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# Oneida County Land & Water Resource Management Plan

2006-2011

Effective January 1, 2006 to December 31, 2011

ONEIDA COUNTY LAND & WATER CONSERVATION COMMITTEE

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**Prepared by: North Central Wisconsin Regional Planning Commission**

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# PLAN SUMMARY

## Chapter 1

### Introduction

The Oneida County Land and Water Resource Management Plan was developed to assist the county in managing and protecting the land and water resources throughout Oneida County.

The goals and objectives in this plan will help resolve local natural resource problems as derived from resource issues created by the Citizens Advisory Committee. These goals and objectives will also provide the basis for various private, local, state, and federal agencies to coordinate implementation of their programs of land and water management.

### Public Participation

The Oneida County Land & Water Conservation Committee (LWCC) brought together a diverse group of agencies, associations, and individuals to assist in the development of this land and water resource management plan. The Technical Advisory Committee and the Citizens Advisory Committee were established to assist the LWCC and the LWC Department to create this 2006 Oneida County LWRM Plan.

Two committees were formed to develop this LWRM plan with a broad range of locally derived personal and technical expertise.

The Citizens Advisory Committee (CAC) had members belonging to many various groups throughout the county. On June 19, 2006 the CAC meet to brainstorm land & water resource issues in Oneida County that needed to be addressed. Six residents created 45 issues in a brainstorming session. Through a self scoring process, several issues were combined and other issues were eliminated. The top issues are identified below with their relative score. The most points for an issue show a high priority given by the CAC:

<b><u>Total Points</u></b>	<b><u>Priority Issues for Work Plan Development</u></b>
47	Water quality monitoring
43	Shoreland restoration
27	Promotion of forest management
26	Forest fragmentation
25	Public education on septic and wells
21	Invasive species
15	Groundwater issues

14	Site erosion
11	Wildlife conflicts
10	Collaboration between agencies
9	Land use planning
9	Illegal dumping
8	Increase technology use for land & water resource info.
7	Quality of surface water
5	Motorized land use conflicts
4	Light pollution
4	Disaster planning
3	Drinking water issues
2	Protection & enhancement of wetlands
1	Forest fire safety issues

The Technical Advisory Committee (TAC) consisted of federal, state, and local staff. The TAC used the prioritized issues derived from the CAC to update the 5-year Work Plan for 2006-2011.

NCWRPC gathered and filtered through resource assessment data to update the 2000 LWRM Plan data and included it in this plan.

(Reserved for LWCC participation)

(Reserved for public hearing comments)

Public participation was also collected from other planning processes within the county as documented in Chapter 2.

## **Current Land Use Issues**

Overall, there are no major or widespread water quality problems regarding Oneida County surface waters. Pollution of surface waters is generally minimal because the county is relatively undeveloped and there is little municipal or industrial waste. The streams exhibit good water quality with the majority supporting cold water fish communities and warm sport fish communities. There are five lakes, one creek and one river that have been designated as outstanding resource waters (ORW) in Oneida County. Surface waters which provide valuable fisheries, hydrologically or geologically unique features, outstanding recreational opportunities, unique environmental settings, and which are not significantly impacted by human activities may be classified as exceptional resource waters. Thirty-eight waterbodies are designated as exceptional resource waters (ERW).

The main sources of pollution that degrade water quality in the county are related to overdevelopment of lakeshores, poor forestry practices, failing septic systems, construction site erosion, and poor management in non-metallic mining. There are also a few point sources of water discharge that may affect the water quality, but have not deteriorated the receiving waters according to each water body not appearing on the 303(d) Impaired Waters list from the DNR. These point sources originate from Rhinelander Paper Company, Rhinelander Wastewater Treatment Plant, Lakeland Sanitary District #1, Arthur Oehmcke Fish Hatchery, Lake Tomahawk, McNaughton Camp Spray Irrigation Outfall, & Three Lakes Sanitary District #1.

## **Performance Standards & Prohibitions Implementation Strategy**

### Agricultural Performance Standards

A voluntary educational approach will continue to be used to achieve erosion control standards in Oneida County. One-on-one contacts with landowners and operators who request technical assistance is the most common method used to promote soil conservation in Oneida County. The average Universal Soil Loss Equation (USLE) soil loss estimates ranged from 6.4 tons per acre per year to less than 1 ton per acre per year. The average for the county is approximately 0.6 tons per acre per year in 1999.

Conservation plans, which plan individual crop fields to the tolerable soil loss rate or "T", are prepared for participants in the Farmland Preservation Program. Participation is through voluntary 10-25 year individual agreements due to no exclusive agricultural zoning in Oneida County. The County Land and Water Conservation Department manages agreements for cropland within mapped areas identified in the 1982 Forest County Farmland Preservation Plan.

### Non-Agricultural Standards

Oneida County finds that construction site erosion and uncontrolled stormwater runoff from land disturbing and land development activities can have significant adverse impacts upon local water resources and the health, safety and general welfare of the community, and can diminish the public enjoyment and use of natural resources.

## **Land Disturbance Activities Subject to Stormwater Management and Erosion Control:**

All activities directly related to the planting, growing and harvesting of agricultural crops are not considered land disturbance activities under this section. Land disturbance activities to the shoreland zone are regulated by the Oneida County Zoning and Shoreland Protection Ordinance. Oneida County also requires new businesses to address erosion control and stormwater management through Administrative Review permits and Conditional Use permits.

## **Standards for Stormwater Management and Erosion Control:**

Stormwater runoff, soil erosion, siltation, or sedimentation from all land disturbing and development activities shall meet standards in NR 151 and 216 and COMM 60 and 20-21, Wis. Adm. Code and/or shall be controlled in accordance with Technical Guidelines as developed by the U.S. Department of Agriculture, Natural Resources Conservation Service, or the Wisconsin Department of Natural Resources.

## **Major 2000-2005 Work Plan Accomplishments**

**Goal 1:** Promote well planned development, which minimizes negative impacts on our land and water resources.

- Comprehensive planning activities are 35% complete countywide.
- P&Z created a shoreland zoning and wetland booklet that was widely distributed.

