Water Performance Measures - 2023 Q4

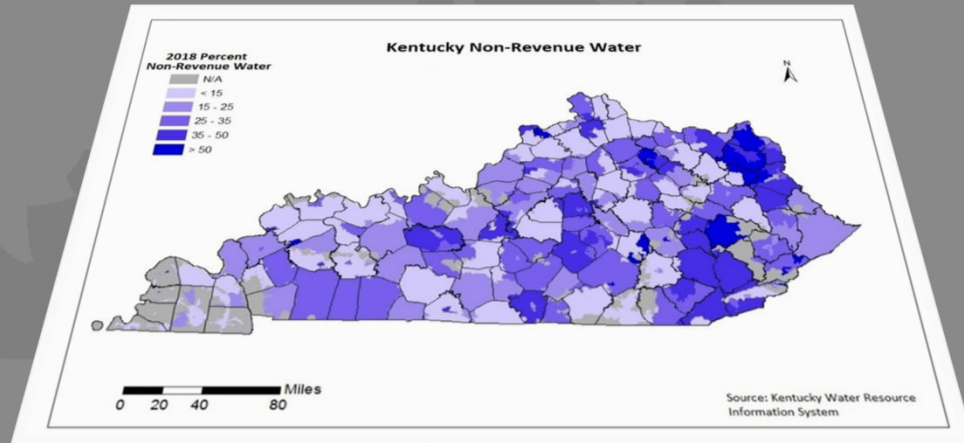


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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

### Water Loss



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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

### Emerging Contaminants

**“Emerging” does NOT mean these chemicals are NEW**

These chemicals have been released into the environment for as long as they have been in use




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# Issues Facing Kentucky's Water Systems

**Regulatory Compliance**  
Emerging Contaminants

Current classes of compounds identified as Emerging Contaminants

- ✓ Pharmaceuticals
- ✓ Personal Care Products
- ✓ Pesticides and Herbicides
- ✓ Halogenated and Non-halogenated Compounds
- ✓ Synthetic Fragrances
- ✓ Phthalates
- ✓ Bisphenol A *(used in the manufacture of epoxy resins and other polymers)*
- ✓ Phytoestrogens
- ✓ Nanomaterials




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# Issues Facing Kentucky's Water Systems

**Regulatory Compliance**  
Emerging Contaminants

**What's the problem with Emerging Contaminants?**

The lack of knowledge of their impact in the long-term effect on human health and the environment



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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

### Emerging Contaminants

#### USEPA Lead and Copper Rule Revisions (LCRR) and Improvements (LCRI)

The Revised Lead and Copper Rule Revisions were developed to make sure no more "Flint Michigan's" happen again. The rule is to decrease/eliminate the chance of lead exposure to anyone drinking tap water, especially young children, who are more susceptible to issues involving lead.



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# Issues Facing Kentucky's Water Systems

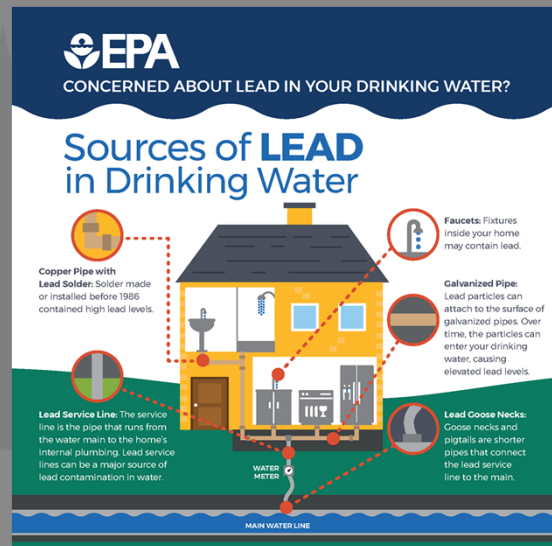
## Regulatory Compliance

### Emerging Contaminants

USEPA Lead and Copper Rule

#### Lead Service Line Inventories:

Due October 16, 2024



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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

### USEPA Final PFAS Drinking Water Rule – April 10, 2024

On April 10, 2024, USEPA released final enforceable standards for six PFAS (per- and polyfluoroalkyl compounds) in drinking water including **PFOA, PFOS, PFHxS, GenX chemicals, PFNA, and PFBS.**

Water Systems with PFAS levels above the Maximum Contaminant Levels (MCLs) are required



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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

### USEPA Final PFAS Drinking Water Rule – April 10, 2024

#### PFAS Overview:

PFAS are a family of man-made chemicals that have been widely used in manufacturing processes and consumer products for their ability to resist heat, oil, grease, and water.

It has been estimated that the PFAS family may include approximately 5,000 to 10,000 chemicals.

They are extremely difficult to break down because of the incredibly strong carbon-fluorine bonds.

Drinking water is one way people can be exposed to PFAS.

Exposure to certain PFAS is linked to a number of negative health effects.



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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

USEPA Final PFAS Drinking Water Rule – April 10, 2024

### Regulatory levels

Compound	Final MCLG	Final MCL (enforceable levels)
PFOA	Zero	4.0 parts per trillion (ppt) (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA (commonly known as GenX Chemicals)	10 ppt	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index

Compliance is determined by running annual averages at the sampling point at the entry to the utility distribution system.



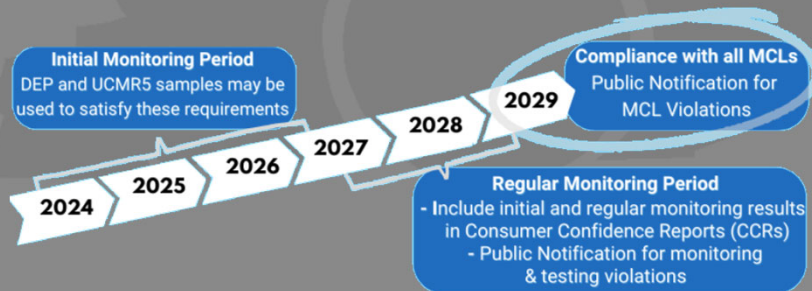
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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

USEPA Final PFAS Drinking Water Rule – April 10, 2024

### 5-year Compliance timeline



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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

PFAS Drinking Water Rule – April 10, 2024

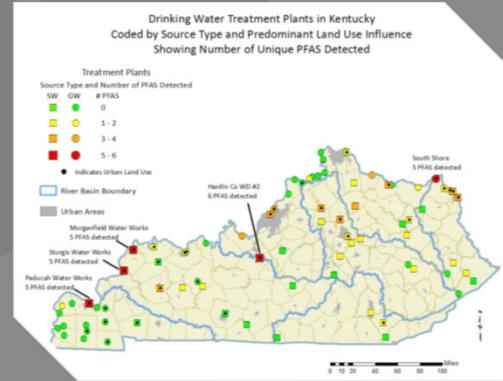
### 2023 Kentucky Drinking Water Study

The study included 113 WTPs and the finished water was analyzed for 31 different PFAS compounds. 118 individual PFAS compound detections were recorded.

11 PFAS compounds were detected during the study. HFPO-DA (Gen-X) was included in the study but not detected.

Laboratory detection limits for finished water samples ranged between 0.68-0.78 nanograms/liter (ng/L) or parts per trillion (ppt). Laboratory reporting limits for finished water samples ranged between 1.0-1.2 ng/L or ppt.

<https://eec.ky.gov/Environmental-Protection/Water/Protection/Pages/PFAS.aspx>



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# Issues Facing Kentucky's Water Systems

## Regulatory Compliance

- Complexity of Regulations
- Emerging Contaminants/Regulations
  - USEPA Lead and Copper Rule
  - Microbial and Disinfection By-Product Rules
  - Cybersecurity Resiliency
  - Per and Polyfluoroalkyl Substances (PFAS)
- Inadequate Treatment Methods and Technologies

## Water Utility Needs

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




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# Issues Facing Kentucky's 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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# Issues Facing Kentucky's 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

## Water Utility Needs

- Technical Assistance
- Workforce Development
- Infrastructure Investment
- Asset Management and Planning
- Regional Cooperation and Consolidation
- Non-capital Utility Investment
  - \$10M Water Management Assistance Fund  
2022 KY General Assembly – HB 758
  - \$150M Kentucky Water and Wastewater Assistance for Troubled or Economically Restrained Systems (KYWWATERS) Program  
2024 KY General Assembly – HB 563



26





# Kentucky's Water Systems Needs

## Infrastructure Investment

### G.R.A.N.T Program

DLG HB 9 Application:  
[https://kydlgweb.ky.gov/Articles/16\\_articleView.cfm?NewsID=895](https://kydlgweb.ky.gov/Articles/16_articleView.cfm?NewsID=895)

The Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization: <https://energycommunities.gov/#>

Funding Clearinghouse for opportunities relevant to energy communities:  
<https://energycommunities.gov/funding-opportunities/all-funding/>  
(487 funding opportunities)



29

# Issues Facing Kentucky's Water Systems

## Technical Expertise and Workforce

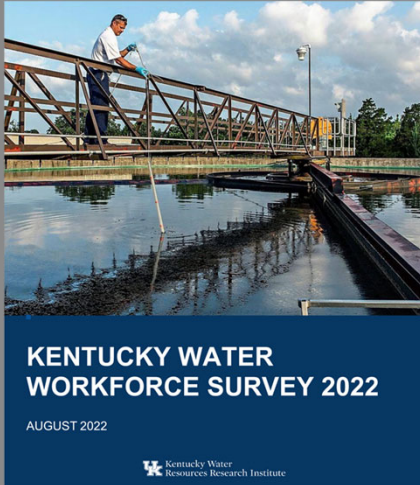
- Limited Availability of Qualified Personnel
- Lack of Succession Planning
- Lack of Effective Recruitment Strategies for the Water Industry



30

# Issues Facing Kentucky's Water Systems

## Technical Expertise and Workforce



[www.research.uky.edu/kentucky-water-resources-research-institute/kwrs-survey](http://www.research.uky.edu/kentucky-water-resources-research-institute/kwrs-survey)

- 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.



31

# Issues Facing Kentucky's Water Systems

## Technical Expertise and Workforce

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

## 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



32

## Issues Facing Kentucky's Water Systems

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



33

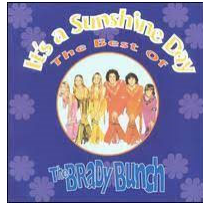
## Questions



Scott Young  
Executive Director  
Kentucky Rural Water Association  
[s.young@krwa.org](mailto:s.young@krwa.org)



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## It's a Sunshine Day: An Overview of Sunshine Laws in Kentucky

Presented by  
Glenn D. Denton  
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1

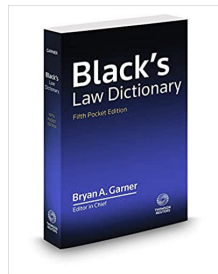
## So, what are sunshine laws in the first place?



2

By definition, sunshine laws are simply:

- A statute (or statutes) requiring a governmental department or agency to open its meetings or its records to public access. See Black's Law Dictionary, Ninth Edition (2009).



3

At the **federal** level, there are two (2) sources of law that govern open records and open meetings:

- The Government in the Sunshine Act of 1976 (dealing with open meetings).
- The Freedom of Information Act (FOIA) (dealing with open records).
- Both can be found within 5 U.S.C. § 552.
- These are primarily applicable to the federal government and federal government agencies.

4

In Kentucky, there are two (2) sources of law governing open records and open meetings:

- The Kentucky Open Records Act (KORA).
- The Kentucky Open Meetings Act (KOMA).
- We will examine each of these acts in turn.



5

## KENTUCKY OPEN RECORDS ACT

- In 1976, the Kentucky General Assembly first adopted the Kentucky Open Records Act (codified at KRS 61.870, *et seq.*) which establishes a right of access to public records.
- The Kentucky General Assembly adopted the Kentucky Open Records Act because they recognized that the free and open examination of public records is in the public interest.
- But, the Act is not without limitation.

6

## Applicability of the Kentucky Open Records Act

- Generally speaking, all public records (whether they are stored electronically or on paper), must be open for inspection unless they are exempted by statute.
- Moreover, the Kentucky Open Records Act applies to public records maintained by state and local government agencies.

7

## Entities Covered Under the Act Include:

- State and local government officers, departments, and legislative bodies;
- County and city governing bodies, school district boards, special district boards, and municipal corporations;
- State or local government agencies created by statute or other executive and legislative acts;
- Bodies created by state or local authority in any branch of government;
- Bodies that receive at least 25% of their funds from state or local authority within any fiscal year (subject to a few exclusions);
- An entity where the majority of its governing body is appointed by a public agency;
- Agencies created and controlled by public agencies; and
- Interagency bodies of two or more public agencies;

8



## So what does the Kentucky Open Records Act actually require?

- Subject to certain specifically delineated exceptions, records that are prepared, owned, used, possessed, or retained by a public agency are public records and must be made **AVAILABLE** for inspection upon request from a resident of the Commonwealth.
- In other words, a covered entity only needs to make non-exempt records available for inspection to a resident of the Commonwealth during regular office hours of the agency.
- The public agency may require the request to be in writing, but the public agency must accept a request that has been submitted by mail, fax, or e-mail.
- In any circumstance, the requester must precisely describe the records sought to be inspected.

