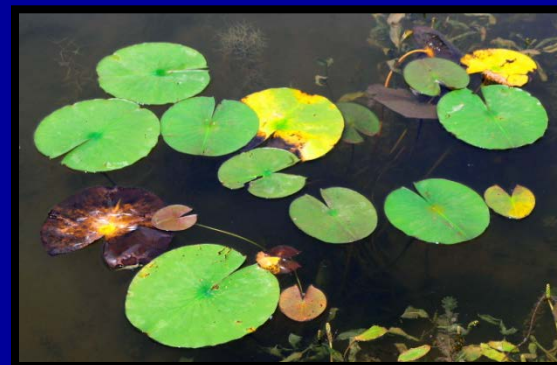


# Des Plaines River Watershed Plan Overview

May 20, 2014









# DRWW and Watershed Planning

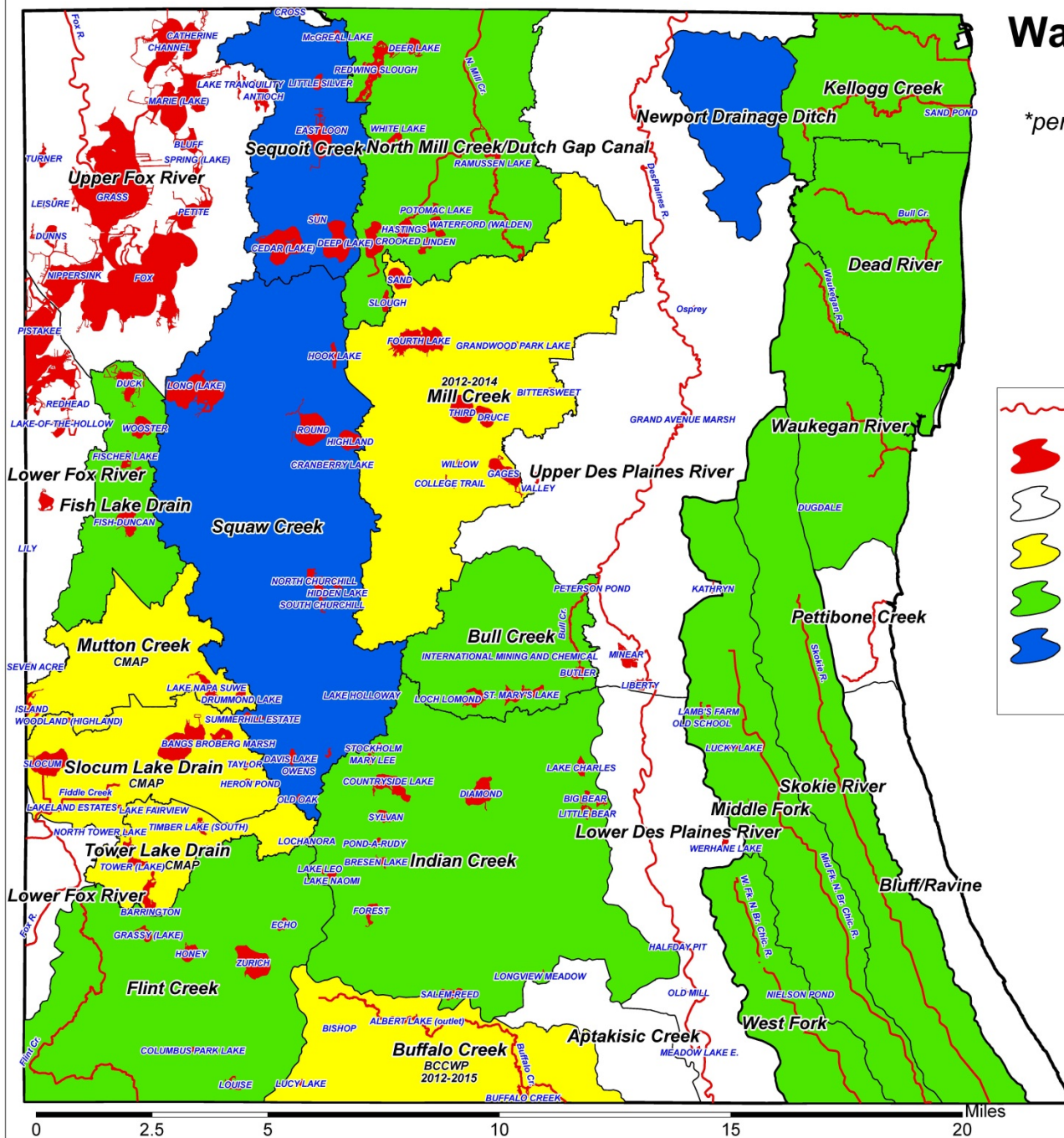
- SMC is in the process of submitting an Illinois EPA Section 319 grant application to complete watershed planning in the Des Plaines River basin
- This presentation explains the process and why we do watershed planning