**Goal 2:** Retain and restore shorelands on lakes, rivers, and streams to preserve or improve shoreline habitat and reduce pollutants entering our waters.

- Landowners have been encouraged to establish shoreland buffers.
- Fertilizer displays were set up at local stores.

**Goal 3:** Improve forestry management to promote productivity of forest products, protect wildlife habitat, water quality, and provide recreational opportunities.

- Forestry practice educational programming was coordinated among agencies and expanded.
- Educational opportunities to improve forest land erosion control and to protect habitat cover types was almost fully complete (70%).
- A committee of ATV stakeholders was organized to deal with unauthorized ATV use.

**Goal 4:** Reduce sources of nonpoint source pollution, which degrade our surface and groundwater.

- Construction site erosion control workshops annually for contractors.

**Goal 5:** Educate the public on groundwater quality.

- Technical assistance was offered to properly abandon unused wells.

**Goal 6: Protect lake ecosystems from the degradation from recreational pressures.**

- Lake user conflicts have been 25% resolved.
- Boating techniques to prevent damage to sensitive lake ecosystems have been 25% established.

**Goal 7: Protect and enhance wetlands in Oneida County.**

- Landowners were encouraged to restore wetlands with NRCS programs that provided cost sharing.

**Goal 8: Utilize current computer technologies to make resource information more readily available to the public.**

- A contact list of resource professionals was created and made available to the public.

**Goal 9: Minimize impacts on our natural resources from mining activities.**

- Local units of government have updated their metallic mining ordinances.
- An inventory of non-metallic mining sites was created.

**Priority Farm Strategy**

It is a state requirement that every county prepares a Soil Erosion Control Plan. In 1997 the Oneida County Board approved a resolution asking the Department of Agriculture Trade and Consumer Protection (DATCP) to grant them a waiver from preparing this plan. Oneida County was granted a waiver from DATCP to release them from their obligation to develop a Soil Erosion Control Plan because Oneida County has relatively small amounts of cropland, and the magnitude and extent of cropland erosion is small. See the Land & Water Conservation Department for a copy of the waiver.

**High Priority 2006-2011 Work Plan Activities**

(To be determined in July 2006)

## **Regulations**

Oneida County has reviewed local, state, and federal regulations relating to land and water resource management for implementing this plan. The regulations that cover land or water resources are briefly described in Chapter 7 of this plan.

## **Progress Tracking & Evaluation**

The Oneida County Land & Water Resource Management Plan is intended to be a working document. This plan will be reviewed annually by the Land & Water Conservation Committee to track progress in accomplishing the goals and actions of this plan. The methods that will track the progress of the Work Plan are described in Chapter 8.

## **Conclusion**

Land and Water Resource Management (LWRM) Plans provide counties an opportunity to explain how they will meet the state performance standards and prohibitions as well as address other local land and water resource management concerns. The LWRM Plan provides the counties with the ability to develop local strategies to address the concerns; budget the limited staff and cost share dollars toward these concerns; provide for integration of programs and funding from all sources; develop a variety of implementation tools; and ultimately ensure accountability.

The Oneida County Land and Water Resource Management Plan provides a framework for local/state/federal conservation program implementation efforts. It is a working document that will utilize existing partnerships to achieve the goals and objectives identified within this plan. The availability of funding for staff and cost sharing will determine the progress in achieving the goals and objectives of this plan. Ultimately, implementation of this plan will protect and improve the valuable natural resources of Oneida County as well as maintain the vision of preserving Oneida County's abundant rural character.

# PLAN DEVELOPMENT & PUBLIC PARTICIPATION

## Chapter 2

### Introduction

Wisconsin Act 27 (1997-1999 Biennial Budget Bill) amended Chapter 92 of the Wisconsin Statutes to require counties to develop land and water resource management plans. The intent of the change was to develop a locally led process, which would improve decision-making by coordinating and clearly defining each agency or department's duty that is entrusted with local, state, or federal programs to protect our land and water resources. This statutory amendment provided Oneida County an opportunity to assess resource conditions and decide how they can be addressed over a five year time frame.

The first Oneida County Land & Water Resource Management (LWRM) Plan was approved in April 2000.

The 2006 LWRM Plan will review accomplishments from the 2000 LWRM Plan, compile some significant legislative changes and planning efforts that have occurred since 2000, and create a new Work Plan based upon new Citizen Advisory Committee goals.

The new legislative changes and planning efforts since 2000 include:

Wisconsin Administrative Rules NR 151 and ATCP 50 – October, 2001

Headwaters Basin Integrated Management Plan (DNR) – December, 2002

Oneida County Shoreland Zoning Ordinance Revisions – 24 Amendments from 1/10/01 to 2/26/06

Regional Comprehensive Plan (NCWRPC) – December, 2003

Wisconsin Administrative Rule NR 216 – August 2004

Oneida County Zoning and Subdivision Code Rewrite – In process

These new legislative changes and planning efforts since 2000 were accomplished through lengthy public participation processes, that ultimately provided for overwhelming support for the protection and wise use of Oneida County's natural resources. This plan compiles the data from these publicly supported plans. Oneida County thanks the citizens who participated in these various planning processes, which added value to this Land and Water Resource Management Plan.

## Public Participation

The focus of this plan's development process was to identify and prioritize land and water resource issues and to develop a Work Plan to address those issues.

To assist with the development of this plan, a technical advisory committee was formed of resource professionals representing: Oneida County Land & Water Conservation Department (LWCD), Oneida County Forestry, Land, & Outdoor Recreation Department (Forestry), Oneida County Planning & Zoning Department (P&Z), Department of Natural Resources (DNR), Natural Resources Conservation Services (NRCS), Farm Service Agency (FSA), and the University of Wisconsin - Extension (UWEX).

The LWCC directed the LWCD to create a Citizens Advisory Committee (CAC) of Oneida County citizens who represented special targeted groups to gather public input. A modified nominal group process of the CAC occurred to identify the resource concerns in Oneida County. Participants brainstormed lists of specific resource concerns. These lists were then presented to the whole group. Lastly, participants were asked to prioritize their issues on a scale of importance.

