



1993
Annual Water
Quality Report



NORTHEASTERN ILLINOIS PLANNING COMMISSION

Water Quality Project Highlights ♦ 1992–1993

- ❖ Evaluation of the water quality effects of the DuPage County Stream Maintenance Program
- ❖ Preparation of a video, *Erosion and Sediment Control: Procedures and Practices for Construction Sites*
- ❖ Development of a curriculum and presentation of a course on "Designing Stormwater Best Management Practices in Northeastern Illinois," April 21-23, 1993
- ❖ Completion of a stream condition inventory of Sequoit Creek in Lake County and assistance to the Sequoit Creek watershed communities to reduce nonpoint source pollution to the creek and lakes within the watershed
- ❖ Selection of sites and completion of final and preliminary designs for detention basin retrofitting demonstration projects in the Villages of Flossmoor and Addison
- ❖ Phase I Clean Lakes Program Diagnostic/Feasibility Studies completed for four Chicago Park District Lagoons in Cook County (Douglas, Garfield, Lincoln, Washington); as well as McCullom Lake in McHenry County
- ❖ Coordination of a sixth annual conference for U.S. EPA entitled "Enhancing the States' Lake Management Programs—Strengthening Local Lake and Watershed Protection Efforts," May 5-7, 1993
- ❖ Coordination of the 1992-93 Volunteer Lake Monitoring Program for 33 lakes in northeastern Illinois
- ❖ Preparation of an inventory of land uses and stormwater pollutant loading rates for the Lake County Lake Michigan Watershed
- ❖ Lake restoration neared completion and ecological enhancement programs continued at the Skokie Lagoons, Cook County
- ❖ Completion of lake water quality assessments for 35 lakes in northeastern Illinois.
- ❖ Coordination of a national conference, "Urban Runoff Management—Enhancing Urban Watershed Management at the Local, County and State Levels," March 30-April 2, 1993
- ❖ Coordination of the 8th Annual Conference of the Illinois Lake Management Association, April 22-24, 1993
- ❖ Coordination of the conference on "Assessment and Treatment of Contaminated Sediments in the North Branch Chicago River," October 19 & 20, 1992
- ❖ Continued technical support of countywide and watershed stormwater management planning programs
- ❖ Review of 5 Level I and 28 Level II Illinois Water Quality Management Plan amendment requests including 27 Facility Planning Area boundary changes, 2 requests for separate Facility Planning Area status, 4 plant expansions, 3 applications for new discharges, and 1 land treatment system. Also reviewed 67 Level III requests for reissue, modification, or termination of NPDES permits.

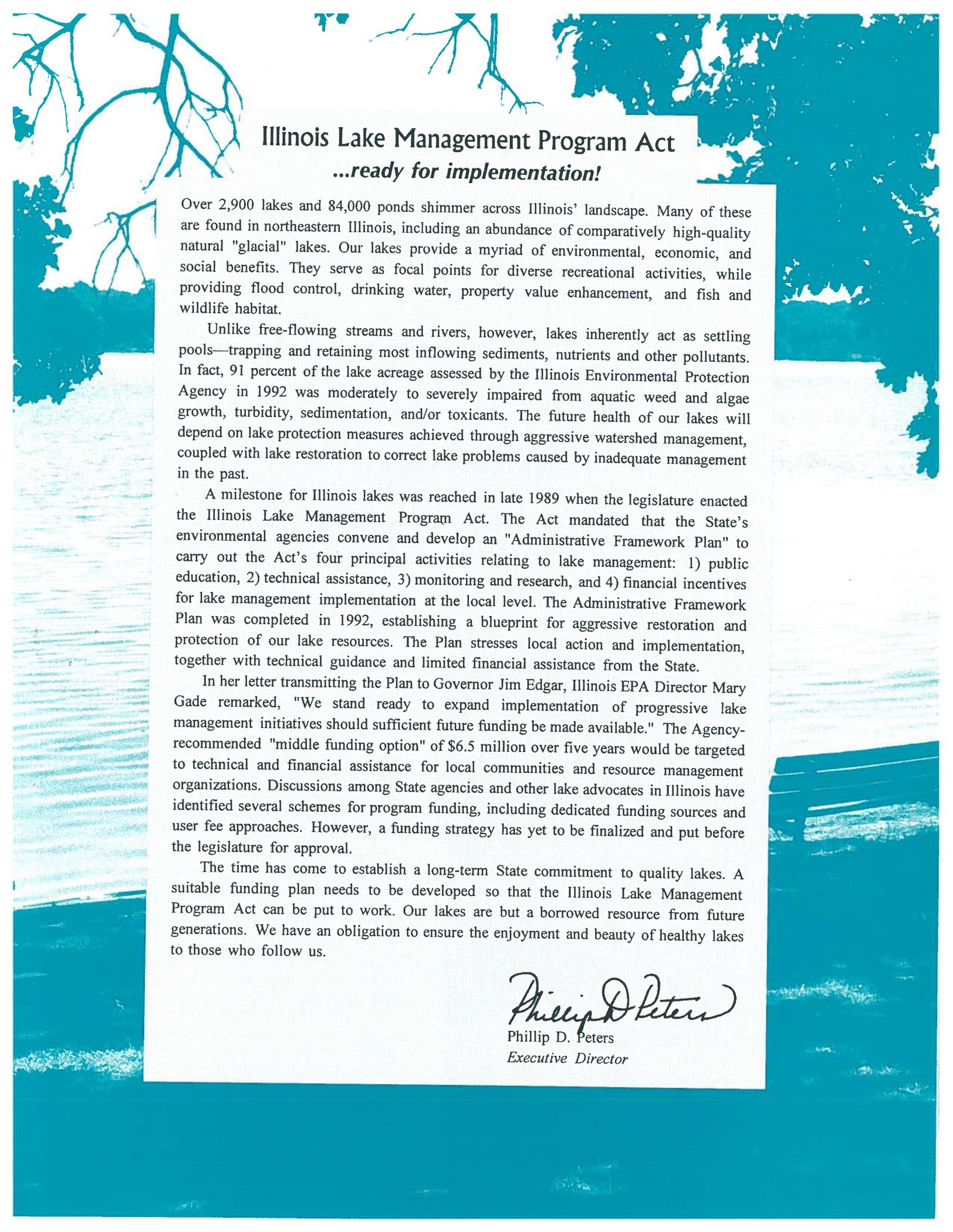
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For more information on the topics discussed in this report, please contact these individuals through NIPC's Natural Resource Department.

