1.0 Introduction

The purpose of this Lakewide Management Plan (LaMP) 2002 is to provide:

- An executive summary of the status of the Lake Michigan ecosystem;
- A report on the progress in achieving the Lake Michigan goals described in LaMP 2000 and examples of significant activities completed in the past two years;
- A summary of the current Lake Michigan mass balance data and findings;
- Links to more detailed information in LaMP 2000 or other sources;
- An opportunity to comment on targets and plans for pollution reduction and ecosystem restoration;
- A proposal to identify additional pollutants to be addressed by the LaMP in the future.

What is the Status of the Lake?

"Lake Michigan is an outstanding natural resource of global significance, under stress and in need of special attention." LaMP 2000

Since the release of LaMP 2000, several key indicators point to the continuing concern for the health of the ecosystem.

- Last year's beach season exhibited a growing number of beach closings.
- Studies revealed that a critical layer of the Lake Michigan aquatic food web appears to be disappearing, and with the discovery of two new aquatic nuisance species–there are now a total of 160 in the Great Lakes ecosystem–the integrity of the food web of Lake Michigan is in question.
- Mercury in fish is such a prevalent problem that 41 states now have mercury fish advisories, and a national advisory has been issued for certain ocean fish pointing to a problem of global proportions.
- Climatic pattern changes, whether temporary or permanent, are lowering lake levels as well as raising concerns about groundwater and lake interaction and diversion.

The Lake Michigan-Mississippi River basin divide: Chicago Avenue west of East Avenue in Oak Park, Illinois
Photograph by Jeffrey E. Edstrom

- Following the September 11, 2001 terrorist attacks, the issue of protecting the lake's vast supply of fresh drinking water has become a higher priority.

Despite these concerns, Lake Michigan supports many beneficial uses. For example, it provides drinking water for 10 million people; has internationally significant habitat and natural features; supports food production and processing; supplies fish for food, sport, and culture; has valuable commercial and recreational uses; and is the home of the nation's third-largest population center. Furthermore, significant progress is being made to remediate the legacy of contamination in the basin. Specifically, ongoing actions to restore the Areas of Concern (AOC) have been successful and are outlined in Appendix B.

Background on the LaMP

Under the Great Lakes Water Quality Agreement (GLWQA), as amended in 1987, the United States and Canada agreed " to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem." To achieve this objective, the parties agreed to develop and implement, in consultation with state and provincial governments, LaMPs for open waters. In the case of Lake Michigan, the only one of the Great

Door County, Wisconsin, Lake Michigan Lakeshore
Photograph by Karen Holland, EPA*

Lakes wholly within the borders of the United States, the Clean Water Act (Section 118c) holds the U.S. Environmental Protection Agency (EPA) accountable for the LaMP.

Work on the Lake Michigan LaMP began in the early 1990s with a focus on critical pollutants affecting the lake. At that time, monitoring data showed that point source regulatory controls established in the 1970s and 1980s were reducing the levels of persistent toxic substances such as polychlorinated biphenyls (PCB), DDT, and other pesticides. Monitoring results also indicated that nonpoint sources of pollution such as runoff and air deposition, as well as aquatic nuisance species, were stressing the Lake Michigan ecosystem. The LaMP states that "pathogens, fragmentation and destruction of terrestrial and aquatic habitats, aquatic nuisance species, uncontrolled runoff and erosion are among the stressors contributing to ecosystem impairments."

It has been documented that core regulatory programs at the federal, state, tribal, and local levels have effectively controlled many pollutants. Increased water quality protection is now being addressed with the adoption of higher water quality standards for the Great Lakes basin by each Great Lakes state, with the goal of having the new standards reflected in all permits by 2006. What remains is a set of difficult, persistent, and multifaceted problems. In response, agencies must develop new tools, refocus their strategies and methods, and continually obtain new data. As the 1994 State of the Lakes Ecosystem Conference reported, "governments have traditionally addressed human activities on a piecemeal basis, separating decision making on environmental quality from decision making on natural resources management or on social or economic issues...." In addition, decisions at different levels of government or across political boundaries are being made unilaterally without regard to watershed or ecosystem alignment.

What is LaMP 2000?