The following list includes all issues that were generated at the meeting.

### Top Priority Issues Identified (*In priority order*):

<b><u>Total</u></b> <b><u>Points</u></b>	<b><u>Priority Issues for Work Plan Development</u></b>
47	Water quality monitoring
43	Shoreland restoration
27	Promotion of forest management
26	Forest fragmentation
25	Public education on septic and wells
21	Invasive species
15	Groundwater issues
14	Site erosion
11	Wildlife conflicts
10	Collaboration between agencies
9	Land use planning
9	Illegal dumping
8	Increase technology use for land & water resource info.
7	Quality of surface water
5	Motorized land use conflicts

4	Light pollution
4	Disaster planning
3	Drinking water issues
2	Protection & enhancement of wetlands
1	Forest fire safety issues

Many planning efforts have solicited public comment. The following plans contain some sections that are applicable to this LWRM plan.

Oneida County Forest Comprehensive Land Use Plan 2006 – 2020

Chapter 400 describes ways to acquire land to become part of the County Forest. Acquisitions may benefit the land and water resources more than cooperation alone. The following objectives will guide the determination of eligible lands:

1. To provide for the most efficient administration of the forest by consolidating and blocking lands within established County Forest boundaries through purchase or trade as provided in §28.11 (3) (c), Wis. Stats. (for full text see Chapter 905.1), and to enter lands so acquired as County Forest, pursuant to §28.11 (4) (b), Wis. Stats.
2. To provide additional public benefits through the acquisition of unique or special areas that will be entered under §28.11 (4)(c) Wis. Stats. special use classification.
3. To facilitate adequate land control on the County Forest by undertaking establishment and perpetuation of survey corners.

The County Forest blocking boundaries are established by the Committee and by subsequent approval of the Oneida County Board and the DNR. Lands within the County Forest blocking boundaries or areas possessing special or unique values shall be recommended to the County Board for acquisition as they become available.

Oneida County Outdoor Recreation Plan 2004 – 2008

Goals from this plan will help with the Work Plan development.

1. Guide the County program for acquisition and development of lands for parks, open space, and resource protection.
2. Promote and practice sound resource management to protect lands and waters, giving special consideration to those resources with unique features or those sensitive to overuse or development.
3. Provide open space and recreational facilities to meet the needs of the County, and support state and federal efforts to provide recreational resources within the County.

Combining the above goals with similar goals from the Oneida County Forest Comprehensive

Land Use Plan will provide coordinated efforts within the same department to manage and acquire lands to conserve and manage land and water resources.

# RESOURCE ASSESSMENT

## Chapter 3

### Introduction

This chapter briefly summarizes the land and water resources within Oneida County. This type of information provides a general background on how trends may impact the land and water resources in the county. Developing an understanding of these characteristics and their changes will help direct future planning efforts in the appropriate directions. This chapter is not intended to contain an exhaustive inventory of land and water resources in Oneida County. Instead, it drew upon existing inventories and information from previously prepared reports.

### Previous Reports Summarized

Plans that describe Oneida County's natural resources are summarized below.

#### Oneida County Land & Water Resource Management Plan 2000 – 2005

The 2000 Land & Water Resource Management Plan was created to coordinate available programs and funding sources to:

- Guide resource management planning;
- Compile existing conditions of the land and water resources in Oneida County;
- Identify land and water resource problems and priorities;
- Develop a multi-year work plan to address land and water resource problems;
- Strengthen partnerships with landowners, and other agencies, municipalities, and organizations;
- Integrate efforts with other county 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 Management goals and objectives; and
- Track progress toward the achievement of the plan's goals and objectives.

This plan contains county-wide descriptions of land and water resources, and was used as a starting point for the 2006-2011 LWRM plan.

#### Oneida County Forest Comprehensive Land Use Plan 2006 – 2020

This plan incorporates or references all county forest policies, pertinent county ordinances, planning documents, and the needs and actions to occur from 2006 to 2020.

Specific flora and fauna within the county forest are described in this plan.

The purpose of the County Forest Law as stated in § 28.11, WI Stats., is generally to provide the basis for the planned development and management of the county forests for optimal production of forest products together with recreational opportunities, wildlife production, watershed protection and stabilization of stream flow, to assure maximum public benefits, and to compensate the counties for the public uses, benefits and privileges these lands provide; all in a manner which will provide a reasonable revenue to the towns in which such lands lie.

### Oneida County Outdoor Recreation Plan 2004 – 2008

The primary purpose of this recreation plan is to provide continued direction in meeting the current and future recreation needs of the County. This direction takes the form of an inventory and analysis of outdoor recreational facilities followed by establishing recommendations to meet identified needs.

Brief descriptions of the physical and social characteristics of Oneida County included in the 2006-2011 LWRM plan came from here when updating was necessary.

### Headwaters State of the Basin Report – 2002

The Headwaters Integrated Basin Plan comprises a six county area in the northeastern portion of Wisconsin including the counties of Forest, Florence, Lincoln, Langlade, Oneida and Vilas. The Headwaters Basin includes 42 watersheds from five basins. The five basins are the Green Bay, Lake Superior, Upper Chippewa, Wolf River and Upper Wisconsin. The basin plan provides a snapshot of the current condition of land and water resources in the basin and identifies priority resource issues and concerns. Attachment A contains the major resource issues, concerns, and recommendations identified in the plan.

## **Location/Geography**

Oneida County is located in the north central part of the state. The largest urban area is the City of Rhinelander, which is the county seat and has a population of 8,052 in 2005. The county is bound on the north by Vilas County, on the west by Price County, to the east by Forest County and to the south by Lincoln and Langlade Counties. Oneida County has a 2005 population of 38,073 in its twenty towns and the City of Rhinelander.

This area was once part of a vast forest region covering much of the Great Lakes area. Today, Oneida County is 80 percent covered with second growth forest. Ever since trains have carried out logs, this area has served as a popular vacation area. The location is a key factor in the economic structure of the area. The establishment of paper and wood industries in the county attests to the physical resources of the region. The county is accessible throughout Wisconsin and adjacent states by highways and an airport with regular connector passenger service.

