Our Mission:
To bring a diverse coalition of stakeholders together to work to preserve and enhance water quality in the Fox River watershed
IL Portion - Fox River Watershed

1720 sq. miles

1/3 watershed in WI - 938 sq. miles
Managing a Multi-Purpose Resource

- Drinking water for 300,000 people
- Wastewater and stormwater conveyance
- Recreation for residents and visitors
- Habitat for aquatic and terrestrial species
- Aesthetic value
Concerns for the Fox River

Chicago Tribune April 1999 on the Fox being named one of the "Top 10 Most Endangered Rivers" in the U.S.— "The Illinois Environmental Protection Agency and national and local waterway activists agree on at least one thing: The water quality of the Fox River is as good today as it has been at any time during the past two or three decades, despite increased urbanization in the watershed..." ..."**concern for the river is not totally baseless. Residential sprawl along its shores is proceeding so quickly that environmental problems--such as polluted storm runoffs and inadequate treatment facilities--could threaten the river's health.**"
FRSG Board of Directors

- City of Aurora
- City of Elgin
- Fox Metro Water Reclamation District
- Fox River Ecosystem Partnership
- Fox River Water Reclamation District
- Friends of the Fox River
- Kane County
- Sierra Club - Illinois Chapter
- Tri-Cities (Batavia, Geneva, St. Charles)

Incorporated as not-for-profit April 2003
Financial Supporters

- USEPA
- Illinois EPA
- IL River Coordinating Council/Lt. Gov. Pat Quinn
- Lt. Gov. Corinne Wood
- Chicago Metropolitan Agency for Planning
- City of Aurora
- City of Elgin
- City of St. Charles
- City of Batavia
- City of Geneva

- City of Plano
- ConAgra Foods
- Dunham Fund
- Fox River Water Reclamation District
- Kane County Riverboat Fund
- The Conservation Foundation
- Village of Algonquin
- Village of Lakemoor
- Village of Port Barrington
- United City of Yorkville
- Yorkville-Bristol Sanitary District
In-Kind Contributors

- Fox River Water Reclamation District
- Fox Metro Water Reclamation District
- IL EPA
- IL State Water Survey
- Northern Moraine Water Reclamation District
- Village of Algonquin
- City of Aurora
- City of Crystal Lake
- City of Elgin
- City of St. Charles
- City of Batavia
- City of Geneva
- Sierra Club
- Friends of the Fox River
- Environmental Defenders of McHenry County
- Lake in the Hills Sanitary District
- The Conservation Foundation
- Kane County
- Gardner Carton & Douglas
- WE Deuchler Associates
Volunteer Water Quality Monitoring

Methods
- Monthly since 2002
- IEPA-approved QA/QC program
- Volunteer collection, transport and analysis
- Samples analyzed by Fox Metro & Fox River WRDs & City of Elgin Water Dept.

Sites
- Seven sites on the Fox River- Johnsburg to Yorkville
- Sleepy Hollow Creek
- Tyler Creek
- Silver Creek
- Indian Creek
- Crystal Creek
- Ferson Creek
- Blackberry Creek
Four Phase Approach

Phase I: 2002-2003
- Understand Available Information
  - Water quality (FoxDB)
  - GIS data
  - Literature review and publication database
  - How to address the issues

Phase II: 2003-2009
- Develop Planning Tools
  - HSPF: loads, storm events
  - QUAL2K: DO regime during low flows
  - Monitoring plan
  - Biological data (FoxDB modified)

Phase III: 2006-2013
- Integrated Monitoring/Refine models
  - Low flow monitoring
  - Storm event monitoring
  - Refinement of Planning Tools
  - Evaluate management options (scenarios)

Phase IV: 2013-...
- Implementation
  - Fox River Implementation Plan
    - Propose & promote management actions
  - Evaluate planned WWTP expansions, NPDES permits, etc.
  - Continued model update & monitoring
  - Expand study area to include upper portion
Phase I - Critical Review of Data

- ISWS completed March 2004
- Some data exceed recommendations/standards
  - Fecal coliform
  - pH
  - Dissolved oxygen
  - Total phosphorus
  - Total nitrogen
2010
Nutrient-related Impairments
Phase II – Tool Development

- Watershed loading model
- Receiving stream model

Completed 2009

31 major tributaries
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  - Biological data (FoxDB modified)

Phase III: 2006-2013
- Integrated Monitoring/Refine models
  - Low flow monitoring
  - Storm event monitoring
  - Completed Sept. 2011
  - Refinement of Planning Tools
  - Evaluate management options (scenarios)

Phase IV: 2013-...
- Implementation
  - Fox River Implementation Plan
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Four Phase Approach

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**Phase II:** 2003-2009
- Develop Planning Tools
  - HSPF: loads, storm events
  - QUAL2K: DO regime during low flows
  - Monitoring plan
  - Biological data (FoxDB modified)

**Phase III:** 2006-2013
- Integrated Monitoring/Refine models
  - Low flow monitoring: Completed June 2012
  - Storm event monitoring
  - Refinement of Planning Tools
  - Evaluate management options (scenarios)

**Phase IV:** 2013-...
- Implementation
  - Fox River Implementation Plan
    - Propose & promote management actions
  - Evaluate planned WWTP expansions, NPDES permits, etc.
  - Continued model update & monitoring
  - Expand study area to include upper portion
Phase III- Initial Management Scenarios

- Best management practices for non-point runoff
  - Ag lands
  - Urban areas
- Modified point source discharges
- Dam removal
- Presentation by ISWS today
  - Completed May 2013
  - Final Phase III report to be released Nov. 2013
Phase IV - Management Decisions/Policy
Recommendations/Implementation

Next Steps
- Efforts incorporated as condition in NPDES permits
- Major Dischargers (> 1 MGD) to evaluate reducing phosphorus discharges to 1 and 0.5 mg/L levels
- Further modeling to refine needed management measures
- Develop Fox River Implementation Plan by June 15, 2015

Goal: designated uses attained
- Resolve dissolved oxygen & algae problems
Be Involved

- All municipalities, wastewater treatment plants and ag community will need to do their part

- Steps to be codified in the FRIP (Fox River Implementation Plan)

- Fox River Study Group Meetings
  - Thurs. Nov. 21, 1 PM
  - Thurs. Dec. 19, 9:30 AM
  - 2014- 4th Thursday 9:30 AM
  - Fox Metro, Oswego
Science-based planning & decision-making

Stakeholder involvement

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