

# Clean Water Act/ Safe Drinking Water Act Coordination Workshop March 21, 2017

Kentucky Division of Water  
Pete Goodman, Director

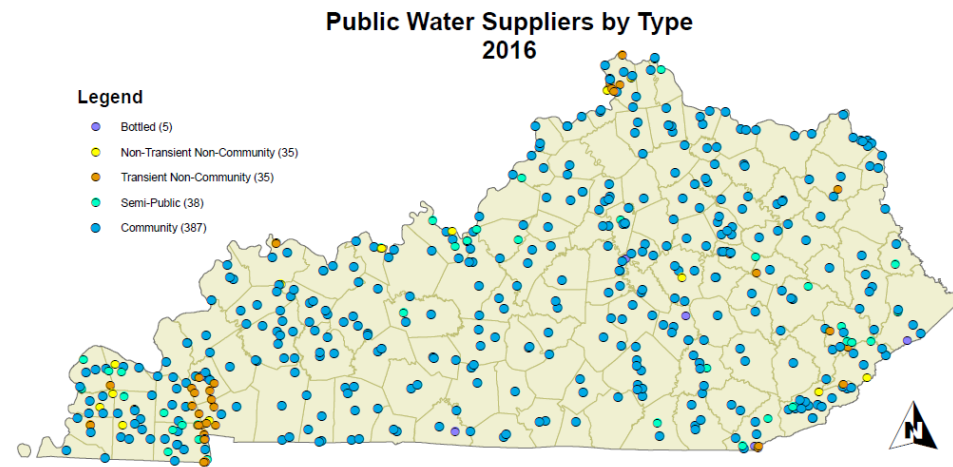
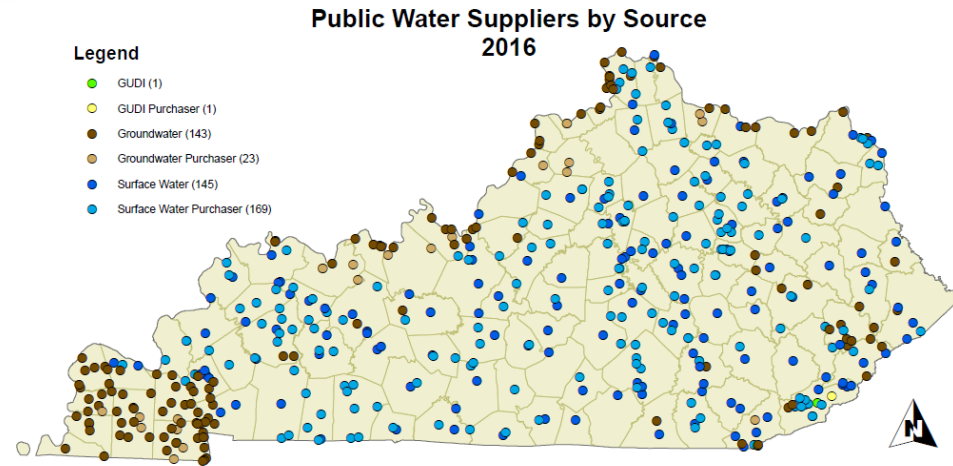


*To Protect and Enhance Kentucky's Environment*

**Kentucky**  
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# Drinking Water – Reliable & Sustainable

- How do we ensure safe, reliable, sustainable, and resilient drinking water
  - 97% of Kentucky residents supplied by public water
  - Funding the maintenance of existing infrastructure
  - Small systems (consolidation opportunities, enhance TMF and operator capacity, ...)
  - **Ensure sufficient, high quality source water**



# Kentucky Source Water Protection Program

- 1<sup>st</sup> SWAPP approved by EPA
  - Form versus Function
    - DOW determined to use what we had in place and get ahead of what EPA wanted
- Good
  - Good delineation methodologies
  - Integrated GIS/data management
- Problems
  - Static exercise
  - **Not collaborative** with stakeholders
  - **Not integrated** across programs



# Challenges to Collaboration

- Organizational
- Leadership!
- Cultural
  - SDWA, CWA programs have unique cultures
  - Developing partnerships b/w programs depends on
    - Understanding extent of Authorities and Resources
    - Personal Relationships
- Funding: creatively seeking smart approaches
  - DWSRF set asides, FEMA HMGP, CWA §106 supp., RCPP, P3, Private Foundation, etc.



# Innovative Practices: Monitoring

- Focus monitoring to evaluate source waters for drinking water use and treatment challenges
  - HABs/algal toxins: has become a regular commitment
  - Focus on susceptible/recurrent waters w/ flexibility
  - Re-thinking lakes assessments? What is proper approach to assessment
  - 304(a) criteria for algal toxins)
- Challenges: competes with traditional monitoring/assessment
  - Ambient, Probabilistic, Lakes, Fish Tissue, Reference Reach



# Volunteer Monitoring

- Refocusing volunteer monitoring to Source Waters
  - Natural constituency of volunteers that live on lakes
  - Potential for support from local PWS, Community, P3 partnerships
    - Local businesses have inherent interest
  - Subsidized by agency (e.g. data management, technical assistance, logistics, supplies)



