



Chicago Metropolitan
Agency for Planning

Ferson-Otter Creek Watershed Planning

September 21, 2010

2:00-4:00 p.m.

Amy Talbot, LEED AP

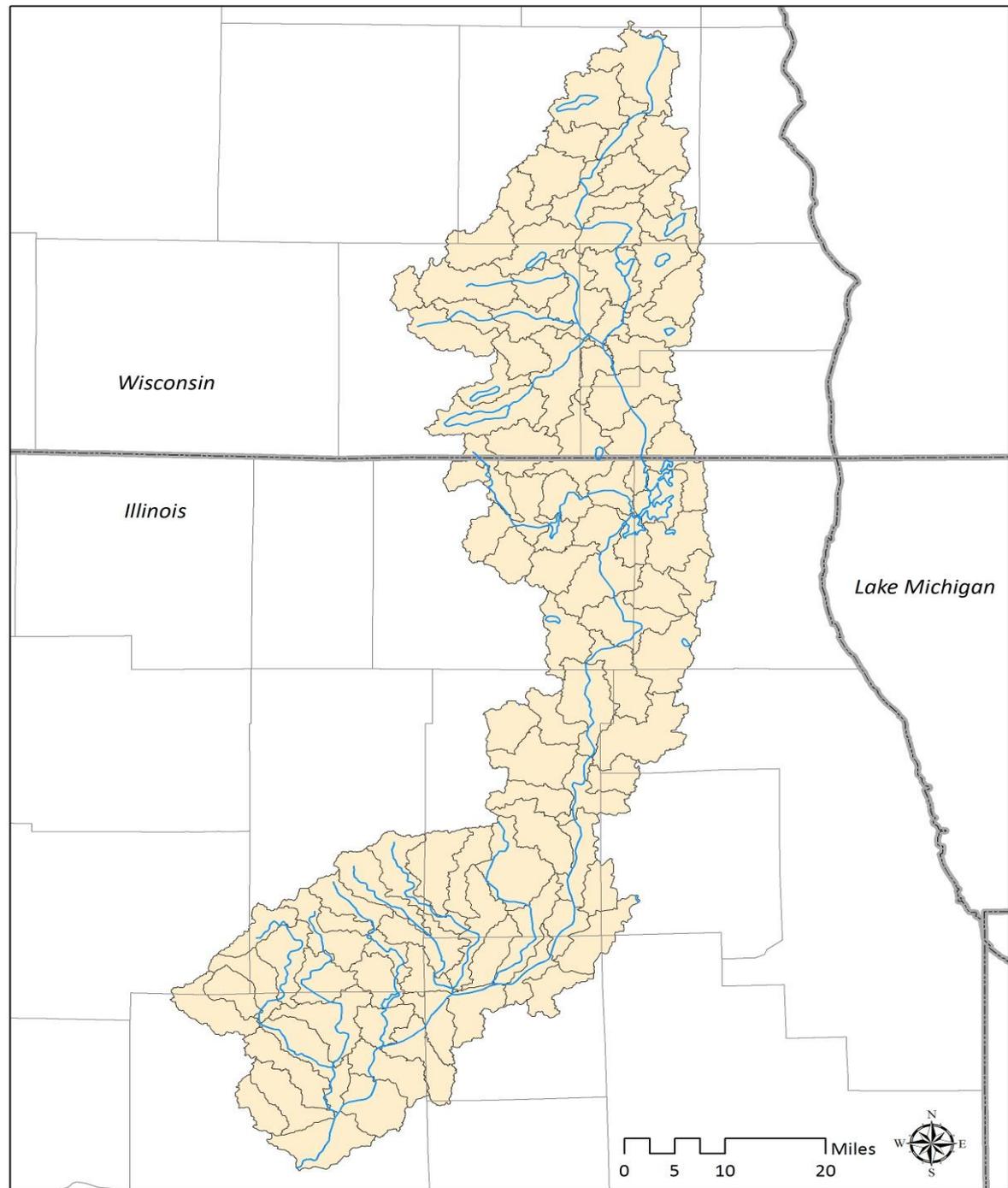
Overview

- Fox River Basin background
- Illinois Integrated Water Quality Report
- Ferson-Otter Creek
- The Watershed Plan
- Questions/Comments?