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- Kim Soulliere**, Planning Technician: Conference Coordination and Publication Production.

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Illinois Lake Management Program Act *...ready for implementation!*

Over 2,900 lakes and 84,000 ponds shimmer across Illinois' landscape. Many of these are found in northeastern Illinois, including an abundance of comparatively high-quality natural "glacial" lakes. Our lakes provide a myriad of environmental, economic, and social benefits. They serve as focal points for diverse recreational activities, while providing flood control, drinking water, property value enhancement, and fish and wildlife habitat.

Unlike free-flowing streams and rivers, however, lakes inherently act as settling pools—trapping and retaining most inflowing sediments, nutrients and other pollutants. In fact, 91 percent of the lake acreage assessed by the Illinois Environmental Protection Agency in 1992 was moderately to severely impaired from aquatic weed and algae growth, turbidity, sedimentation, and/or toxicants. The future health of our lakes will depend on lake protection measures achieved through aggressive watershed management, coupled with lake restoration to correct lake problems caused by inadequate management in the past.

A milestone for Illinois lakes was reached in late 1989 when the legislature enacted the Illinois Lake Management Program Act. The Act mandated that the State's environmental agencies convene and develop an "Administrative Framework Plan" to carry out the Act's four principal activities relating to lake management: 1) public education, 2) technical assistance, 3) monitoring and research, and 4) financial incentives for lake management implementation at the local level. The Administrative Framework Plan was completed in 1992, establishing a blueprint for aggressive restoration and protection of our lake resources. The Plan stresses local action and implementation, together with technical guidance and limited financial assistance from the State.

In her letter transmitting the Plan to Governor Jim Edgar, Illinois EPA Director Mary Gade remarked, "We stand ready to expand implementation of progressive lake management initiatives should sufficient future funding be made available." The Agency-recommended "middle funding option" of \$6.5 million over five years would be targeted to technical and financial assistance for local communities and resource management organizations. Discussions among State agencies and other lake advocates in Illinois have identified several schemes for program funding, including dedicated funding sources and user fee approaches. However, a funding strategy has yet to be finalized and put before the legislature for approval.

The time has come to establish a long-term State commitment to quality lakes. A suitable funding plan needs to be developed so that the Illinois Lake Management Program Act can be put to work. Our lakes are but a borrowed resource from future generations. We have an obligation to ensure the enjoyment and beauty of healthy lakes to those who follow us.



Phillip D. Peters
Executive Director

Section 314 "Clean Lakes Program" Projects

For over 17 years, Section 314 of the Federal Water Quality Act—the *Clean Lakes Program*—has provided technical and financial assistance to restore and protect our lake resources. Administered by the U.S. EPA, the program awards grants for state agencies and local organizations to diagnose lake quality problems and their causes (Phase I grants), as well as Phase II grants to implement comprehensive lake and watershed management strategies.

Since its inception, the Clean Lakes Program (CLP) has funded over 21 Phase I grants and 10 Phase II grants in Illinois, with federal funds exceeding \$4.25 million. Four principles have guided the CLP over the years: 1) involvement and commitment from local communities, 2) project oversight and management from Illinois EPA, 3) availability of federal matching funds, and 4) good science. Fortunately, many of the grants awarded in Illinois have been in the region with a high density of both people and lakes: northeastern

Illinois. NIPC's Natural Resources Department has served as technical coordinator for many of these including the Forest Preserve District of Cook County's Skokie Lagoons (one of the largest CLP projects in the country), McCullom Lake (City of McHenry), and eight of the Chicago Park District's recreational lagoons. Units of local government interested in applying for CLP assistance may contact NIPC's Natural Resources Department, or the Illinois EPA's Lake and Watershed Unit (217/782-3362).

Clean Lakes Updates

Lakes are an important natural resource in northeastern Illinois. Together with local sponsors and the U.S. EPA's Clean Lakes Program, the Commission is coordinating several lake restoration/protection projects that are at various stages of completion.