9

## “Resident of the Commonwealth”

### “Resident of the Commonwealth” means:

- (a) An individual residing in the Commonwealth;
- (b) A domestic business entity with a location in the Commonwealth;
- (c) A foreign business entity registered with the Secretary of State;
- (d) An individual that is employed and works at a location or locations within the Commonwealth;
- (e) An individual or business entity that owns real property within the Commonwealth;
- (f) Any individual or business entity that has been authorized to act on behalf of an individual or business entity defined in paragraphs (a) to (e) of this subsection; or
- (g) A news-gathering organization as defined in [KRS 189.635\(8\)\(b\)](#)1.a. to e.

10

Additionally, the Act requires every covered entity must adopt rules and regulations describing:

- The principal office of the public agency and its regular office hours;
- The title and address of the official custodian of records;
- The fees charged for copies (which may or may not be constitutional...more on that later); and
- The procedures to be followed in requesting public records. *See* 200 KAR 1:020.

11

And, new for 2021...

- The public agency must display in a prominent location accessible to the public, including on its website, a copy of its rules and regulations pertaining to public records, including the mailing address, e-mail address, and phone number of the official custodian of records AND the form promulgated by the attorney general that **may be** used to request public records.

12

## Procedure for Requesting Inspection of Public Records

- If required by the public agency, a resident of the commonwealth must make a specific request to the official custodian of the public agency's records. The custodian may require that the request be in writing.
- The application must also include a declaration that the request is not for a commercial purpose and that it is from a resident of the commonwealth (as defined by statute).
- The application for inspection shall be hand-delivered, mailed, sent via fax, or e-mailed to the public agency's custodian of public records.
- The public agency must respond to the request in writing within five (5) days (excluding Saturdays, Sundays, and legal holidays). **BUT, the public agency is not required to produce the records for inspection within five (5) days.**
- **If the request is denied, the response must include a statement of the specific exception which authorizes the agency to withhold the record and how the exception is applicable.**

13

## So, what records are exempt from public inspection?

- KRS 61.878(1) provides a listing of records that are exempt from inspection (barring a court order).
- The list of exempt records is too long to list here.
- But, in general, most of the exemptions are applicable to records that contain confidential, personal, or otherwise secretive information.

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## ONLINE ACCESS

- A public agency may provide online access to public records in electronic format.
- The agency may require that the requester enter into a contract, license, or other agreement with the agency vis-à-vis the online public records AND may charge fees (maybe) to access the online public records.
- However, the fees cannot exceed the cost of physical connection to the system and the reasonable cost of computer time access.

15

## Appeals/Penalties

- If a public agency denies a request for public records, the requester may file an appeal with the Kentucky Attorney General's Office for review of the agency's actions.
- The Attorney General will review the appeal and issue a decision as to whether the agency violated the Act.
- The burden of proof rests with the agency.
- If the AG sides with the requester and the agency does not appeal, the AG's decision can be enforced in Circuit Court.
- If the requester prevails in circuit court, then he/she can be awarded costs, attorney's fees, and up to \$25.00 per day for each day that he/she was denied the right to inspect the records.
- The Open Records Act also contains criminal penalties for public officials who **willfully** conceal or destroy records with the intent to violate the Act.

16

## Moving on...



17

## KENTUCKY OPEN MEETINGS ACT

- In 1974, the Kentucky General Assembly enacted the Kentucky Open Meetings Act (codified at KRS 61.800, *et seq.*).
- The General Assembly adopted the Kentucky Open Meetings Act because they recognized that the formation of public policy is public business and should not be conducted in secret.
- Generally speaking, the Act requires that all meetings of quorum of members of a public agency where public business is discussed or action is taken must be held in public.
- Public meetings must be open to the public at all times unless the subject of the meeting falls within one or more of thirteen (13) exceptions found in the statute.

18

## What is a public meeting?

- The Kentucky Open Meetings Act applies to all meetings held by state and local government agencies.



19

## The agencies covered under the Kentucky Open Meetings Act include:

- state and local government boards, commissions, and authorities;
- state and local legislative boards, commissions, and committees;
- county and city governing bodies, councils, school district boards, special district boards, and municipal corporations;
- state and local government agencies, including policy making boards of educational institutions, that are created by state or local statute or other legislative act;
- bodies created by state or local statute or legislative act in the legislative or executive branch of government;
- an entity where the majority of its governing body is appointed by a public agency;
- agencies, including committees, advisory committees, and ad hoc committees, which are established, created, and controlled by a public agency; and
- interagency bodies of two or more public agencies.

20

## What are the general requirements of the Kentucky Open Meetings Act?

- All meetings of public agencies, and committees or subcommittees thereof, must be held at specified times and places which are convenient to the public.
- Public agencies must keep minutes of action taken at every meeting which set forth an accurate record of votes and actions taken. These minutes must be open for inspection by the public no later than the conclusion of the agency's next public meeting.

21

## General Requirements of KOMA (Continued)

- To the extent possible, meeting room conditions should allow for effective public observation of the meetings. No person attending the meeting can be required to identify himself in order to **attend** a meeting.
- Public agencies must permit news media coverage, including recording and broadcasting.
- Public agencies should provide for a schedule of regular meetings by ordinance, order, resolution, bylaws, or by other means.

22

## Public Participation at an Open Meeting

- Under the Kentucky Open Meetings Act, there is no requirement that governmental bodies and public agencies allow members of the general public to speak.
- Many governmental bodies and public agencies permit this as a civic courtesy.
- Members of the public who desire to speak at an open meeting can be required to register/identify themselves as a speaker at a public meeting.
- Additionally, members of the public who desire to speak at an open meeting can be required to adhere to time restrictions (and other restrictions) previously promulgated by the governmental body/agency.

23

## Special Meetings

- All meetings which are not regularly scheduled meetings are considered to be special meetings and are subject to special requirements.
- The requirements for special meetings are found in KRS 61.823.
- So, what are the requirements for holding special meetings anyway?

24



## Requirements for Holding Special Meetings

- **Who may call a special meeting** - The presiding officer or a majority of the members of the public agency may call a special meeting.
- **Notice Requirements:**
- **Contents** - The public agency shall provide written notice of the special meeting. The notice shall consist of the date, time, and place of the special meeting and the agenda. Discussions and action at the meeting shall be limited to items listed on the agenda in the notice.
- **Delivery and Posting** -
- **To Whom and How Delivered - When** -
- As soon as possible, written notice shall be delivered personally, transmitted by facsimile machine, or mailed to every member of the public agency as well as each media organization which has filed a written request, including a mailing address, to receive notice of special meetings. The notice shall be calculated so that it shall be received at least twenty-four (24) hours before the special meeting. The public agency may periodically, but no more often than once in a calendar year, inform media organizations that they will have to submit a new written request or no longer receive written notice of special meetings until a new written request is filed.

25

## Posting of Notice Regarding Special Called Meetings

- **Posting of the Notice - When** -
- As soon as possible, written notice shall also be posted in a conspicuous place in the building where the special meeting will take place and in a conspicuous place in the building which houses the headquarters of the agency. The notice shall be calculated so that it shall be posted at least twenty-four (24) hours before the special meeting.

26

## Emergency Situations

- In the case of an emergency which prevents compliance with the ordinary notice requirements for special meetings, reasonable efforts must be undertaken to notify the public of the special meeting(s) and to limit discussion(s) to the topic(s) for which the emergency meeting was called.
- The emergency meeting shall be called by the presiding officer or a majority of the members of the public agency.
- The public agency shall make a reasonable effort, under emergency circumstances, to notify the members of the agency, media organizations which have filed a written request to be notified, and the public of the emergency meeting.
- At the beginning of the emergency meeting, the person chairing the meeting shall briefly describe for the record the emergency circumstances preventing compliance with the notice provisions. These comments shall appear in the minutes.
- Discussions and action at the emergency meeting shall be limited to the emergency for which the meeting is called.

27

## Video Teleconferencing of Meetings

- The Kentucky Open Meetings Act now provides that a public agency may conduct any meeting through video teleconference.
- Notice of a video teleconference must comply with the regular notice requirements of the Kentucky Open Meetings Act **AND** clearly state that the meeting will be a video teleconference **AND provide specific information on how any member of the public or media organization may view the meeting electronically.**

28

## Video Teleconferencing of Meetings (Continued)

- The same procedures with regard to participation, distribution of materials, and other matters shall apply in all video teleconference locations.
- Members of the public agency who participate in the video teleconference shall remain visible on camera at all times that business is discussed.

29

And...

- **Any interruption in the video or audio broadcast of a video teleconference at any location shall result in the suspension of the video teleconference until the broadcast is restored.**
- **THIS IS A BIGGIE!!!**

30

## What subjects may be discussed in a closed session?

The exceptions to the Kentucky Open Meetings act are found in KRS 61.810(1) and include:

- (a) Deliberations for decisions of the Kentucky Parole Board;
- (b) Deliberations on the future acquisition or sale of real property by a public agency, but only when publicity would be likely to affect the value of a specific piece of property to be acquired for public use or sold by a public agency;
- (c) Discussions of proposed or pending litigation against or on behalf of the public agency;
- (d) Grand and petit jury sessions;
- (e) Collective bargaining negotiations between public employers and their employees or their representatives;
- (f) Discussions or hearings which might lead to the appointment, discipline, or dismissal of an individual employee, member, or student without restricting that employee's, member's, or student's right to a public hearing if requested. This exception shall not be interpreted to permit discussion of general personnel matters in secret;**

31

## Subjects which may be discussed in a closed session (Continued).

- (g) Discussions between a public agency and a representative of a business entity and discussions concerning a specific proposal, if open discussions would jeopardize the siting, retention, expansion, or upgrading of the business;
- (h) State and local cabinet meetings and executive cabinet meetings;
- (i) Committees of the General Assembly other than standing committees;
- (j) Deliberations of judicial or quasi-judicial bodies regarding individual adjudications or appointments, at which neither the person involved, his representatives, nor any other individual not a member of the agency's governing body or staff is present, but not including any meetings of planning commissions, zoning commissions, or boards of adjustment;
- (k) Meetings which federal or state law specifically require to be conducted in privacy;
- (l) Meetings which the Constitution provides shall be held in secret; and
- (m) That portion of a meeting devoted to a discussion of a specific public record exempted from disclosure under KRS 61.878(1)(m). However, that portion of any public agency meeting shall not be closed to a member of the Kentucky General Assembly.

32

## QUORUM ISSUES

- The Open Meetings Act prohibits any series of less than quorum meetings, where the members attending one or more of the meetings collectively constitute at least a quorum of the members of the agency, if the meetings are held to avoid the requirements of the Act.
- This prohibition does not restrict discussions between individual members if the purpose of the discussion is to educate the members on specific issues.

33

## REMEDIES FOR PERCEIVED VIOLATIONS

- If a person believes that a public agency has violated the Open Meetings Act, he may file a written complaint with the presiding officer of the agency.
- Within three (3) business days of receipt of the complaint, the public agency must decide whether to correct the violation and notify the complaining party of its decision in writing. If the agency believes that no violation has occurred and rejects the proposed remedy, it must issue a written response which cites the statute authorizing its actions and briefly explain how the statute applies.

34

## APPEALS PROCESS

- The complaining party may appeal to the Attorney General for review of the agency's action within sixty days of receipt of the agency's response. The appeal must include a copy of the written complaint and a copy of the agency's response, if the agency issued a denial. The Attorney General will review the appeal and issue a decision stating whether the agency violated the Open Meetings Act within ten business days. Both the complaining party and the agency will receive a copy of the decision. Both may appeal the Attorney General's decision to the circuit court of the county where the public agency has its principal place of business or where the violation occurred. If an appeal is not filed within thirty days, the Attorney General's decision has the force and effect of law and can be enforced in circuit court.

35

## DAMAGES

- If the complaining party prevails against an agency in circuit court, he may be awarded costs, **including attorney fees**, if the court finds that the violation was **willful**. The court may also award the complaining party up to \$100.00 for each violation.

36

## **HOT TOPICS REGARDING OPEN RECORDS/OPEN MEETINGS**



37

### **In RE: Phillip Hamm/McCracken County Sheriff's Office (X 2)**

#### **22-ORD-109**

- On February 17, 2022, the McCracken County Sheriff's Office executed a search warrant at the home of Phillip Hamm.
- On February 22, 2022, Phillip Hamm submitted an open records request to the MCSO requesting various records pertaining to the execution of the search warrant at his home.

