

Walworth County

Land and Water Resource Management Plan 2010-2020

Plan Summary

Introduction

The Walworth County Land and Water Resource Management Plan (LWRMP) is a State-mandated long-range plan to guide the land and water quality programs, activities and priorities of the Walworth County Land Conservation Committee and the Committee Staff. The initial LWRMP was adopted by Walworth County in 1999 and up-dated in 2004. This Plan Amendment presents the current conditions of Walworth County's natural resource base, prioritizes resource issues and concerns and identifies opportunities to achieve land and water resource management goals. This Plan promotes new ideas and strategies and serves as a means to target staff and financial resources on those land and water resource management issues the residents of Walworth County are most concerned about. The LWRMP was developed to define and shape policies, programs and activities that can be cooperatively undertaken by Walworth County agencies and organizations, to guide landowners towards the use of better practices protect Walworth County land and water resources.

The Walworth County LWRMP Amendment includes the following new elements:

- An assessment of current land use and natural resource data and goals articulated in the *Walworth County Multi-Jurisdictional Comprehensive Plan* or Smart Growth Plan.
<http://www.sewrpc.org/smartgrowth/walworthcounty>
- Recognition of the "Wisconsin Working Lands Initiative", including actions to assist Walworth County landowners and elected officials consider these institutional tools aimed at protecting Walworth County's rich agricultural lands.
<http://www.datcp.state.wi.us/workinglands/index.jsp>
- New strategies to help landowners, developers, contractors and communities comply with the Non-agricultural and Agricultural Performance Standards and the Agricultural Prohibitions, pursuant to NR 151 of the Wisconsin Administrative Code.
<http://www.legis.state.wi.us/rsb/code/nr/nr151.PDF>
- Strengthens and broadens initiatives that advance biodiversity and sustainability of Walworth County's diverse and rich mosaic of natural resources, including its lakes, streams, wetlands, and woodlands.

Walworth County developed this LWRMP Amendment for implementation from 2010 through 2020, recognizing the plan will be reviewed in 2015 and up-dated if needed. The 5-year Work Plan serves to prioritize goals, estimate staffing needs and other costs necessary to implement the programs and activities identified in the LWRMP. The Work Plan will be reviewed annually and amended to accommodate changing programs, policies, funding availability and opportunities. **It should be noted, the implementation of the activities in the multi-year work plan is subject to the availability of federal, state and local funding to support staff and program support costs.**

Plan Development Process and Public Input

The major strength of the LWRMP comes from the participatory process used to develop the Plan that brought together a thoughtful and diverse group of Walworth County citizens and natural resource professionals. A Citizen Advisory Committee (CAC) convened on March 24, 2009 and August 4, 2009. The ideas, concerns, priorities and proposed activities represent a consensus of the most important land and water resource concerns in Walworth County.

A public hearing on the plan was held on January 18, 2010.

This Plan is intended to complement other planning efforts guiding Walworth County toward a more productive and sustainable future. The Southeastern Wisconsin Regional Planning Commission (SEWRPC) provided essential and timely technical information gathered for the preparation of the *Walworth County Multi-Jurisdictional Comprehensive Plan* or “*Smart Growth Plan*”. Water quality reports prepared by the Wisconsin Department of Natural Resources (WDNR) were also used as the foundation of this plan.

The LWRMP is not intended to replace any current plan, policy or ordinance approved by the Walworth County Board of Supervisors and will be implemented with the availability of staffing and funding.

The Plan contains an information and education strategy to support and achieve the Plan’s goals and objectives. The strategy focuses on the strengths and diverse interests of County agencies, organizations and citizens. The Plan stresses activities that result in public engagement and participation for the protection, improvement and enhancement of Walworth County’s land and water resources.

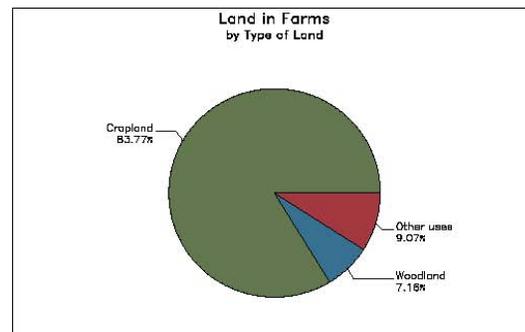
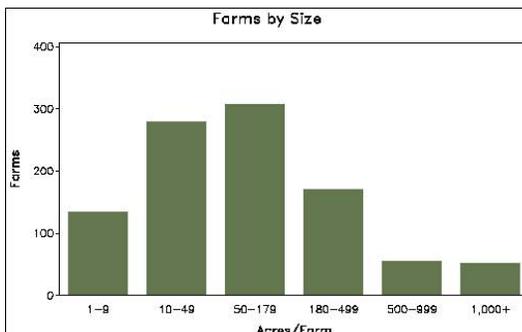
Land Use and Natural Resource Issues of Concern