Skokie Lagoons

This ongoing lake protection project has been included in many previous Water Quality Reports, having been investigated under a Clean Lakes Program Phase I Diagnostic/Feasibility Study that began all the way back in 1980. The lagoons' 226 acres of water and over 650 acres of land are owned and managed by the Forest Preserve District of Cook County. They were constructed by the Civilian Conservation Corps (CCC) during the 1930s and represented the CCC's largest public works effort. The Phase II lake restoration/protection project has been in several implementation stages since 1984, including diversion of wastewater discharges, dredging and removal of organically-enriched bottom sediments, aquatic habitat enhancement, recreational access improvements, and various shoreline and watershed management activities. The lake dredging and deepening will be completed by late summer 1993, with over 1 million cubic yards of accumulated sediment "muck" having been removed. Ongoing activities will include shoreline erosion control, ecological restoration of aquatic and terrestrial habitats, and watershed management to reduce nutrient and sediment loadings from upstream watershed areas.



Skokie Lagoons

McCullom Lake

As reported in last year's Water Quality Report, McCullom Lake has been the focus of a Phase I study since 1989. Located in the City of McHenry in McHenry County, the 244-acre natural glacial lake is now slated for a Phase II implementation project to restore and protect the lake's ecological and recreational features. Among the management strategies to be implemented over the next several years will be control of nuisance exotic plant and animal species that impair the lakes ecology (notably carp and eurasian water milfoil plants), wintertime aeration of the lake, acquisition of the lake's outlet structure and critical watershed areas, control of agricultural and urban sources of nutrient and sediment runoff, and community education and homeowner initiatives to improve surface and groundwater quality in the lake's watershed.



McCullom Lake

Sherman Park Lagoon

Owned by the Chicago Park District and situated on Chicago's south side, Sherman Park Lagoon is an important recreational lake for thousands of nearby residents. Implementation of management strategies under a Phase II project began in 1992 and continued into 1993. The lakebed was restored to its original configuration through dredging, and will be followed by planting of native vegetation species along the shoreline and throughout the lakebed. Fish will be restocked later in 1993 and managed through a cooperative agreement between the Park District and the Illinois Department of Conservation's Urban Fishing Program. Sources of nutrients from surrounding park property, water levels and aquatic plant growth will be carefully managed by Park District staff.



Douglas Park Lagoon

Douglas, Garfield, and Washington Park Lagoons and Lincoln Park North Pond

Clean Lakes Program Diagnostic/ Feasibility Phase I studies at four of the Chicago Park District's lagoons—Douglas, Garfield, and Washington Park Lagoons and Lincoln Park North Pond—were recently completed by NIPC's Natural Resources Department staff. The studies identified the causes and sources of pollution affecting each lagoon, and developed management plans that will improve lake quality and provide for long-term protection. Plagued by somewhat similar problems including sedimentation, nuisance aquatic plant growth, and poor fisheries, these urban lakes are vital to inner-city recreational users—and provide valuable ecological and wildlife benefits as well. Also a historic resource, these lagoons have been in existence since the late 1880s, and the Park District continues its commitment to their restoration and protection.

Section 319 Funds Innovative Nonpoint Source Management Projects

Nonpoint source pollution, unlike point sources such as municipal or industrial treatment plant discharges, comes from diffuse sources such as parking lots, farm fields, eroding stream banks, and faulty septic tanks. The Federal Water Quality Act of 1987 established a national initiative—under Section 319—to assist states in developing effective new control strategies for controlling nonpoint source pollution. The Illinois Environmental Protection

Agency annually reviews and coordinates requests for Section 319 grants which are approved by U.S. EPA, Region 5. The grants stipulate that at least 40 percent of the project budget must be provided by state or local sources. From the time the grant program began about three years ago, NIPC's Natural Resources Department has been fortunate to coordinate several innovative projects, several of which are summarized in this Water Quality Report.



Newly installed vegetative stabilization measures are used on Glencrest Creek in DuPage County.

Sequoit Creek Watershed Management Project

An important nonpoint source management project in the Sequoit Creek watershed began in 1992 and is continuing during 1993. The Sequoit Creek Watershed Management Project emerged as an outgrowth of the Special Area Management Plan (SAMP) process for the Chain O'Lakes-Fox River waterway (described in last year's Water Quality Report). The Sequoit Creek project focuses on approaches to minimize nonpoint sources of pollution from urbanizing areas. The project is being conducted by the Lake County Soil and Water Conservation District, with financial assistance from Section 319. Cooperating in the study are NIPC, the Lake County Stormwater Management Commission, the Lake County Health Department, the USDA - Soil Conservation Service, and the Illinois EPA.

Draining an area of about 15 square miles, Sequoit Creek passes through the Lake County municipalities of Antioch and Lake Villa, as well as unincorporated areas. The watershed is rich in water resources

with extensive wetlands and several important recreational lakes. The creek channel travels 8 miles from its headwaters in Cedar Lake to its terminus at Lake Marie and the Chain O'Lakes.

Agricultural land use in the watershed is being converted to urban uses at an increasing rate. In fact, this watershed is projected to experience the second fastest rate of growth in the Fox River basin over the next 20 years. Hence, the project's primary focus—preventing and mitigating water quality impacts from urban development sites—is especially important.