# Watershed-Based Plan Status\*

\*per sub-watershed as of March 2014  
including Illinois EPA 2012  
303(d) Impaired Waters.



-  303D Listed Streams
-  303D Listed Lakes
-  No Watershed-Based Plan
-  Watershed-Based Plan: In Progress
-  Watershed-Based Plan: Complete
-  Watershed Plan Complete (Not Watershed-Based Plan)



**STORMWATER MANAGEMENT COMMISSION**  
This map is provided for general locational information only. Map features have been derived from various sources, each of which has its own scale and accuracy. The locations of all features are approximate.  
Lake County Stormwater Management Commission  
March 11, 2014

**DATA SOURCES:**  
Lake County Stormwater Management  
Lake County Department of Information And Technology, GIS & Mapping Division

# Designated Uses

- Uses specified by state standard regulations for each waterbody
- Water quality goals
- In Illinois: General Use Standards
  - Aquatic Life
  - Fish Consumption
  - Primary Contact Recreation
  - Aesthetic Quality

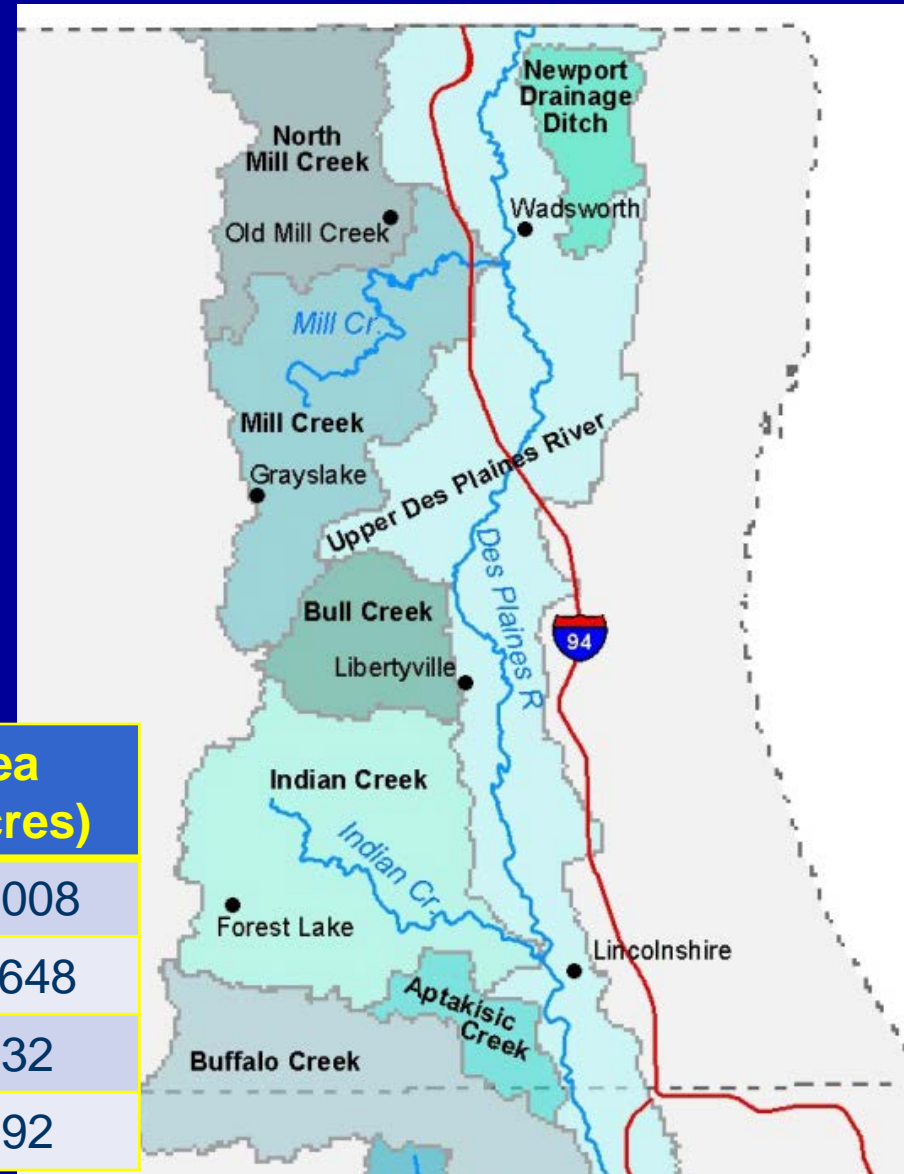
# Impaired waters

- Water bodies not meeting their designated uses
- Existing pollution controls are not sufficient to attain or maintain
- Water Quality Standards – protect the uses of water bodies; require appropriate uses of water bodies specified, achieved and protected

# Des Plaines River Watershed

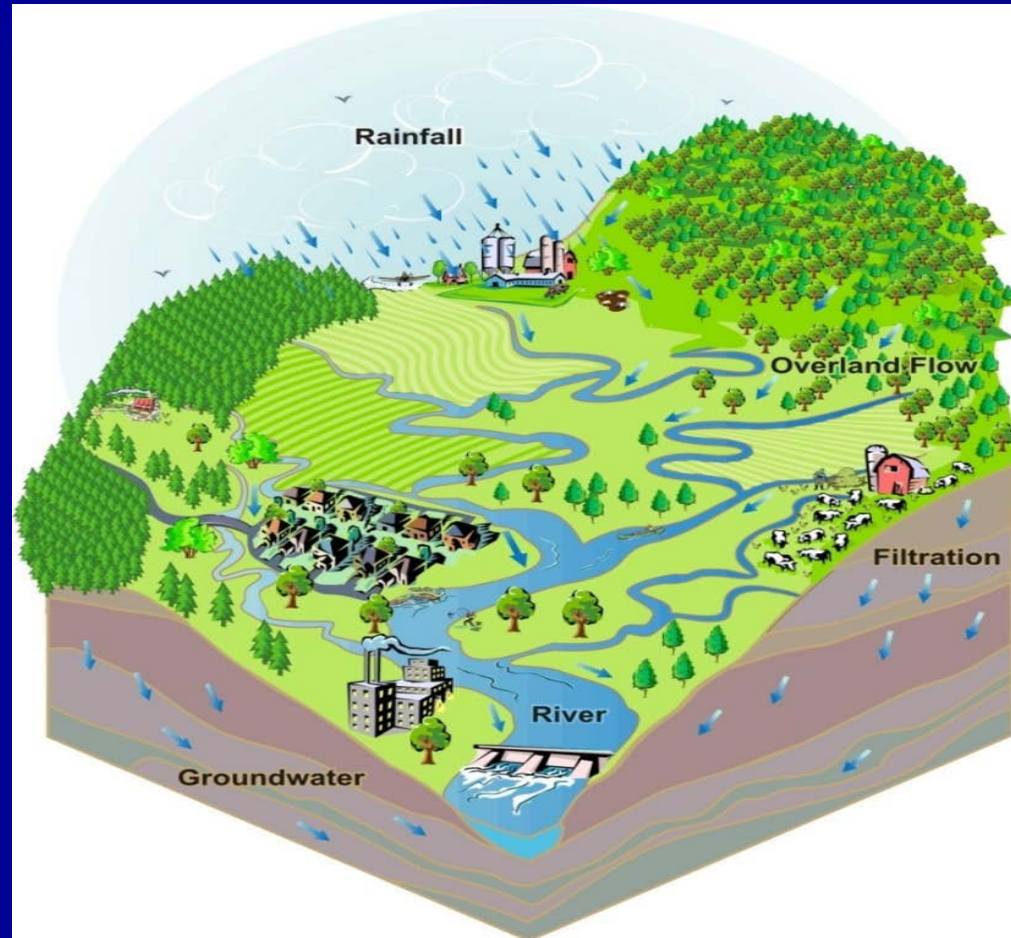
- Four subwatersheds: Upper Des Plaines, Lower Des Plaines, Newport, and Aptakisic
- 87 square miles (55,680 acres)
- Subwatershed of the Des Plaines River – Mississippi River Basin