38

## **22-ORD-109 (Continued)**

- Mr. Hamm also requested, “any documents that mention [him] being involved in any type of drug activity.”
- The MCSO provided the following response: “[T]he documentation [Mr. Hamm] requested will have to be obtained through filing [a] Motion of Discovery in [his] court process.”
- Mr. Hamm appealed.

39

## **22-ORD-109 (Continued)**

- The AG’s office found that the MCSO violated the Kentucky Open Records Act when it denied a request for records without citing an exception to the Act or explaining how the exception applied to the records withheld.
- The AG’s office also held that the fact that Mr. Hamm was involved in criminal litigation, with the opportunity to conduct discovery, did not alleviate the MCSO’s duty to comply with the Kentucky Open Records Act.

40



## 22-ORD-157 (More Hamm!)

- On June 22, 2022, Phillip Hamm submitted a request to the MCSO to inspect all body camera footage related to the execution of a search warrant at a specific address on a specific date.
- On June 30, 2022, having received no response from the MCSO, Mr. Hamm initiated an appeal.

41

## 22-ORD-157 (Continued)

- The AG's office found that the MCSO failed to respond to the open records request within five (5) business days, thereby violating the Kentucky Open Records Act.
- The takeaways: public agencies must respond (in some shape, form, or fashion) to open records requests within five (5) business days AND in the event of a denial of a request for records, must cite the specific exception upon which the denial is based.

42

## Kentucky HB 509

- House Bill 509 was introduced into the Kentucky House of Representatives on February 12, 2024.
- This bill creates new definitions for what constitutes a public records and sets standards for elected and appointed officials using government e-mail.
- This bill passed the Kentucky House 61-31 with amendments.
- This bill is currently in the Kentucky Senate for consideration.

43

## Kentucky Open Government Coalition v. KDFWR (2022-CA-0170-MR)

- This Kentucky Court of Appeals decision holds that electronic messages stored on personal cell phones are public records when such messages are prepared by or used by the members of the [Fish and Wildlife Commission] and relate to or concern [Fish and Wildlife Commission] business.
- In a concurring opinion, Judge Chris McNeill wrote that, "Our opinion merely holds that text messages related to Commission business and stored on personal cell phones of its members are public records generally subject to disclosure under the Open Records Act absent an applicable exception."

44

And, finally...



45

VS.



**MURRAY STATE**  
UNIVERSITY

46

Let's get it on!



47

## WPSD-TV, LLC v. MURRAY STATE UNIVERSITY

- Calloway/Marshall Circuit Court Judge Jamie Jameson was removed from the bench by the Judicial Conduct Commission (JCC).
- One of the JCC charges concerned Judge Jameson's efforts to pressure former WKMS station manager Chad Lampe to stop investigating a story about Judge Jameson walking around the Marshall County Courthouse in his underwear. **(Lampe filed an open records request seeking this security footage.)**
- According to WPSD's Complaint, Murray State leadership also contacted Chad Lampe about the same story and his open records request.

48

So, WPSD submitted an open records request to MSU on 10/20/2022...

- The open records request sought correspondence to/from Murray State President Bob Jackson and others in university leadership about Lampe's open records request.
- The open records request also sought correspondence to/from individuals at WKMS and in the journalism department regarding the open records request

49

## Murray State Response to WPSD Open Records Request

- Murray State denied much of WPSD's open records request on the grounds that such records were protected from disclosure under the First Amendment.
- Murray State also asserted that some of the records requested were burdensome to produce.

50

## Murray State did produce some heavily redacted communications...

- The redactions were accompanied by a list of claimed open records exemptions including:
  - The First Amendment
  - The preliminary records exemption of the ORA
  - Attorney-client privilege
  - The personal privacy exemption of the ORA

51

## WPSD appealed to the Kentucky Attorney General...

- The Office of the Attorney General (OAG) determined that Murray State violated the ORA when it invoked the preliminary records exemption and simply refused to search for other records on the grounds that it was unreasonably burdensome.
- The OAG also rejected the argument that e-mails related to WKMS were protected under the First Amendment.

52

## In response to this AG's opinion...

- Murray State did produce some additional e-mails and other communications (albeit largely redacted).
- WPSD was apparently unhappy about this.
- But, they were also unhappy about the fact that an additional open records request to MSU on November 16, 2022 (which covered a wide range of topics) was also met with a response containing a number of redactions and non-productions based a multitude of open records act exemptions.

53

## So, WPSD sued Murray State alleging...

- Willful violations of the Open Records Act due to the responses received from the October 10, 2022 open records request.
- Willful violations of the Open Records Act due to the responses received from the November 16, 2022 open records request.
- That WPSD was entitled to injunctive relief requiring production of non-redacted records and a judgment for costs, attorney's fees, and statutory penalties.

54

## At the end of the day...

- Special Judge John Atkins entered summary judgment for WPSD. In doing so, he found that, after performing an *in camera* examination of the records and redactions (and after reviewing the pleadings and evidence), WPSD misused or misapplied the attorney-client privilege, the personal privacy privilege, and “a near categorical redaction scheme at odds with existing law.”

55

## Murray State was ordered to...

- Comply with pending open records requests without unreasonable delay with the only redactions being tolerated being the ones concerned with “purely personal or private information such as phone numbers and other personal descriptions.”
- AND, WPSD was given ten (10) days to file a motion for costs, attorney’s fees, and statutory penalties.

56



## WPSD's Motion for Costs, Attorney's Fees, and Penalties

- WPSD filed a motion with the Court asking for a total of \$40,428.45 in costs and attorney's fees AND **\$374,850.00** in statutory penalties!
- Naturally, Murray State objected on the basis that its violations were not willful and that WPSD's requests for costs, fees, and penalties was "gluttonous."
- BUT, WPSD and Murray State ultimately settled this issue, and Murray State agreed to pay WPSD \$132,500.00, which includes \$42,500.00 in attorney's fees. The case was dismissed by stipulation on April 17, 2024.

57

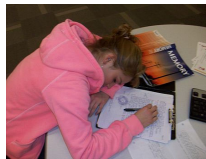
## ALMOST THERE!!!



58

## OTHER GENERAL CONSIDERATIONS

- All public agency board members must be provided with the Kentucky Attorney General's publication on open records and open meetings, and each public agency must require board members to acknowledge receipt of this guide (which is a GREAT CURE FOR INSOMNIA!!!!).



59

## And speaking of sleep...

- If anyone is still awake, I'd be happy to answer any questions you may have.
- I would also be happy to end this presentation and put an end to your agony!



60

Thank you for your time today.

- If you do have any additional questions, please feel free to contact me at:

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# Asset Management and Financing



Kentucky Rural Water Association

1

The Fundamentals of  
Asset Management  
and Financing using  
a Notepad, a Pencil,  
a Calculator, and Your  
Own Judgment



2

2

# Explaining Asset Management

Asset management is a process to make sure that:

- ✓ Planned maintenance can be conducted
- ✓ Assets can be repaired, rehabilitated, or replaced on time
- ✓ That there is enough money to pay for it.



*Because assets installed while Adolph Rupp was coaching eventually need to be replaced.*

3

3

# Selling the Benefits of Asset Management

- Prolonging asset life
- Improving decisions about asset rehabilitation and replacement
- Setting rates based on sound operational and financial planning
- Meeting regulatory requirements
- Improving responses to emergencies
- Reducing overall costs for both operations and capital

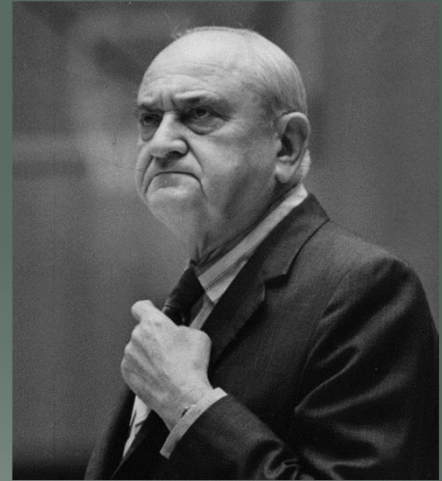


4

4

## Five Core Questions

1. What is the current state of my assets?
2. What is required level of service?
3. Which assets are critical?
4. When to repair or rehabilitate or replace?
5. What is long-term funding strategy?



5

5

## 1. What is the current state of my assets?

- a. What do I own?
- b. Where is it?
- c. What condition is it in?
- d. What is its remaining useful life?

6

6

# 1. What is the current state of my assets?



Plan on multi-year effort to identify assets



Use what you already have: maps, accounting records, and as-built drawings



Focus on "what wakes you up at night"



Identify what will need attention during the next five years

7

7

# 1. What is the current state of my assets?

- Source of Supply
- Treatment Plant
- Pumping Plant
- Chemical Feeds
- Transmission Pipes
- Storage Tanks
- Booster Stations



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# 1. What is the current state of my assets?



- Distribution Pipes
- Valves
- Hydrants
- Meters
- Vehicles and Equipment

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# 1. What is the current state of my assets?

Don't forget your back-office assets.



- Telemetry System
- Mapping System
- Accounting System
- Billing System
- Communications System

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1. What is the current state of my assets?

Don't attempt it alone.

Get advice and assistance from retirees and field personnel.



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1. What is the current state of my assets?



Gather identifying information:

- ✓ Make
- ✓ Model
- ✓ Serial Number
- ✓ Location
- ✓ Take photos.

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# 1. What is the current state of my assets?

Develop your own evaluation scale:

- ✓ Routine maintenance needed.
- ✓ Rehabilitation needed.
- ✓ Replacement needed.

Condition ratings

Condition Rating	Description of Condition
1	Very good condition – Only normal maintenance required
2	Minor defects only – Minor maintenance required (5%)
3	Maintenance to enable an asset to provide an acceptable level of service – Significant maintenance required (10% - 20%)
4	Requires renewal – Significant renewal/upgrade required (20% - 40%)
5	Asset unserviceable – Over 50% of the asset requires replacement

Dedicated to a better Brisbane

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## 2. What is required level of service?



What do my customers expect?



What do regulators require?



What is my actual performance?

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2. What is required level of service?

*Example: Water Main Break Frequency*

- a. What do my customers expect?
- b. What do regulators require?
- c. What is my actual performance?

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2. What is required level of service?

*Example: Water Pressure*

- a. What do my customers expect?
- b. What do regulators require?
- c. What is my actual performance?



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2. What is required level of service?

*Example: Fire Hydrants*

- a. What do my customers expect?
- b. What do regulators require?
- c. What is my actual performance?

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2. What is required level of service?

*Example: Meter Accuracy*

- a. What do my customers expect?
- b. What do regulators require?
- c. What is my actual performance?



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### 3. Which assets are critical?



How does it fail?



What is the likelihood of failure?



How much advance notice is there of imminent failure?



What are the consequences of failure?

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### 3. Which assets are critical?



*How does it fail?*

- ✓ It rusts.
- ✓ It just stops.
- ✓ Slowly at first, then rapidly.
- ✓ It bursts into flames.

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### 3. Which assets are critical?

*What is the likelihood of failure in next five years?*

- ✓ Not Likely
- ✓ Possible
- ✓ Likely



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### 3. Which assets are critical?



*How much advance notice is there of imminent failure?*

- ✓ Like a tornado, less than one hour
- ✓ Like a hurricane, three to five days
- ✓ Like climate change, several years

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### 3. Which assets are critical?

*What are the consequences of failure?*

- ✓ Routine
- ✓ Emergency
- ✓ Extreme
- ✓ Catastrophic



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### 4. When to repair, rehabilitate, or replace?



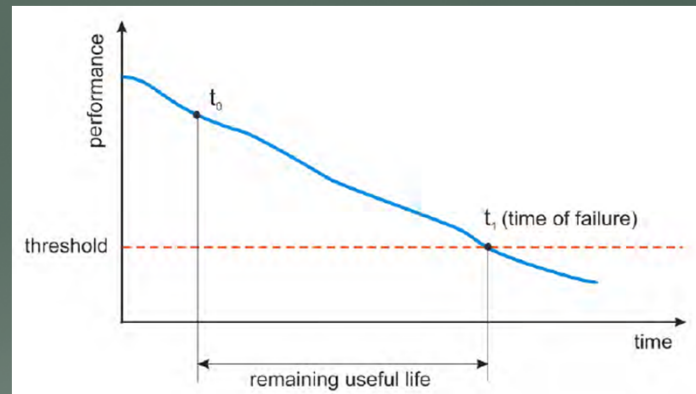
- a. How much time and money does repair take?
- b. How much time and money does rehabilitation take?
- c. How much time and money does replacement take?

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## 4. When to repair, rehabilitate, or replace?

- a. How long does repair last?
- b. How long does rehabilitation last?
- c. How long does replacement last?