The publication of LaMP 2000 was the beginning of a basinwide dialogue on which pollutants and stressors should be prioritized for control, what reduction targets should be applied to them, and which ecologically rich areas should be identified for restoration and protection. Some issues, such as aquatic nuisance species, legacy sites, and drinking water protection, require immediate attention. Others will continue to be the subject of public dialogue, while still other issues may arise that require additional research. In 2000, the Binational Executive Committee determined that an adaptive management approach would guide the LaMP process, making it an iterative approach. This status report provides new information, responds to input received, and sets targets and objectives for public comment.

What was Accomplished and What Challenges Remain?

Areas that were highlighted in LaMP 2000 and have been accomplished include the following:

- Setting targets for reduction of critical pollutants and stressors,
- Reviewing the LaMP list of contaminants and stressors,
- Filling data gaps, including the Lake Michigan Mass Balance Project,
- Identifying ecologically rich areas and habitats,
- Developing the concept of the area of stewardship, and
- Convening public conferences and workshops for development of a Total Maximum Daily Load (TMDL) strategy, beach management, and monitoring issues.

Sailing Along the Milwaukee, Wisoncion Shoreline of Lake Michigan
Photograph courtesy of the Lake Michigan Federation*

Progress made on accomplishing these objectives is outlined in this status report. More detailed sections on TMDLs, mass balance, and adaptive management implementation will become supplements to LaMP 2000 by 2003.

Areas of LaMP Work that Remain a Challenge

Finalization of a monitoring plan and prioritization of indicators are still in progress. A draft monitoring plan was issued along with a set of recommendations in August 2000. To prioritize indicators and gather missing data, two major initiatives have begun that are focused on wetlands and the importance of the "coastal area." The results of these efforts will provide not only new data but also refined indicators for wetlands by 2004, and the LaMP will utilize this work in finalizing a set of LaMP indicators.

What is the LaMP? How and by Whom is it Used?

The LaMP issued in April 2000 is both a large reference document and a set of iterative proposals or strategic agendas for remediating past errors and achieving sustainable integrity in the Lake Michigan basin ecosystem. It was prepared collaboratively and is designed to be used by any number of Lake Michigan entities or individuals. See the back cover of this document for a list of Lake Michigan partners who collaborated on the LaMP.

The LaMP document is being utilized as a guide for decision making on policy issues and to help guide funding like EPA's Coastal Environmental Management Program and the Great Lakes National Program Office grant process. At the state level, for example, Michigan has utilized it for the Clean Michigan Initiative grant program. A number of universities are using it as a text book. Results from grants and research provide the information used in determining the lake status as reported in this 2002 status report.

How is the Process Utilized?

The list of goal, subgoals and activities have produced projects like the Cook County PCB/ Mercury Clean Sweep Project. Other issues have highlighted the need to convene and train managers from around the basin resulting in sessions on the Federal Beach Bill and a number of monitoring conferences. LaMP partners have also participated in the TMDL strategy discussion. For education and outreach, materials have not only been produced, but distribution opportunities have been supported like the State of Lake Michigan 2001 Conference and the Making Lake Michigan Great Boat Tour.

The goal of going beyond regulation requires a focus on ecosystems, partnerships and innovation, shared information, and the future.

A Focus on Ecosystems

In 1995, the Federal Interagency Ecosystem Management Task Force defined an ecosystem as "an interconnected community of living things, including humans, and the physical environment with which they interact. As such, ecosystems form the cornerstone of sustainable economies." With regard to ecosystem management, the Task Force explained that "the goal of the ecosystem approach is to restore and maintain the health, sustainability, and biological diversity of ecosystems while supporting sustainable economies and communities. Based on a collaboratively developed vision of desired future conditions, the ecosystem approach integrates ecological, economic, and social factors that affect a management unit defined by ecological–not political–boundaries."

In 1998, the Lake Michigan Management Committee adopted the ecosystem approach. The significance for the Lake Michigan LaMP was the intent to address not only the 10 areas that had been formally designated AOCs by the 1987 GLWQA amendments, but also other areas that were responsible for impairing the lake's ecosystem. The prime example was the Chicago area. Because of the rerouting of the Chicago River into the Mississippi River system, Chicago's surface water has been diverted out of the basin; however, groundwater from the Chicago area has not been diverted, and the city's large airshed has been shown to be a source of pollutants that are deposited in and affect the lake.