Subwatershed	Area (square miles)	Area (acres)
Upper Des Plaines	54.7	35,008
Lower Des Plains	18.2	11,648
Aptakisic	6.3	4,032
Newport	7.8	4,992



# What is a Watershed?

- The area of land that catches precipitation and drains into a stream, river, lake or groundwater
- Land use effects water quality
- The watershed has become the planning and management unit of choice for many water resource issues.



# Why a Watershed Plan?

- Clean water, healthy lakes and streams, safety from flooding are important for residents & businesses
- H<sub>2</sub>O doesn't flow with political boundaries
- Projected population and land use changes
- Improves coordination & cooperation among communities

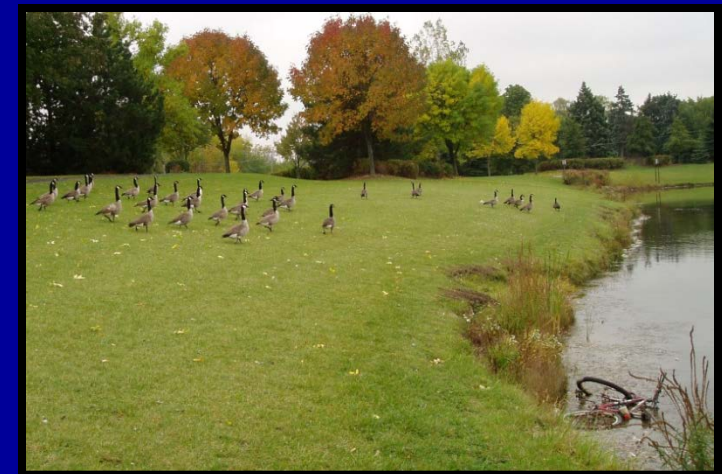


# Watershed Plan

## Purpose and Benefits

Watershed planning is proactive and will improve management and restoration of the watershed to:

- Reduce/Prevent Flood Damage
- Improve Water Quality
- Protect and Enhance Natural Resources
- Educate, Communicate, and Coordinate



# Watershed Plan

## Purpose and Benefits...there's more!

- eligibility to access 319 funding to offset project costs;
- NPS loading modeling and more detailed assessment identifies the critical areas where there is best bang for the buck;
- supports CRS rating for flood insurance reduction

# USEPA's Nine Elements

- 1) Identification of the causes and sources of pollution;
- 2) Estimate of the pollutant load reductions;
- 3) Description of the non-point source management measures (BMPs) that will need to be implemented to achieve the load reductions and an identification of the critical areas in which those measures will be needed to implement the plan;
- 4) Estimate of the amounts of technical and financial assistance needed and the sources and authorities that will be relied upon, to implement the plan;

# USEPA's Nine Elements (cont.)

- 5) Public information/education component that is designed to change social behavior;
- 6) Plan implementation schedule;
- 7) Description of interim, measurable milestones;
- 8) Set of criteria that can be used to determine whether pollutant loading reductions are being achieved over time;
- 9) Monitoring component to evaluate the effectiveness of the implementation efforts over time.

