

Chapter I. Introduction

Land and Water Resource Management Plan Background

In the mid-1990's, the Wisconsin Legislature was interested in redesigning the state's nonpoint source water pollution abatement programs in order to address certain program shortfalls and looming financial issues. In 1996, during discussions among state agencies and the Wisconsin Land and Water Conservation Board, the Wisconsin Association of Land Conservation Employees (WALCE) proposed a locally led process based on County Land & Water Resource Management (LWRM) Plans. The proposal was to have the state adopt minimum nonpoint pollution performance standards and each county would describe how they will implement the standards through a LWRM plan. The implementation of these plans would be supported by a larger base allocation of grant funds to counties, rather than the previous competitive, and sometimes duplicative state grant processes, including the Priority Watershed Program (DNR) and the Soil and Water Resource Management Program (DATCP). The LWRM planning concept is based on the principle that local leaders and residents are best suited to identify and resolve local natural resource problems.

The WALCE proposal received support from state and federal conservation agencies, the Wisconsin Land and Water Conservation Board and state legislators, and the LWRM planning concept was subsequently signed into law as part of 1997 Wisconsin Act 27 (the 1997-1999 Biennial Budget Bill). Act 27 directed the Wisconsin Department of Natural Resources (DNR) to develop administrative rules that establish agricultural and non-agricultural performance standards to reduce nonpoint source pollution and meet water quality standards. The Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) was directed to update Administrative Rule ATCP 50 to prescribe the conservation practices to implement the DNR performance standards and to redefine the grant programs available to counties to carry out their new duties.

LWRM plans are intended to function as a local planning process that assesses natural resource conditions and needs, guides decisions on how to meet water quality goals and conservation objectives, measures progress towards meeting those goals, and makes efficient use of local, state and federal resources. The initial round of "prototype" LWRM plans began in 1998, including Waukesha County, which was adopted by the County Board in 1999. The passage of 1999 Wisconsin Act 9 (1999-2001 Biennial Budget Bill) further amended state law by prescribing the minimum requirements of a LWRM plan, transferring county staffing grant funds from DNR to DATCP, and beginning the formal phase-out of the Priority Watershed Program. By 2002, all 72 counties in the state had approved LWRM plans prepared by following a guidance document produced by a statewide work team. In October 2002, after a contentious 5-year rule making process, a series of state administrative rules were finally promulgated by DATCP and DNR, implementing the requirements of 1997 Act 27 and 1999 Act 9. Most notable of this rule package were NR 151 (DNR), which contained the new agricultural and non-agricultural nonpoint pollution performance standards, and ATCP 50 (DATCP), which contained county LWRM planning and related grant requirements.

This is the third generation Land and Water Resource Management Plan for Waukesha County, serving as an update to the second generation plan, adopted by the County Board in March 2006. This plan has been prepared in accordance with the requirements under ATCP 50, and is intended to guide the Land Resources Division (LRD) program efforts for the next 10 years.

Plan Requirements

DATCP is statutorily responsible for approving LWRM plans. The Wisconsin Land and Water Conservation Board (LWCB) is responsible for reviewing all county LWRM plans and making approval recommendations to DATCP. In order to be approved, a plan must address the following:

- Assessment of county natural resources, including water quality and soil erosion conditions;

- Water quality objectives derived in consultation with the DNR;
- Applicable performance standards and prohibitions related to the control of soil erosion and water pollution from nonpoint sources;
- Conservation practices needed to meet water quality objectives and to address soil erosion problems;
- A plan to identify priority producers and livestock operations in the county;
- Use of state and local regulations to implement the county plan;
- Encouragement of voluntary implementation of conservation practices through county strategies;
- Procedures to ensure compliance with the nonpoint performance standards and prohibitions;
- A multi-year description of planned activities, including priorities and expected costs;
- A system to monitor the progress of activities described in the plan;
- Information and education related to soil and water resource management strategies;
- Coordination of activities described in the plan with programs of other local, state, and federal agencies;
- Notification of affected landowners and land users of findings about key problems and needed conservation practices;
- Public participation in the planning process, including an advisory committee, public hearing and county board approval.