Project goals include adoption and implementation of comprehensive construction site erosion and sediment control ordinances by the watershed's municipalities. Assistance on ways to meet ordinance requirements is provided to developers through site plan review and pre-construction conferences. And, project staff will be helping municipal inspectors assess and enforce water quality and erosion control measures during the construction phase.

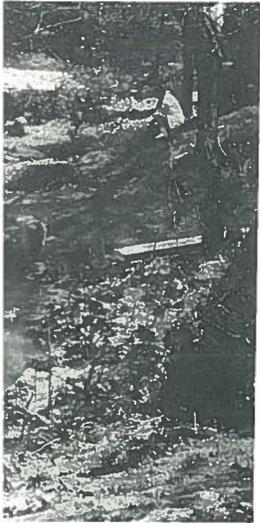
Other components of the project include an agricultural nonpoint source assessment, development of stormwater retrofitting alternatives for existing urbanized areas, public education/involvement in watershed management planning, and an assessment of streambank and lake shoreline conditions.

During the summer of 1992, NIPC staff evaluated the physical and biological conditions of Sequoit Creek. The on-site stream survey documented channel modifications, eroded banks, locations of point discharges, water and sediment quality, as well as habitat conditions for aquatic and terrestrial organisms. Beyond its use in this project, the stream survey will be helpful to the Lake County Stormwater Management Commission in its identification of stream problems and stormwater management needs.

For more information about the project, call the Lake County Soil and Water Conservation District at 708/223-1056, or contact NIPC's Natural Resources Department.

Control Activities

Demonstration Project Evaluates Innovative Stream Maintenance and Streambank Stabilization Approaches



Urban stream channels tend to accumulate excessive debris and vegetation which may obstruct flows and cause flooding problems. Many urban streams also suffer from severe bank erosion caused by high flow velocities and inappropriate

channel modifications. Traditional solutions to these problems are sometimes very expensive and may damage sensitive habitats and impair water quality.

With Section 319 funding from the U.S. EPA, NIPC assisted the DuPage County Department of Environmental Concerns, Stormwater Management Division in the evaluation of several stream management demonstration projects. The principal objective was to evaluate the effects of innovative stream maintenance and streambank stabilization approaches on water quality and stream uses.

Stream Maintenance

Many urban stream channels are overgrown with non-native trees and shrubs, such as buckthorn and multiflora rose. These species are generally undesirable because they shade out native understory plants, contribute excessive woody debris to the stream, and provide poor aquatic habitat. Stream maintenance demonstration sites were selected on two small streams, Winfield Creek and Sawmill Creek. The objective was to carefully remove channel debris, selectively thin undesirable woody vegetation, and reintroduce native non-woody vegetation. This approach involves a substantial first-time maintenance effort followed by routine inspection

and upkeep by landowners or local governments. This proactive approach can be contrasted with a more traditional reactive approach in which intensive maintenance may be done on an irregular basis, perhaps once every 30 years, often in response to a major flood.

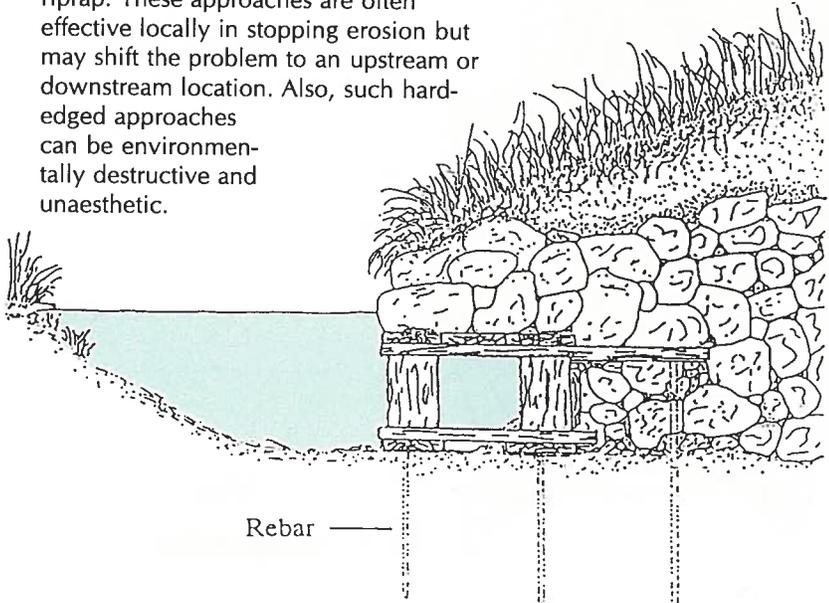
The maintenance approach demonstrated in this project has several advantages. By opening portions of the channel to sunlight, native grasses and wetland plants can reestablish along streambanks. These native plants are more effective at filtering pollutants, provide better habitat for fish and other aquatic life, and can provide effective stabilization of streambanks. Also, removing undesirable woody species eliminates the source of much stream debris and reduces the stock of twigs and limbs used by beavers in building obstructing dams. Over the long run, with effective routine maintenance, converting streamside vegetation to native grasses interspersed with desirable trees can significantly reduce stream maintenance costs.