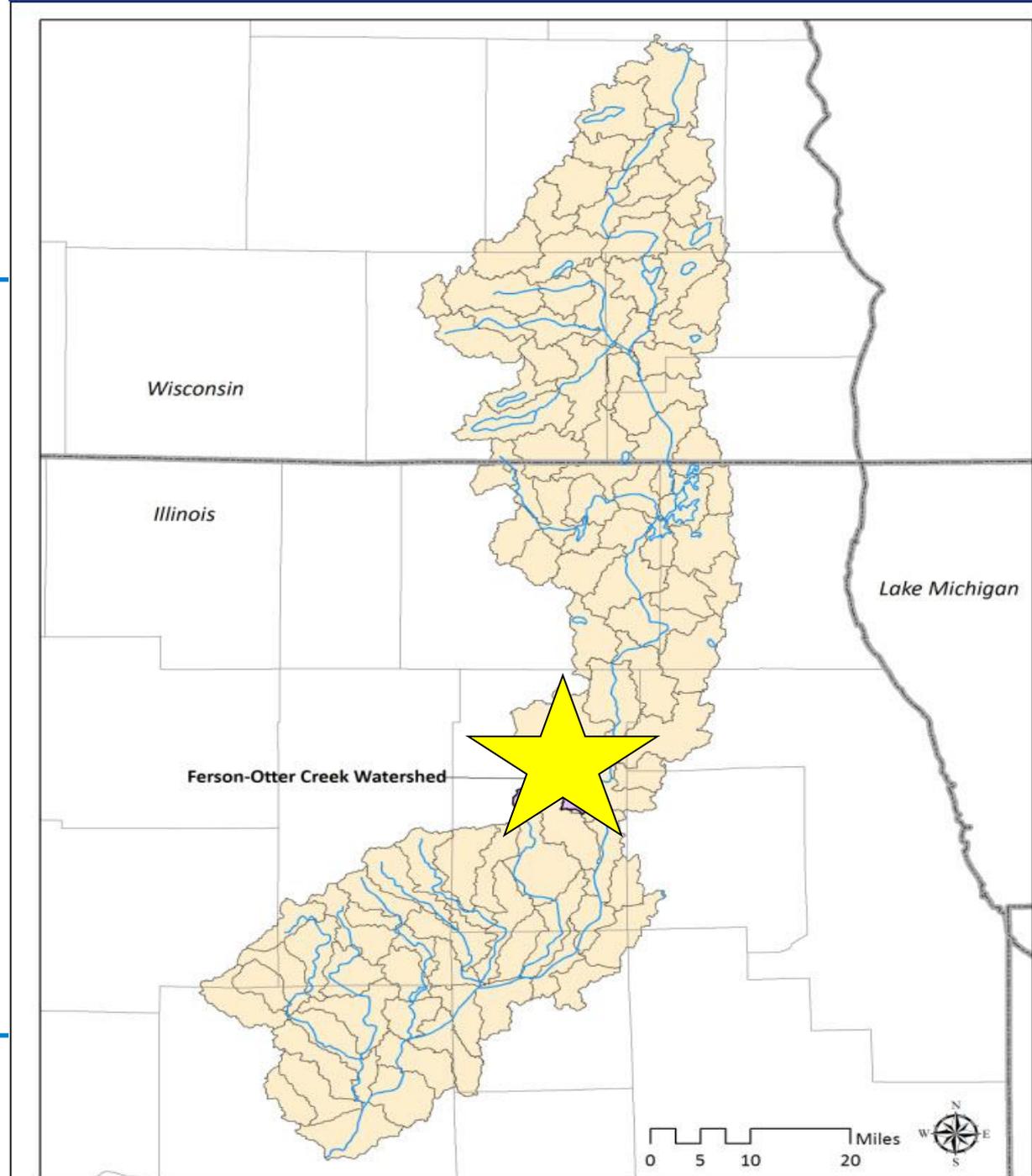
The Fox River Basin – Wisconsin & Illinois

