

PLAN SUMMARY

INTRODUCTION

In 1996, Land and Water Conservation professionals throughout Wisconsin forged the County Land and Water Resource Management Plan concept. This was done partly in response to a state legislative call to “redesign” Wisconsin’s non-point source pollution abatement programs. The Land and Water Resource Management Plan concept grew out of the need to establish a process that ensured local decision-making and improved program delivery mechanisms. The process was to utilize local, state and federal funds with greater effectiveness toward the protection of land and water resources. In 1997, the Land and Water Resource Management Plan concept became law, as Chapter 92 of the Wisconsin Statutes was amended. This created a County Land and Water Resource Management Planning Program that is intended to 1) rely on a locally driven process for plan development and implementation; 2) maximize flexibility in how program funds are used; 3) foster comprehensive watershed-based efforts without excessive planning; 4) support innovation and cost effectiveness toward achieving objectives; 5) foster the “seamless” integration of programs and funding sources; and 6) establish a credible means to measure the extent to which planned objectives are achieved.

Chapter 92 is the enabling legislation that provides counties, through their Land Conservation Committees, the formal authority to develop a County Land and Water Resource Management Plan. This plan provides structured means that will integrate and leverage available programs, funds, and other resources to:

- Guide the process for resource management planning and decision making;
- Compile information for evaluating land and water resource conditions;
- Identify land and water related resource problems and priorities;
- Develop a multi-year work plan to address land and water resource problems by watershed;
- Strengthen partnerships with landowners, other agencies, municipalities, and organizations;
- Integrate efforts with other county and basin level Natural Resource Management Plans;
- Coordinate with Township and County comprehensive land-use planning efforts;
- Develop effective information and education strategies that will strengthen and maintain community support for the planned Land and Water Resource Management Plan goals and objectives; and
- Track progress toward the achievement of the plan’s goals and objectives.

The goal of the Milwaukee County Land and Water Resource Management Plan is to restore, improve, and protect ecological diversity and quality, and promote the beneficial uses of the land, water, and related resources found throughout the County. The Milwaukee County Land and Water Resource Management Plan was designed to assist agencies that manage land in protecting and improving water and land resources in Milwaukee County. Goals established in the plan will help guide County and other agency initiatives from 2007 to 2011, a five-year

period. The goals also provide the basis for funding those initiatives from various private, local, state, and federal sources. Used as a tool to guide and coordinate a variety of agencies and programs, the plan streamlines decision-making and program administration. The process to revise the plan for another five-year period will begin in 2010. Progress toward reaching plan goals will be evaluated each year.

A Summary Outline of the Milwaukee County Land and Water Resource Management Plan is presented below:

- Chapter 1.** Introduction
- Chapter 2.** Physical description of Milwaukee County and natural resource initiatives
 - Geography, population, climate, physiographic features
 - Geology and soils
 - Water resources
 - Groundwater resources
 - Surface water resources
 - Milwaukee River South Watershed
 - Menomonee River Watershed
 - Kinnickinnic River Watershed
 - Oak Creek Watershed
 - Root River Watershed
 - Lake Michigan Shoreline
 - Point source and nonpoint source pollution initiatives
 - Information management and distribution
- Chapter 3.** Land use trends, resource and issue identification
- Chapter 4.** Goals, objectives and work plan
- Chapter 5.** Progress and evaluation
- Appendices:** Project updates, completed goal evaluation forms, references

PUBLIC PARTICIPATION

Development of this plan involved identifying and prioritizing land and water resource issues of concern and strategizing ways to address them. Input from a wide variety of stakeholders and the public was sought concerning the individual goals and objectives of this plan (see Appendix 1 for more detailed discussion). Comments received from these stakeholders, which include Land & Water Basin Team Leaders in the Milwaukee River Basin, citizen advisory groups, the Wisconsin Department of Natural Resources (WDNR) and the Southeastern Wisconsin Regional Planning Commission (SEWRPC), were used to refine goals and objectives to better reflect current conditions and issues. The plan was approved by the Milwaukee County Board on April 13, 2006.

ASSESSMENT OF WATER QUALITY, SOIL EROSION, AND NONPOINT SOURCES

Milwaukee County waterways include five main watersheds, the Milwaukee River South, the Menomonee River, the Kinnickinnic River, the Root River, and Oak Creek (see Figure 4, page 10). The Lake Michigan Shoreline is considered a sixth watershed for purposes of this plan.