Looking Back (Major Accomplishments since 2006)

Before planning for the next 10 years, it is important to look back at the previous Waukesha County LWRM plan adopted in 2006 and reflect on progress made and program changes that have occurred. The most prominent program change has been the issuance of Municipal Separate Storm Sewer System (MS4) storm water discharge permits, which has affected 31 of the 37 communities in the county, including Waukesha County itself. This permitting process has instituted major changes in the way communities think about infrastructure projects and pollution prevention. Nonpoint pollution is now a primary issue being addressed whenever a new building, parking lot or road project is discussed, instead of being an after-thought as only a few years ago. A more detailed description of the MS4 permit program and a list of affected communities are provided in Chapter IV.

A review of the planned activities from the 2006 LWRM plan shows that much progress has been made. While too numerous to list all of the accomplishments, some program highlights and significant accomplishments since 2006 are listed below:

- Issued 338 storm water permits and conducted over 4000 construction inspections in 12 communities, preventing water pollution over from 2,200 acres of construction sites;
- Completed Watershed Protection Plans for Pebble Creek and the Mukwonago River in cooperation with SEWRPC and citizen advisory committees;
- Became the first community in the state to receive “Authorized Local Program” status by the DNR, allowing county storm water permits to also provide DNR permit coverage under NR 216;
- Composted over 45,000 tons of community yard waste and demonstrated the use of compost in reclaiming the county gravel pit through a series of test plots and field tours;
- Developed a comprehensive county-wide storm water education program and executed intergovernmental agreements with 25 communities to implement the program under the MS4 storm water discharge permit requirements;
- Hosted 7 annual storm water workshops for developers, engineers, contractors and municipal officials, consistently filling the 100-person capacity room and receiving high evaluation ratings from participants;
- Completed soil and water conservation teacher training workshops for 221 teachers and completed classroom presentations on nonpoint pollution to over 8000 students;
- Sponsored an average of 25 volunteer teams monitoring stream water quality each year, and hosted annual training and recognition events for participants;

- Administered \$1.7 million in federal Emergency Assistance Program funds to 32 low-moderate income home owners who suffered flood damages in 2008;
- Developed and enforced a series of technical standards and soil investigation protocol to prevent basement flooding from surface and groundwater in new home construction;
- Developed a storm water database linked to the county GIS-web system and populated it with photos, as-built data and maintenance agreements for over 600 storm water BMPs;
- Wrote a model storm water BMP maintenance ordinance and hosted an all-day community workshop on the topic, including training for communities to log into the county storm water database to view and upload BMP inspection reports and other BMP information;
- Expanded/updated a robust storm water web page at www.waukeshacounty.gov/stormwater and a public educational web page at www.waukeshacounty.gov/cleanwater.
- Implemented storm water BMPs on 14 county infrastructure projects and developed pollution prevention plans for all 16 county owned facilities;
- Cost-shared the proper abandonment of 37 residential wells to protect groundwater;
- Developed a GIS database to record agricultural nonpoint compliance checks and mapped all livestock facilities in the county;
- Completed an update to the County Comprehensive Plan (2009) and Farmland Preservation Plan (2011) in cooperation with the Planning and Zoning Division;

Plan Development Process

The plan goals from the 2006 LWRM Plan update were developed through an extensive nominal group process from two citizen advisory committees, one with an urban focus and one with a more rural perspective. To stay true to this process, those goals were only slightly modified to form the foundation for this 2012 plan update. The LRD drafted background information on each of the goals along with updated objectives and planned activities for this 2012 update. Together, these formed Chapter III – Plan Goals, Objectives and Planned Activities, merging two chapters from the 2006 LWRM plan.

The draft Chapter III was sent to an advisory committee made up of a combination of the two citizen groups from the 2006 plan. Membership of the committee, as shown at the front of this plan, included representatives from other local conservation agencies and organizations. The advisory committee met on February 23, 2012 - one week after the mailing - to exchange comments and ideas on the draft. These comments have been incorporated into the final draft presented herein. A public informational meeting and hearing was also held on May 31, 2012. No comments were submitted. A copy of the public hearing announcement is found in Appendix D.