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## Building an Asset Management Plan

### Considering:

1. Current state of assets
2. Level of service required
3. Which assets are critical
4. When to repair, rehabilitate, or replace

### Build a Five-Year Plan:

- ✓ What new maintenance needs to be scheduled
- ✓ What assets need to be rehabilitated
- ✓ What assets need to be replaced

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## 5. What is long-term funding strategy?

- a. Transaction Approach: Lump as much as possible into a “capital project” for grants and loans and accompanying rate increase.
- b. Asset Management Approach: Look at revenues and requirements over multiple years using mix of debt and rates.

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## KY PSC Approach to Ratemaking

- Utilities are being ordered to perform rate studies.
- Rate studies compute revenues required to recover operating expenses, debt service, and depreciation.
- Current rates typically recover operating expenses and debt service.
- ***New rates include depreciation.***
- Depreciation funds can be used reactively or proactively.



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# How to Use Depreciation Funds

## Concept of Depreciation and Depreciation Reserve Fund

The concept of depreciation refers to the gradual decrease in the value of the capital stock either through the physical tear and wear, obsolescence or changes in demand for services of the capital.



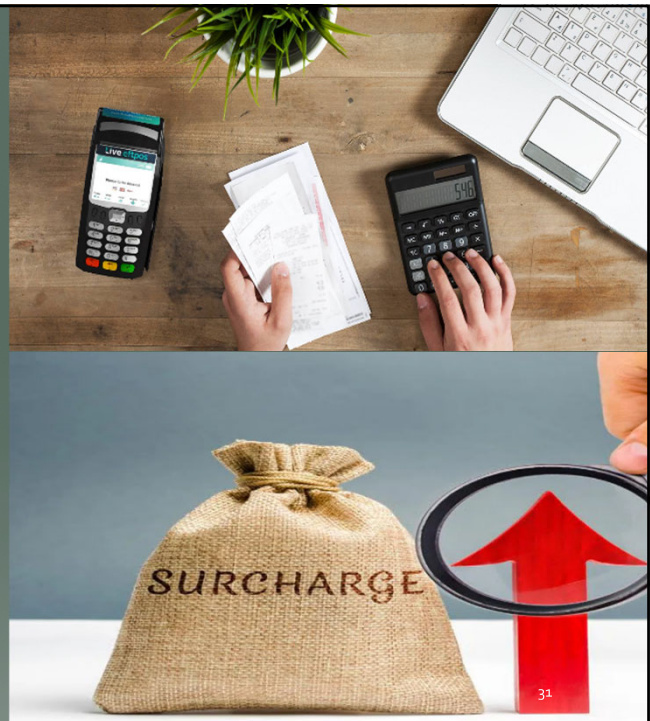
## Proactive vs Reactive Strategies

More Information Online [WWW.DIFFERENCEBETWEEN.COM](http://WWW.DIFFERENCEBETWEEN.COM)

	Proactive Strategies	Reactive Strategies
DEFINITION	Proactive strategies are the strategies a company uses to anticipate possible challenges and threats	Reactive strategies are the strategies a company uses to respond to some unanticipated event only after it occurs
USE	Reacts to anticipated challenges	Helps to deal with unexpected situations
EFFORTS FOR CRISIS MANAGEMENT	Can reduce the effort a company makes for crisis management	Will not take any effort until a crisis happens
TIME PERIOD	Applicable for anticipated threats, challenges and future conditions	Applicable to the current situation

## KY PSC Approach to Ratemaking

- New rates may also include a water loss reduction surcharge.
- Established during a rate case at request of utility.
- Cost of purchased water, power, and chemicals above 15% water loss excluded from rates.
- May be recovered via fixed amount per bill for 48 months.
- Use limited to certain projects.
- Expenditures subject to prior approval by KY PSC.



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## Recommended Approach

Build a five-year asset management financing plan using:

Sources and Uses of Funds	Maintenance Budget	Water Loss Surcharge *	Depreciation Funds	Loan Proceeds
Maintenance	✓	✓	✓	
Rehabilitation		✓	✓	✓
Replacement		✓		✓

\* Subject to prior approval by KY PSC

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## 5. What is long-term funding strategy?

- Start with the Income Statement from most recent PSC Annual Report.
- Make known and measurable adjustments to revenues and maintenance expenses.
- Project out for five years.

	2021 Actual	Known and Measurable Adjustments	2023 Proforma
<b>Operating Revenues</b>			
Total Metered Retail Sales	768,264	24,146	792,410
Other Water Revenues	32,475	-	32,475
<b>Total Operating Revenues</b>	<b>800,739</b>	<b>24,146</b>	<b>824,885</b>
<b>Operating Expenses</b>			
Total Operation and Mnt. Expenses	500,155	14,110	514,265
Current Depreciation Expense	224,465	(39,189)	185,276
New Depreciation	-	-	-
Taxes Other Than Income	16,979	3,570	20,549
<b>Total Operating Expenses</b>	<b>741,599</b>	<b>(21,509)</b>	<b>720,090</b>
<b>Total Utility Operating Income</b>	<b>59,140</b>	<b>45,655</b>	<b>104,795</b>
<b>Non Operating Income</b>	<b>11,999</b>	<b>-</b>	<b>11,999</b>
<b>Current Interest Payments</b>	<b>(156,180)</b>	<b>-</b>	<b>(135,455)</b>
<b>Net Income</b>	<b>(85,041)</b>	<b>45,655</b>	<b>(18,661)</b>

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## 5. What is long-term funding strategy?

	2023 Proforma	2024 Proforma	2025 Proforma	2026 Proforma	2027 Proforma	2028 Proforma
Net Income	(18,661)	25,176	88,982	48,616	12,015	(26,560)
Plus Current Depreciation	185,276	185,276	185,276	185,276	185,276	185,276
Plus New Depreciation	-	21,725	31,992	48,448	59,983	67,304
Less Current Bond Principal Payments	(106,245)	(135,455)	(110,981)	(131,346)	(113,722)	(127,027)
Less New Debt Service Payments	-	(127,226)	(127,226)	(211,080)	(211,080)	(211,080)
<b>Cash Generated from Operations</b>	<b>60,370</b>	<b>(30,505)</b>	<b>68,043</b>	<b>(60,086)</b>	<b>(67,528)</b>	<b>(112,087)</b>

Determine Cash Generated from Operations for next five years.



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# 5. What is long-term funding strategy?

Identify and sequence planned capital improvements.



Walton Pike WM Replacement Replacement of approximately 3 miles of water main.	\$	850,000
New Customer Radio Read Meters Installation of approximately 800 new customer meters.	\$	325,000
Minerva BPS Installation of new above ground BPS.	\$	350,000
Germantown Road WM Replacement Replacement of approximately 1 mile of water main.	\$	850,000
Wellhead Protection Purchase of additional land to protect the well field.	\$	260,000
Permanent Generator for WTP Installation of permanent generator at WTP.	\$	100,000
Unplanned Capital Requirements	\$	375,000
	\$	<u>3,110,000</u>

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# 5. What is long-term funding strategy?

Assign to targeted year and increase for inflation.



	2024	2025	2026	2027	2028
	Proforma	Proforma	Proforma	Proforma	Proforma
Walton Pike WM Replacement Replacement of approximately 3 miles of water main.	\$ 850,000	\$ -	\$ -	\$ -	\$ -
New Customer Radio Read Meters Installation of approximately 800 new customer meters.	\$ 325,000	\$ -	\$ -	\$ -	\$ -
Minerva BPS Installation of new above ground BPS.	\$ -	\$ 350,000	\$ -	\$ -	\$ -
Germantown Road WM Replacement Replacement of approximately 1 mile of water main.	\$ -	\$ -	\$ 850,000	\$ -	\$ -
Wellhead Protection Purchase of additional land to protect the well field.	\$ -	\$ -	\$ -	\$ 260,000	\$ -
Permanent Generator for WTP Installation of permanent generator at WTP.	\$ -	\$ -	\$ -	\$ -	\$ 100,000
Unplanned Capital Requirements	\$ 50,000	\$ 62,500	\$ 75,000	\$ 87,500	\$ 100,000
	\$ 1,225,000	\$ 412,500	\$ 925,000	\$ 347,500	\$ 200,000

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## 5. What is long-term funding strategy?

- a. Assign useful lives and compute new depreciation.
- b. Link to Income Statement.



	2024 Proforma	2025 Proforma	2026 Proforma	2027 Proforma	2028 Proforma
Walton Pike WM Replacement Replacement of approximately 3 miles of water main.	13,600	13,600	13,600	13,600	13,600
New Customer Radio Read Meters Installation of approximately 800 new customer meters.	8,125	8,125	8,125	8,125	8,125
Minerva BPS Installation of new above ground BPS.	-	10,267	10,267	10,267	10,267
Germantown Road WM Replacement Replacement of approximately 1 mile of water main.	-	-	16,456	16,456	16,456
Wellhead Protection Purchase of additional land to protect the well field.	-	-	-	11,535	11,535
Permanent Generator for WTP Installation of permanent generator at WTP.	-	-	-	-	7,321
Unplanned Capital Improvements	2,500	5,938	10,475	16,298	23,619
	21,725	31,992	48,448	59,983	67,304

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## 5. What is long-term funding strategy?

Pull it all together into a financial plan.



	2024 Proforma	2025 Proforma	2026 Proforma	2027 Proforma	2028 Proforma
Beginning Cash Balance	\$ 229,407	\$ 1,173,902	\$ 788,195	\$ 1,058,859	\$ 528,809
Plus Cash Generated from Operations	\$ (30,505)	\$ 68,043	\$ (60,086)	\$ (67,528)	\$ (112,087)
Less Operating Reserve	\$ (90,014)	\$ (94,515)	\$ (99,241)	\$ (104,203)	\$ (109,413)
Cash Available for Capital Improvements	\$ 108,888	\$ 1,147,430	\$ 628,868	\$ 887,128	\$ 307,309
Less Indexed Capital Improvements	\$ (1,225,000)	\$ (453,750)	\$ (1,119,250)	\$ (462,523)	\$ (292,820)
Ending Funds Prior to Borrowing	\$ (1,116,112)	\$ 693,680	\$ (490,382)	\$ 424,606	\$ 14,489
Plus Borrowed Funds	\$ 2,200,000	\$ -	\$ 1,450,000	\$ -	\$ -
Ending Funds After Borrowing	\$ 1,083,888	\$ 693,680	\$ 959,618	\$ 424,606	\$ 14,489
Plus Operating Reserve	\$ 90,014	\$ 94,515	\$ 99,241	\$ 104,203	\$ 109,413
Ending Cash Balance	\$ 1,173,902	\$ 788,195	\$ 1,058,859	\$ 528,809	\$ 123,902

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## 5. What is long-term funding strategy?

Determine how much borrowing is necessary to ensure funding of operating reserve with positive ending cash balance.

	2024		2025		2026		2027		2028	
	Proforma		Proforma		Proforma		Proforma		Proforma	
Beginning Cash Balance	\$	229,407	\$	1,173,902	\$	788,195	\$	1,058,859	\$	528,809
Plus Cash Generated from Operations	\$	(30,505)	\$	68,043	\$	(60,086)	\$	(67,528)	\$	(112,087)
Less Operating Reserve	\$	(90,014)	\$	(94,515)	\$	(99,241)	\$	(104,203)	\$	(109,413)
Cash Available for Capital Improvements	\$	108,888	\$	1,147,430	\$	628,868	\$	887,128	\$	307,309
Less Indexed Capital Improvements	\$	(1,225,000)	\$	(453,750)	\$	(1,119,250)	\$	(462,523)	\$	(292,820)
Ending Funds Prior to Borrowing	\$	(1,116,112)	\$	693,680	\$	(490,382)	\$	424,606	\$	14,489
Plus Borrowed Funds	\$	2,200,000	\$	-	\$	1,450,000	\$	-	\$	-
Ending Funds After Borrowing	\$	1,083,888	\$	693,680	\$	959,618	\$	424,606	\$	14,489
Plus Operating Reserve	\$	90,014	\$	94,515	\$	99,241	\$	104,203	\$	109,413
Ending Cash Balance	\$	1,173,902	\$	788,195	\$	1,058,859	\$	528,809	\$	123,902

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## 5. What is long-term funding strategy?