Streambank Stabilization

When confronted with severely eroding streambanks, land owners and local governments have traditionally resorted to expensive engineered solutions such as steel or concrete retaining walls or riprap. These approaches are often effective locally in stopping erosion but may shift the problem to an upstream or downstream location. Also, such hard-edged approaches can be environmentally destructive and unaesthetic.

DuPage County selected several innovative alternatives to address severe channel erosion along Glencrest Creek in Glen Ellyn. These alternatives, classified under the general category of soil bioengineering, rely heavily on native vegetation to stabilize eroded areas. Deep-rooted grasses and shrubs are used in combination with simple structures such as lunkers (see figure). These approaches were very successful in Glencrest Creek as well as another demonstration project in the Waukegan River in Lake County. Beyond correcting an erosion problem, vegetative stabilization can enhance habitat for wildlife and fish and improve water quality.

The key to successfully implementing effective stream management programs is public education. DuPage County has produced two informative brochures: *Living on a Stream*, and *Stream Corridor Landscaping*. These brochures, available from the Department of Environmental Concerns, are useful to local government officials, developers, and streamside property owners. For a more technical discussion, the *DuPage County Stream Maintenance and Streambank Stabilization Demonstration Project Report* is available from NIPC's Publications Department.



Lunkers were used to prevent channel erosion in Glencrest Creek, DuPage County and the Waukegan River in Lake County.

Rebar ———

Lake Michigan Stormwater Pollution Control Program

A Watershed Inventory for Lake County

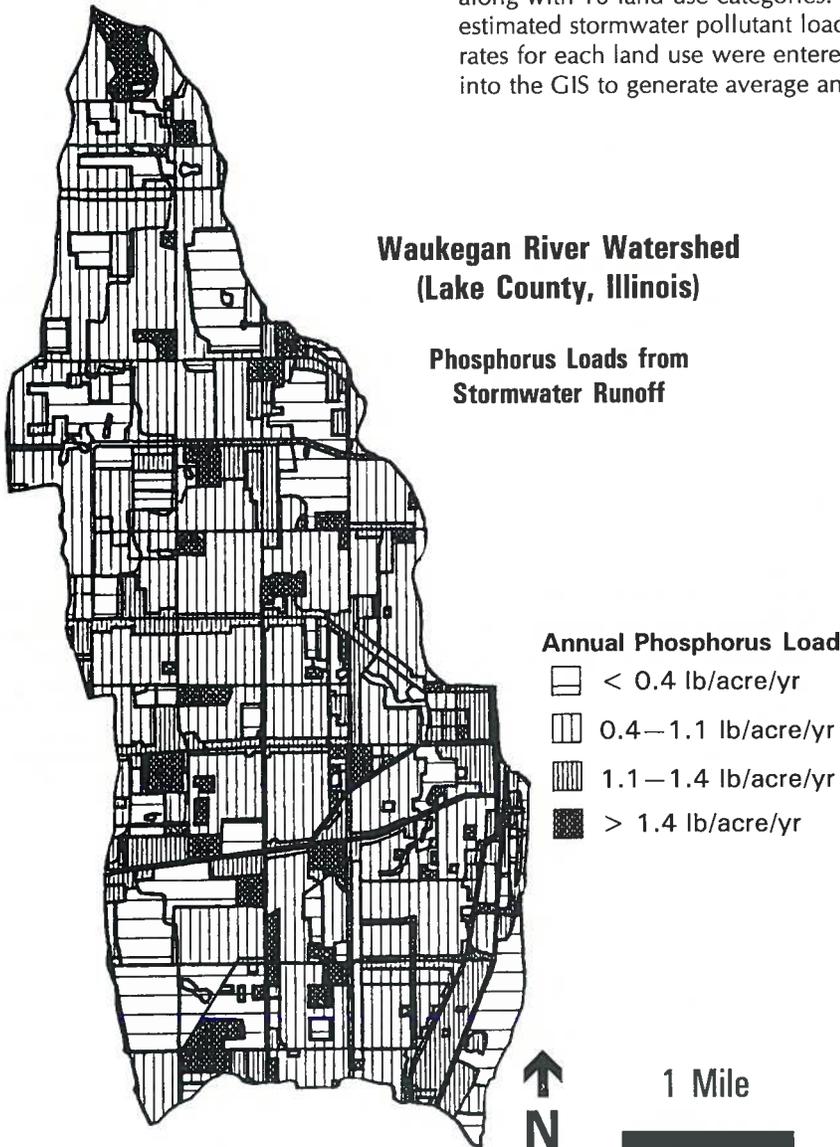
The Lake County Stormwater Management Commission, with the assistance of NIPC staff, is conducting an inventory to identify sources of land-based pollution transported by stormwater runoff to one of northeastern Illinois' most treasured natural resources: Lake Michigan. This inventory was designed to utilize the capabilities of Lake County's and NIPC's Geographic Information Systems (GIS). Subwatershed boundaries were delineated for Kellogg Creek, Dead River, Waukegan River, Pettibone Creek, and the Highland Bluff Ravine system, and then entered into the GIS along with 10 land use categories. Next, estimated stormwater pollutant loading rates for each land use were entered into the GIS to generate average annual

stormwater pollutant loads from each subwatershed. A map displaying relative pollutant loading rates was produced (see figure). This type of mapping can be used to target stormwater pollution abatement efforts to particular land use areas where loading rates are the highest.