Map 1 – Land Use - 2005

## **Land-Use**

Oneida County is characterized by well developed forests and its abundance of lakes and streams. Oneida County has a total surface area of 779,235 acres; of which 80% of the land is forested, about 10% of the county is water, 6.5% of the county is agricultural lands, and the remaining 3.5% of the land is urban land uses as shown on Map 1.

The following is a brief description of the major land uses and their trends in Oneida County.

### *Agriculture*

According to the 2002 Census of Agriculture (USDA), there are approximately 51,000 acres of agricultural land in Oneida County, or 6.5% of the land area. Potatoes and cranberries are the dominant cash crops. A short growing season limits cropping mainly to forage species, small grains, and suitable vegetables for specialty crops.

### *Forestry*

Oneida County is characterized by well developed secondary growth forests with a mixture of hardwoods and conifer stands, covering 80 percent of the county 575,000 acres. The majority of the forestland in Oneida County is owned by the forest industry and is operated as industrial forests. According to Wisconsin Forestry Statistics, industrial forests are the predominant land-use in Oneida County with approximately 402,900 acres of forestland. Oneida County and the DNR own approximately 23 percent of the forestland with 51,000 acres part of the American Legion State Forest in Oneida County. The forest contributes substantially to the supply of pulpwood and saw lumber in the area. Private woodland owners own four percent of the forestland and 2 percent of Oneida County's forestland is part of the Nicolet National Forest.

### *Residential Development*

Oneida County is experiencing the most substantial residential development in its history. In 1990 the Oneida County Planning & Zoning Department (P&Z) issued 1,125 building permits. In 1998 there were 2,244 building permits issued. In 2005 there were 1,668 building permits issued. Much of this development is occurring on lakes and rivers.

Most of the residential development in Oneida County, according to the Oneida County P&Z report, is in the Town of Minocqua which has averaged 362 occupancy permits from 1991-1998. The least development occurred in the Town of Piehl with an average of only 2 occupancy permits within the same time period.

Tourism is the largest reason for residential development outside of the Rhinelander urbanized area like in the Town of Minocqua.

### *Commercial / Industrial Development*

Commercial and industrial development in Oneida County is a relatively small land use. In March 2005 the economy of Oneida County was dominated by several prominent industries: food service & drinking places, education, hospitals, ambulatory health care, general merchandise stores, nursing & residential care, nonstore retailers, administration & support, paper manufacturing, and food & beverage stores.

**Brownfields** are usually defined as abandoned, idle, or under utilized industrial or commercial facilities where expansion or redevelopment is complicated by environmental contamination. Wisconsin's Land Recycling Law exempts purchasers, municipalities, lenders, and representatives from certain parts of the Spill Law (Hazardous Substance Discharge Law §144.76 WI Stats.) and some other legislative changes have clarified the responsibilities of each party to the clean up process. Both the WDNR and DATCP have brownfield redevelopment grant programs.

## Basin & Watersheds

There are 15 watersheds contained completely or partially within Oneida County as shown in Map 2. The majority of Oneida County drains into the Wisconsin River. A small area in the southeastern part of the county drains into the Wolf River, as well as, a small portion of the northwest corner of the county drains to the Upper Chippewa River Basin, which then drains to the Upper Mississippi River. Table 1 lists the Oneida County watersheds and their WDNR rankings.

<b>Watershed</b>	<b>Overall Ranking</b>	<b>Stream Ranking</b>	<b>Lake Ranking</b>	<b>Groundwater Ranking</b>
Upper South Fork of Flambeau River (UC10)	Low	Not Ranked	Low	Low
Bear River (UC15)	Low	Not Ranked	Medium	Low
Prairie River (UW30)	Medium	Medium	Medium	Low
Noisy and Pine Creeks (UW33)	High	High	High	Low
Somo River (UW35)	Low	Not Ranked	Low	Low
Lower Tomahawk River (UW36)	Low	Low	Low	Low
Middle Tomahawk River (UW37)	Low	Not Ranked	Low	Low
Upper Tomahawk River (UW38)	High	High	High	Low
Woodboro (UW39)	High	Low	High	Low
Pelican River (UW40)	Medium	Not Ranked	Low/Med.	Low
Rhineland Flowage (UW41)	High	Not Ranked	High	Low
Sugar Camp Creek (UW42)	Medium	Not Ranked	High	Low
Saint Germain River (UW43)	Medium	Not Ranked	High	Low
Eagle River (UW44)	High	Not Ranked	High	Low
Upper Wolf River and Post Lake (WR20)	Not Ranked	Not Ranked	Not Ranked	Low

Source: Headwaters Basin Plan, 2002.

## Surface Water

The WDNR describes Oneida County as having excellent watershed characteristics as a result of high percentage of land in forest cover. Oneida County contains approximately 68,874 acres of

surface water. One of the highest concentrations of natural lakes in the world is found in Oneida County along with Vilas County to the north. In Oneida County along there are 426 named lakes with a total of 66,545 acres and 701 unnamed lakes for a total of 2,056 acres. The largest natural lake is Lake Tomahawk, which covers 3,627 acres. The Willow Reservoir is the largest artificial body of water in the county with 5,135 acres. The deepest lake is Clear Lake, which is approximately 100 feet deep. The county also contains 830 miles of streams, of which about 192 miles are classified as trout streams.

Approximately 20% of the lakes in the county are impoundments. Water control structures are maintained on some lakes for regulation of flow and particularly for maintaining water levels by the Wisconsin Valley Improvement Company (WVIC). The other natural lakes in the county are small with 806 lakes under 20 acres.

Overall, there are no major or widespread water quality problems regarding Oneida County surface waters that can be controlled within Oneida County. Pollution of surface water generally occurs from mercury deposition, the source of which is coal fired power plant emissions and automobile road run-off. There is little municipal or industrial waste according to the DNR Water Quality Management Plan for the Upper Wisconsin River Basin. The streams exhibit good water quality with the majority supporting cold water fish communities and warm sport fish communities. The quality of the water in the portion of the Wisconsin River below the city of Rhinelander has been studied. This stretch of the river does not always meet the 5.0 ppm dissolved oxygen standard for a warm water fishery.