- **3rd largest trib to Illinois R.**
 - **185 miles long from Waukesha, WI – Ottawa, IL; 115 river miles in Illinois**
 - **2,658 mi² watershed; 1,720 mi² in Illinois**
 - **Illinois part of watershed has ~2,300 river and tributary stream miles & 406 lakes**
 - **Parts of 11 Illinois counties, 11% of Illinois' population**
-



Ferson-Otter Creek Watershed

- Drainage area of 54 sq. miles
- 29% developed
- Kane County, 5th
- Elgin, St. Charles, Campton Hills, South Elgin, and Lily Lake
- Population: approx. 32,515
- Star Watershed!



Illinois Integrated Water Quality Report

State of Illinois
Rod R. Blagojevich, Governor
Illinois Environmental Protection Agency
Douglas P. Scott, Director



Illinois Integrated Water Quality Report and Section 303(d) List-2008

Clean Water Act Sections 303(d), 305(b) and 314

Water Resource Assessment Information
and Listing of Impaired Waters



In memory of Gary Minton for 30 years of service to Illinois' water resources



August 2008

IEPA/BOW/08-016

- Fulfills requirement of Sections 305(b) and 303(d) of the Federal Clean Water Act
- Serves as the primary assessment of State W.Q.—rivers, streams, lakes, groundwater
- Impaired waters placed on 303(d) List



Chicago Metropolitan
Agency for Planning

Section 305(b) requires...

- Prepare and submit a report which shall include a description of the water quality of all waters in the State
- 2 year cycle
- 2010-draft form



Monitoring

- Surface

- Water samples are collected and sent to labs for chemical analysis
- Physical and biological data are also collected and analyzed

Designated Uses & WQ Standards

- Designated Uses include:

Aquatic Life	Aesthetic Quality
Primary Contact	Secondary Contact
Public Water Supply	Fish Consumption

- Water Quality Standards

- Numeric values (.05 mg/L Phosphorus)
- Narrative statements (water shall be free of excessive algae)
- Standards determined by Illinois Pollution Control Board



Water Body Assessments

- Lake or stream segment is assessed:

Fully Supporting	Good
Not Supporting	Fair or Poor (impaired)

- Causes and Sources identified for each “impaired” designated use.
- “Not assessed” support level for those waterbodies that have not been evaluated.

Section 303(d) requires....

- Identify waters which are not meeting applicable water quality standards/designated uses-303(d) List
- Establish priority ranking for those waters taking into account the severity of pollution and the uses to be made of such waters
- Target waters for the development of TMDLs (and watershed-based plans)