*Reduce size of capital program if necessary.  
Plan on preparing multiple iterations of financial plan.*

	2024		2025		2026		2027		2028	
	Proforma		Proforma		Proforma		Proforma		Proforma	
Beginning Cash Balance	\$	229,407	\$	1,173,902	\$	788,195	\$	1,058,859	\$	528,809
Plus Cash Generated from Operations	\$	(30,505)	\$	68,043	\$	(60,086)	\$	(67,528)	\$	(112,087)
Less Operating Reserve	\$	(90,014)	\$	(94,515)	\$	(99,241)	\$	(104,203)	\$	(109,413)
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Ending Funds Prior to Borrowing	\$	(1,116,112)	\$	693,680	\$	(490,382)	\$	424,606	\$	14,489
Plus Borrowed Funds	\$	2,200,000	\$	-	\$	1,450,000	\$	-	\$	-
Ending Funds After Borrowing	\$	1,083,888	\$	693,680	\$	959,618	\$	424,606	\$	14,489
Plus Operating Reserve	\$	90,014	\$	94,515	\$	99,241	\$	104,203	\$	109,413
Ending Cash Balance	\$	1,173,902	\$	788,195	\$	1,058,859	\$	528,809	\$	123,902

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# Is There a Spreadsheet Model Available?

*Under Development by KRWA!*

FINANCIAL PLAN INPUTS 2023-2028  
County Water District

Model Inputs	2023	2024	2025	2026	2027	2028
Rate Increase		11.0%	11.0%	-	-	-
O&M Inflation Factor		5.0%	5.0%	5.0%	5.0%	5.0%
Capital Inflation Factor	0.0%	0.0%	10.0%	10.0%	10.0%	10.0%
Beginning Cash Balance	\$169,037					
Operating Reserve Requirement as Percent of O&M	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%
Debt Service Years	30	30	30	30	30	30
Debt Service Rate	4%	4%	4%	4%	4%	4%
Borrowed Funds	-	\$ 2,200,000	-	1,450,000	-	-
Additional Borrowing Required	No	No	No	No	No	No

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## What Does KY PSC think of this?

- ✓ Commission supports asset management approach.
- ✓ Commission has not yet considered a rate case for a rural water utility based on asset management approach.
- ✓ *Discussions underway!*



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# Questions?

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# What to Expect During a Rate Study

Kentucky Rural Water Association



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# What is a Rate Study?

- ✓ A calculation of a utility's revenues and expenses...
- ✓ Using methods acceptable to the Kentucky Public Service Commission...
- ✓ To support an application to change the utility's tariff...
- ✓ To ensure water service in compliance with state regulations and customer expectations.

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## Reasons to Have a Rate Study

### Ordered by Kentucky Public Service Commission



- ✓ Certificate of Public Convenience and Necessity
- ✓ Purchased Water Adjustment
- ✓ Newly issued or refinanced debt
- ✓ Other reasons determined by Commission

### Determined by Board of Directors



- ✓ Financial necessity
- ✓ Other reasons determined by Board of Directors

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## Getting Started

- ✓ Identify targeted application date and board meeting prior to that date.
- ✓ Notify Staff, Customers, Auditor, Engineer, and Attorney.
- ✓ Determine what type of rate study should be prepared.
- ✓ Determine who will perform rate study.
- ✓ Identify the point of contact for the utility.



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## What Type of Rate Study is Needed?

- ? Are you merging two or more systems?
- ? Have you added or lost a large commercial or industrial customer?
- ? Are you preparing to adopt a large multi-year capital program?
- ? Do you simply need to update your rates to reflect changes in costs?



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## Who Should Perform Rate Study?



- ✓ Staff?
- ✓ Engineer?
- ✓ Auditor?
- ✓ Consultant?
- or
- ✓ **Kentucky Rural Water Association**

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## About Kentucky Rural Water Association



Districts / Associations *may be* eligible for funding from:

- ✓ Kentucky Division of Water grant
- ✓ Appalachian Regional Commission grant

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## Types of Rate Studies

### **General Rate Case**

- *Requires an attorney and a cost-of-service study.*
- *Most detailed and fair to all customers.*
- *Most time-consuming and most expensive.*
- *Can be difficult to explain.*
- *Appropriate for system mergers, major changes in customer bases, and to support large capital investments.*
- *Yields different rate increases for different customers.*

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## Types of Rate Studies

### Alternative Rate Filing with Cost-of-Service Study

- *Does not require an attorney.*
- *Detailed and fair to all customers.*
- *Can be difficult to explain.*
- *Less expensive than General Rate Case.*
- *Appropriate when several years since previous Cost-of-Service Study.*
- *Yields different rate increases for different customers.*

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## Types of Rate Studies

### Alternative Rate Filing without Cost-of-Service Study

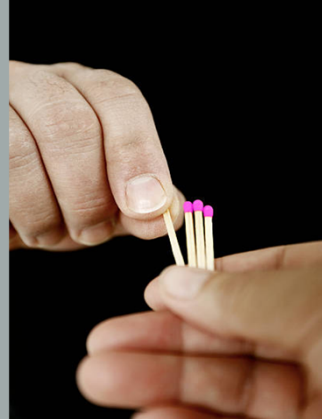
- *Least detailed, least time-consuming, and least expensive.*
- *Still fair to all customer classes when system has not significantly changed.*
- *More straightforward to explain.*
- *Appropriate for routine update to reflect changes in costs.*
- *Yields equal across-the-board increase.*

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## Selecting a Point of Contact for Utility

Board Chairman  
Board Secretary  
**Utility Manager**  
**Office Manager**  
Office Clerk



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## Alternative Rate Filing Process

- This application is governed by 807 KAR 5:076 Alternative Rate Adjustment Procedure for Small Utilities.
- Available to utilities with gross annual revenue less than \$5,000,000 who maintain separate financial records and have filed an annual report with PSC for the immediate past year and the prior two years.

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# ARF Rate Study Phases

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## 1. Rate Study Phase – 8 to 12 weeks

Adjust for known and measurable changes since most recent annual report filed with KY PSC:

- Adjust reported metered sales to match existing billing records of customers, consumption, and rates.
- Adjust wages and staffing to reflect current employees.
- Adjust for limit to employer-funded portion of medical and dental premiums.
- Adjust depreciation to reflect limits on asset life ranges.
- Compute revenue requirement using Debt Service Coverage Method and Operating Ratio Method.

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## 2. Board Review / Approval Phase – 2 weeks

- Review rate study report findings and recommendations.
- Determine which method for computing Revenue Requirements should be used: Debt Service Coverage method or Operating Ratio method.
- If applicable, determine whether to request a temporary Water Loss Reduction Surcharge.
- Determine whether to request that tariff changes to be implemented immediately or over two or more years.
- Adopt resolution for recommended rates and application.

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## 3. Application Phase – 2 weeks

- Sign Resolution.
- Sign Statement of Disclosure of Related Party Transactions.
- Advertise Customer Notice 3 times.
- File application electronically on PSC website with email copy to the AG office.
- Receive PSC procedural order with schedule.



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### 3. Request for Information Phase – 14 weeks



- Most time-consuming information discovery phase.
- Typically two or more iterations of detailed requests from PSC.

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### 4. Wrap-Up Phase – 8 weeks

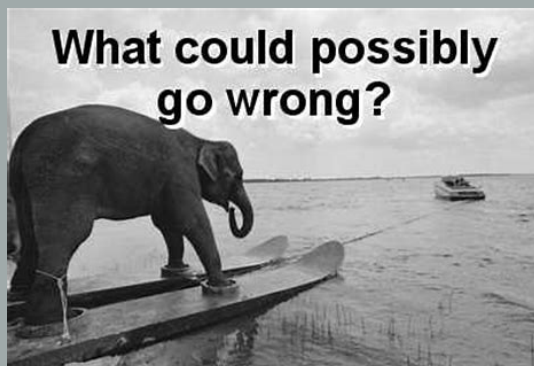
- PSC Staff releases Report to PSC Commission.
- Utility files response:
  - ✓ Utility can agree with all Staff conclusions and request rates be approved.
  - ✓ Utility can agree with portions of Staff Report, but make exceptions.
  - ✓ Utility can ask for a hearing or informal conference.
- PSC issues Final Order.
- Utility files revised tariff.
- Utility updates billing system with revised rates.



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## Lessons Learned



- ✓ Problems with Annual Report.
- ✓ Unable to provide records.
- ✓ Debt issued without authorization.
- ✓ Commissioners paid more than authorized amounts.
- ✓ Conflicts of interests.
- ✓ Failure to meet deadlines.
- ✓ Waiting too long between rate studies.

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## Remember:

**PSC bats last!**



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# Questions?

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# The Value of Water

A Commissioner's Guide to Water  
Accountability Success

phone: 270-843-2291


 Kentucky Rural Water Association

www.krwa.org


1

## Commissioner Wisdom

- Water is Money
- Water loss happens
  - Lines break, tanks overflow, meters misread & theft
- Controlling water loss can make or break a utility
- Not all non-revenue water is bad
  - Flushing is necessary for preventative maintenance and to safeguard water quality



phone: 270-843-2291

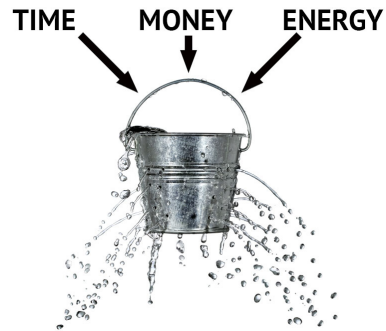
 Kentucky Rural Water Association

www.krwa.org

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# Topics Covered

- Water Accountability
- Water Loss - Value
- Water Use Reports
- System Demand
- Planning



# Water Accountability

Water Purchased – Water Sold = Non-Revenued Water

Non-Revenued Water – Water Used (i.e. flushing, breaks, ect.) =  
Accounted-for Water

Non-Revenued Water - Accounted-For Water = Unaccounted-For  
Water

Unaccounted Water = Leakage??

# Water Loss

- Real Loss
  - Real loss consists of physical water losses from leaks, line breaks, tank overflows, etc.
  
- Apparent Loss
  - Apparent loss consists of unauthorized consumption, customer metering inaccuracies, and errors in the meter reading and billing processes.

# Value of Lost Water

Lost Water			Production \$1.25 /k	Wholesale \$3.00 /k
GPM	Day	Month	Monthly Cost (\$)	
5	7,200	216,000	270	648
10	14,400	432,000	540	1,296
15	21,600	648,000	810	1,944
20	28,800	864,000	1,080	2,592
25	36,000	1,080,000	1,350	3,240
30	43,200	1,296,000	1,620	3,888
40	57,600	1,728,000	2,160	5,184
50	72,000	2,160,000	2,700	6,480
60	86,400	2,592,000	3,240	7,776
70	100,800	3,024,000	3,780	9,072
80	115,200	3,456,000	4,320	10,368
90	129,600	3,888,000	4,860	11,664
100	144,000	4,320,000	5,400	12,960
500	720,000	21,600,000	27,000	64,800



# Value of 5.0 gpm

(actual revenue loss)

- 5.0 gpm = 216,000 gals/month
- Cost per thousand = \$3.00
- $216 \times \$3.00 = \$648$  / month
  
- \$648 / month = new truck payment
- \$7,776 / year = \$3.73 / hr pay raise

# Water Use Reports



# Monthly Water Use Report

Microsoft Excel - KRWA Monthly Water Use Report

File Edit View Insert Format Tools Data Window Help


This copy of Office is not genuine. Click here to learn more online.

File Home Insert Layout References Send To Tools

150%

Reply with Changes... Egd Review...