# The Watershed Planning Process

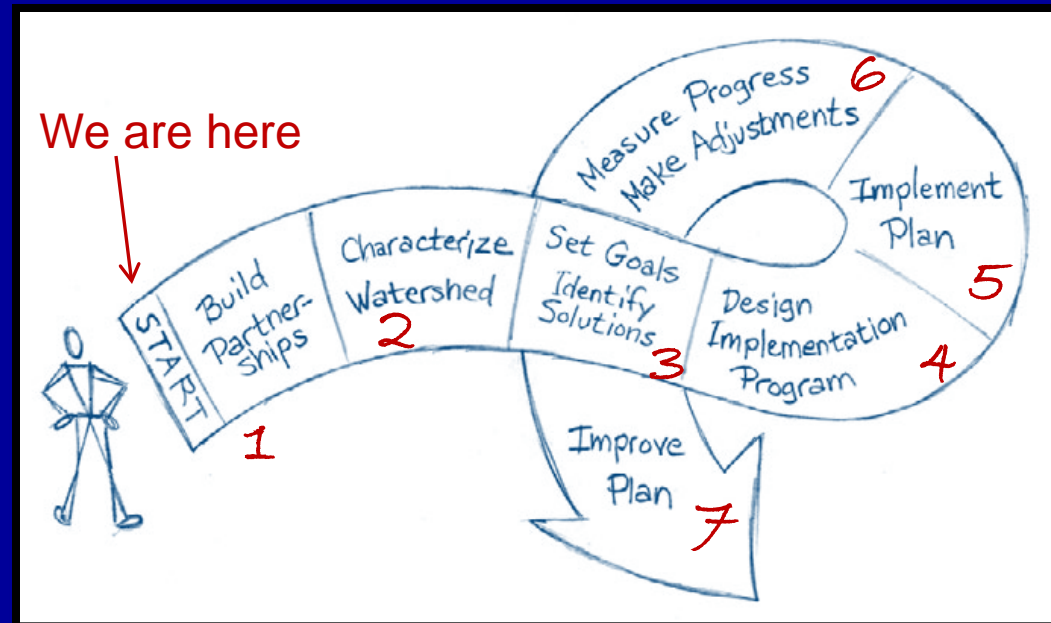
- **Brings People Together to...**
  - Identify Opportunities and Common Problems
  - Develop Public Support and Ownership
- **Links Overlapping or...**
- **Competing Interests and...**
  - Provides Mechanisms for Cooperation



# The Planning Process:

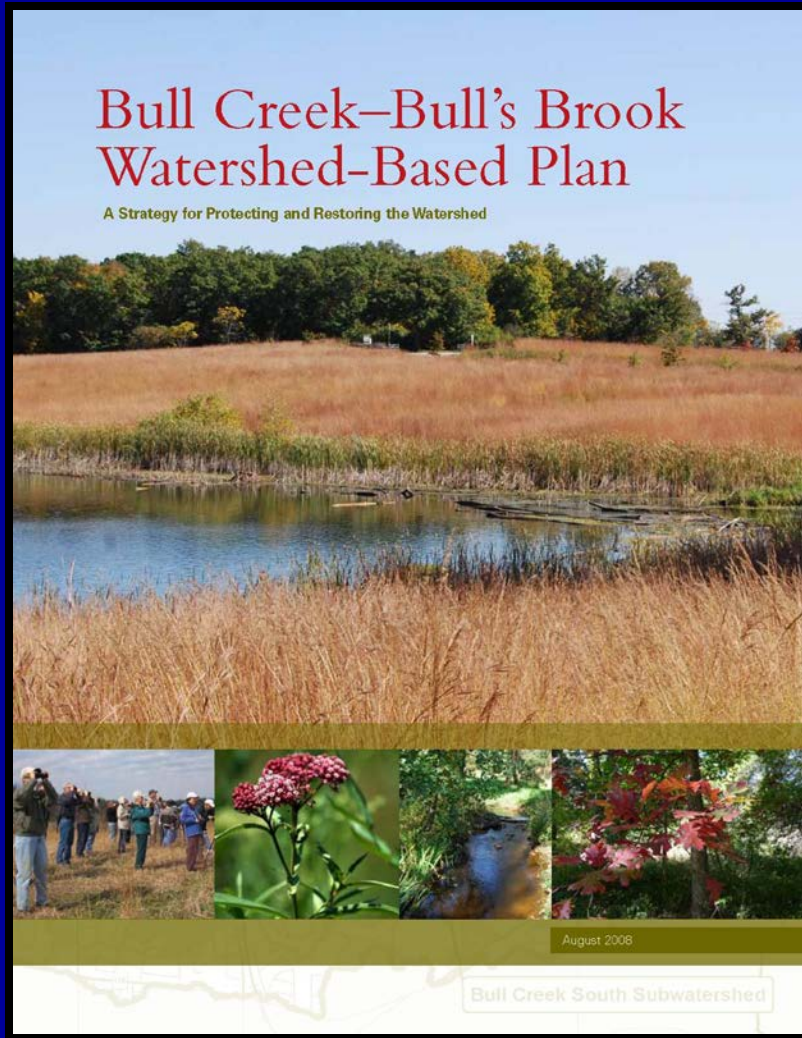
1. Outreach to stakeholders
2. Identify and collect watershed information/data
3. Develop goals and objectives and explore alternative solutions
4. Develop an action plan