Relationship to Other Plans

As noted earlier, the goals and objectives described in this plan are often interrelated and involve many other agencies and organizations involved in natural resource management. Below is a list of other planning efforts that are related to and will be coordinated with the implementation of this plan.

Comprehensive Development Plan for Waukesha County (2009)

In 1999, the Wisconsin Legislature enacted a comprehensive development planning initiative. Commonly referred to as “Smart Growth” law, this initiative required any community that enforces a zoning ordinance to adopt a comprehensive plan by January 1, 2010 that is consistent with the zoning ordinance. In response to this law and the on-going need to update existing development plans, Waukesha County, in cooperation with 27 local communities, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) and the University of Wisconsin-Extension (UWEX) completed a comprehensive development plan for Waukesha County in 2009. This plan serves as an update to A Development Plan for Waukesha County Wisconsin (1996 - SEWRPC Community Assistance Planning Report No. 209). Under state law, the county plan was required to incorporate comprehensive plans adopted by local communities, coordinating development between the 37 municipalities in the county. The plan includes an analysis of population, economy,

housing, land use, natural and cultural resources, transportation, community facilities and intergovernmental cooperation. An annual plan update process was also adopted with the plan, which incorporates changes to the plan that are consistent with the adopted planning standards. A copy of the Waukesha County Comprehensive plan is available on the county web site:

www.waukeshacounty.gov/comprehensiveplan.

Waukesha County Farmland Preservation Plan (2011)

The Wisconsin Legislature adopted significant changes to the state's Farmland Preservation law (Chapter 91 Wis. Stats.) in 2009, commonly referred to as the "Working Lands Initiative". Under these law revisions, every county in the state was required to update their Farmland Preservation Plan, and two new preservation tools were made available – Agricultural Enterprise Areas and Purchase of Agricultural Easement (PACE) grants. Waukesha County completed their plan update in 2011 in accordance with the law, and incorporated the plan as Appendix D to the 2009 Waukesha County Comprehensive Plan. As part of this process, the LRD completed a 2010 inventory of agricultural lands in the county, which is presented in Chapter II. The Farmland Preservation Plan identified farmland to be preserved for agricultural uses in three towns in the county, which made those designated landowners eligible for the Farmland Preservation income tax credit. A copy of the adopted farmland preservation map is presented in Chapter IV.

Regional Water Quality Management Plans (208 Plans)

In 1974, the Southeastern Wisconsin Regional Planning Commission was designated as the water quality planning agency for southeastern Wisconsin pursuant to the terms of Section 208 of the Federal Water Pollution Control Act (P.L. 92-500) also known as the "Clean Water Act". In 1975, the SEWRPC initiated preparation of the Regional Water Quality Management Plan for Southeastern Wisconsin – 2000, which was formally adopted in 1979.

In 1995, the SEWRPC published an update and status report to the original regional water quality management plan. This report describes the implementation activities that had occurred since adoption of the original plan, identified progress on meeting the water quality objectives, and identified issues still needing to be addressed in the ongoing planning process. In 2007, SEWRPC completed 208 plan updates for the Milwaukee River and Root River watersheds in Waukesha County.

Regional Water Supply Planning

SEWRPC recently completed a three-phased multi-agency effort to inventory local groundwater resources, develop a regional groundwater model, and develop and publish a Regional Water Supply Plan for Southeast Wisconsin (2010). The plan is based upon an adopted regional comprehensive plan design year of 2035, recommends a sustainable water supply for every community in southeast Wisconsin. This plan includes several recommendations that affect LRD programs, including encouraging water conservation, infiltration of runoff and protection of groundwater quality from polluted runoff. A copy of the plan is available for purchase or public viewing on the SEWRPC web site:

www.sewrpc.org/SEWRPC/Environment/RegionalWaterSupplyPlan.htm.