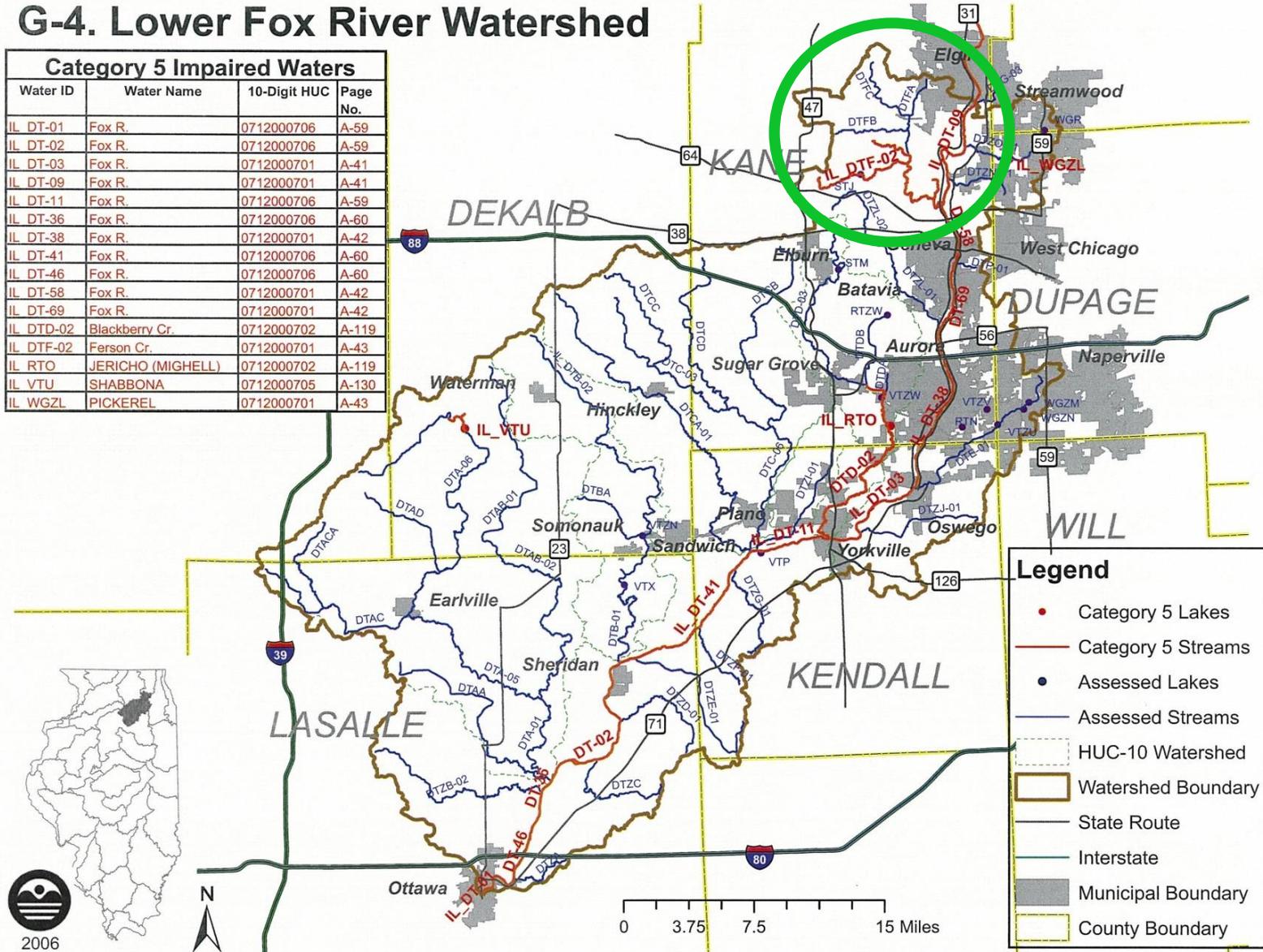
Why the Fox River?

- 14 out of 17 river segments are listed on the 303(d) list
- Causes:
 - Sedimentation
 - TSS, P, pH
 - Mercury, PCB (fish consumption)
 - Fecal coliform (primary contact)
- Sources
 - Ag and Urban Runoff
 - CSO
 - Muni Point Sources

The Lower Fox River Basin in Illinois – Assessed & Impaired Surface Waters

G-4. Lower Fox River Watershed

Category 5 Impaired Waters			
Water ID	Water Name	10-Digit HUC	Page No.
IL DT-01	Fox R.	0712000706	A-59
IL DT-02	Fox R.	0712000706	A-59
IL DT-03	Fox R.	0712000701	A-41
IL DT-09	Fox R.	0712000701	A-41
IL DT-11	Fox R.	0712000706	A-59
IL DT-36	Fox R.	0712000706	A-60
IL DT-38	Fox R.	0712000701	A-42
IL DT-41	Fox R.	0712000706	A-60
IL DT-46	Fox R.	0712000706	A-60
IL DT-58	Fox R.	0712000701	A-42
IL DT-69	Fox R.	0712000701	A-42
IL DTD-02	Blackberry Cr.	0712000702	A-119
IL DTF-02	Ferson Cr.	0712000701	A-43
IL RTO	JERICHO (MIGHELL)	0712000702	A-119
IL VTU	SHABBONA	0712000705	A-130
IL WGZL	PICKEREL	0712000701	A-43