Steps in the watershed planning and implementation process



From: Handbook for Developing Watershed Plans to Restore and Protect Our Waters, USEPA

# Watershed Plan Components



- Goals & Objectives
- Watershed Assessment
- Action Plan
- Education & Outreach Strategy
- Implementation Plan

# Plan Goals & Objectives

- Address stakeholder priority issues
- Reflect watershed conditions
- Consider expected future changes
- Meet funders' expectations





# Watershed Assessment

- Use Existing Information to Assess Watershed Character & Condition
- Fill in Holes by Collecting New Field Data
- Map Green Infrastructure
- Forecast Future Conditions

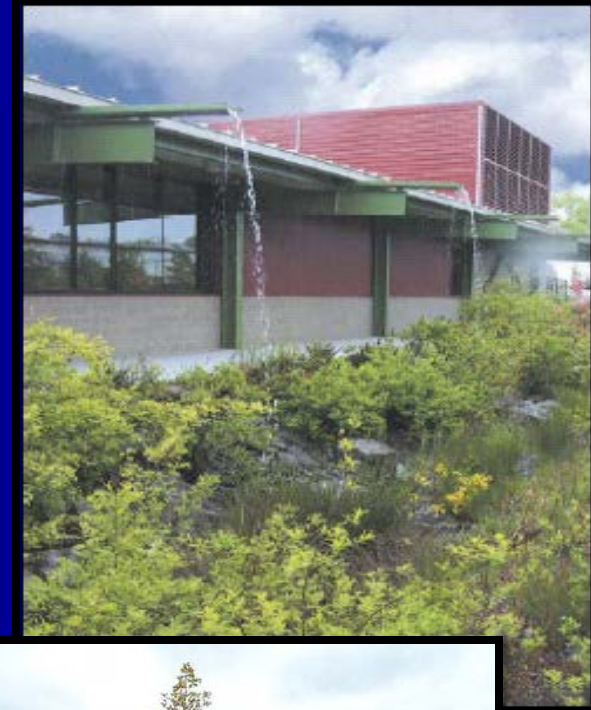


# Action Plan

- Identifies Stakeholders
- Programmatic and Policy Recommendations
- Site-Specific Recommendations
  - e.g. repair severe erosion etc.
- Conceptual Cost Estimates



# Action Plan: Best Management Practices



# Signs of Success:

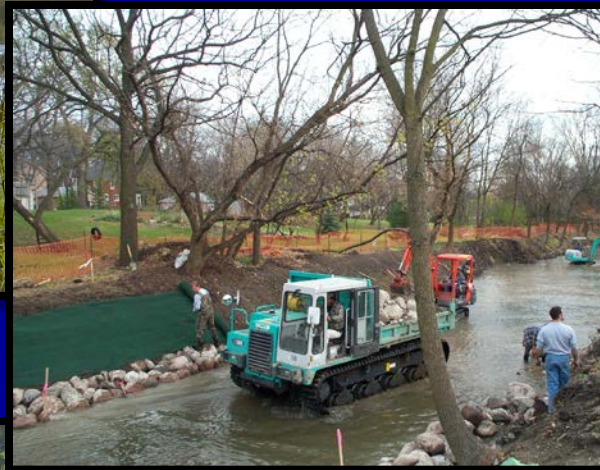
## From planning to... In-the-Ground Projects



**Wetland Restoration**



**Stream Restoration**



**Detention Retrofit**



**Bio-infiltration**

# Review and Adoption

- Approved by:
  - Illinois EPA
- Adopted by:
  - Lake County Stormwater Management Commission
  - County Board
  - Communities



# Grant Application

- SMC writing the application
- Letters of support
- Dues used as match
- Due August 1, awards announced next spring

Questions?