	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>Monthly Water Use Report</b>											
2	(insert water system name)											
3	Water Utility:	<input type="text"/>			PWSID:	<input type="text"/>						
4	(insert month)											
5	For the Month of:	<input type="text"/>			Year:	<input type="text"/>						
6												
7	1	PRODUCTION COST PER THOUSAND				(insert cost)	<input type="text"/>					
8	2	PURCHASE COST PER THOUSAND				(insert cost)	<input type="text"/>					
9												
10											<b>GALLONS</b>	
11	<b>WATER PRODUCED or PURCHASED</b>											
12	3	Water Produced					<input type="text"/>					
13	4	Water Purchased					<input type="text"/>					
14	5	<b>TOTAL PRODUCED AND PURCHASED</b>							0			
15	6	<b>TOTAL COST</b>										
16	<b>WATER SOLD</b>											
17	7	Residential					<input type="text"/>					
18	8	Commercial					<input type="text"/>					
19	9	Industrial					<input type="text"/>					
20	10	Bulk Loading Stations					<input type="text"/>					

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## system data, dates, and costs

	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>Monthly Water Use Report</b>											
2												
3	Water Utility:	<input type="text" value="Countywide Water District"/>			PWSID:	<input type="text" value="KY0000123"/>						
4												
5	For the Month of:	<input type="text" value="July"/>			Year:	<input type="text" value="2010"/>						
6												
7	1	PRODUCTION COST PER THOUSAND					<input type="text" value="\$1.95"/>					
8	2	PURCHASE COST PER THOUSAND					<input type="text" value="\$2.37"/>					
9												

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# gallons produced/purchased

9				
10				<b>GALLONS</b>
11	<b>WATER PRODUCED or PURCHASED</b>			
12	3	Water Produced	\$8,569.50	4,350,000 48%
13	4	Water Purchased	\$11,198.25	4,725,000 52%
14	5	<b>TOTAL PRODUCED AND PURCHASED</b>		9,075,000
15	6	<b>TOTAL COST</b>		\$19,767.75

11

# list all water “sold”

16	<b>WATER SOLD</b>			
17	7	Residential		5,244,900
18	8	Commercial		127,780
19	9	Industrial		180,000
20	10	Bulk Loading Stations		41,514
21	11	Wholesale		120,000
22	12	Other Sales (explain) _____ Building Contractor		85,000
23				
24	13	<b>TOTAL WATER SOLD</b>		5,799,194 63.90%
25	14	<b>TOTAL WATER NOT SOLD</b>		3,275,806 36.10%

12

# water "used" needs to be identified

F23									
A	B	C	D	E	F	H	I	J	
<b>Monthly Hydrant Flushing Report</b>									
Countywide Water District (name of Water System)					Month		July		
KY0000123 (PWSID)					Year		2010		
Formula: $GPM = 29.83 \text{ cfd}^2 \sqrt{p}$							unit conversion factor		29.83
							coefficient value		0.95
Date	Hydrant Location and/or Number	Reason Operated	Total Minutes Operated	Nozzle size (typically 2.5 or 4.5)	Pitot Pressure	GPM	Gallons Flowed	Estimated Flow if Pitot not used	
07/08/2010	End of Highway 112	DBP	35.00	4.5	55	4256	148,954		
07/08/2010	9th and High Street	DBP	18.00	4.5	60	4445	80,011		
07/08/2010	Frank Hollow	DBP	23.00	4.5	63	4555	104,761		
12-Jul	Pike Road	Break	32.00	4.5					125,000
07/12/2010	Cross Road	Break	35.00	4.5					150,000
07/18/2010	Calloway Avenue	DBP	25.00	4.5	65	4627	115,664		
07/18/2010	West End	DBP	27.00	4.5	73	4903	132,381		
07/23/2010	Chicken Gizzard Ridge	DBP	42.00	4.5	45	3850	161,680		
07/23/2010	Bull Run	DBP	37.00	4.5	53	4178	154,576		
07/26/2010	Bass Ridge	Complaint	26.00	2.5	65	1428	37,127		
07/26/2010	Dry Creek	Complaint	32.00	2.5	56	1325	42,413		

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# water "used" by fire departments

F15									
A	B	C	D	E	F	H	I	J	
<b>Fire Department - Water Usage Report Form</b>									
KRS 278.170(3) 807 KAR 5:095 Section 9									
Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district ("User") may withdraw water from the utility's water distribution system for the purpose of fighting fires or training firefighters at no charge on the condition that it maintains estimates of the amount of water used for fire protection and training during the calendar month and reports the amount of this water usage to the utility no later than the 15th day of the following calendar month.									
Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district that withdraws water from the utility's water distribution system for fire protection or training purposes and fails to submit the required report on water usage in a timely manner shall be assessed the cost of this water.									
A non-reporting user's usage shall be presumed to be 0.3 percent of the utility's total water sales for the calendar month.									
Valley Station Fire Department (name of Fire Department)					Month		July		
Countywide Water District (name of Water System)					Year		2010		
Formula: $GPM = 29.83 \text{ cfd}^2 \sqrt{p}$							unit conversion factor		29.83
							coefficient value		0.95
Date	Hydrant Location and/or Number	Reason Operated	Total Minutes Operated	Nozzle size (typically 2.5 or 4.5)	Pitot Pressure	GPM	Gallons Flowed	Estimated Flow if Pitot not used	
07/10/2010	Fairground Road	Training	10.00	2.5	70	1482	14,819		
07/16/2010	Maple and Dale	Fire							150,000

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# long-term for current month

J16

1	A	B	C	D	E	F	H	I	J
1	<b>Monthly Leak Repair Report</b>				<b>Area Calculator</b>				
2					diameter in inches Hole= <input type="text" value="0.25"/> Area= <input type="text" value="0.049"/> sq. in.				
3	Countywide Water District				Insert the approximate dimensions of the hole or crack to determine the area of the break. Insert the area in the spreadsheet below.				
4	(Water System)								
5	KY0000123				length (in) width (in) Crack= <input type="text" value="1.4"/> <input type="text" value="0.063"/> Area= <input type="text" value="0.0875"/> sq. in.				
6	(PWSID)								
7	Month	July							
8	Year	2010							
9									
10	Date of Repair	Location of Leak or Line Break	Days Line Leaked?	Hole or Crack?	Area of hole or crack	Normal PSI	GPM	Calculated Loss for Month	Estimated Loss for Month
11	7/12/10	Highway 222 milepoint 6.7	12	hole	0.049	53	11	187,355	
12	7/25/10	Pond Hollow	25	crack	0.088	81	18	646,267	
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									


Water Use Report / System Flushing / Fire Department / Excavation Breaks / Repaired Line Breaks

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# cost of water not sold or used

36	BREAKDOWN OF WATER LOST		
37	22	Tank Overflows	<input type="text" value="0"/>
38	23	Excavation Breaks	<input type="text" value="45,000"/>
39	24	Repaired Line Breaks	<input type="text" value="833,800"/>
40	25	Unknown Loss	770,406 8.49%
41			
42	26	TOTAL WATER NOT SOLD OR USED	1,649,206
43	27	COST OF WATER NOT SOLD OR USED	\$3,592.41
44			

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## “unknown Loss”

44  
45  
46  
47  
48  
49  
50  
51  
52

"UNKNOWN LOSS" FLOW RATE AND COST:		
"Unknown Loss"		770,406
% "Unknown Loss"		8.49%
Number of Days in Period		31
"Unknown Loss" per Day (Gallons per Day)		24,852
"Unknown Loss" per Minute (GPM)		17.26
"Unknown Loss" Cost for Month		\$1,678.15

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## Using The Monthly Water Accountability Report

- Document how much is sold, used and “lost”
- Separate zones of a distribution system
- Billing system code for each meter
- Decide where to focus search efforts
- Entered into the Annual Water Use Report

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# Annual Water Use Report

The screenshot shows an Excel spreadsheet with the following structure:

Row	Column	Content										
1	Water Use Report											
2	(insert water system name)											
3	Water Utility:	<input type="text"/>	PWSID:	<input type="text"/>								
4					(insert PWSID)							
5	For the Month of:	<input type="text" value="January"/>	Year:	<input type="text"/>								
6					(insert year)							
7	1	PRODUCTION COST PER THOUSAND	(insert cost)	<input type="text"/>								
8	2	PURCHASE COST PER THOUSAND	(insert cost)	<input type="text"/>								
9					(insert cost)							
10	GALLONS											
11	WATER PRODUCED or PURCHASED											
12	3	Water Produced	<input type="text"/>									
13	4	Water Purchased	<input type="text"/>									
14	5	TOTAL PRODUCED AND PURCHASED	0									
15	6	TOTAL COST										
16	WATER SOLD											
17	7	Residential	<input type="text"/>									
18	8	Commercial	<input type="text"/>									
19	9	Industrial	<input type="text"/>									
20	10	Bulk Loading Stations	<input type="text"/>									

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# Annual Water Use Report

- Provides “running totals”
  - Gallons produced/purchased
  - Production/purchase cost
  - Amounts sold, used, lost
  - Revenue generated
  - Revenue lost
  - Unknown loss cost, volume, GPM
  - % loss for PSC reporting (rate making purpose)

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# System Demand

- The first step is to understand the current system demand as it relates to the “theoretical” system demand. This is determined by calculating the demand factor. This can be calculated for the entire customer base or by discrete zones where water flow can be monitored.

## Demand Factor

Average Customer Usage /30 days/1,440 minutes = Demand Factor

$$5,000 \text{ gal} / 30 \text{ days} / 1,440 \text{ minutes} = 0.1157 \text{ gpm}$$

Demand Factor X # of Customers = Expected daytime flow (gpm)  
Demand Factor X # of Customers X 33% = Expected nighttime flow (gpm)

$$0.1157 \times 200 = 23.14 \text{ gpm}$$
$$0.1157 \times 200 \times 0.33 = 7.7 \text{ gpm}$$

# Actual –vs- Demand

- By dividing the system into zones and comparing actual flow to the expected flow allows an operator to quickly assess the volume and significance of the loss. The quickest way to find leaks is to knowing where not to look.

## Actual -vs- Demand

Actual Flow =< Expected Flow = Do Nothing

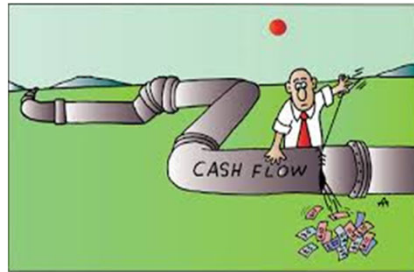
Actual Flow => Expected Flow = Continue to Monitor

Actual Flow >> Expected Flow = You Have Leakage



# Key to Control Water Loss

- Distribution management is the key to reducing water loss. Creating hydraulically isolated zones, accurate metering, customer usage monitoring, pressure monitoring, tank performance, demand factoring and preventative maintenance are needed to identify real & apparent water loss.



Words you never want to hear  
“we can’t afford to fix our leaks”

# Develop a Water Loss Plan

- Maintain Accurate Records
- Establish Routine Procedures
- Dedicate resources to leak detection



# It's Your Choice

Will water loss cost you dollars...



... or cost you pennies

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# Records

- **Infrastructure:** Knowledge of water system components and how they function under normal operating conditions is crucial to identifying where water loss occurs. Infrastructure inventory, maintenance and operational performance records are maintained where applicable.
  - Meters
  - Hydrants
  - Mains
  - Control Valves
  - Service lines
  - Pumps
  - Line valves
  - Tanks
- **Customer:** Billing and water usage data needs to be maintained as a historic record so that apparent losses can be identified
  - Meter readings
  - Adjustments
  - Active / inactive meter count
  - Water sales

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# Routine Procedures

- **Daily**
  - Record master / zone meter readings;
  - All distribution personnel (meter readers, maintenance, etc.), shall immediately report any identified water leaks, tank overflows, or other concerns that are presently or could result in water leaks or loss.
  - Water leaks, given the urgency of the problem reported are repaired immediately or at the earliest possible time;
  - All office personnel shall immediately report any customer reported leaks, tank overflows, pressure problems, or other issues (whether during regular operational hours or after hours) to the Operator.
- **Weekly**
  - Utilize SCADA or other means to assess system demand.
  - Analyze data with water audit and demand factor spreadsheets

# Routine Procedures

- **Monthly**
  - Read customer meters approximately the same time;
  - Record fire department usage
  - Compile estimated loss from flushing, line brakes, overflows, etc.;
  - Compile customer usage by hydraulic zone
- **Annually**
  - Customer meters will be tested every ten years to ensure that they are registering water accurately;
  - Meters between 1" and 3" shall be tested every three years;
  - Meters larger than 4" shall be tested annually; and
  - All meters will be replaced as warranted

# Leak Detection

- Invest in the utility
  - Labor
  - Training
  - Tools
- Utilize Outside Resources
  - Technical assistance
  - Engineers
  - Other industry professionals



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# Infrastructure Planning

- Some of the youngest water utilities in Kentucky are celebrating 60 years
- Maintenance will only take you so far; at some point replacement is the only answer
- Planned replacement is always better than emergency response
- Plan wisely; customer rates pay for the future



**Asset Management Policy Program**  
Renewing New Jersey's Water Infrastructure

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## Final Words

- Govern for 40 years ahead
- A utility loosing money is a result of bad management / leadership or bad operations – if operations are bad so is management
- Drive the system – don't let it drive you
- Preventative maintenance is always cheaper than reactive repair

## Parting Thought

"If you don't have time to do it right, you must have time to do it over." - John Wooden

## GIS/GPS & Asset Management – Guidance for Commissioners and Managers



1

### Asset Management

“Asset Management is a systematic process of creating and managing the infrastructure asset necessary to ensure ongoing, cost-effective delivery of services to customers”



2

## Asset Management

### ▪ Asset Management Will:

- Save money
- Help secure funding
- Protect your assets
- Provide quality service to your customers



3

## Asset Management

### ▪ 5 Core Components

- Assets
- Service Level
- Criticality
- Life Cycle
- Funding



4

## What is GIS?

- Data/Attributes
- Maps/Spatial Data
- Software/Hardware
- Mobile Apps
- People
- Satellites



...all working together to form a system for viewing and analyzing spatial data.



