

Kentucky Division of Water

Assessing Infrastructure Needs

Drinking Water

May 19, 2010

KY Division of Water

Department for Environmental Protection
Energy and Environment Cabinet



To Protect and Enhance Kentucky's Environment

Kentucky
UNBRIDLED SPIRIT™

US Environmental Protection Agency

- Passed the Safe Drinking Water Act in 1974 that included requirements that states have
 - A process for reviewing and approving engineering plans for water system improvements
 - A process for providing technical assistance to drinking water systems
- Revisions to the Act in 1996 included
 - Drinking Water State Revolving Loan Program
 - Capacity Development



Assessing Drinking Water Infrastructure Needs

- Drinking water infrastructure needs are dependent upon:
 - New regulations requiring new treatment
 - Aging infrastructure
 - Population growth
 - Source water
- Needs are determined by
 - Water system
 - Engineering companies
 - Division of Water inspections or evaluations

Capacity Development

- KY's drinking water Capacity Development program assesses the ability of water system to meet the Safe Drinking Water Act in the following areas
 - Technical
 - Managerial
 - Financial
- No new water system is allowed to be developed if all 3 areas cannot be met
- Existing water systems are assessed through an inspection process
- KY Division of Water has 7 staff in the Capacity Development program

Capacity Development Inspection Process

- The inspection process is an in-depth, on-site evaluation of entire water system operation
 - Management and financial practices
 - Treatment plant
 - Distribution system
 - Operator certification
 - Recordkeeping
- One-third of all water systems are inspected each year by a team from the Division of Water
 - 2 or 3 members on the team
 - 1-3 days to conduct the inspection
 - Inspection form can be 20 pages long
 - Report is provided to the water system with deficiencies to be corrected

Drinking Water Technical Assistance

- The KY Division of Water has 6 staff that provide on-site technical assistance to water systems
- There are also 10 regional Division of Water offices across the state with 38 inspectors that assist with drinking water evaluations

Average over 300 site visits per year



500 inspections and evaluations were done in 2009

Division of Water Regional Offices



Small Drinking Water Assistance

- Small drinking water systems must meet the same Safe Drinking Water Act requirements as larger systems
 - Drinking water technical assistance and regional office staff assist small systems with operations and compliance issues
 - Regionalization is encouraged
 - Training is provided
 - KY Division of Water works with other regulating agencies such as the KY Public Service Commission
 - Also work with non-governmental assistance providers
- Small systems may be eligible for grants that do not require re-payment

Drinking Water Revolving Loan Fund

- EPA provides money to each state for the Drinking Water Revolving Loan Fund
 - Each year there is a “Call for Projects”
 - Water systems submit projects to the Division of Water
 - The projects are given points and ranked
 - Those projects with the most points are funded
- The Fund provides low-interest loans up to \$4 million dollars per project per year
- Since 2000, KY Division of Water has provided over \$164 million to water systems for 64 projects