Fox River segment DT-58

Excerpt from Illinois Integrated Water Quality Report and Section 303(d) List – 2010: Appendix B-2. Specific Assessment Information for Streams, 2010

Name	Assessment Unit ID	10-digit HUC	Size (miles)	Use Attainment	Causes of Impairment	Sources of Impairment
Fox River	IL_DT-58	0712000701	3.74	<ul style="list-style-type: none"> • N (Aquatic Life) • N (Fish Consumption) <p><i>N = "Not supporting"</i></p>	<ul style="list-style-type: none"> • Polychlorinated biphenyls (PBCs) • Mercury • Dissolved Oxygen • Alteration in stream-side or littoral vegetative covers • Other flow regime alterations 	<ul style="list-style-type: none"> • Streambank modification and destabilization • Impacts from Hydrostructure Flow Regulation/ Modification • Atmospheric deposition-toxics • Unknown sources



Fox River Segment DT-58

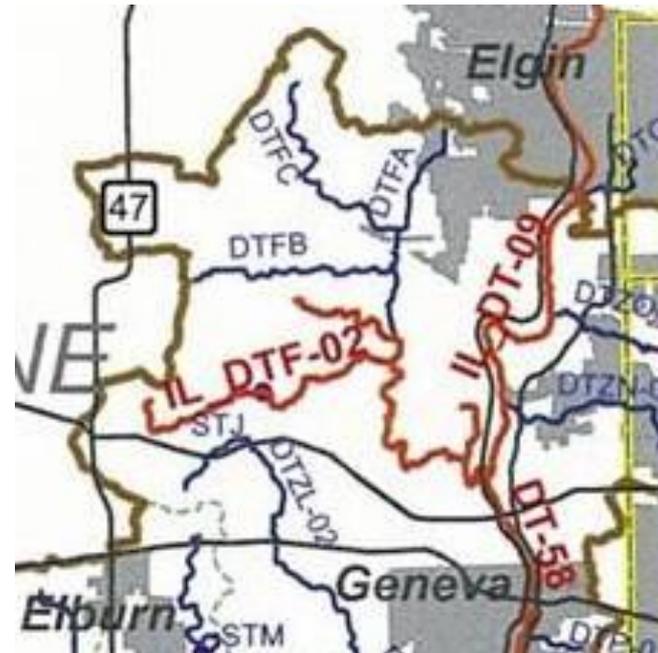
Ferson-Otter Creek drains
to this segment of the Fox
River