This Plan reaffirms Walworth County’s continued commitment to protect and restore Walworth County’s natural resources and renews the vision developed in the initial Walworth County LWRMP. This Plan addresses the following land use and resource management challenges facing Walworth County:

- Farmland preservation.
- Protection of Walworth County’s groundwater quality and abundance.
- Protection and restoration of Walworth County’s natural communities with significant biodiversity, wildlife habitat and recreational opportunities.
- Building partnerships and collaboration to inspire citizens and organizations to promote the protection of watersheds within Walworth County.
- Impact of farming on the quality of Walworth County streams, rivers, lakes, groundwater and wetlands.
- Impact of urban development on the quality of Walworth County streams, rivers, lakes, groundwater and wetlands.

Land Use in Walworth County

Agriculture is the dominant land use in Walworth County. Approximately 238,000 acres or 64% of Walworth County is classified as agricultural land. Although the extent of agricultural land has declined since 2002, the number of farms in the County has risen to 1000. The average farm size in 2007 was 217 acres. Corn, soybeans and hay are the major crops produced in the County. Over 100 dairy farms operate in Walworth County and dairy products account for one-third of the total agricultural product sales in the County. Each year over 400 owners of farmland in Walworth County participate in the current Wisconsin Farmland Preservation Program and claim program tax credits, averaging \$550.



Natural areas, including lakes, streams, wetlands, upland woodlands and other open spaces cover approximately 23% of Walworth County or 73,000 acres. These areas support a wide diversity of recreational uses, such as boating, hiking, biking, scenic viewing and hunting.

Land used for urban purposes, such as residential dwellings, commercial, industrial and institutional sites covers 12% of Walworth County. Land currently used as a source for sand and gravel covers about 1000 acres.

Assessment of Walworth County Land And Water Resources

Walworth County Soil Resources - How land is used is greatly influenced by the soil beneath it. Walworth County soil maps and data are published in the *Soil Survey for Walworth County*, (USDA, 1971). Soil properties and interpretations contained in the soil survey help determine the potential and limitations of Walworth County soils and assist in land use and management decisions. Walworth County has over 170,000 acres land classified as prime farmland or land formed in soils that have the best combination of physical and chemical characteristics for producing food, feed, and forage, with no or few limitations. Data collected and assessed from the Transect Survey from 1999 through 2007, indicated nearly 75% of the County's cropland fields are meeting annual soil loss goals. Cropland erosion rates have remained low, despite recent extreme spring rains and a reduction in the use of hay and lands enrolled in CRP. Contributing to soil conservation effort has been the use of no-till planting for corn and soybeans.

Walworth County Water Resources - Walworth County's water resources are attractive sites for a variety of recreational uses. Over 30 Walworth County lakes lure residents, businesses and visitors to their shores. Equally important are the 173 miles of perennial streams and hundreds of miles of intermittent streams that flow through the County.

Lulu Lake, Bluff Creek, Potowatomi Creek Van Slyke Creek are designated *Outstanding*

Resource Waters of the State. The Mukwonago River, Little Turtle Creek, and some reaches of Turtle Creek are designed *Exceptional Resource Waters of the State.* These waterways feature valuable fisheries, unique environmental settings, outstanding recreational sites and are not significantly impacted by human activities.

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) has ranked Walworth County surface waters with respect to their quality as *Critical Aquatic Habitat Areas.*

The following Walworth County streams and lakes are ranked as **AQ-1, Aquatic Areas of Statewide or Greater Significance:** Beulah Lake, Mukwonago River, Pickerel Lake, Lulu Lake, and Bluff Creek.

Twelve Walworth County streams and lakes are ranked as **AQ-2, Aquatic Areas of County-wide or Regional Significance:** Benedict Lake, Turtle Lake, White River, Geneva Lake, Mill Lake, Turtle Creek, Pleasant Lake, Tripp Lake, Potowatomi Creek, Comus Lake, Southwick Creek, Van Slyke Creek.