The inventory also identifies storm sewers serving industrial and commercial areas, since these areas often convey a disproportionate share of toxic compounds and other pollutants. In addition to contributing contaminated stormwater, national studies have shown that old industrial and commercial areas often contain illicit connections to storm sewers from non-storm drains. These illicit connections can cause direct discharge of untreated sanitary and process wastes to sensitive waterbodies such as Lake Michigan. The watershed inventory approach is a low-cost approach for identifying potential pollution problems within a watershed. It also provides useful information for designing cost-effective programs for water quality sampling and stormwater pollution abatement.

Waukegan River Watershed (Lake County, Illinois)

Phosphorus Loads from Stormwater Runoff



New Regional Land Use Inventory Can Benefit Natural Resource Evaluations

A new program at NIPC of tremendous potential benefit to natural resource and environmental analyses is the regional land use inventory scheduled for completion in December 1993. This inventory is currently being performed for the entire six-county northeastern Illinois region with a minimum level of resolution of about 2.5 acres. This land use inventory will be loaded onto NIPC's Geographic Information System and will serve as a valuable resource for watershed water quality analyses such as computation of stormwater pollutant loads. This regional land use inventory also will allow NIPC to monitor changes over time in important land uses such as wetlands, vacant parcels available for development, and open space.

1992 Volunteer Lake Monitoring Program

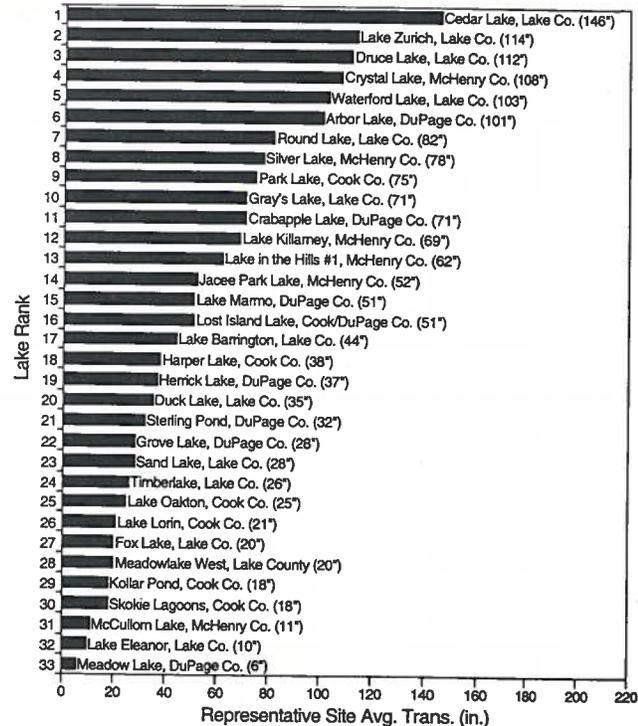
The Illinois Volunteer Lake Monitoring Program (VLMP) marked its 12th season in 1992. Of the 134 lakes participating in the program statewide, 33 were in the northeastern Illinois region, involving 50 volunteers. In addition to monitoring lake water clarity, volunteers at 12 lakes also collected water quality samples that were analyzed for nutrients and suspended solids. NIPC continued to serve as program coordinator for the region providing volunteer training, technical assistance, educational materials, and an annual summary report.

The accompanying figure presents lake ranking by average annual transparency for the 1992 monitoring season. Cedar Lake in Lake County exhibited the greatest average Secchi disc transparency of 146 inches. Lake Zurich and Druce Lake, both also in Lake County, followed with 114 and 112 inch average transparencies, respectively. Crystal, Waterford, and

Arbor Lakes also averaged greater than 100 inches transparency. The lowest average clarity of 6 inches occurred at Meadow Lake in DuPage County (due to substantial algal growth). Compared to the other participating lakes statewide, Cedar Lake ranked fifth, Lake Zurich eighth, and Druce Lake ninth. Snake Den Hollow Lake in Knox County in western Illinois exhibited the greatest average clarity of 243 inches. Eleven of the top thirty lakes in the state (average clarity of at least 64 inches) were in the northeastern Illinois region. However, eight lakes in northeastern Illinois were among the thirty lakes with lowest average transparency (22 inches or less).

More information on the VLMP and copies of the 1992 VLMP Regional Report (as well as previous years' reports) are available from NIPC's Natural Resources Department.

Northeastern Illinois Lake Rankings — 1992
lakes monitored four or more sampling periods



1992 Lake Water Quality Assessment Program

NIPC's Natural Resources Department, in cooperation with the Illinois Environmental Protection Agency, conducted an assessment of 35 publicly owned/public access lakes in the northeastern Illinois region. Lakes selected for this assessment focused on those about which little information was previously known. Together with water and sediment quality samples collected during the summer of 1992, information was gathered on lake morphology, hydrology, watershed and shoreline use, and lake and watershed uses and management. The data were used to identify the major and minor sources and causes of pollutants as well as the extent of biological and recreational use impairment. A report summarizing each lake's chemical (water and sediment), physical, and lake assessment information will be available in late summer 1993. To request a copy of the summary report, call the Natural Resources Department at NIPC.