Assessed and Nonsupport

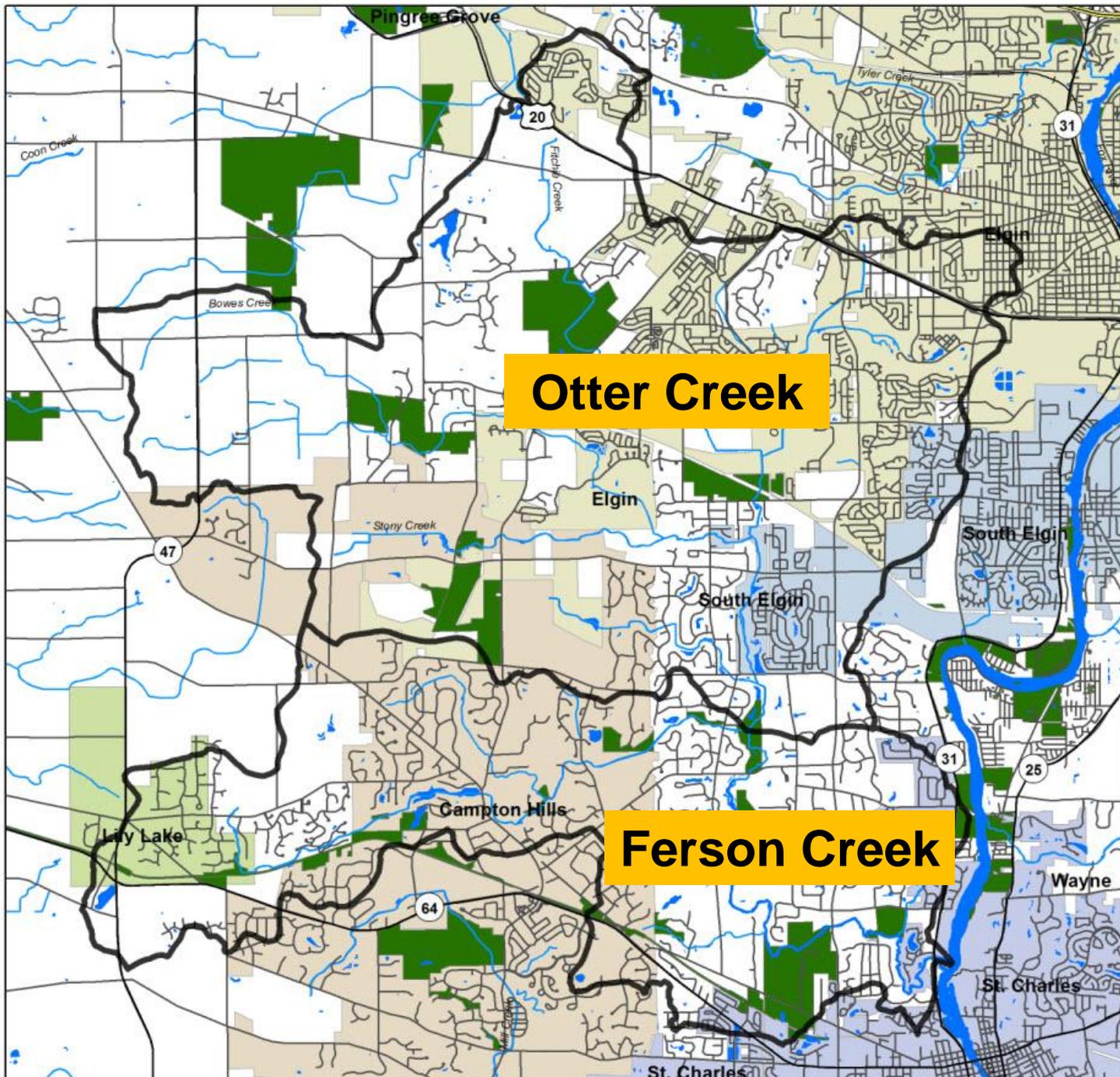
- Aquatic Life Use
- Fish Consumption Use

Not Assessed

- Primary Contact
- Secondary Contact
- Aesthetic Quality



Ferson - Otter Creek Watershed

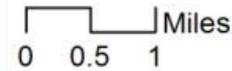


Otter Creek

Ferson Creek

Watershed Planning Area

-  Otter Creek
-  Ferson Creek
-  Campton Hills
-  Elgin
-  Lily Lake
-  South Elgin
-  St. Charles
-  Kane County Forest Preserves
-  Water Bodies



Data Sources: Watershed Boundaries: Illinois State Water Survey; Municipal Boudaries: CMAP; Forest Preserve District of Kane County Sites: FPD of Kane Co.; Roads: NAVTEQ and CMAP; Metra Rail Lines: RTA; U.S. Major Highways Shapefile: ESRI; County Boundary Lines: Illinois Natural Resources Geospatial Data Clearinghouse; Water Features: National Hydrography Dataset and Kane County ADID

Person and Otter Creek

Excerpt from Illinois Integrated Water Quality Report and Section 303(d) List – 2010: Appendix B-2. Specific Assessment Information for Streams, 2010