Regional Storm Water Management and Watershed Protection Plans

Many communities are investing in regional storm water management planning to coordinate new developments with existing storm water systems, plan for system upgrades or to satisfy state MS4 storm water discharge permit requirements. Storm water management planning by watershed rather than by individual parcel during the development process allows a community to consider the cumulative downstream impacts of land use and storm water management decisions prior to development. This type of up-front planning can also help coordinate activities between local units of government within the same watershed. Watershed protection planning takes this process a step further. This gets communities to work together toward a common goal of protecting a particular water resource by coordinating land use and storm water planning along with related program efforts within a watershed. Storm water planning by watershed is also used to determine options for reducing runoff pollution from existing development, which may be required to satisfy municipal storm water discharge permits under NR 216 Wis. Admin. Code.

The LRD has assisted SEWRPC in preparing watershed protection plans for the Pebble Creek, Mukwonago River, and Pewaukee River Watersheds.

Basin Water Quality Management Plans

The Department of Natural Resources (DNR) also prepares area-wide water quality management plans for drainage basins encompassing Waukesha County. Waukesha County contains portions of five major watershed basins: the Illinois Fox River, Milwaukee River, Root-Pike Rivers, and the Upper and Lower Rock River basins, as shown in Map II-9. During the preparation of this plan, the most recent “State of the Basin” reports prepared by the DNR were reviewed and the recommendations incorporated as appropriate.

Priority Watershed Plans

From 1979 to 2005, the DNR administered the Nonpoint Source Water Pollution Abatement Program, resulting in the preparation of Priority Watershed plans for several watersheds in Waukesha County. These include the Root River (1980), the Oconomowoc River (1986), the Menomonee River (1991), the Upper Fox River (1993) and the Muskego-Wind Lakes watersheds (1994). Upon adoption, these plans became subset amendments to the Regional Water Quality Plans. The watershed plans identified resource issues of concern and recommended specific nonpoint source pollutant reduction goals by subwatershed. State grants for technical assistance and cost-share dollars were made available to encourage landowners to install conservation practices for water quality improvement. Counties were a primary local delivery system for the program and were provided grants for conservation staff and program support. As noted in the introduction section of this plan, this program was redesigned by the state legislature in 1997-1999 and state funding for watershed projects was phased out by the end of 2005. Additional information regarding these watersheds is provided in Chapters II and III of this plan.

Lake Management Plans

Sixteen lake organizations in Waukesha County have organized lake districts under Chapter 33 of the Wisconsin Statutes. The largest lake in the county, Lake Pewaukee, has an active sanitary district. Many of the other lakes have active lake associations. Collectively these groups represent thousands of county residents who have a vested interest in protecting and improving water quality. Through grants made available through the DNR and other sources, many of these groups have prepared water quality management plans, aquatic plant management plans, lake protection and recreational use plans to address specific concerns on a particular water resource. Many of the activities identified in these plans complement activities identified in the Land and Water Resource Management Plan. During lake management planning and implementation, LRD staff regularly provides technical information, educational services or other resources to the various lake organizations, especially related to storm water runoff.

Total Maximum Daily Load (TMDL) Plans

TMDL plans is a federally mandated watershed planning program under the Clean Water Act designed to improve water quality in lakes and streams that are not meeting water quality standards. A list of these water resources is called the 303(d) list, named after the applicable section of the federal law. This list is updated every two years by the DNR and reported to the EPA. Under the TMDL planning process, water quality of a specific stream is measured and a plan is developed which establishes the maximum amount of pollution the stream can tolerate to meet water quality standards and water use objectives. Through extensive modeling, a TMDL plan “allocates” tolerable pollutant discharges between point and nonpoint sources throughout the watershed. During plan implementation, pollutant trading can occur between sources. The DNR encourages counties to act as “brokers” of the pollutant trading that can occur. An example is a sewage treatment plant paying for nutrient management planning or a manure storage facility on a farm upstream. A TMDL plan may affect the minimum state nonpoint pollution control standards for both urban and agricultural areas, and therefore may affect other goals in this plan. As of 2012, TMDL plans are being written for the Upper Rock River and Milwaukee River watersheds.

Coordination with Other Agencies and Partners

During the preparation of this plan, other agencies with a focus on natural resource protection were consulted and given the opportunity to comment on the content and focus of the plan. In particular the DNR was consulted on the priorities contained in the basin water quality management plans. The Natural Resources Conservation Service (NRCS) was also given the opportunity to provide their input. Both of these agencies were also members of the LWRM Plan Advisory Committee. Presently the LRD and NRCS for Waukesha County are co-located in the Waukesha County Administration Center with the LRD and have daily interaction on conservation related activities around the county. Other conservation partners either participated on the LWRM Plan Advisory Committee or were invited to participate, as shown in Appendix C.