Three of the watersheds, Milwaukee River South, the Menomonee River and the Kinnickinnic River are part of the Milwaukee River Basin. Of these, only the Kinnickinnic River watershed is located fully within Milwaukee County. The Root River and Oak Creek watersheds are part of the Root-Pike River Basin. Complete discussions of water quality information for each of the watersheds are available within each respective, comprehensive water quality plan and/or basin report. Non-point sources of pollution in the county include eroding agricultural lands, eroding stream-banks and roadsides, erosion from developing urban areas, and runoff from established urban areas.

NONPOINT SOURCE POLLUTION CONTROL INITIATIVES IN MILWAUKEE COUNTY

State performance standards for agricultural and non-agricultural nonpoint pollution sources, developed by the Department of Natural Resources and the Department of Agriculture, Trade, and Consumer Protection, were set forth in 2002. The standards address methods for controlling sediment runoff at construction sites, managing stormwater, controlling nutrient runoff, and reducing cropland soil erosion.

Since Milwaukee County is entirely incorporated, each municipality within Milwaukee County is charged with implementing and enforcing the agricultural and non-agricultural standards. To implement the non-agricultural standards, municipalities have developed a Construction Site Erosion Control (CSEC) ordinance in accordance with state law. This ordinance details compliance, enforcement, and appeal procedures relating to the non-agricultural performance standards. Milwaukee County currently follows municipal ordinances relating to the non-agricultural standards when applicable. In addition to local requirements, on a construction site of greater than one acre, an appropriate construction site erosion control plan must be submitted to the Wisconsin Department of Natural Resources or the Wisconsin Department of Commerce for review and approval.

Each municipality is also responsible for implementing the NR 151 agricultural standards and prohibitions. Milwaukee County currently follows municipal ordinances relating to the standards and prohibitions when applicable (i.e., Milwaukee County Zoo operations, farmland owned by Milwaukee County). As Milwaukee County is entirely incorporated and farming makes up a small percentage of the overall land use, this plan focuses more on compliance with the non-agricultural standards than with the agricultural standards. However, ensuring that applicable operations are in compliance with the agricultural standards is still a priority for Milwaukee County.

In order to ensure that all croplands and agricultural operations in Milwaukee County are in compliance with the NR 151 agricultural standards and prohibitions, cost-share and technical assistance will be provided to all eligible farms, with preference given to priority farms and operations. Priority Farms/Operations are those that are non-compliant with the state prohibitions and performance standards, have received a "Notice of Discharge" (NOD), and are adjacent to sensitive water resource areas.

Identification of priority farms/operations may occur through a review of existing records, interagency consultation, and annual monitoring. Owners of fields/operations that are not in

compliance with the NR 151 standards will be notified following the annual monitoring. Milwaukee County staff will work with UW Extension, NRCS, and FSA staff to educate owners about Best Management Practices (BMPs), conservation initiatives, and cost share programs that can be used to bring their fields/operations into compliance.

INFORMATION MANAGEMENT AND DISTRIBUTION

Information sharing and educational outreach initiatives are critical to the County's long-term ability to protect natural resources. To be proactive in providing citizens, natural resource professionals, and the development community with the information needed for them to embrace environmental initiatives and make informed decisions, Milwaukee County developed a County-wide Geographic Information System (GIS) that contains all of the GIS data available within the County. This data is essential for planning for future development, protecting sensitive natural resources, and improving existing stormwater infrastructure. The data is expected to be made available to the general public via the municipal internet portals soon.

Training opportunities that provide up-to-date information and technologies related to stormwater and natural resource issues and regulations are vital for advancing progress toward meeting the goals in the Land and Water Resource Management Plan. Milwaukee County employees have worked with a variety of partners to host in-house workshops and public seminars covering stormwater issues. In addition, the County supports efforts by the University of Wisconsin Extension Service to conduct outreach and training related to natural resource issues.

LAND AND WATER RESOURCES: ISSUES AND CONCERNS

Most citizens in Milwaukee County believe that substantial social, economic and environmental change will occur over the next fifty years. All seem to want acquisition and protection of green and open space to bring them closer to their vision of a sustainable, desirable Wisconsin for their children. The Milwaukee County Department of Transportation and Public Works - Environmental Services/Land Conservation Department initiated the development of the initial Land and Water Management Plan by: gathering input from the Parks, Energy, Environment and Extension Education Committee; compiling results of public meetings initiated by the DNR in January and February 2000, with representation from local and state conservation and recreation organizations; collecting information from DNR questionnaire and citizen survey responses on the needs related to important natural resource issues; and reviewing the top issues identified and prioritized by Milwaukee River Basin conservation professionals.

