

## Summary

In 1997, the Wisconsin State Legislature amended Chapter 92 of the Wisconsin State Statutes, requiring all counties to prepare a Land and Water Resource Management Plan (LWRMP). The intent was to develop a locally led planning process to address each County's unique natural resources and establishes a long-range set of goals, objectives, and actions to protect and restore those resources.

The original edition of the Racine County Land and Water Resource Management Plan was written in 2000. The 1<sup>st</sup> revision was approved in 2008 and 2<sup>nd</sup> revision was approved in 2013. This is the 3<sup>rd</sup> revision of this plan.

This 10-year workplan:

- Uses a locally led process for plan development and implementation
- Identifies local land and water resource objectives
- Establishes goals and objectives based on the resource concerns
- Develops a comprehensive program integrating existing and proposed resource programs
- Establishes partnerships between agencies, municipalities, and organizations
- Incorporates an information and education strategy
- Identifies a method to evaluate and monitor progress.

Public participation was used in the plan under the guidance of a Citizen's Advisory Committee. The committee was comprised of individuals that had natural resource, agricultural, or environmental backgrounds. The committee utilized their natural resource knowledge, combined with public participation surveys submitted by citizens, to develop the following goals.

The five goals established by the committee include:

- Reduce non-point source pollution, primarily cropland erosion, to improve water quality
- Utilize management and control of aquatic and terrestrial invasive species
- Prioritize and promote the repair of Lake Michigan bluff erosion, shoreline erosion, and streambank/ditch bank erosion
- Increase the awareness and provide further education of environmental stewardship to farmers, youth, elected officials and the general public
- Protect and preserve natural resources and environmental corridors

The Land and Water Resource Management Plan was organized into chapters to include charts, photos, and tables to help illustrate the resource base, current needs, planned actions and an implementation strategy. The chapters are as follows:

Chapter 1 – Introduction and Plan Development Process

Chapter 2 – Resource Assessment

Chapter 3 – Related Plans, Regulations and Programs

Chapter 4 – Goals, Objectives, Monitoring, Evaluation and Estimated Costs

The following represents a brief summary of each chapter to identify the major components of the plan.

## **Introduction and Plan Development Process**

The plan was developed under the recommendations of the Citizen Advisory Committee (CAC). The CAC included agency personnel, farmers, elected officials, municipal representatives, industry representatives, and environmental non-profit members. The CAC reviewed survey responses, analyzed the results, and provided input for local priorities to be included in the plan.

This chapter provides an overview of the planning process, the study area, the plan purpose, and plan content. Finally, the chapter identifies the Citizen's Advisory Committee members along with their titles and affiliation.

## **Resource Assessment**

The land and water resources of Racine County are susceptible to development, intensive farming, invasive species and other variable trends and elements over the next ten years. It is important to identify the soils and their production capability because this, combined with climate change, can determine locations dependent on soil health and regenerative agricultural systems. Secondly, the topography and geology of the County is taken into consideration for mineral extraction or other geologic characteristics.

The water resources are identified with this plan. Groundwater remains an important water supply and is generally protected by heavy clay in the central to eastern portion of the County. In the western portion of the county, sand and gravels create a higher potential for contamination.

Currently, a majority of the surface water resources are only partially meeting established water use objectives. Waterbodies listed as Section 303(d) waters include: Lake Michigan (near shore Racine, Wind Point, Myers Park Beach), and portions of the Root River, Fox River, Root River Canal, the Racine Harbor, the Pike River, the White River, the Des Plaines River, Eagle Creek, Husher Creek, Hoods Creek, the Kilbourn Road Ditch, Wind Lake, Waubeesee Lake, Tichigan Lake, Eagle Lake and a few unnamed tributaries. All water resources, including lakes, rivers, streams, ditches, groundwater, and wetlands are prioritized in this plan.

Terrestrial natural resources such as woodlands, natural areas and environmental corridors are to be protected due to their natural, recreational, historic and aesthetic value. These areas have been identified and should be preserved to maintain the overall quality of the environment.