The Rhinelander landfill adjacent to Slaughterhouse Creek discharges groundwater containing ammonia, high conductivity, volatile organic compounds (VOC's) and heavy metals. Studies of wetlands adjacent to the landfill have shown toxic impacts to aquatic life. The DNR feels that more studies are needed to show if remedial actions being taken at the landfill are adequately addressing the impacts to the wetlands along Slaughterhouse Creek.

### **Impaired Waters – 303(d) Waters**

The DNR maintains a list of surface waters that do not meet specific water quality standards outlined by section 303(d) of the Clean Water Act. The DNR is required to update the list every two years.

In 2004 there were 44 waterbodies in Oneida County on the 303(d) list. Forty-two of these waterbodies are listed due to fish consumption advisories for mercury contamination. The exception is Slaughterhouse Creek, which is included on the list due to contaminated sediment. Slaughterhouse Creek's contaminated sediment is suspected to have come from the old city of Rhinelander landfill adjacent to the creek, which seeps leachate into the groundwater that provides base flow in Slaughterhouse Creek. The leachate contains volatile organic compounds (VOC's) and heavy metals. The WDNR feels that more studies are needed to determine the landfill's impact on the surface water quality, stream sediment, and aquatic life.

## **Outstanding/Exceptional Resource Waters**

The DNR has given special designations to water resources throughout the state of Wisconsin that have the highest water quality and fisheries in the state and therefore deserve special protection. No discharge is allowed to these waters unless its quality equals or surpasses the quality of the receiving water body.

ORW's and ERW's share many of the same environmental and ecological characteristics. The primary difference between the two is that ORW's typically do not have any direct point sources (e.g., industrial or municipal sewage treatment plant, etc.) discharging pollutants directly to the water. In addition, any pollutant load discharged to an ORW must meet background water quality at all times. Exceptions are made for certain types of discharge situations to ERW's to allow pollutant loads that are greater than background water quality when human health would otherwise be compromised.

Outstanding resource waters (ORW) in Oneida County include five lakes, one creek, and one river.

Exceptional resource waters (ERW) in Oneida County include 38 creeks. This designation of ERW also includes all Class I trout streams listed in Wisconsin Trout Streams publication 6-3600 (80).

## **Groundwater**

Groundwater is an important resource in Oneida County. It is the source of almost all water used for domestic, agricultural, commercial and industrial purposes in the county.

According to the Oneida County Soil Survey report, the main aquifer in the county is glacial drift, particularly glacial outwash and ice-contact sand and gravel. The total mineral content is less than 150 milligrams per liter. The main components in the water are calcium, magnesium, and bicarbonate ions. A large concentration of iron is in the groundwater throughout the county, but is not considered to be a health hazard.

The groundwater quality in Oneida County is generally good, however the county is susceptible to groundwater contamination in most areas due to the predominance of sandy soils and shallow depth to groundwater. Contamination to groundwater can be a result from various sources such as: improperly placed or leaking landfills sites, private septic systems, excessive use of lawn fertilizers or pesticides, leaks from municipal sewer pipes, and seepage from nonmetallic mining operations. Runoff from livestock yards and urban areas, improper application of agricultural pesticide or fertilizers and leaking petroleum tanks and spill can also add organic and chemical contaminants in locations where the water table is near the surface.

## **Geology & Soils**

Oneida County is in the Northern Highlands physiographic region of Wisconsin, a gently arched dome underlain by crystalline rock. In the glacial area the basic soils are weathered sedimentary deposits and outwash materials over a granite bedrock. A wide variety of soils occur on Oneida County forest lands. They range from droughty sands to wet, poorly drained organic soils -- from steep, stony moranic soils to those on level outwash plains. This intricate pattern and variety of soils determines to a large degree the site quality. The County Forest in the western portion of the County has relatively poor site quality due to the presence of an underlying hardpan layer and to the fact that the unit was so severely burned in the past that the topsoil was largely destroyed. The soils of the central and eastern units are better drained moranic soils with good to medium site quality. Complete soils information can be obtained by reviewing the "Soils Survey of Oneida County, Wisconsin" as published by the U.S. Department of Agriculture – NRCS.

## **Soil Erosion from Cropland**

Croplands are concentrated in the north central and south central portions of Oneida County. Concern regarding cropland erosion is generally low in the county because of the limited amount of croplands and low erosion rates. The Northern Wisconsin Cropland Study in 1999 identified 5 percent of non-federal rural county land as cropland, 10 percent as surface waters, 80 percent as forest, and 5 percent as residential, commercial or industrial land.

In 1999 a Cropland Transect Survey was conducted to estimate soil erosion rates in Oneida County. The average Universal Soil Loss Equation (USLE) soil loss estimates ranged from 6.4 tons per acre per year to less than 1 ton per acre per year. The average for the county is approximately 0.6 tons per acre per year in 1999. The report indicates that 48% of the cropland are on slopes of 0-2%; 28% is on slopes of 3-4%; 20% is on slopes of 5-7%; 2% on slopes of 8-10%; and 2% is on slopes greater than 10%. The report also indicates that erosion is limited due to the present crop rotations that are used in Oneida County. The study found that forage production covers 54% of the cropland and 17 % in idle conservation cover. There is also 18% in small grains and 10% in row crops or specialty crops. These types of crop covers help reduce the amount of soil erosion coming from Oneida County's croplands.

It is a state requirement that every county prepares a Soil Erosion Control Plan. In 1997 the Oneida County Board approved a resolution asking the Department of Agriculture Trade and Consumer Protection (DATCP) to grant them a waiver from preparing this plan. Oneida County was granted a waiver from DATCP to release them from their obligation to develop a Soil Erosion Control Plan because Oneida County has relatively small amounts of cropland, and the magnitude and extent of cropland erosion is small. Contact the Land & Water Conservation Department for a copy of the waiver.

A voluntary educational approach will continue to be used to achieve erosion control standards in Oneida County. One-on-one contacts with landowners and operators who request technical assistance is the most common method used to promote soil conservation in Oneida County.