5

## Location, Location, Location!

- **Phone/Navigation GPS vs High accuracy GPS**
  - Phone & navigational devices have an internal GPS chip with an accuracy of around 10-15ft
  - High accuracy GPS includes the use of differential correction and/or real-time correction techniques to provide up to centimeter level accuracy



6





7

## What Else Beside Location?

### ▪ Attributes

- Asset Information
- Billing Information
- Inspection Information
- Service Information
- Flushing Information
- Leak Information
- Lead Service Inventory
- Pictures/Videos



8

## Other Benefits of GIS

- Disaster/Emergency Response
  - Quickly locate and access assets
  - Response coordination
  - Recovery after the disaster



9



10

## Putting Everything Together

- Through GIS and GPS technology you can:
  - See utility assets on a map
  - Store and retrieve information about each asset
  - Analyze information about assets to develop strategies for maintaining those assets
  - Become more efficient in the field
  - Disaster/Emergency Response



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## GIS Functionalities

- Web-based Applications
  - Online Maps
  - Online Dashboards
  - Online Experience Pages



12

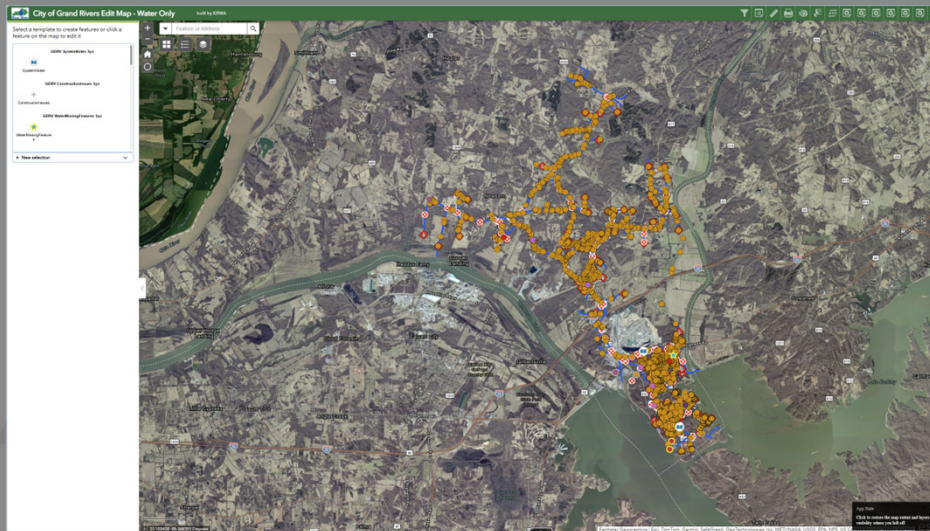
## Online Interactive Maps

- You can have the ability to set up any mapping capabilities that you need
  - Full Editing
  - Limited Editing
  - View only
  - Public



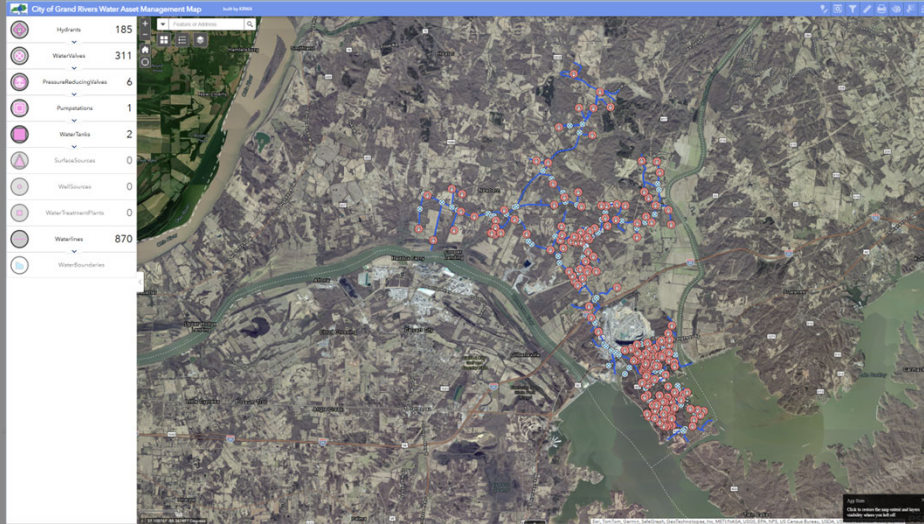
13

## Full Editing Capabilities



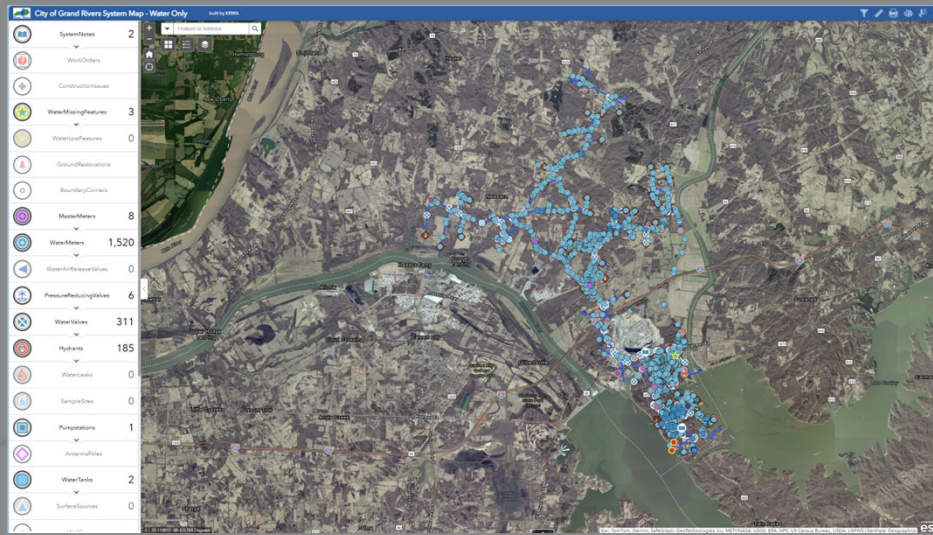
14

## Limited Editing Capabilities



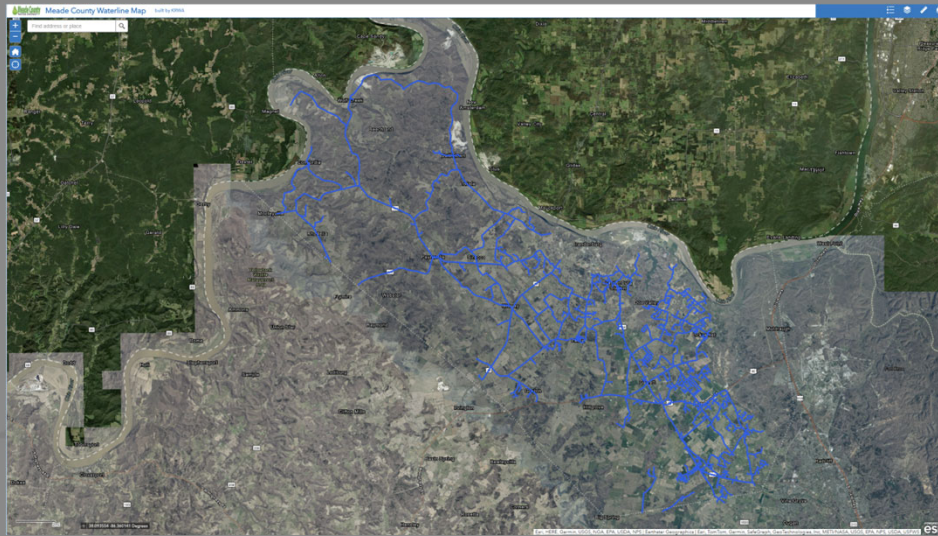
15

## View Only Capabilities



16

## Public Map Capabilities



17

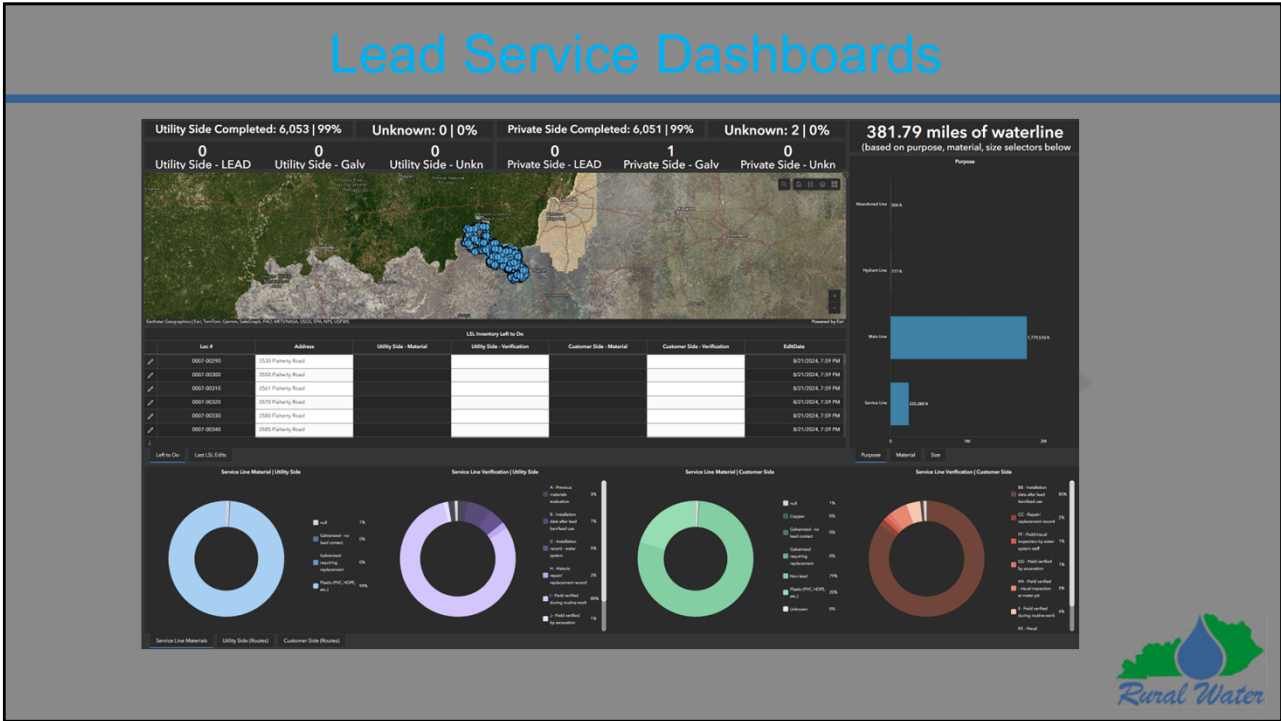
## Online Interactive Dashboards

- You can setup dashboards to review and analyze your GIS data
  - Lead Service Inventory
  - Billing
  - Asset Management
  - Inspections
  - Water Loss/Water Leaks
  - GPS Collection