Based on a review of issues characterized and prioritized by the groups referenced above, the top issues were identified for consideration (reference Table below). On-going dialogue with the public and stakeholders, such as Land & Water Basin Team Leaders in the Milwaukee River Basin, citizen advisory groups, the Wisconsin Department of Natural Resources (WDNR) and the Southeastern Wisconsin Regional Planning Commission (SEWRPC), has indicated that the top natural resource issues in Milwaukee County have not changed significantly since 2000. As such, the goals in this updated plan are similar to that of the initial plan. The objectives have

changed, since they build upon progress made over the past five years. They also reflect the issues that are currently at the forefront of resource management.

Top Natural Resource Issues Identified for Milwaukee County (2000)
<p>Loss of wetlands, woodlands, quality farmland, environmental corridors and other green space due to development pressure: need for preservation of unique natural areas; endangered, threatened and rare species preservation; habitat restoration and enhancement; loss of wetlands due to filling/development encroachment; loss and fragmentation of Environmental Corridors and wildlife habitat; protection and restoration of riparian areas; financial support for purchase of conservation easements, particularly for riparian areas.</p>
<p>Nonpoint Source Pollution Control: Need for buffers along waterways (perennial and intermittent streams); concern about surface water pollution (streams, rivers) caused by urban and suburban runoff pollution; urban storm water management; soil erosion from construction sites; flooding; contamination of sediment caused by excessive runoff; adoption of comprehensive stormwater management plans by all cities, villages, and towns; overall, need for improvement of water quality by controlling nonpoint sources of pollution; need for training and enforcement to assure more uniform erosion control ordinances.</p>
<p>Lake Michigan Shoreline: Lakeshore bluff erosion; beach erosion; shoreline recession; public access; shoreline erosion control measures.</p>
<p>Need for local, publicly-available natural resource education and information support programs, including GIS and a county web page: Need for informative web page to disseminate available GIS layers, current news, standards and educational materials related to local water quality issues in Milwaukee County; invasive and exotic plant identification and controls; and nuisance wildlife management control measures.</p>

SUMMARY OF WORK PLAN: GOALS, ACTIONS, BUDGET

The overall goals of this Milwaukee County Land and Water Resource Management Plan are to restore, improve, and protect ecological diversity and quality, as well as to promote the beneficial uses of its land, water, and related resources. To accomplish this, the specific goals of this Plan are to:

- Goal 1: Improve Water Quality through the Reduction of Sediment and Nutrient Delivery to Surface Waters in Milwaukee County.**
- Goal 2: Protect, Restore and Enhance Wetlands, Grasslands, Woodlands, Environmental Corridors, Quality Farmland, and Natural Areas, including those located within Milwaukee County-owned Parks and Open Spaces.**

Goal 3: Enhance Lake Michigan Bluff Protection Initiatives.

Goal 4: Effectively Use and Maintain the Existing Information Management Network, and establish a Land Information Web Portal to Distribute GIS Data.

The following work plan breaks these goals down into more detailed and readily measurable steps (in the form of objectives and actions) toward reaching each goal. Information and education initiatives are critical components of the objectives. Success in meeting resource goals requires that both citizens and Milwaukee County employees make behavioral changes to protect water resources. Individuals will not make these changes unless they understand the importance of water resources, the ways to protect those resources, and are aware of available assistance.

WORK PLAN IMPLEMENTATION, PROGRESS TRACKING, MONITORING AND EVALUATION

Satisfying these goals will meet the primary objective of this plan, which is to achieve a significant reduction in sediment delivery within the next 5–10 years, along with building a stewardship ethic into urbanization activities. The goals in this plan will be implemented over a five-year period beginning in 2007 and running through 2011. They represent priorities for land and water resource management for Milwaukee County. The individual objectives, detailed within the Milwaukee County Land and Water Resource Management Plan, provide a work plan with readily measurable steps toward reaching each goal.

To ensure successful implementation of the Land & Water Resource Management Plan, goals and objectives will be reviewed and evaluated several times throughout each year. Monitoring the improvement of the land and water resources of Milwaukee County will indicate the actual measure of success of the Land and Water Resource Management Plan. While there may not be dollars available for in-depth monitoring, monitoring programs are already in place. Milwaukee County will continue to work closely with partners who provide monitoring information and will encourage expansion of their monitoring programs.

CONCLUSION

Milwaukee County has a long-standing record of leadership and participation in natural resource protection and improvement, such as stream bank stabilization, establishment of environmental corridors and protection of floodplains. These natural resource protection and improvement measures have included prior plan development, program design and project implementation, which all emphasize cooperation and integration to get good value from the available funding.

Many of the goals referenced in this Plan are consistent with on-going efforts of existing local programs. Some of the objectives will be further developed in later years of the plan. Progress towards these goals will be subject to funding available from all sources, both County and otherwise. Adoption of the LWRMP by Milwaukee County makes it available as a guide for local municipalities who may wish to work cooperatively with the County on local projects.