Conservation plans, which plan individual crop fields to the tolerable soil loss rate or "T", are prepared for participants in the Farmland Preservation Program. Participation is through voluntary 10-25 year individual agreements due to no exclusive agricultural zoning in Oneida County. The County Land and Water Conservation Department manages agreements for cropland within mapped areas identified in the 1982 Oneida County Farmland Preservation Plan.

Map 2 - Watersheds

# PERFORMANCE STANDARDS & PROHIBITIONS

## Chapter 4

### Performance Standards and Prohibitions

The County land and water resource management plans are the local mechanism to implement performance standards and prohibitions. Through Wisconsin Act 27, the Wisconsin Legislature amended state statutes to allow county land & water conservation committees to develop implementation strategies for addressing local water quality priorities related to controlling erosion, sedimentation, and nonpoint source water pollution.

### Non-Agricultural Performance Standards

Oneida County finds that construction site erosion and uncontrolled stormwater runoff from land disturbing and land development activities can have significant adverse impacts upon local water resources and the health, safety and general welfare of the community, and can diminish the public enjoyment and use of natural resources.

#### Land Disturbance Activities Subject to Stormwater Management and Erosion Control:

All activities directly related to the planting, growing and harvesting of agricultural crops are not considered land disturbance activities under this section. Land disturbance activities to the shoreland zone are regulated by the Oneida County Zoning and Shoreland Protection Ordinance. Oneida County also requires new businesses to address erosion control and stormwater management through Administrative Review permits and Conditional Use permits.

#### Standards for Stormwater Management and Erosion Control:

Stormwater runoff, soil erosion, siltation, or sedimentation from all land disturbing and development activities shall meet standards in NR 151 and 216 and COMM 60 and 20-21, Wis. Adm. Code and/or shall be controlled in accordance with Technical Guidelines as developed by the U.S. Department of Agriculture, Natural Resources Conservation Service, or the Wisconsin Department of Natural Resources.

# 2000-2005 WORK PLAN ACCOMPLISHMENTS

## Chapter 5

This chapter is a summary of how each of the Work Plan goals was accomplished. Actions for each goal are described. Knowing what has occurred helps to determine which actions to continue with when creating the next 5-year Work Plan.

**Goal 1: Promote well planned development, which minimizes negative impacts on our land and water resources.**

This is an on-going activity. Several towns in the county are working on their land-use plans. The soils information is now available on the web, which can be used for planning purposes. We developed a booklet of shoreland zoning and wetland requirements. It was distributed to landowners, developers, contractors, real estate agents, and units of government. We do take digital pictures of our shoreline cost-share projects for documentation.

**Goal 2: Retain and restore shorelands on lakes, rivers, and streams to preserve or improve shoreline habitat and reduce pollutants entering our waters.**

We have been working with riparian landowners on shoreland buffers. We have received state funding annually to address this issue since 2001. In calendar years 2001 through-2004, Oneida County received \$30,000.00 annually from DATCP, and in 2005 we received \$85,248. The County Board authorized a full-time Land & Water Conservation Specialist position in 2005. With the additional staff position, we were able to assist more landowners with their cost-share projects in 2005. Informational packets are being distributed to shoreline property owners participating in our county cost-share program. We have had a booth at the Minocqua Lake Fair and have distributed information annually. One DNR public demonstration site has been established on Minocqua Lake and has signage.

We received a DNR lake-planning grant in 2005 to work on the self-help monitoring program and non-native aquatic invasive species. We developed a county- wide lakes database for Oneida County Lakes. We supported lake association/districts efforts to obtain grants for their lake projects.

We have set up displays at local stores that sell lawn fertilizers to inform the general public about purchasing zero and low phosphorus fertilizers.

**Goal 3: Improve forestry management to promote productivity of forest products, protect wildlife habitat, water quality, and provide recreational opportunities.**

We have expanded educational programming for forestry practices. We have held meetings with DNR Foresters to discuss private landowner participation in various cost share programs utilizing forestry Best Management Practices. A local work group was established for the Environmental Quality Incentives Program. They had established one third of their county allocation for forestry priorities. We worked with Partners in Forestry to encourage private landowners with small forested acreage to cooperatively manage and market their forest products. We provided input on the DNR Northern Highland – American Legion State Forest Master plan.

We took ownership of a portable timber bridge and are currently renting the bridge out to loggers. They utilize it for stream crossings when they are harvesting timber. We have contracted with private individuals, county, and industry for rental of the anchor chain scarifier for regeneration. We cooperate with DNR on shipping trees into the county. We have rented the tree planter to private landowners. We have provided information on the Managed Forest Law program to landowners.

Cooperating agency personnel from the Natural Resources Conservation Service works with private landowners and has planned access roads, forest trails, and landings to prevent sedimentation and erosion.

The County Forestry Committee has held hearings on the use of county lands by ATV groups. An ATV Club has been organized in Oneida County. One trail has been established for their use. Additional trails may be established in the future.

**Goal 4: Reduce sources of nonpoint source pollution, which degrade our surface and groundwater.**

Contractors have had the opportunity to attend workshops on construction site erosion control. We worked with cooperating agency personnel to assist specialty crop growers to consider programs to address nutrient management issues on their lands (potato and cranberry growers). Lake Nokomis Cranberries signed up for nutrient/pest management on a total of 255 acres. In 2004 Cranberry growers received a special statewide EQIP allocation.

We monitor Ag land use for the Farmland Preservation Program. We developed soil and water conservation standards for the Farmland Preservation Program. Status reviews are completed annually for 25% of FPP program participants.

**Goal 5: Educate the public on groundwater quality.**

We offer cost sharing and technical assistance to landowners for well abandonment through EQIP or LWRM Plan implementation funds. We had a booth at the Minocqua Fair in 2004 that stressed well testing, proper maintenance and abandonment.

**Goal 6: Protect lake ecosystems from the degradation from recreational pressures.**

A courtesy code has been developed. It can be used by lake associations and districts to help reduce user conflicts and boating pressure on lakes. We will continue to work with the Oneida County Lakes Association to get this courtesy code established for use on Oneida County lakes.