A Focus on Partnerships and Innovation

As the LaMP 2000 points out, this framework "also develops partnerships of organizations brought together to solve problems too large or complex to be dealt with by one agency with a limited mission. This approach also has the potential to leverage and direct local, state and federal, and private resources into a coordinated effort. The challenge is to create the framework for participating organizations to contribute their expertise and resources, often on an uneven basis, but in a manner that allows all partners to participate in the decision making on an even basis."

Nature Class at Chiwaukee Prairie, Kenosha, Wisconsin
Photograph courtesy of EPA Region 5*

A Focus on Shared Information

A key to engaging the necessary partners is a common, accessible, and scientifically sound body of knowledge. Lake Michigan protection and restoration requires open dialogue between academia and government agencies, as well as a collaborative monitoring plan to provide a current database. Reporting of current data and conclusions to the public is an important component of this system. This component presents many challenges, as data quality plans improve data accuracy but hinder the speed of reporting. Current management decisions are often made with gaps in both data and interpretation. These gaps may lead to incorrect problem assessments or incorrect response actions. The Lake Michigan LaMP has formed a basinwide coordinating and monitoring council to coordinate and promote common protocols and comparability in monitoring. The goal is to facilitate data sharing across agencies as well as among academic and research disciplines. Lake Michigan as a studied object is a moving target, and to provide adaptive management, there is a continuing need for monitoring and reporting of the lakes's current status.

A Focus on the Future: Sustainability and Stewardship

While partnerships can leverage resources, they also must be led and supported. Setting shared goals, objectives, and indicators in alignment helps to conserve resources but does not do away with resource needs. The interdependencies inherent in the ecosystem approach require a balance among three fundamental elements: environmental integrity, economic vitality, and sociocultural well-being. The ability of these elements to function in balance over time is one measure of sustainability. Complex ecological processes link organisms and their environment. These processes are often referred to as "ecological services" because they perform functions that combine to sustain life in the ecosystem. The significant natural features of Lake Michigan, such as its encompassing the world's largest collection of freshwater sand dunes, supporting 43 percent of the Great Lakes' large sport fishing industry, and providing drinking water for over 10 million residents, means billions of dollars not only to the economies of the four states that share the lake but also to the nation as a whole.

Yellow Moccasin, Gibson Woods, Indiana
Photograph by Karen Holland, EPA*

Organization of this LaMP 2002 Status Report

This document is intended to provide a status report on the health of the Lake Michigan ecosystem and a summary of the activities related to the Lake Michigan LaMP that have occurred during the last 2 years. Specifically, this report is organized to provide a summary status report on the subgoals identified by the Lake Michigan LaMP. These subgoals are stated as questions and are organized in the following 11 sections:

1. Can we all eat any fish?
2. Can we drink the water?
3. Can we swim in the water?
4. Are all habitats healthy, naturally diverse, and sufficient to sustain viable biological communities?
5. Does the public have access to abundant open space, shorelines, and natural areas, and does the public have enhanced opportunities for interaction with the Lake Michigan ecosystem?
6. Are land use, recreation, and economic activities sustainable and supportive of a healthy ecosystem?
7. Are sediment, air, land, and water sources or pathways of contamination that affect the integrity of the ecosystem?
8. Are exotic species controlled and managed?
9. Are ecosystem stewardship activities common and undertaken by public and private organizations in communities around the basin?
10. Is collaborative ecosystem management the basis for decision-making in the Lake Michigan basin?
11. Do we have enough information, data, understanding, and indicators to inform the decision-making process?

Overall, the finding of this report is that the status of achieving the goals is mixed. Some successes have been achieved in pursuing these subgoals – notably, drinking water quality is generally good throughout the basin– but there is much room for improvement in all the other areas. One objective of the LaMP is to foster activities that will cause the status of the subgoals to be "mixed/improving" by 2010 and "good" by 2020. A summary graphic at the start of each section of this report highlights the current and projected future status of each subgoal. In addition, following this introduction, an executive summary of this status report is provided in the form of a table. The table outlines the status of the subgoals organized under the strategic agendas outlined in LaMP 2000, significant activities completed in the last 2 years, and next steps to achieve the targets for each goal. Comments are requested on the next steps and proposed targets.