Thirty-three Walworth County streams and lakes ranked as **AQ-3, Aquatic Areas of Local Significance:** Army Lake, Booth Lake, Lake Wandewega, Swift Lake, Lake Ivanhoe, Cravath Lake, Lake No. 10, Tombeau Lake, Silver Lake, Green Lake, Peters Lake, Potter Lake, Powers Lake, Lake Como, Honey Lake, Whitewater Lake, Rice Lake, Loraine Lake, Swan Lake, Middle Lake, 4 un-named lakes, Honey Creek, Lake Ivanhoe Creek, Ladd Creek, Nippersink Creek, Sugar Creek, Steel Brook Creek, Spring Creek, Darien Creek, Whitewater Creek, Little Turtle Creek, Spring Brook, Honey Creek.

The following 6 Walworth County waterways are currently not meeting water quality standards and occur on the List of Impaired Waters, (WDNR, 2003).

<u>Waterbody</u>	<u>Watershed</u>	<u>Listed Category of Impairment</u>
Turtle Creek	Lower Rock River (L. Comus to County Line)	Habitat – Dominated
Spring Creek	Sugar-Honey Creeks	Sediment, Phosphorus, Habitat, Temperature
Perennial Str. (SPP1)	Sugar Honey Creeks	Sediment, Phosphorus, Habitat, Temperature
Perennial Str. (TM2)	Sugar Honey Creeks	Sediment, Phosphorus, Habitat, Temperature
Perennial Str. (B4)	Sugar Honey Creeks	Sediment, Phosphorus, Habitat, Temperature
Perennial Str. (B5)	Sugar Honey Creeks	Sediment, Phosphorus, Habitat, Temperature

Walworth County Groundwater Resources - Everyone in Walworth County drinks groundwater from public or private wells. Groundwater is also a major source of water to Walworth County lakes, streams and wetlands. Although Walworth County is groundwater rich, there is a growing concern the groundwater is being used faster than it is being replenished. Protection of groundwater recharge areas in the County has become a major resource management issue. Groundwater contamination problems from septic systems, improperly managed animal waste, spills, improper use of fertilizers and pesticides, abandoned dump sites, leaky underground storage tanks, abandoned wells, and storm water runoff have been noted in Walworth County.

Walworth County Wetland Resources - Approximately 26,900 acres (42.0 square miles) of wetlands are present in Walworth County. Wetlands support and perform important ecological services. The Turtle Valley Wildlife Area is a recent reclaimed wetland established through a partnership of Federal, State and local governments. Currently this new wildlife area spans nearly 1600 acres and is vibrant habitat for a diversity of migratory birds and other wildlife.

Walworth County Natural Areas and Critical Species Habitat Sites - A total of 77 natural areas were identified in Walworth County in 1994. Natural areas contain intact native plant and animal species and represent rich surviving examples of Walworth County's natural heritage before European Settlement. These sites encompassed about 9,200 (14.3 square miles), or 2.5 percent of the total area of the County.

Walworth County Land Legacy Places - The Wisconsin Land Legacy Report was prepared by the Wisconsin Department of Natural Resources at the request of the Wisconsin Natural Resources Board. The purpose of this report was to identify those places in Wisconsin the citizens believe are most important in meeting Wisconsin's conservation and recreation needs over the next 50 years. This report and the important information it contains can serve to mobilize partners and stakeholders to consider these places as they plan their resource protection strategies and discover opportunities to provide places for people to hunt, watch birds, canoe, fish, hike or participate in enjoying other outside recreational activities. The land legacy report includes 229 legacy places that are ecologically distinct throughout Wisconsin.

The Land Legacy Report identified the following ecologically special places in Walworth County: 1) The Sugar Creek Valley; 2) the Kettle Moraine State Forest; 3) the Southern Kettle Moraine, from Whitewater Lake to Turtle Creek; 4) the White River (Bloomfield Area); 5) the Troy Wildlife Area; 6) Lake Beulah Bog and Pickerel Lake Fen and; 7) the Mukwonago River, including Lulu Lake.

Woodlands - Woodlands are the most distinctive natural communities in Walworth County and perform a number of ecological services, provide shade, clean air and contribute to the County's natural scenic beauty. Woodlands cover approximately 31,000 acre in Walworth County, with the largest concentration found in the Kettle Moraine Forest and corridor of Sugar Creek. The introduction and spread of non-native invasive species in Walworth County woodlands such as common buckthorn create dense shade and effectively prevent native woodlands from reproducing. In addition, the fragmentation of woodlands by development is noted as a concern to the preservation of these important communities.

Environmental Corridors - Environmental corridors represent the best remaining elements of the natural resource base in Walworth County. SEWPRC identified and delineated over 67,000 acres of environmental corridors in Walworth County. The preservation of the environmental corridors

is paramount for the maintenance of the environmental quality of Walworth County and sustaining the high quality of life for the County's residents.

