The Fox River Study Group

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
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 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

- Monthly since April 2002
  - Samples analyzed by Fox Metro & Fox River WRDs & City of Elgin Water Dept.
  - IEPA-approved QA/QC program
  - Seven sites on the Fox River- Johnsburg to Yorkville

- Tributaries
  - Sleepy Hollow Creek
  - Silver Creek
  - Crystal Creek
  - Blackberry Creek
  - Tyler Creek
  - Indian Creek
  - Ferson 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

**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
  - Propose & promote management actions
  - Evaluate planned WWTP expansions, NPDES permits, etc.
  - Continued model update & monitoring
  - Expand study area to include upper portion

 Illinios State Water Survey
Phase I – Critical Review of Data

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

- Watershed loading model
- Receiving stream model

Completed 2009

31 major tributaries
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

Phase III: 2006-2013
Integrated Monitoring/Refine models
- Low flow monitoring
- Storm event monitoring
  Completed Sept. 2011
- Refinement of Planning Tools
- Biological data (FoxDB modified)
- Evaluate management options (scenarios)
- Evaluate planned WWTP expansions, NPDES permits, etc.

Phase IV: 2013-
Implementation
Propose & promote management actions
Continued model update & monitoring
Expand study area to include upper portion
Drought Helping Provide Data For Fox River Pollution Study

July 23, 2012 10:41 AM

The Fox River in Geneva, Ill. (CBS)

ALGONQUIN, Ill. (CBS) – The lack of rain this summer might be killing your garden, but it’s actually good news for people studying the health of the Fox River.

WBBM Newsradio’s Nancy Harty reports the based Fox River Study Group has been analyzing water samples for the last decade in an effort to help address pollution of the river.

However, the group has not yet been able to take low-flow measurements from the river for several years.

“For the last five years, we’ve had unusually wet years, and so we’ve never been able to meet those conditions since 2005,” said Cindy Skrukrud, chairwoman of the group. “So, our study was kind of stalled.”
Drought a boon for Fox River pollution study

Philippe Moreau, left, and Karen Clementi of Deuchler Environmental take algae samples earlier this month from the Fox River near Fabyan Forest Preserve in Geneva. They were one of several crews working as part of a low-flow study of the Fox River conducted by the Illinois State Water Survey. They had been waiting six years for the water level to be low enough to conduct the study.

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RICK WEST | STAFF PHOTOGRAPHER
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 Last week of June!
- Storm event monitoring
- Refinement of Planning Tools
- Evaluate management options (scenarios)

Phase IV: 2013-
Implementation
- Propose & promote management actions
- Evaluate planned WWTP expansions, NPDES permits, etc.
- Continued model update & monitoring
- Expand study area to include upper portion

Illinois State Water Survey
Karen Clementi holds a clump of algae as she and Philippe Moreau of Deuchler Environmental take algae samples in the Fox River near Fabyan Forest Preserve in Geneva earlier this month. They were one of several crews working as part of a low-flow study of the Fox River conducted by the Illinois State Water Survey.

RICK WEST | STAFF PHOTOGRAPHER
Management Alternatives to be studied

- Non-point source measures - ag and urban BMPs
- Modified point source discharges
- Dam removal

To be completed by May 31, 2013
Management Decisions/Policy Recommendations

- **Next Steps**
  - Plan incorporated as condition in NPDES permits
  - Major Dischargers (> 1 MGD) evaluate reducing phosphorus discharges to 1 and 0.5 mg/L levels
  - Develop timeline for implementation based on review of scenarios by Jan. 1, 2015

- **Goal: designated uses attained**
  - Solve dissolved oxygen & algae problems by 2030
Tools for Implementations

- TMDL Implementation Plan
- Integrated Watershed Planning
- Illinois Green Infrastructure Grant Program

2012 ILLINOIS Clean Water Initiative
Tools for Implementations

- KIC 2025
  Keep It for the Crop by 2025

- Illinois Nutrient Research & Education Council

- Post-Development Stormwater Standards
- Subwatershed Groups & Plans
Be Involved

Fox River Study Group Board of Directors meets 2\textsuperscript{nd} Thursday of each month

- 9:30 am
- Fox Metro Water Reclamation District
  Rt. 31, Oswego
Science-based planning and decision making

Stakeholder involvement

www.foxriverstudygroup.org

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