Following the status report, this document concludes with a proposal for updating the list of pollutants addressed under the LaMP. The LaMP has adopted an adaptive management approach that requires a continuing review of the LaMP goals and pollutants. The proposed process for updating the LaMP pollutant list along with an updated proposed list of pollutants for 2002 are provided in Appendix A and are being offered for comment. A summary of the status and progress in cleaning up the Lake Michigan Areas of Concern is provided in Appendix B.

Where Can I Find LaMP 2000? Where Do I Send Public Comments?

Lake Michigan LaMP 2000 is available on line at www.epa.gov/glnpo/michigan.html For a CD or printed copy of the LaMP or to make a public comment, contact Janice Carrollo at U.S. Environmental Protection Agency, Mail Code T-13J,

Executive Summary

Details on the Bullets Below are Found in the Individual Subgoal Sections

Strategic Action Agenda	Subgoals of the Lake Michigan LaMP	Significant Happenings 2000-2002	Near-Term Objectives 2002-2004	Long-Term Objectives
	END POINT SUBGOALS			
Human Health Actions that prevent human exposure to pollutants in the ecosystem and prevent or minimize sources	**Subgoal 1** We can all eat any fish ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020 **Subgoal 2** We can drink the water ***Status*** • Good in 2000 • Good in 2010 • Good in 2020 **Subgoal 3** We can swim in the water ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020	• Fish advisories for mercury by USFDA and for dioxin by Michigan and the Tribes • Grand Cal and Fox River AOC sediment cleanup plans underway • Sokaogon Chippewa Community Bans Burn Barrels • Grand Traverse Band of Ottawa and Chippewa Indians ban burning trash/garbage on tribal lands • TMDL workshops with regulators and stakeholders held • Mercury Phase-Out proposal proposed • Drinking water monitoring and reporting information available on the web • Great Lakes Beach Conference held • Beaches Environmental Assessment and Coastal Health Act of 2000	• By 2003, hold a mercury phaseout TMDL stakeholder meeting • By 2004, a TMDL Strategy will be developed for Lake Michigan. • By 2002, EPA will track and report on raw source water for Green Bay, Milwaukee, Chicago, and Muskegon. • By 2003, source water assessments (including security assessment) will be completed and reported. • By 2004, states will adopt criteria, standards, and monitoring programs for beach bacteria.	• By 2006, the Binational Toxics Strategy goals of 90 percent reduction of high-level PCBs, 75 percent reduction of total dioxin and furan releases, and 50 percent reduction of mercury use and release will be reached. • By 2007, concentrations of PCBs in lake trout and walleye will be reduced by 25 percent. These results are based on early Lake Michigan Mass Balance model runs. • By 2005, plans will be in place to address drinking water susceptibility to contamination. • By 2005, achieve a 30 percent reduction from the 1992 per capita loadings from combined sewer overflows (CSO), POTWs, and industry. • By 2005, 95 percent of high-priority beach waters (as defined by the state) will be monitored and a public advisory system will be in place. • By 2007, 90 percent of monitored high-priority beach waters (as defined by the state) will meet federal and state bacteria standards for more than 95 percent of the average swimming season.