**Goal 7: Protect and enhance wetlands in Oneida County.**

We have encouraged landowners to utilize NRCS programs that provide cost sharing for wetland restorations.

**Goal 8: Utilize current computer technologies to make resource information more readily available to the public.**

We maintain a current list of contractors, shoreline planting professionals, and plant suppliers. We maintain a current contact list of agency resource professionals that we provide to landowners for their use. We utilize “a Guide for Landowner’s Responsibility for Constructed Conservation Systems” on all shoreline cost-shared projects.

**Goal 9: Minimize impacts on our natural resources from mining activities.**

The Oneida County metallic mining ordinance was updated on March 21, 2000. The Potawatomi Tribe, and the Sokaogon Band of Lake Superior Chippewa Band have purchased the adjacent Forest County mining property. At the present time, there are no further plans to use the Wisconsin River that flows through Oneida County for mining wastewater.

An inventory of non-metallic mining sites was completed. A hard copy map was completed for all non-metallic sites not listed on the countywide inventory GIS base map, but have a visible footprint on the landscape. We have established one good non-metallic restoration site for wildlife habitat. It will act as an example of what can be done at similar sites. Effective in 2001, the Oneida County Solid Waste Department was given the responsibility for reclamation of non-metallic mining sites.

# 2006-2011 WORK PLAN

## Chapter 6

Based upon the resource concerns identified by the Community Advisory Committee (CAC) and the resource information available, the goals in the Work Plan were selected to focus on over the next five years. These goals, ranked in order of priority, were further defined in the Work Plan by identifying specific actions to address the resource concerns. The LWC Department staff along with agency partners will implement the action items listed in the Work Plan as staff and funding become available. The estimated costs listed in the *Cost/Funding Source* column are annual costs. If no cost is listed, then existing staff will perform the activity.

(Goals, objectives, & actions will be prioritized in July 2006.)

(Anticipated outcomes will include measurable outcomes in July 2006.)

(Work Plan budgets will be determined in July 2006.)

**Goal 1: Protect shoreland areas by minimizing impacts from land disturbing activities.**

*(Anticipated Outcome --)*

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<u>Objective</u> (Highest priorities in bold)	<u>Activities</u> (Highest priorities in bold)	<u>Anticipated Outcomes</u>	<u>Responsible Agencies</u> (Lead agency in bold)	<u>Estimated Staff Hours/Cost Needed</u>	<u>Estimated Cost-Share Needed</u>	<u>Time Frame</u>
A. Provide assistance to the P&Z Department and local units of government with land use planning activities.						
	1. Work with P&Z along with other County Departments to coordinate land use planning efforts to comply with the state planning requirements of §66.1001 WI Statutes.		<b>P&amp;Z</b> , NCWRPC, Land Records, LWCD, DOA, DNR,			2006-2011
	2. Provide necessary technical information to local units of government for planning efforts.		<b>P&amp;Z</b> , Land Records, NCWRPC			2006-2011
	3. Assist in grant writing and exploring funding sources for land use planning efforts.		<b>P&amp;Z</b> , NCWRPC			2006-2011

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B. Increase compliance and education of current ordinances and waterway classifications.						
	1. Work with P&Z to develop a shoreland zoning fact sheets, and publish online.		<b>P&amp;Z, LWCD, NCWRPC, DNR</b>			2006-2011
	2. Target distribution of information to lake associations, absentee landowners, developers, contractors and real estate agents, by online publication.		<b>LWCD, UWEX, NCWRPC, DNR</b>			2006-2011

**Goal 2: Retain and restore shorelands on lakes, rivers, and streams to reduce non-point source pollution.**

**(Anticipated Outcome --)**

<u>Objective</u> (Highest priorities in bold)	<u>Activities</u> (Highest priorities in bold)	<u>Anticipated Outcomes</u>	<u>Responsible Agencies</u> (Lead agency in bold)	<u>Estimated Staff Hours/Cost Needed</u>	<u>Estimated Cost-Share Needed</u>	<u>Time Frame</u>
A. Assess the condition of the lakeshore habitat.						
	1. Form a study group to determine need and procedure to create lake inventories.		<b>LWCD</b>			2007

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B. Educate landowners on the importance of shoreland buffers						
	1. Work with lake associations to provide and develop educational information.		LWCD, P&Z, UWEX, NRCS, FSA			2006-2011
	2. Distribute and mail information packets to riparian owners.		LWCD, P&Z, UWEX, NRCS, FSA			2006-2011
	3. Provide information to local media and various agency newsletters regarding shoreland issues.		LWCD, P&Z, UWEX, NRCS, FSA			2006-2011
	4. Encourage landowners to visit Oneida County web page to learn about shoreland restoration.		LWCD, P&Z, UWEX, NRCS, FSA			2006-2011

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C. Encourage landowners to establish shoreland buffers.						
	1. Hold workshops and develop demonstration sites on lakes.		LWCD, P&Z, UWEX, NRCS, DNR			2006-2011
	2. Distribute informational signage for shoreland buffers.		LWCD, P&Z, UWEX, NRCS, DNR			
	3. Seek State funding to provide cost sharing to riparian landowners.		LWCD, P&Z, UWEX, NRCS, DNR			2006-2011
	4. Organize a local training group to share techniques used in shoreland restoration.		LWCD, P&Z, UWEX, NRCS, DNR			2006-2011
	5. Provide technical expertise to help implement shoreland projects.		LWCD, P&Z, UWEX, NRCS, DNR			2006-2011
D. Protect shoreland habitats from land development.						
	1. Convene a work group to study the feasibility of establishing a stewardship fund for purchasing available lands for preservation, and create land purchase criteria.		LWCD, UWEX, P&Z, Forestry, NRCS, Northwoods Land Trust			
	2. Utilize easements, land trusts, and incentive payments to protect critical areas.		LWCD, UWEX, P&Z, Forestry, NRCS, Northwoods Land Trust			2006-2011

**Goal 3: Improve forestry management to promote productivity of forest products, protect wildlife habitat, water quality, and provide recreational opportunities. .**