# Volunteer Lake Monitoring Program

- Use Volunteers to expand lake monitoring efforts
  - Simple field tests
  - Secchi Depth measurements;
  - Visual observations: emphasis on HAB and reporting
- Goal 1: Provide opportunities for citizen scientist to research local water bodies
- Goal 2: Generate accessible, quality data to characterize water quality
- Goal 3: Augment DOW lake monitoring conducted



# Re-imagining Source Water Protection: ORSANCO

- Integrating Source Water Protection through system-scale data management and communication

Ex. Working with NKWD, Cincinnati Water Works, and ORSANCO to develop a Ohio River systemic source water approach

- GIS, Data Management, Sentry Monitoring (ODS)





# TMDLs

- Focusing TMDL development on impaired source waters/watersheds
  - Particularly for nutrient-impaired and HAB-impaired water bodies (generally lakes)
    - Requires significant water quality and land-use data
    - Focuses on permitting solutions
    - Identifies and provide goals for non-permitted, NPS activities and land uses



# Permitting

- Focusing permitting in source water/watersheds on protections for nutrients, TOCs, other precursors/pollutants of concern
- Require monitoring of receiving waters for POC?
- Provide incentives and tools for watershed-scale reduction of nutrients from both point and non-point sources



# Re-imagining AWOP

- Traditionally addressed turbidity to reduce risks to public health
- Focusing on DBPs
- Using same efforts to address specific source water treatment challenges
  - HABs, TOC, Turbidity...
  - Looking at methods outside the WTP
    - Monitoring, Source Water treatment...



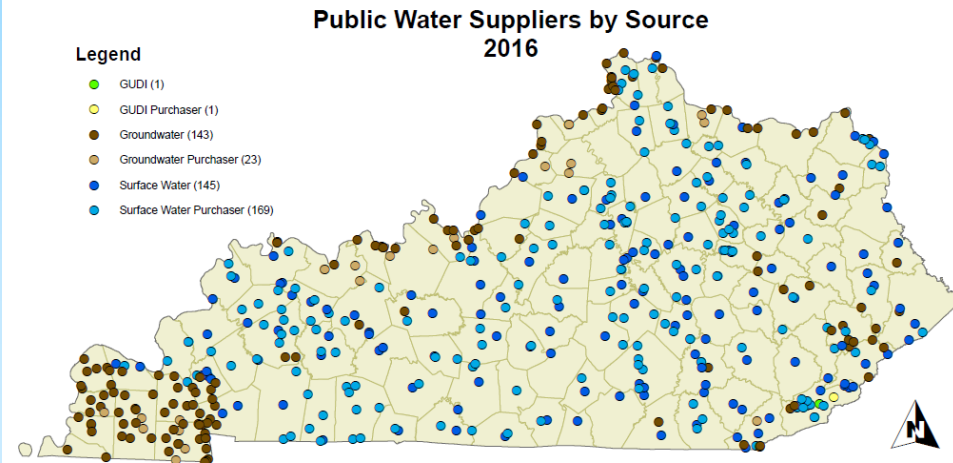
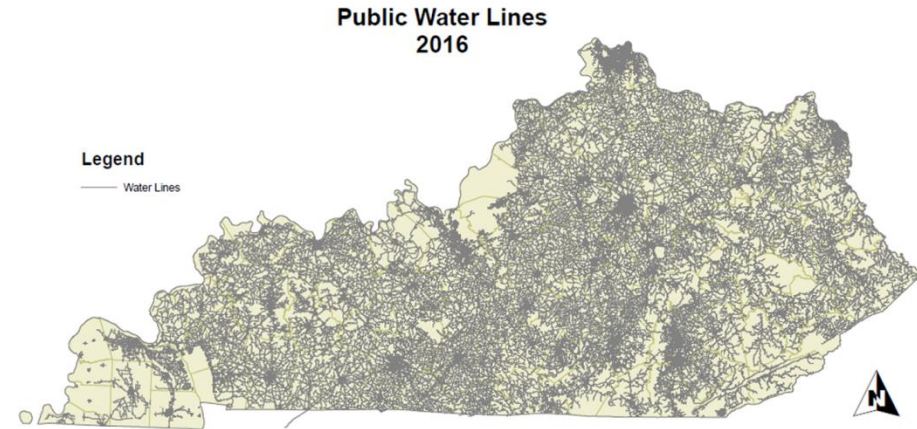
# Preserving High Quality Source Waters

- Identify using available data and new tools:
  - Monitoring data
  - Recovery Potential Screening Tool
- Preserving high quality waters is more cost effective than restoring impaired waters
  - Controlling land use via easements, restrictions, mandatory water quality plans, AWQ plans, NMPs



# Integrated Infrastructure Planning

- Regionalization of water and prioritizing preferred source waters
- Sewer priority areas (e.g. residential development around lakes)
- Dam design, maintenance and upgrades



# Source Water Assistance Program

- Mini-Grants for Source Water Protection
  - Uses DWSRF Set-Asides
- Short-term 1-year “shovel ready” projects directly linked to source water protection
  - High likelihood of implementation
  - \$150k/year; limit \$60k/project
- PWS, municipals, water/conservation districts, local governments, associations, educational institutions, 501 (c)(3) organizations



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