Retrofitting Stormwater Detention Basins to Improve Water Quality

Most older stormwater detention basins were designed only to control flooding and do not include the features being built into modern basins to address the water quality impacts of stormwater runoff. Many of the older basins are also showing signs of malfunction or degradation due to poor design and deferred maintenance.

With the cooperation and assistance of local government officials, NIPC has identified detention basins in Flossmoor and Addison which will be retrofit to improve their performance as well as

their appearance. The retrofit site in Flossmoor serves both residential and commercial areas. Construction drawings are complete for the Flossmoor basin and construction is scheduled for August 1993. The Village of Addison recently signed an agreement with NIPC to retrofit a basin in an industrial park. Design of detention modifications in Addison is proceeding and construction should occur in the fall. The retrofit project is funded by a Section 319 grant with local match provided by the participating municipalities and NIPC.

Conference Highlights

There was no "foolin' around" on April Fool's Day 1993, as people from all over the country (including many from northeastern Illinois) convened in Chicago for nearly a week to learn and share the latest information at the **National Conference on Urban Runoff Management**. The event was sponsored and coordinated by NIPC, together with the U.S. EPA, USDA - Soil Conservation Service, the U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration. Over 360 people representing municipalities, regional/state/federal agencies, and consulting firms attended.

Two of the most advanced stormwater management programs in the country were highlighted during several presentations: the State of Delaware's Sediment and Stormwater Management Program, and the State of Florida's Stormwater Management Program. Delaware's program staff have found that one key to an effective stormwater program is statewide enforcement of erosion control regulations. However, the high cost of inspection was creating a financial drain on the State budget. To alleviate the problem, Delaware shifted the burden by requiring that all contractors provide their own inspector for construction jobs. The inspectors must be certified by the state through attendance at a training course, and the inspectors are generally third parties—not on the contractor's payroll. The inspector documents site conditions on a daily basis and must provide a report to the State. Failure to accurately report site conditions can result in revocation of an inspector's certification.

In Florida, where stormwater management for water quality has been required for almost fifteen years, there is a high level of public awareness of stormwater issues. Public hearings for new developments draw considerable interest in stormwater management concerns. Public education highlighting the

value of water resources, particularly water quality, has led to greater support and a demand for proper protection, including the adoption of statewide stormwater regulations.

A consistent theme of the innovative state programs was the need for a comprehensive approach that includes a regulatory program, effective public education and technical assistance, and watershed planning. Planning needs to be done on a watershed basis so that the resources to be protected can be identified and the constraints to achieving full use of those resources can be assessed. Watershed level planning also allows planners to assess the implications of different land use or regulatory policy decisions and tailor those policies to the specifics of the watershed.

Though weary from nearly 25 hours of intensive training, conference participants felt the event was quite worthwhile. They left the conference site enthusiastic and ready to tackle their own urban runoff challenges back home.

For the sixth consecutive year, NIPC also coordinated and cosponsored the **National Conference on Enhancing the States' Lake Management Programs** in May 1993. Conducted in partnership with the U.S. EPA's Clean Lakes Program and the North American Lake Management Society, this annual gathering brings state program staff together with the leaders from the country's statewide lake management organizations. This year's event focused on strengthening local lake and watershed protection efforts through instructional presentations and interactive workshops. Greg Searle, president of our state's own Illinois Lake Management Association, facilitated a workshop on building more effective statewide lake management organizations.

Many residents and local agency staff from northeastern Illinois joined hundreds of other lake enthusiasts from across the state at the **Illinois Lake Management Association's 8th Annual Conference** in St. Charles (April 22-24, 1993). NIPC's Natural Resources Department staff served as Conference Coordinator and Program Chair for the event, which emphasized comprehensive approaches for lake management. Hands-on field demonstrations of shoreline vegetation plantings and lake monitoring strategies were a big hit with conference attendees.

NIPC staff also coordinated the **Assessment and Treatment of Contaminated Sediments in the North Branch Chicago River** conference for the U.S. Department of Interior-Bureau of Mines. The conference was held in October 1992 at the Chicago Botanic Garden, and served as a public outreach and technology transfer vehicle for the Bureau of Mine's ongoing research into contaminated sediments in the Chicago River waterway. Nearly 200 citizens, researchers, local government staff, and public advocacy organization representatives were in attendance.

New Tools for Urban Best Management Practices

One of the constraints often cited in implementing effective water quality controls for new urban development is the lack of effective training and technical assistance materials. In response to this problem, two new tools have been developed with Section 319 funding from U.S. EPA and matching funds from several county stormwater committees, soil and water conservation districts and NIPC.

The first is an 18-minute video entitled ***Erosion and Sediment Control: Procedures and Practices for Construction Sites***. The video describes the basic concepts and procedures for minimizing the effects of erosion, specifically addressing construction site planning and design, soil stabilization, sediment and runoff controls, and site inspection and maintenance. It highlights specific control practices which are most appropriate in northeastern Illinois. Copies of the video are available from NIPC's Publications Department for \$10.50.