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Strategic Action Agenda	Subgoals of the Lake Michigan LaMP	Significant Happenings 2000-2002	Near-Term Objectives 2002-2004	Long-Term Objectives
Restoration and Protection Actions that restore, enhance, and sustain the health, biodiversity, and productivity of the ecosystem	**Subgoal 4** All habitats are healthy, naturally diverse, and sufficient to sustain viable biological communities ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020	• Perch population still dropping • Northwest Indiana Advanced Identification of Wetlands Study underway • Keystone species (diporeia) in Lake Michigan food web vanishing • Supreme Court Ruling narrows wetland regulation • Wisconsin passes wetlands protection law • Piping Plover critical habitat designated by USFWS • Antrim County Wisconsin Wetland Protection ordinance • Wolf populations recovering • Habitat and Land Use Management Tool Box under development • Established a 1994 baseline for land cover • NIPC "Biodiversity Recovery Plan" document produced	• By 2002, a process for developing biodiversity recovery manuals for major ecosystem types in the Lake Michigan basin will be implemented. • By 2004, set targets for critical areas (fish spawning areas, dune and swale complexes, wetlands, alvars, prairies, and oak savannas) will be identified, mapped, and presented on line. • Habitat and Land Use Tool Box published, distributed • Utilize SOLEC and Duluth lab indicators and the Wetland Consortium to finalize Lake Michigan indicators • NACD stream buffer report release • A basin-wide buffer program will be developed • Utilize 2000 landsat data to update 1994 baseline land cover GIS • Critical areas mapped and presented on-line • By 2004, critical areas (fish spawning areas, dune and swale complexes, wetlands, alvars, prairies, and oak savannas) will be identified, mapped, and presented on line	• By 2005, no net loss of wetland acreage and function will be achieved in the basin. • By 2012, the 2004 target acreages will be enhanced, restored, or protected: 1,000 acres of spawning areas (islands under water reefs); (example acreages: 12,500 acres of system wetlands; 1,000 acres of isolated wetlands; 1,000 acres of dunes; and 37,500 acres of stream buffers - comments requested).

Executive Summary

Details on the Bullets Below are Found in the Individual Subgoal Sections

Strategic Action Agenda	Subgoals of the Lake Michigan LaMP	Significant Happenings 2000-2002	Near-Term Objectives 2002-2004	Long-Term Objectives
Sustainable Use Actions that concurrently sustain the health of the environment, the economy, and the communities of the ecosystem	**Subgoal 5** Public access to open space, shoreline, and natural areas is abundant and provides enhanced opportunities for human interaction with the Lake Michigan ecosystem ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020 **Subgoal 6** Land use, recreation, and economic activities are sustainable and support a healthy ecosystem ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020	• Governors and Premiers sign Great Lakes Charter Annex 2001 • Indiana moves into Coastal Zone Management program • Wisconsin Smart Growth act • Historic Agreement to Manage Fisheries in 1836 Treaty Waters • Economic valuation studies by Northeast-Midwest Institute, Lake Michigan Federation, and University of Wisconsin Sea Grant • Lake Michigan Potential Damages study continues in sixth year • USGS Lake Michigan Trends Project funded • USGS Pollutants of Concern list developed • Upland Michigan Land Use report • Federal two-year ban on drilling under the Great Lakes • Michigan moratorium on drilling under the Great Lakes	• By 2003, the LaMP will partner with coastal zone management programs in the Lake Michigan basin to ensure public access to the lake is balanced with protection of the ecosystem • Identify the need for additional facilities and access points (such as boat ramps canoe, and bicycle and walking trails around Lake Michigan). • Expand the Northeastern Illinois water trail to other states around Lake Michigan. • Publication and distribution of a Habitat and Land Use Management Tool Box that provides web-based information sources on environmentally sensitive habitat and land use management policies and programs. • Establishment of a Lake Michigan Watershed Academy to provide training to local planners and policy makers on balancing environmental concerns with economic and social activities in a watershed context. • Convening of a Brownfield to Greenfield Conference to highlight the need for redevelopment of facilities that have mild to medium contamination rather than developing greenspace. • Convene Planning Commissions to partner on identifying societal indicators and gathering data. • On-line habitat atlas operational. • Forum/Grand Valley State University boat tour to AOC ports	• Sustainable management of the basin