## **Related Plans, Regulations, and Programs**

One of the first steps to developing this plan was to take into consideration a collaboration of inventory, collation, and review of recommendations of relevant previously prepared plans and reports. Accordingly, an important step in the planning process was a review of existing framework of an area-wide, local land use planning effort and related land use regulations. Chapter three represents a summary of that review.

## **Summary of the Goals and Objectives**

The CAC developed the five goals listed on the first page of this summary. No goal has a priority over another goal. Tables 12 through Table 16 list the planned actions, with measurable goals (**shown in bold**), to be accomplished by the Land and Water Conservation Division. The other planned actions listed may be part of the equation to assist with accomplishing the goals and work plan activities.

The first goal is to reduce non-point source pollution, primarily cropland erosion, to improve water quality. The Agricultural Performance Standards, Farmland Preservation Program, Nutrient Management Planning, the Animal Waste Management Ordinance and Livestock Siting are still effective regulatory methods to complete this task. A

successful plan can be accomplished through a combination of the standards and ordinances along with the priority farm strategy and continued monitoring.

An effective voluntary approach is to continue to work with the Watershed Protection Committee of Racine County, a producer-led group, to promote soil health and regenerative agriculture. This is done through workshops, field days, research plots, demonstrations, and informal meetings.

Finally, several State and Federal programs such as: SWRM, CREP, EQIP, CRP, TRM, CSP, Producer Led and any other grants funds can be used to assist with accomplishing this goal. Our office has established strong partnerships with the USDA's Farm Service Agency, Natural Resources Conservation Service, UW Extension, WI DATCP and WDNR to assist with completing this goal.

The second goal is to utilize management and control of aquatic and terrestrial invasive species. This includes youth activities, workshops, volunteer programs and the encouragement of plant removal or management.

The third goal is to prioritize and promote the repair of Lake Michigan bluff erosion, shoreline erosion and streambank/ditch bank erosion. The County will work with impacted municipalities to secure funding and find potential shoreline stabilization solutions. The LWCD will promote shoreline plantings and vegetative buffer zones for more natural plantings and an aesthetically native look. The LWCD will identify cost-share programs for funding and provide the Shoreline Stabilization Guide to Lake Association members and riparian owners.

The fourth goal is to increase awareness and provide further education of environmental stewardship to farmers, youth, elected officials and the general public. This outreach involves providing conservation information through newsletters, press releases, the County website, direct mailings, and social media. Also, the LWCD will continue to provide information through one-on-one contacts, phone calls, brochures and handouts related to all goals listed in this summary.

The final goal is to protect and preserve natural resources and environmental corridors. This includes utilizing conservation programs and environmental easements through planning efforts to protect natural resources. Other efforts include promoting buffer programs, groundwater recharge protection areas, and the protection of forestlands and woodlots. The proper management of shorelands, floodplains and wetlands are also included in the chapter, as well as appropriate reclamation of non-metallic mining sites.

### **Progress, Monitoring, Evaluation, and Estimated Costs**

Monitoring the progress and program effectiveness is a critical component of not only accomplishing our goals but protecting the environment to enhance and improve the quality of the life of citizens of Racine County. Automated tracking, using GIS, spreadsheets, erosion data and water quality data is a vital component to demonstrate improvements. Knowing the number of farmland preservation participants, permits issued, acres of conservation easements, inspections conducted, and non-metallic mines reviewed are easier to quantify, but just as important to track and realize trends with data.

Consistent and thorough monitoring and evaluations of conservation efforts is essential to this plan. Racine County completes an annual report to WI DATCP to quantify implementation of this plan. Data has been collected since the beginning of Racine County's first adopted LWRM plan. The LWCD will continue to improve tracking and reporting to show the effectiveness of accomplished activities and trends for focusing on new activities.

The total cost of current funding levels to implement this plan is listed on Table 17. Fully implementing the Racine County Land and Water Resource Management Plan will require additional staff and cost share resources. Therefore, outside funding sources will be sought and used whenever possible to assist with staffing or cost share to fully implement this plan.