

What Happens When the Dog Finally Catches the Car?

Implementing Watershed Plans for Lake Bloomington and
Evergreen Lake, McLean County, IL

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Illinois Lake Management Association 28th Annual Conference

April 4, 2013

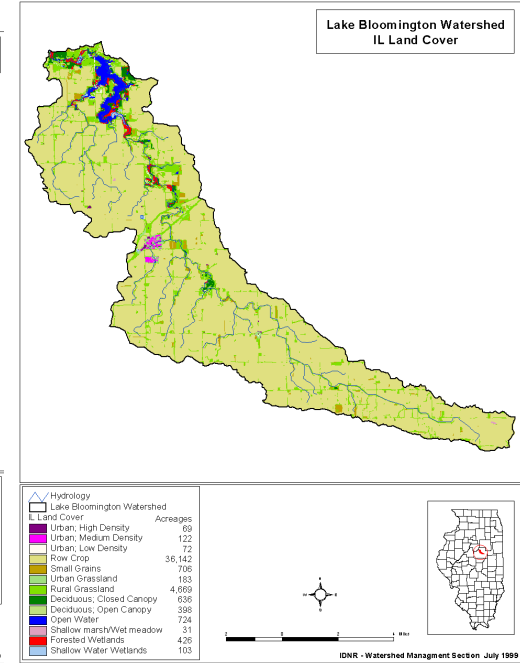
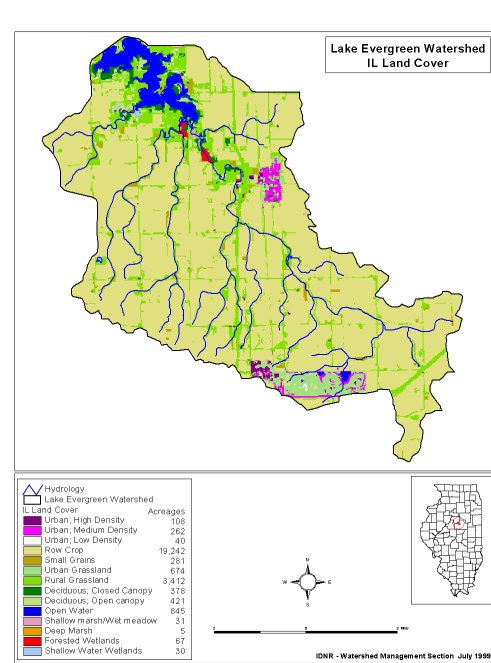
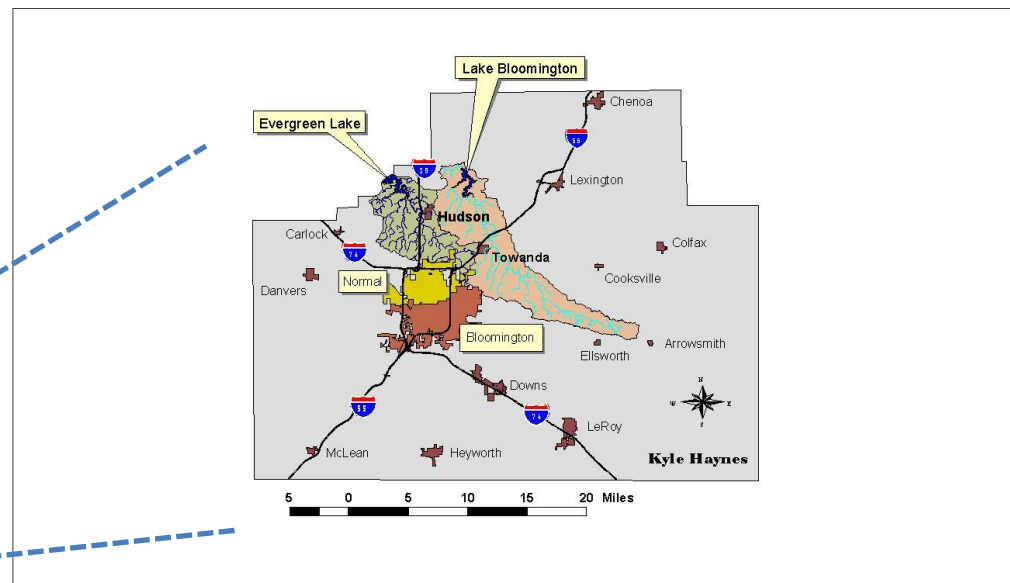
Bloomington, IL