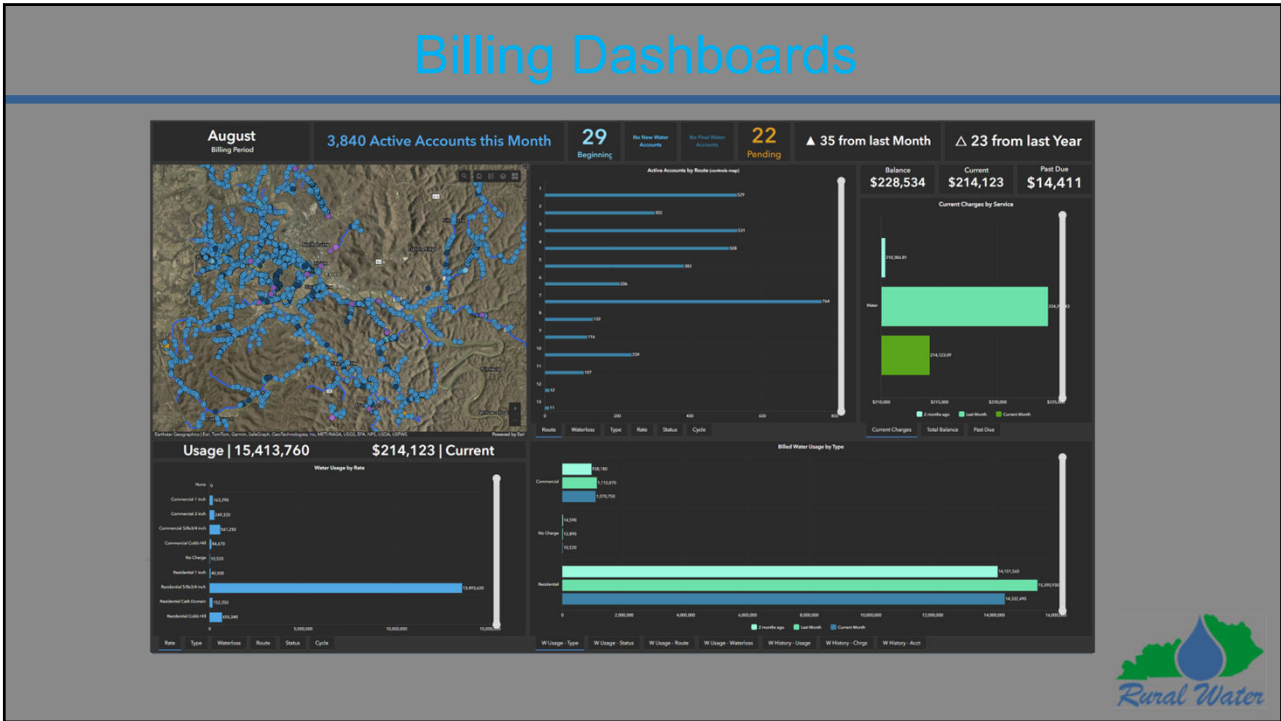
18

# Lead Service Dashboards



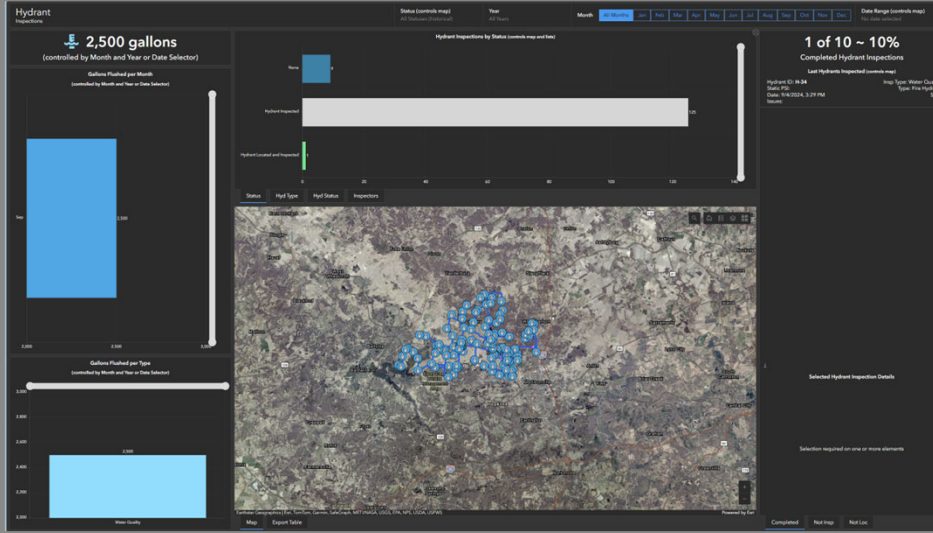
19

# Billing Dashboards



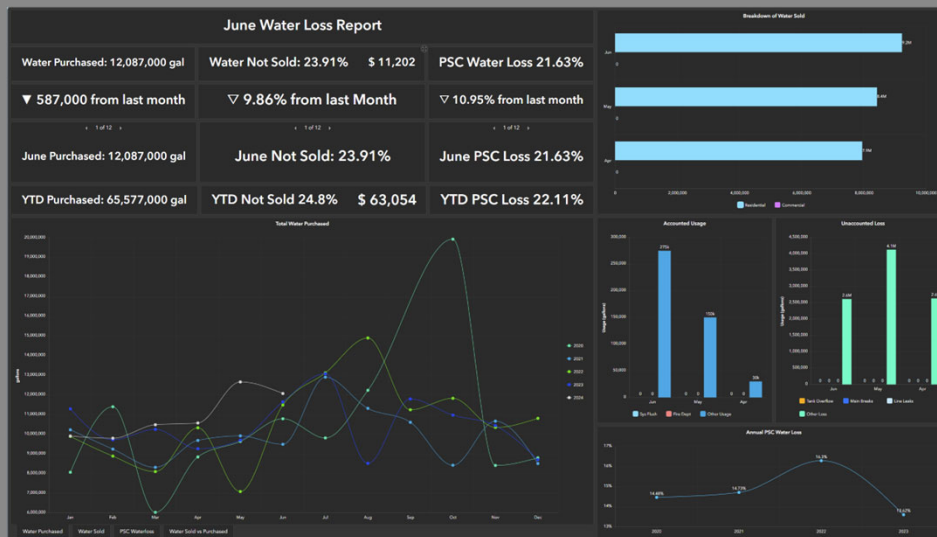
20

# Inspection Dashboards



21

# Water Loss Dashboards



22





## Online Interactive Experience Pages

- You can setup Experience Pages for online access to material
  - Board Packets
  - Financials
  - Sampling Data
  - Monthly Reports
  - Annual Reports
  - Planning Uses



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## Board Experience Pages

Lebanon Water Works Board Book

Overview

8 / 2024					
68.6	51.3	17.3	16	2.70	
Monthly Water Treated (MG)	Pulled from River (MG)	Pulled from Reservoir (MG)	# of Employees	Rainfall (inches)	
790.8	5.2	77.62	2,836		
Total Water Treated FY 2024 (MG)	WTP Capacity (MGD)	Miles of Waterline	Active Customers		

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# Board Experience Pages

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# Board Experience Pages

	07/2024	07/2024	Variance	Net Income Trend Line
Net Operating Revenue	\$ 102,519	\$ 102,519	0	
Net Profit Margin	8.69%	8.69%	0.00%	
Capital Assets	\$ 40,600,922	\$ 40,600,922	0	
% Capital Depreciated	43.4%	43.4%	0.00%	
Debt Ratio	44.74%	44.74%	0.00%	
Debt Service Coverage	130%	130%	0.00%	
Cash	\$ 2,360,511	\$ 2,360,511	0	
Days Op Cash	85	85	0	
Depr Variance	\$ -7,964	\$ -7,964	0	
Depr Funded %	81%	81%	0.00%	

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## GIS Functionalities

- Mobile Apps
  - Field Maps
  - Survey123



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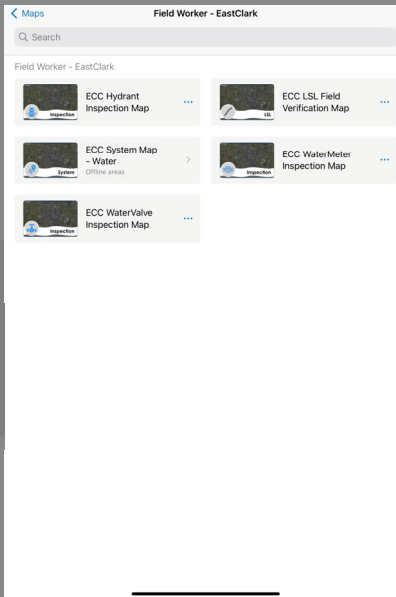
## Field Map Capabilities

- Just like online maps, you can have similar capabilities on mobile apps
  - Full Editing
  - Limited Editing
  - Inspection Maps



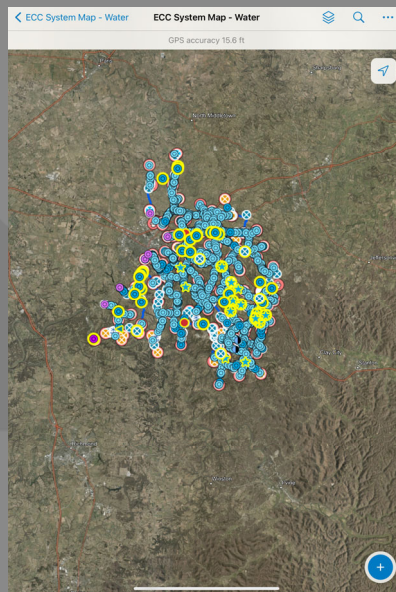
30

# Field Map Capabilities



31


# Field Map Capabilities



32

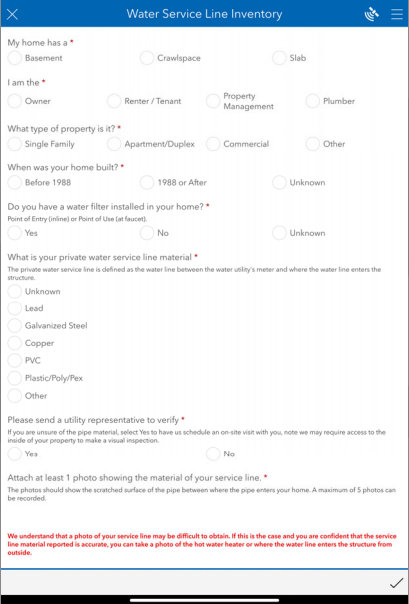
## Survey123 Capabilities

- Survey123 allows the capability to fill out forms in the field
- Inspections Forms
- Meter Reading
- Work Order



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## Inspection Capabilities



**Water Service Line Inventory**

My home has a \*

Basement     Crawlspace     Slab

I am the \*

Owner     Renter / Tenant     Property Management     Plumber

What type of property is it? \*

Single Family     Apartment/Duplex     Commercial     Other

When was your home built? \*

Before 1988     1988 or After     Unknown

Do you have a water filter installed in your home? \*

Point of Entry (inlet) or Point of Use (at faucet).

Yes     No     Unknown

What is your private water service line material? \*

The private water service line is defined as the water line between the water utility's meter and where the water line enters the structure.

Unknown  
 Lead  
 Galvanized Steel  
 Copper  
 PVC  
 Plastic/Polyflex  
 Other

Please send a utility representative to verify \*


If you are unsure of the pipe material, select Yes to have us schedule an on-site visit with you, note we may require access to the inside of your property to make a visual inspection.

Yes     No

Attach at least 1 photo showing the material of your service line. \*

The photos should show the scratched surface of the pipe between where the pipe enters your home. A maximum of 5 photos can be recorded.

We understand that a photo of your service line may be difficult to obtain. If this is the case and you are confident that the service line material reported is accurate, you can take a photo of the hot water heater or where the water line enters the structure from outside.



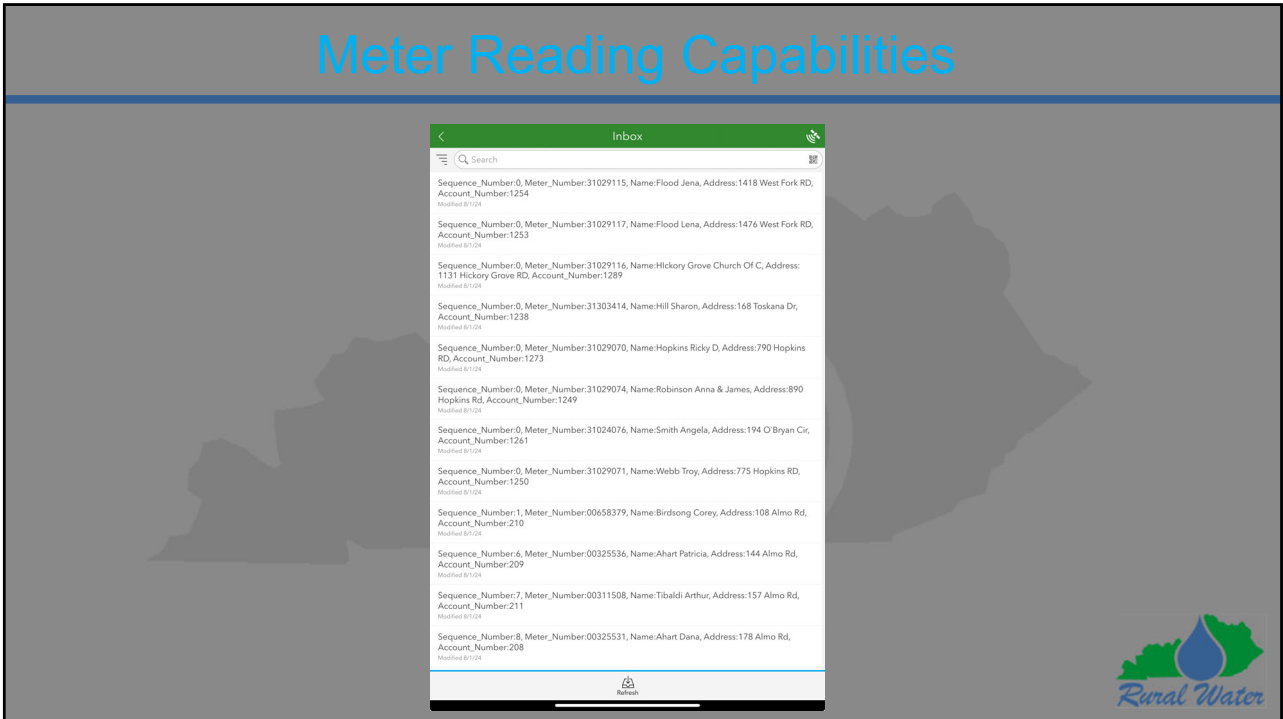
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# Inspection Capabilities



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# Meter Reading Capabilities



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# Questions?

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