Lake Bloomington Executive Summary

In December 2006, the McLean County Soil and Water Conservation District and the USDA Natural Resource Conservation Service invited landowners, representatives of local governments, local experts, and concerned citizens to meet to address the issue of elevated levels of phosphorus, nitrate, and sediment in Lake Bloomington.



In response to the IEPA mandated reductions of 66% in phosphorus and 34% of nitrates, this committee formulated a plan to address the phosphorus, sedimentation and nitrate levels in Lake Bloomington. Phosphorus loading is closely aligned with sedimentation. Nitrates primarily enter Lake Bloomington from agricultural and urban fertilizer application. This plan primarily addresses three divisions of the watershed:

- Riparian Areas- which include the lake itself and its tributaries.
- Urban Areas- including north Normal, Towanda, and several subdivisions, including a substantial development on the lake shore.
- Agricultural areas- farming and grazing areas, including managed habitat areas.

Our Goals

- Reduce delivery of sediment from erosion caused by sheet and rill, lake shore, stream bank and ephemeral erosion.
- Reduce phosphorous and ammonia loading to the lake from agricultural animals from all agricultural sources.
- Reduce general phosphorous and nitrate loading and other pollutants as a result of urban runoff.
- Increase the number of wetlands to remove sediment and nutrients from runoff before the water reaches Lake Bloomington.
- Establish a program to monitor urban runoff and collect water quality data to better evaluate storm water management practices and propose improvements.
- Increase urban awareness of lawn care practices that do not contribute excess nutrients to the watershed.
- Inspect and replace septic systems as needed in developed areas of the watershed.

Implementation

Implementation projects include:

- Lake Bloomington lake shore stabilization (riparian)
- Septic system inspection and replacement as needed (urban)
- Urban development construction erosion control ordinances (urban)
- Stream bank stabilization (riparian)
- Increasing filter strips along agricultural land (agricultural)
- Increasing CREP participation (agricultural)
- Increasing agricultural nutrient management (agricultural)
- Expanding Buffers and grassways along agricultural waterways (agricultural)
- Reducing urban storm water and nutrient runoff (urban)
- Increasing public education addressing urban issues that affect the watershed (urban)

Implementation practices will be paid for by McLean County Parks, The City of Bloomington, The Town of Normal, state and federal programs, and in specific cases, partially funded by land owners. (Some agricultural programs have a 75/25 cost share program.)

Monitoring

In the Lake Bloomington watershed, monitoring stations are already located at several points close to the lake. To assess the impact of urban runoff, both quantity and quality of water entering the watershed also needs to be monitored. Seven additional monitoring stations along the upper ends of Money Creek and its major tributaries will be able to record the impact of urban watershed protection regulations.

Cost Estimates

Cost estimates for a primary comprehensive program to combat sedimentation, phosphorus, and nitrate loading to Lake Bloomington are just under \$3.3 million. Two alternative programs for septic system output control to the lake would add \$9 million to \$10 million for each program.

The majority of the costs would be spread over several different governmental bodies through federal grants, state programs, and local storm water fees.

Riparian Programs	\$1,926,420
Urban Monitoring	\$366,000
Agricultural Programs	\$1,322,550
Alternative programs (each)	\$9,000,000- \$10,000,000



Measuring Our Success

Our primary goal is to reduce the phosphorus, sediment, and nitrate levels in Lake Bloomington. Monitoring of the lake will show how effective our practices have been. In addition, the monitoring sites close to urban areas will allow us to pinpoint future sources of phosphorus.

Plan Implementation

A major component to the overall success of this plan is the appointing of an over site committee to oversee all watershed issues that affect McLean County. This committee will include representatives of all municipalities and community members to over see the implementation and updating of this and any other TMDL watershed plans as required. This plan will be housed and the over site committee will be established under the guidance of McLean County Soil and Water Conservation District office, 405 Kays Drive, Normal, IL 61761