Related Waukesha County Ordinances

Chapter 14 and the Appendices of the Waukesha County Code of Ordinances contain the following ordinances related to management of land and water resources in Waukesha County. A complete copy of the following may be viewed at: www.waukeshacounty.gov/landconservation.

Storm Water Management and Erosion Control Ordinance

The Waukesha County Storm Water Management and Erosion Control Ordinance was most recently updated by the Waukesha County Board in March of 2005. The new version of the ordinance incorporated the standards of the Department of Natural Resources administrative rule NR 151 for non-agricultural runoff control. The purpose of the ordinance is to establish regulatory requirements for land development and land disturbing activities aimed to minimize the threats to public health, safety, welfare and the natural resources of Waukesha County from construction site erosion and post-construction storm water runoff. The LRD administers this ordinance in all unincorporated areas of the county. More details are provided in Chapters III and IV.

Nonmetallic Mining Reclamation Ordinance

The Waukesha County Nonmetallic Mining Reclamation ordinance was adopted in July of 2001. The ordinance is intended to establish effective standards for nonmetallic mine reclamation in accordance with uniform statewide standards under NR 135. The reclamation requirements are intended to rehabilitate nonmetallic mining sites, protect the environment and allow for other post-mining land uses. The LRD administers the ordinance in portions of the county and currently has 16 operations under permit. In addition, some local units of government have adopted their own ordinances based on the statewide model. More details on the location of regulated sites and the communities that have adopted ordinances are provided in Chapter II.

Animal Waste Management Ordinance

The Waukesha County Animal Waste Management Ordinance, initially adopted by the Waukesha County Board of Supervisors in 1987, regulates the design, construction, alteration, and use of animal waste storage facilities. This ordinance is administered by the LRD. A landowner must obtain a permit for constructing, enlarging, or substantially altering an animal waste storage facility. Facilities must be constructed in accordance with Natural Resource Conservation Service Technical Guide standards.

Waukesha County Zoning Code

The Zoning Code applies to the Townships of Genesee, Oconomowoc, Ottawa and Vernon. The Code is designed to provide standards for land development to provide for adequate sanitation, drainage, safety, convenience of access, the preservation and promotion of the environment, property values and general attractiveness. The LRD often provides technical assistance to zoning staff relating to erosion control, storm water management, soil investigations and basement flooding related issues.

Shoreland and Floodland Protection Zoning Ordinance

The Shoreland and Floodland Zoning Ordinance is state mandated under Chapter NR 115 to protect or improve the quality and aesthetics of lakes and streams. It generally applies to lands in unincorporated Townships and annexed lands within 1,000 feet of a lake and 300 feet of a river or stream and is administered by the Planning and Zoning Division. The LRD often provides similar technical assistance as noted under the zoning code and will assist with updating the code to meet recent revisions to NR 115, including restrictions on impervious surfaces and mitigation planning.

Plan Review and Approval

Following the review of the draft Land and Water Resource Management plan by the advisory committees on February 23, 2012, and the public hearing on May 31, 2012, the plan was presented to the Waukesha County Land Use, Parks and Environment Committee and the Waukesha County Board of Supervisors. At their meeting on July 24, 2012 the Waukesha County Board of Supervisors adopted a resolution of approval for the Waukesha County Land and Water Resource Management Plan - 2012 Update. This resolution was then forwarded to the Waukesha County Executive who approved it on July 30, 2012 (See Appendix F).

In accordance with state law, this plan was also reviewed by the Wisconsin Department of Natural Resources (DNR), the Department of Agriculture, Trade, and Consumer Protection (DATCP) and the Land and Water Conservation Board (LWCB). The LWCB recommended approval at their meeting on June 5, 2012. The plan was also forwarded to the DATCP Secretary who signed an order approving the Waukesha County Land and Water Resource Management Plan - 2012 Update on August 28, 2012 (See Appendix G).