Common Characteristics of Successful Lake and Watershed Programs:

(per limited observations by RMT)

- Have a purpose (defined goals)
- Have dedicated and enthusiastic leadership
- Have a plan
- Have more than one group of constituents
- Have a home (institutional)
- Have been around for a while (longevity)
- Have both short term and long term goals
- Have relatively stable funding (membership dues, association fees, tax revenues, utility support, ...)
- Are not afraid to include new groups or adopt new approaches



Source:
Illinois State Geological Survey

Bloomington, Illinois Water Department's Source Water Protection Program

Goals

- Improve water Quality
- Reduce sediment inputs
- Extend useful life of the reservoirs
- Reduce occurrences of algal blooms in the lakes
- Improve recreational opportunities in the lakes

Water Supply Characteristics

- 2 reservoirs
- 110 square mile drainage area
- >80% agricultural land use
- Tributary streams regularly exceed the 10 mg/l nitrate-N standard

Leadership

Can take many forms

*“When the shepherd is
on fire, the sheep feel
the warmth ”*

-traditional saintly saying



Leadership is provided by:
Private landowners, Producers, SWCD, NRCS, IEPA, IDNR, ISU, U of I,
McLean County, City Council, TNC, EDF, ILMA and many others



*“When you fail to plan,
.....”*

-traditional coach's saying

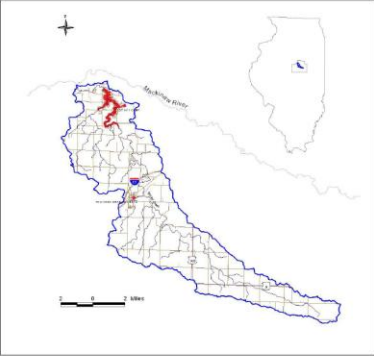
Implementation of the plans developed by the locally led watershed committees for addressing water quality and total maximum daily loads will help sustain and improve the capacity of both reservoirs to serve as water supplies.

- Based upon NRCS Resource Planning Process
- Funded by IEPA to develop locally led watershed plans
- Clean Lakes, VLMP, ambient lakes and in-house monitoring data were used to develop the plans
- Useful when applying for grants!

LAKE BLOOMINGTON TMDL

Final
Stage 1 Report: Watershed Characterization, Data Analysis,
and Methodology Selection

Submitted to:
Illinois Environmental Protection Agency



TETRA TECH EM INC.

November 13, 2006

Illinois Environmental Protection Agency

Total Maximum Daily Load
Evergreen Lake Watershed

April 2005



Stage One Final Report

DRAFT
Lake Bloomington Watershed Plan



Prepared by:
Lake Bloomington Watershed Planning Committee



DRAFT
Evergreen Lake Watershed Plan



Prepared by:
Evergreen Lake Watershed Planning Committee





New Partners: Friends of EverBloom

- “Grass Roots”
- Extremely diverse
- Highly motivated
- Friends of Reservoirs (parent organization) is a potential funding source
- You can organize a chapter for your reservoir (see Mike Garthaus)

Friends of EverBloom

Friends of EverBloom's mission is to positively contribute to the overall health and function of Lake Bloomington and Evergreen Lake and their associated watersheds while using the idea of minimization, restoration and protection of fish and aquatic species, sustainability plans for these ecosystems and associated watersheds, and enhanced public awareness of conservation issues surrounding these lakes as guiding principles.

Mike Goffman
2020 - 2021 Executive Director
Mike.goffman@everblooms.org

“New” Partners:
Illinois State University
Hydrogeology Department
Geography Department

- Graduate and undergraduate students
- Professors
- Highly motivated
- Unique learning opportunities through use of advanced instrumentation

Partnership allows us to maintain programs that could not be accomplished in-house due to lack of adequate staff numbers

New Partners: The Nature Conservancy Environmental Defense Fund

- Wide breadth of experience and expertise
- Full time scientists
- Highly motivated
- Experience in obtaining and managing grants

Partnership allows us to scale up to basin wide
implementation

Selected Projects

- Nutrient management (particularly nitrogen)
 - IEPA/USDA, Sand County Foundation
 - Tile research (in-house, ISU)
- Shoreline protection
 - IEPA Conservation Partnership
- Stream Stabilization
 - NRCS State CIG
- Adaptive management for nutrients
 - EDF/TNC
- Drinking Watersheds Project
 - TNC/EDF National CIG

DRAFT
Evergreen Lake Watershed Plan

Prepared by:
Evergreen Lake Watershed Planning Committee

Partially funded by the Governor of Illinois and the Illinois Environmental Protection Agency through Section 319 of the Clean Water Act.