Land and Water Resource Management Implementation Plan

The LWPRP includes a detailed list of goals and objectives aimed at addressing the land and water resource management issues expressed by Walworth County residents, natural resource professionals and elected officials during the preparation of this Plan. **Advancing the specific activities, programs, and policies described in the work plan is dependent on receiving adequate financial resources to cover staff and cost-sharing programs.**

The following LWRMP Goals have been developed and will be achieved through the preparation of conservation plans implementation of conservation practices and advancement of the information and education strategy.

- Protect Walworth County lakes, streams and wetlands from agricultural runoff.
- Protect Walworth County streams, lakes, wetlands and groundwater from the adverse impact of urban development and nonmetallic mining.
- Prevent the introduction and dispersal of aquatic invasive species in Walworth County lakes, streams, and wetlands.
- Protect Walworth County's productive agricultural land.
- Preserve and restore Walworth County's environmental corridors, natural areas, critical species habitat sites, wetlands, floodplains and groundwater.
- Protect Walworth County's watersheds by seeking collaboration and supporting partnerships.
- Initiate solution-based information and education outreach programs to land users, youth, residents, businesses, visitors and elected officials to encourage the support and use of sustainable conservation practices.

Agricultural Performance Standards and Prohibitions Implementation Strategy

The LWRMP must include a strategy to help Walworth County land users comply with the State Agricultural Performance Standards and Prohibitions contained in NR 151. LURM will implement the following strategy:

The LURM will give preference to landowners that voluntarily seek technical assistance from Walworth County to comply with the State Agricultural Performance Standards and Prohibitions.

The LURM staff will use the following order to schedule inventories and assessments of farms and determine compliance with State Agricultural Performance Standards and Prohibitions.

1. Landowners voluntarily seeking program or technical assistance from Walworth County LURM.

2. Landowners issued County Zoning Permits or County Waste Storage Permit.
3. Livestock operations with State WPDES Permit.
4. Livestock operations issued WDNR Notice of Discharge, (NR 243).
5. Landowners participating in a State Farmland Preservation Program.
6. Landowners participating in current or past local, state or federal conservation programs.

The LURM staff will use a watershed approach to select and evaluate additional parcels for compliance with State Agricultural Performance Standards and Prohibitions. The LURM staff will use the following order of priority areas to select and evaluate parcels:

1. Parcels that drain to “Impaired Waters”.
2. Parcels that drain to outstanding or exceptional waters.
3. Parcels that drain to any Walworth County lake basin.
4. Parcels located within a WQMA.
5. Parcels in the Turtle Creek watershed.
6. Parcels in the Sugar and Honey Creek watershed.
7. Parcels in the Piscasaw Creek watershed.
8. Parcels in the Mukwonago River watershed.
9. Parcels in the White River and Nippersink watersheds.
10. Parcels in the Scuppernong River watershed.

Walworth County Public Information & Educational Strategy

The CAC preferred LURM staff to help engage Walworth County residents, businesses, youth, or visitors by doing the following: update web site with local conservation concerns, activities, and important events; use quarterly newsletters or news articles, including the County Administrator feature in local newspapers; contact landowners on a one-to-one basis; network with local organizations; sponsor workshops on specific conservation issues for targeted audience; inform various municipalities and planning commissions about conservation efforts and learn their needs; work with County Board.

Events or activities determined by the CAC most likely to lure public participation were: workshops on lakeshore buffers; workshops on invasive species; workshops on private well management; field trips to view lakeshore buffers, agricultural conservation practices, urban storm water practices, prairies; and wetlands restoration projects, and; special activities to engage youth.

Assessment of Plan Accomplishments and Tracking Progress

Since 1999, LURM has participated in the state-wide “transect survey” program to estimate cropland soil erosion rates. This inventory is based on a visual examination of 694 sites annually throughout Walworth County. The Walworth County LURM staff will continue to collect, record and assess this data.

The Walworth County LURM will continue to record and monitor the progress of conservation and nutrient management plan implementation for each land user or program participant. Soil erosion and pollution reduction achieved by land users will be calculated and recorded in State and County-approved electronic data monitoring programs.

LURM will continue to monitor and record erosion control and storm water management

progress on construction sites and make program and ordinance modifications, if necessary and offer training if needed.

LURM will continue to monitor and assess Walworth County waterways for the presence and abundance of aquatic invasive species (AIS) and make adjustments to the County AIS program when and where needed.

LURM staff will recruit citizen volunteers to monitor Walworth County lakes and streams and record the water quality conditions.

Evaluations from attendees and participants of workshops and other information and educational programming will be solicited. Feed back from attendees will be used to make program improvements or modifications.