Name	Assessment Unit ID	10-digit HUC	Size (miles)	Use Attainment	Causes of Impairment	Sources of Impairment
Person Cr.	IL_DTF	0712000701	14.57	<ul style="list-style-type: none"> • F (Aquatic Life) • N (Primary Contact) • X(2nd Contact) • X(Fish consumption) • X(Aesthetic quality) <p>F= "Full support" N ="Not supporting" X="Not accessed"</p>	<ul style="list-style-type: none"> • Fecal coliform 	<ul style="list-style-type: none"> • Urban runoff/storm sewers • Runoff from Forest/Grassland/ Parkland
Otter Cr.	IL_DTFA	0712000701	6.5	<ul style="list-style-type: none"> • F (Aquatic life) • X (Primary Contact) • X(2nd Contact) • X(Fish consumption) • X(Aesthetic quality) 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A







319 Project



9/29/2010

The Watershed Plan

- CMAP and IEPA
- Funding-Section 604(b) of the Clean Water Act
- Collaborative approach
- Goal
 - to restore beneficial uses and remove from 303(d) list
- Requirements/criteria
- Completed by December 31, 2011

Planning Process: USEPA 9 elements

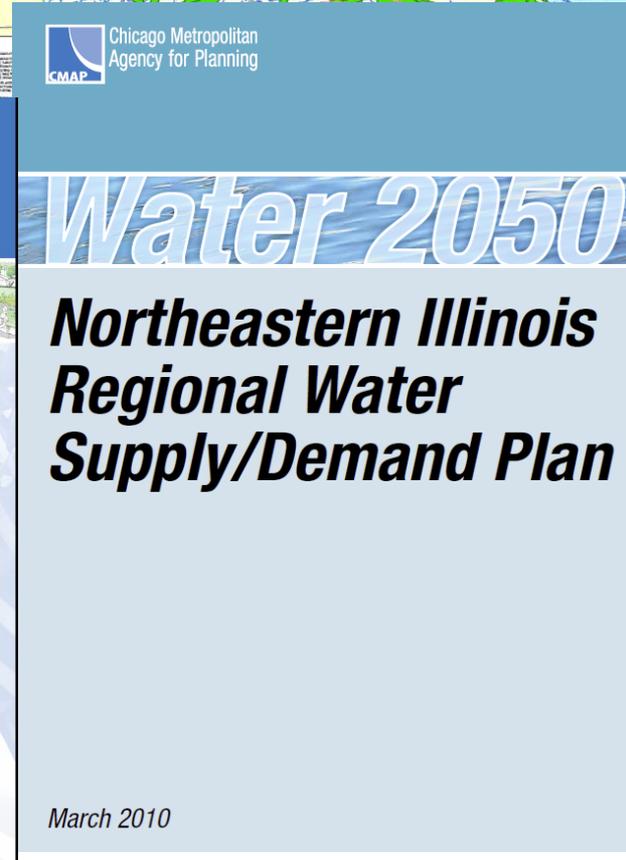
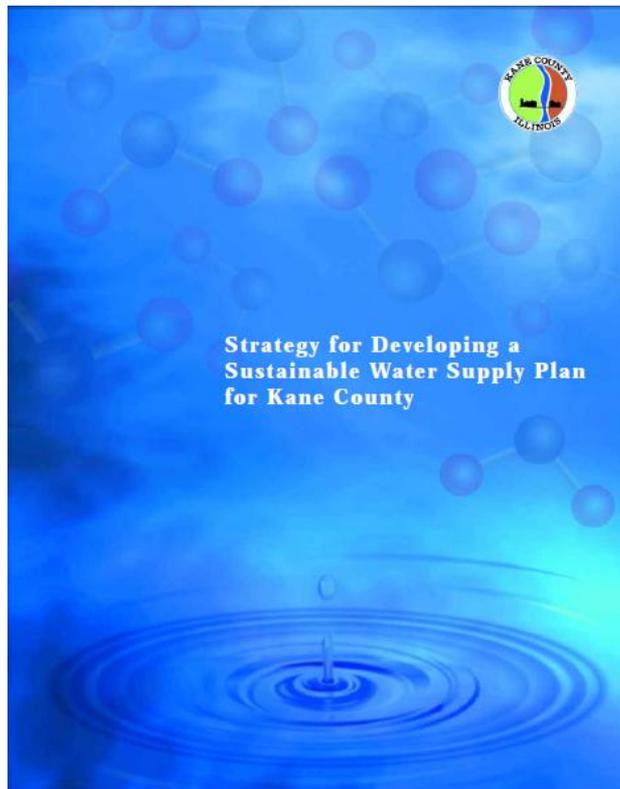
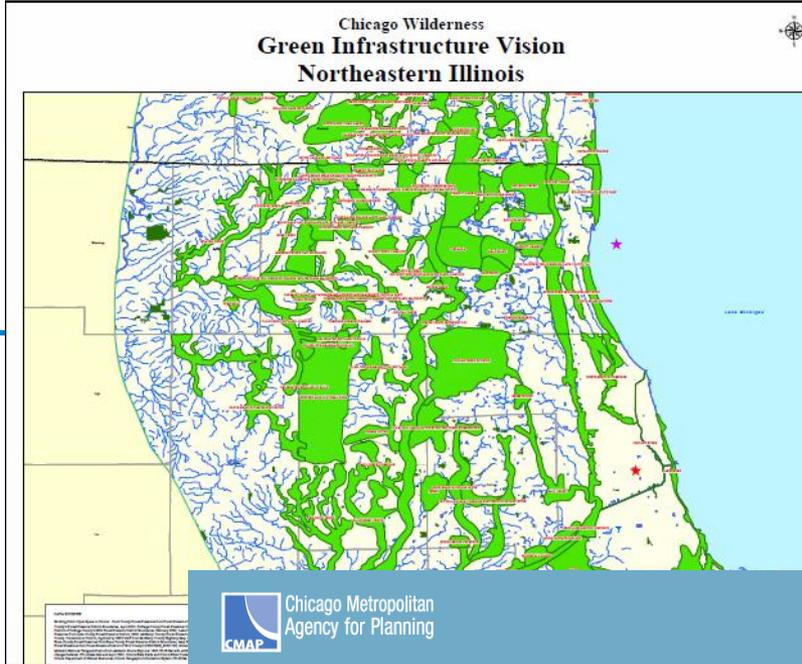
- Causes and sources of pollution
- Estimate pollutant reduction loads expected from implementation of measures
- NPS management measures to achieve load reductions
- Information/education
- Amount of tech/financial assistance needed & sources