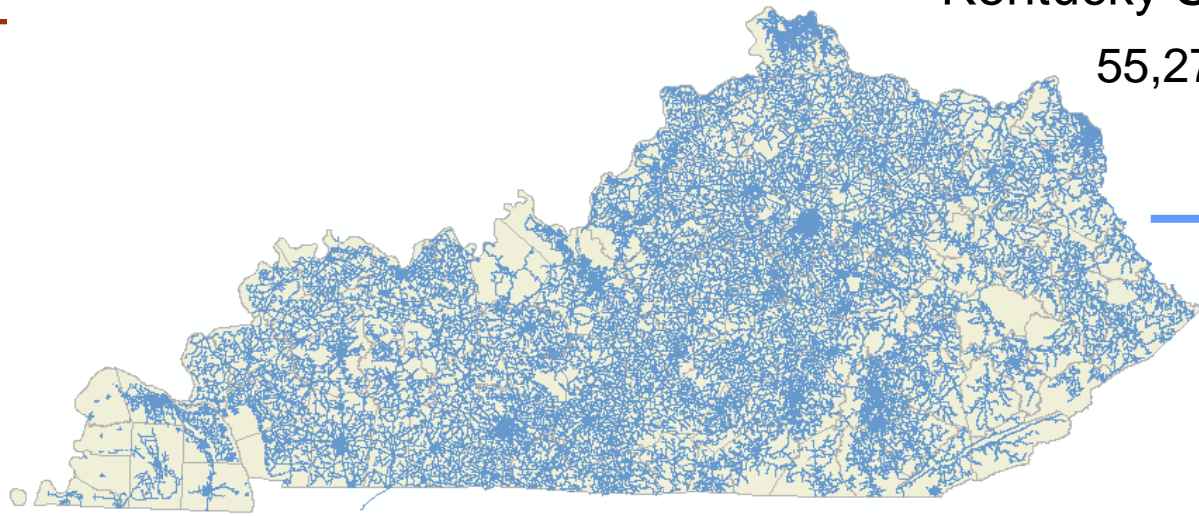
Drinking Water Engineering Review

KY Division of Water

- Any new treatment or distribution system project or modification of an existing treatment or distribution system must be reviewed and approved by the KY Division of Water
 - Treatment and distribution processes only
 - Do not review architectural, electrical or heating/cooling
 - Do not design treatment or distribution systems for water systems
- In 2009, 10 KY Division of Water engineers received and approved with no backlog
 - 40 treatment plant plans
 - 529 distribution plans

Kentucky Statewide Water lines

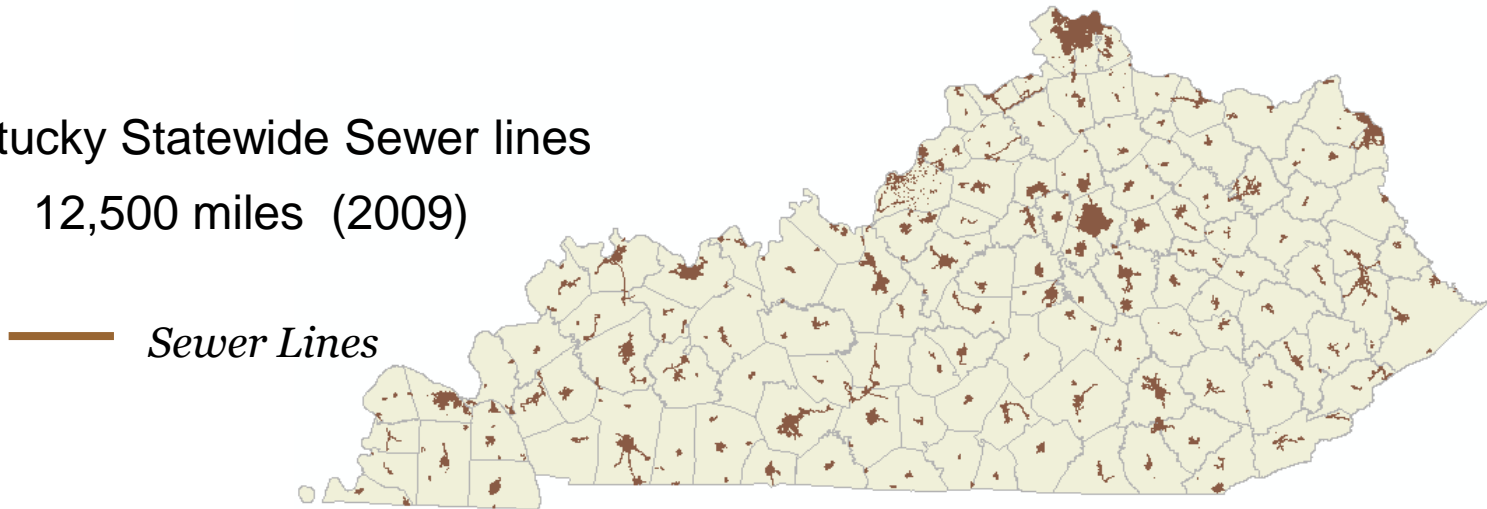
55,272 miles (2009)



Water Lines

Kentucky Statewide Sewer lines

12,500 miles (2009)



Sewer Lines

Data Source: WRIS (KY Water Resources Information System) data on Energy and Environment Cabinet GIS P

Questions?

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