Lake Evergreen Shoreline Erosion Class 4, 5 & 6 Erosion

Red = Top priority
Yellow = Medium priority

Legend:
 ● erosional events
 ● erosional events
 ● erosional events

Erosion Classes 4, 5 and 6 represent 10.7% of the Shoreline, but 47.7% of the erosion

Eight Priority Treatment Sites Comprising 48% of Total Erosion

DRAFT
Lake Bloomington Watershed Plan

Prepared by:
Lake Bloomington Watershed Planning Committee

CDM

Illinois Environmental Protection Agency
Total Maximum Daily Load
Evergreen Lake Watershed
April 2005

Stage One Final Report

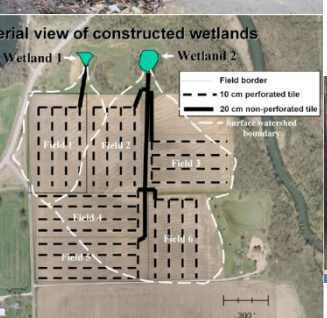


Summary of Eight Priority Area Cost-Benefit Analysis

Site No.	Length	Cu. Ft.	Percent	Tons	Rec. Am. #	Est. Cost	Est. Cost/Cu. Ft. Protected	Additional Benefits
1	2427	292,191	6.27	2612	6	\$173,000	\$0.59	Flood, Dry Hydrant, Utilities
2	2875	287,423	11.24	3746	6	\$187,200	\$0.65	Campground, Picnic Area
3	1365	151,208	4.43	1911	6	\$95,000	\$0.63	Beach Area, Utilities
4	590	68,960	1.72	828	6	\$41,300	\$0.70	Parking, Picnic Area
5	1070	178,663	5.17	2188	6	\$108,000	\$0.61	Aesthetics Only
6	900	125,731	3.68	1330	6	\$66,500	\$0.53	Aesthetics Only
7	1600	278,680	8.16	2910	7	\$284,000	\$1.02	Aesthetics Only
8	1195	172,058	5.05	2390	7	\$258,000	\$1.38	Aesthetics Only
Total	10297	1,423,978	42.13	13862		\$1,246,100		

Estimated Treatment Cost and Benefits of Priority Treatment Sites

Legend:
 ● Wetland
 ● Intersecting Trail
 ● Secondary Trail



Filter Strip Program

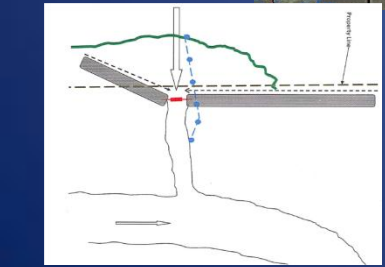
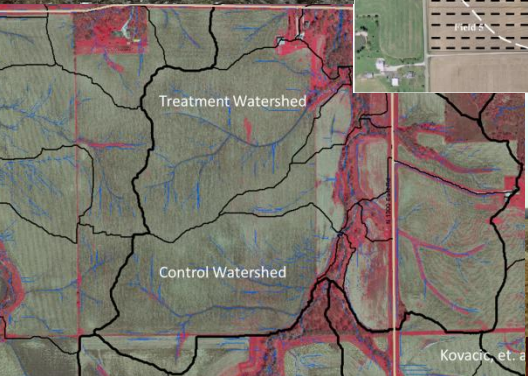
Free Set Aside Seed

There are many benefits to implementing filter strips on your land. You will:

- improve soil structure
- improve water infiltration
- improve soil fertility
- improve soil moisture
- improve soil structure
- improve soil fertility
- improve soil moisture

Eligible land must be enrolled in a conservation program and have a minimum of 10 acres of land under 100-year-old trees. The maximum fee is \$1000 per acre. The maximum fee is \$1000 per acre.

For more information, contact the Illinois Environmental Protection Agency at 1-800-252-2832.



LOW <250 MARGINAL 250-700 OPTIMAL 700-2,000 HIGH >2,000

ORNSTALK NITRATE-N (NO₃) mg kg⁻¹ (ppm)



CITY OF
Bloomington

ILLINOIS