- Implementation schedule
- Interim, measurable milestones
- Indicators for achieving load reductions- WQ progress
- Monitoring

Planning Process: Regional Criteria

- Watershed land use vision
- Pollutant load reductions targets
 - Hydrologic Simulation Program FORTRAN (HSPF)
- Groundwater protection
- Municipal codes/ordinances vs. USEPA WQ Scorecard

Other Plans

- County/Municipal Comp Plans
- Regional Plans
- Others....



Planning Process Timeline

September '10	introductions/roles, planning structure, project purpose/timeline
October	goals and objectives
November	watershed vision
December	groundwater protection
January '11	ordinances
February	draft Introduction chapter
March	draft Inventory and Assessment chapter, including problem statement(s)
April	finalize watershed inventory, prepare to submit to IEPA May 1st
May	model output, load reduction targets, etc. / chapter
June	plan recommendations
July	plan recommendations / chapter
August	<i>summer recess</i>
September	monitoring and assessment chapter
October	finalize draft plan, prepare to submit Nov. 1st
November	incorporate feedback from IEPA on draft plan
December	Final draft plan approval; next steps



Stakeholder Committee

- Role & expectations
- Who's missing?
- Meeting Schedule



Questions and Comments?

Amy Talbot
atalbot@cmap.illinois.gov
312.386.8646

