# EPA Overview and the Need to Quantify Results



Kentucky Agriculture Science and Monitoring Committee Executive Meeting
April 5<sup>th</sup>, 2012

#### EPA & KASMC

EPA Region 4 is looking to work closely with state and federal partners to achieve shared environmental goals via watershed restoration and protection projects.



## **EPA Funding**

- EPA Water Focused Funding
  - 106 state program grant
  - 319 Non point source grants
  - 104 Wetlands Grants
  - CWA SRF
- Urban Waters
- Healthy Watersheds Initiative
- Targeted Watershed Grants



#### **EPA 319 NonPoint Source Funding**

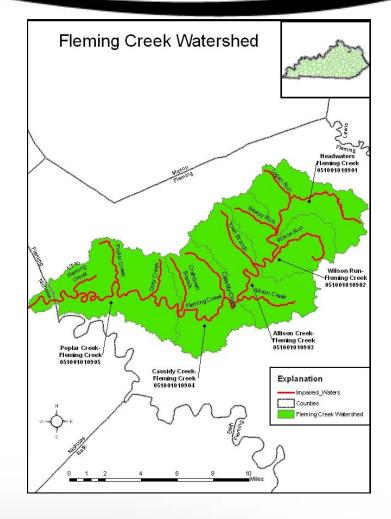
- EPA 319(h) Funds
- Remediation and removal of over 355 waterbodies from CWA 303(d) lists of impaired waters (2005-2011).
- Watershed-based planning and implementation has allowed state NPS programs to effectively and costefficiently identify and "target" NPS problem areas



#### **Telling the Story**

#### **Communicating Success**

- 319(h) WQ10 http://water.epa.gov/polwaste/nps/success319/
- EPA's Strategic Plan (measure 12) –
   Watershed Improvement Summaries
- http://www.epa.gov/region4/water/w atersheds/watershed summaries.html





#### Floyds Fork Watershed

- \$420,000 TMDL Watershed and Water Quality Model Development for Nutrients
  - 3 Public Meetings in Louisville, KY
  - Next Meeting in June, 2012

- State led Stakeholder Engagement Process
  - Watershed Center of Excellence (KWRRI)



## Recovery Potential – Kentucky Pilot

- Tool for Prioritization and Planning State Tool
- Step 1: Kickoff Meeting
  - Goals and Objectives
  - Selection of Indicators
    - Ecological
    - Stressors
    - Social
- Step 2: Data crunching
  - HQ & Contractor Support (Barry Tonning Tetra Tech)
- Step 3: Running Scenarios
- Step 4: State Tool



#### Nutrients

- 1. 50% of U.S. streams have medium to high levels of nitrogen and phosphorus.
- 2. 78% of assessed coastal waters exhibit eutrophication.
- 3. Nitrate drinking water violations have doubled in eight years
- 4. 2010 USGS Report
  - nitrates exceeded background concentrations in 64% of shallow monitoring wells in agriculture and urban areas,
  - and exceeded EPA's MCLs for nitrates in 7% or 2,388 of sampled domestic wells.
- 5. Algal blooms are steadily on the rise; related toxins have potentially serious health and ecological effects.



#### **Optional Nutrient Framework**

- Stoner Memo -Recommended Elements of a State Framework for Managing N&P Pollution
  - 1. Prioritize watersheds on a statewide basis for nitrogen and phosphorus loading reductions
  - 2. Set watershed load reduction goals based upon best available information
  - 3. Ensure effectiveness of point source permits in targeted/priority sub-watersheds for:
    - Municipal and Industrial Wastewater Treatment Facilities that contribute to significant measurable N & P loadings;
    - All CAFOs that discharge or propose to discharge; and/or
    - Urban Stormwater sources that discharge into N & P-impaired waters or are otherwise identified as a significant source.
  - 4. Agricultural Areas
  - 5. Storm water and Septic systems
  - 6. Accountability and verification measures
  - 7. Annual public reporting of implementation activities and biannual reporting of load reductions and environmental impacts associated with each management activity in targeted watersheds
  - 8. Develop work plan and schedule for numeric criteria development



#### Other EPA Resources

- EPA Provides Ag Targeted Funding through a Variety of Other Programs:
  - Climate Change/Renewable Energy
  - Environmental Stewardship
  - RCRA
  - Examples of Agriculture Projects in Region 4:
     <a href="http://www.epa.gov/region4/agriculture/ag\_projects.html">http://www.epa.gov/region4/agriculture/ag\_projects.html</a>
- The National Agriculture Compliance Assistance Center
  - Provides Ag Community info on compliance with environmental regulations
    - Offered by USEPA with support of USDA
    - http://www.epa.gov/agriculture/agctr.html
  - Publications from Ag Center (<a href="http://www.epa.gov/agriculture/publications.html">http://www.epa.gov/agriculture/publications.html</a>)
    - BMPs
    - Livestock Environmental Stewardship Brochures



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