Also developed was a course curriculum for ***Designing Stormwater Best Management Practices in Northeastern Illinois***. The curriculum begins with an overview of urban stormwater impacts and BMPs and presents the basic concepts of stormwater hydrology, hydraulics, and water quality. The curriculum next describes the importance of effective site planning and design. The bulk of the curriculum focuses on specific stormwater drainage and detention BMPs, including: filter strips, vegetated swales, infiltration trenches and basins, filtration devices, and various detention designs. For each of the BMPs, information is presented on effectiveness, site suitability, design and construction, cost considerations, and maintenance. The curriculum concludes with discussions of BMP systems and retrofitting. All of these topics are documented in a detailed course notebook.

The curriculum was presented in a 3-day course attended by over 55 engineers and local government officials in April 1993. This first course was instructed by BMP experts from Delaware and Florida and by NIPC staff. A second offering of the course is tentatively planned for the fall of 1993. Civil engineering continuing education units will be awarded to course participants.

For those interested in a less detailed treatment of urban BMPs, NIPC's ***Best Management Practice Guidebook for Urban Development*** describes practices for site planning and design, soil erosion and sediment control, stormwater drainage and detention, and protection of waterbodies and wetlands. This 60-page illustrated guidebook is available from the Publications Department for \$6.00.

Water Resources Committee Level I and II Review Actions JULY 1, 1992—JUNE 30, 1993

WQ No.	Applicant	Request	Finding
92-WQ-016	Village of Bolingbrook	FPA* Amendment	Partial Support
92-WQ-041	City of Wood Dale	FPA Amendment	Non-Support
92-WQ-042	City of Waukegan	FPA Amendment	Support
92-WQ-047	Village of Antioch	Plant Expansion	Support
92-WQ-058	Village of Plainfield	FPA Amendment	Non-support
92-WQ-062	Villages of Roselle/Hanover Pk	FPA Amendment	Support
92-WQ-063	Good Shepherd Hospital	FPA Amendment	Support
92-WQ-066	City of Joliet	FPA Amendment	Support
92-WQ-067	Village of Carpentersville	FPA Amendment	Support
92-WQ-068	Village of Schaumburg	Facility Plan Review	No Objection
92-WQ-076	Village of Green Oaks	FPA Amend.-Applicant Withdrew	N/A
92-WQ-081	City of Crystal Lake/LITH S.D.	FPA Amendment	Support
92-WQ-082	Lake in the Hills Sanitary District	Level I FPA Amendment	Non-support
92-WQ-083	Village of Antioch	Level I FPA Amendment	Non-support
92-WQ-084	Village of Round Lake Beach	FPA Amendment	Support
92-WQ-086	DuPage Co. Dept. of Environ. Conc.	FPA Amendment	Support
92-WQ-093	Village of Fox Lake	FPA Amendment	Support
92-WQ-094	Village of Channahon	FPA Amendment and New Plant	Support
92-WQ-096	Village of Lindenhurst	Level I Est. FPA & Plant Exp.	Partial support
92-WQ-102	Village of East Dundee	FPA Amendment	Support
92-WQ-105	Village of Wilmington	FPA Amendment	Support
92-WQ-106	City of Crest Hill	Plant Expansion	Support
92-WQ-107	Village of Lake Zurich	FPA Amendment	Support
92-WQ-109	Lake in the Hills S.D.	FPA Amendment	Support
93-WQ-004	Metro Utility Company	Establish FPA and New Plant	Non-support
93-WQ-006	Wheaton Sanitary District	FPA Amendment	Support
93-WQ-007	Village of Bolingbrook	Plant Expansion	Support
93-WQ-009	City of West Chicago	FPA Amendment	Support
93-WQ-010	Mill Creek Water Reclamation District	Land Treat. Sys.-Appl. Withdrew	N/A
93-WQ-012	Lake County Dept. of Public Works	Level I New Regional Plant	Support
93-WQ-015	North Shore Sanitary District	Level I FPA Amendment	Non-support
93-WQ-016	Village of Vernon Hills	FPA Amendment	Support
93-WQ-017	Village of Round Lake Park	FPA Amendment	Partial Support

* Wastewater Facility Planning Area

For further information regarding Water Resources Committee review actions, please contact the following individuals through NIPC's Project Review Department: Deborah Washington, Director of Project Review; Penny Wenstrom, Assistant Planner; and Sheri Jendra, Assistant Planner.



northeastern illinois planning commission

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Northeastern Illinois is diverse in its land use and complex in its political structure. It has some of the most productive farms on earth—also one of the world's greatest cities. It contains 3,714 square miles of land and 38 square miles of water. It is home to 7 million people, organized in more than 1,250 units of government.

In 1957, following a decade of rapid urbanization in the Chicago suburban area, the Illinois General Assembly created the Northeastern Illinois Planning Commission (NIPC) to conduct comprehensive planning for the six-county greater Chicago region.

The Commission has three statutory charges: conduct research and collect data for planning; assist local government; and prepare comprehensive plans and policies to guide the development of the counties of Cook, DuPage, Kane, Lake, McHenry and Will.

By necessity, regional planning deals with general development policies not local land use detail. NIPC supports and coordinates county and municipal planning. The Commission has advisory powers only and relies upon voluntary compliance with its plans and policies.

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Commissioner

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- Ruth K. Kretschmer**,
Commissioner, Illinois Commerce Commission
- Donna P. Schiller**,
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- Raymond Semplinski**, *Will County Board*

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