Executive Summary

Details on the Bullets Below are Found in the Individual Subgoal Sections

Strategic Action Agenda	Subgoals of the Lake Michigan LaMP	Significant Happenings 2000-2002	Near-Term Objectives 2002-2004	Long-Term Objectives
	MEANS (TO AN END POINT) SUBGOAL			
Remediation and Pollution Prevention Actions that achieve substantial pollution reduction by remediating sites, controlling pathways, preventing or minimizing sources	**Subgoal 7** Sediments, air, land, and water are not sources or pathways of contamination that affect the integrity of the ecosystem ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020 **Subgoal 8** Exotic species are controlled and managed ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020	• Lake Michigan Mass Balance (LMMB) findings published • PCB levels in lake trout achieving equilibrium • U.S. EPA Atrazine Reassessment initiated • IADN results consistent with LMMB findings • Bush administration announced climate change and "Clear Skies" initiatives • Toxic Air Emissions inventory released • U.S. EPA published Air Great Lakes Deposition (GLAD) Strategy • PCB/mercury Clean Sweep • Wisconsin mercury regulations • States act to control animal operations • New aquatic nuisance specie found in Lake Michigan • Michigan Ballast Water Bill • St. Lawrence Seaway Corporation to incorporate ballast water practices • Chicago River invasive species dispersal barrier installed • ANS Task Force and Great Lakes Panel on ANS continue work to control ANS • Great Lakes Governors ANS group created	• A mercury source reduction and sediment remediation strategy will be finalized. • Contaminated sediment sites will be reviewed and their status will be updated. • EPA will compile a report on nutrient contributions from the agricultural sector and on point sources during wet weather. • Fall 2003 State of Lake Michigan Conference will present updated mass balance results. • By 2004 and 2005, develop coordinated monitoring to provide a 10-year trend for the lake • Track and provide information on ANS developments as an important part of the LaMP education and outreach efforts. • By 2003, a multi-agency "SWAT" Team will be developed to respond to newly discovered invasive species with the latest control technology.	• By 2010, remediation of 50 percent of AOC sites • By 2020, remediation of 70 percent of AOC sites • By 2025, remediation of 100 percent of AOC sites • By 2010, vessels entering the Great Lakes will discharge ballast water free of invasive species.

Executive Summary

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Strategic Action Agenda	Subgoals of the Lake Michigan LaMP	Significant Happenings 2000-2002	Near-Term Objectives 2002-2004	Long-Term Objectives
Information Sharing, Collaboration and Stewardship Actions that provide data access and exchange, facilitate involvement, and build capacity	**Subgoal 9** Ecosystem stewardship activities are common and undertaken by public and private organizations in communities around the basin ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020 **Subgoal 10** Collaborative ecosystem management is the basis for decision-making in the Lake Michigan basin ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020	• Lake Michigan Forum developing Stewardship trust • State of Lake Michigan Conference held - November 2001 • Forum/Grand Valley State University "Making Lake Michigan Great Tour" continues to educate about Lake Michigan ecosystem during summer cruises • Great Lakes Strategy released in 2002 by U.S. EPA • Great Lakes Human Health Network established • Wingspread Accord signed • Volunteer Monitoring Conference March 2002	• Establish the Lake Michigan Watershed Academy • Publish additional education and outreach materials • Publish the habitat and land use management tool box • On-line habitat atlas will be operational • Hold FY 2002 State of Lake Michigan Conference • Convene a bi-state St Joseph Watershed conference on June 10 and 11, 2002 • Establish the Lake Michigan Watershed Academy • Hold a 2003 State of Lake Michigan conference • Take comments on proposed changes to Lake Michigan pollutant and stressor lists	• Clean up and delist AOCs • Implement the Lake Michigan Watershed Academy

Executive Summary

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Strategic Action Agenda	Subgoals of the Lake Michigan LaMP	Significant Happenings 2000-2002	Near-Term Objectives 2002-2004	Long-Term Objectives
Research and Monitoring Actions that monitor the ecosystem, reduce uncertainty, and inform our decisions	**Subgoal 11** We have enough information/data/understanding/ indicators to inform the decision-making process ***Status*** • Mixed in 2000 • Mixed/Improving by 2010 • Good by 2020	• LMMB project findings • Lake Michigan Monitoring Coordinating Council monitoring and assessment inventory • Lake Michigan Monitoring Assessment report released • Beach monitoring program (BEACH) created by U.S. EPA • BEC statement and monitoring conference • IJC/Delta Institute/Lake Michigan Forum Air Deposition Workshop • Great Lakes Wetlands Consortium consolidates wetland information • EPA/ORD wetlands indicators • LaMP pollutant list review • Beach Conference, web site, and manager's group	• Monitoring research and development will be presented for the critical pollutant Watch List. • A LMMB Study report will be prepared for each contaminant studied added to the LaMP 2000 online. • Progress will be made in prioritizing indicators for the lake and monitoring them. • The coordinated monitoring plan for the lake will be finalized. • LMMB Study findings will be documented and model runs will be completed.	• Special effort and emphasis on coordinated monitoring in the Lakes Michigan basin by 2004-05