*(Anticipated Outcome --)*

JUNE 2006 DRAFT

<u>Objective</u> (Highest priorities in bold)	<u>Activities</u> (Highest priorities in bold)	<u>Anticipated Outcomes</u>	<u>Responsible Agencies</u> (Lead agency in bold)	<u>Estimated Staff Hours/Cost Needed</u>	<u>Estimated Cost-Share Needed</u>	<u>Time Frame</u>
A. Develop and expand educational programming for forestry practices.						
	1. Work with various agencies to develop and coordinate existing educational activities.		<b>UWEX, DNR, Forestry, NRCS</b>			2006-2011
B. Improve forest management to control sediment, erosion and protect habitat cover types						
	1. Work with organizations in the forestry industry to hold educational programs that educate woodland owners and loggers on the importance of using Best Management Practices (BMPs.)		<b>DNR, UWEX, NRCS, Forestry, FISTA</b>			2006-2011
	2. Encourage private landowners to use professional forestry assistance.		<b>DNR, UWEX, NRCS, Forestry, FISTA</b>			2006-2011
	3. Promote teacher use of DNR Environmental Education for Kids (EEK) program.		<b>DNR, UWEX, NRCS, Forestry, FISTA</b>			2006-2011

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C. Control illegal garbage dumping on commercial, county, state and federal forestlands						
	1. Encourage towns and the County to increase fines for illegal dumping.		<b>Solid Waste, Health, Forestry, DNR, USFS</b>			2006-2011
	2. Establish a tire recycling program.		<b>Solid Waste, Health, Forestry, DNR, USFS</b>			2006-2011
	3. Help promote and support the "Clean Sweep" program.		<b>Solid Waste, Health, Forestry, DNR, USFS</b>			2006-2011
D. Reduce erosion and habitat degradation caused by unauthorized ATV use.						
	1. Assist ATV clubs by providing educational materials for users.		<b>Forestry, DNR</b>			

**Goal 4: Reduce sources of nonpoint source pollution which degrade our surface and groundwater.**

**(Anticipated Outcome --)**

JUNE 2006 DRAFT

<i>Objective</i> (Highest priorities in bold)	<i>Activities</i> (Highest priorities in bold)	<b>Anticipated Outcomes</b>	<b>Responsible Agencies</b> (Lead agency in bold)	<b>Estimated Staff Hours/Cost Needed</b>	<b>Estimated Cost-Share Needed</b>	<b>Time Frame</b>
A. Educate contractors, developers, and citizens about construction site erosion control.						
	1. Hold construction site erosion control workshops for contractors, & landscapers.		<b>P&amp;Z, DNR, LWCD, UWEX, NRCS</b>			
	2. Provide fact sheets that explain local and state requirements regarding construction site erosion.		<b>P&amp;Z, DNR, LWCD, UWEX, NRCS</b>			
B. Increase compliance and monitoring of construction site erosion.						
	1. Seek state funding for LTE to help P&Z with plat reviews, erosion control plans, conditional use permits, and monitoring.		<b>P&amp;Z, DNR, COMM</b>			

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C. Educate agricultural producers on proper nutrient management, plan development, and agricultural waste systems.						
	1. Prepare or review nutrient management plans for landowners.		NRCS, LWCD, UWEX, P&Z, Crop Consultants			
	2. Sponsor field demonstrations, tours, and workshops		NRCS, LWCD, UWEX, P&Z, Crop Consultants			
	3. Convene a work group to investigate whether a county animal waste ordinance should be created.		NRCS, LWCD, UWEX, P&Z, Crop Consultants			
D. Educate producers on benefits of rotational grazing to protect surface and ground water.						
	1. Develop rotational grazing plans.		NRCS, UWEX, LWCD			
	2. Sponsor pasture walks.		NRCS, UWEX, LWCD			

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E. Reduce pollution from stormwater runoff in developed areas.						
	1. Educate municipalities on the importance of establishing a stormwater management ordinance.		<b>P&amp;Z, UWEX, DNR, NRCS</b>			
	2. Encourage local municipalities to participate and seek funding for stormwater management through DNR's Targeted Runoff Management Program (TRM).		<b>P&amp;Z, UWEX, DNR, NRCS</b>			
F. Educate the public on sources of urban pollution.						
	1. Distribute existing publications and provide information to local media.		<b>DNR, UWEX, LWCD, NRCS, FSA</b>			
	2. Create a link to DNR website on Runoff Management.		<b>DNR, UWEX, LWCD, NRCS, FSA</b>			

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G. Educate riparian landowners on improved fertilization techniques to reduce phosphorus loading to water resources.						
	1. Set up displays at local stores that sell lawn fertilizers.		LWCD, NRCS, UWEX			
	2. Encourage local retailers to sell zero phosphorus fertilizers.		LWCD, NRCS, UWEX			
	3. Notify local retailers about County directives.		LWCD, NRCS, UWEX			
	4. Support statewide creation of a zero phosphorus fertilizer ban.		LWCD, NRCS, UWEX			

**Goal 5: Educate the public on groundwater quality.**

**(Anticipated Outcome --)**

JUNE 2006 DRAFT

<i>Objective</i> (Highest priorities in bold)	<i>Activities</i> (Highest priorities in bold)	<b>Anticipated Outcomes</b>	<b>Responsible Agencies</b> (Lead agency in bold)	<b>Estimated Staff Hours/Cost Needed</b>	<b>Estimated Cost-Share Needed</b>	<b>Time Frame</b>
A. Educate the public on proper maintenance of septic systems, groundwater testing, well maintenance and the closure of abandoned wells.						
	1. Educate landowners through mailings, and local media.		<b>P&amp;Z</b> , UWEX, LWCD, NRCS, DNR			
	2. Send out educational mailings each year in cooperation with P&Zs septic pumping cards. Create oversized postcards to include both types of information.		<b>P&amp;Z</b> , UWEX, LWCD, NRCS, DNR			
	3. Work with area septic service companies to provide information.		<b>P&amp;Z</b> , UWEX, LWCD, NRCS, DNR			
	4. Offer technical assistance to properly abandon wells.		<b>P&amp;Z</b> , UWEX, LWCD, NRCS, DNR			

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B. Encourage landowners to enhance or restore degraded wetlands.						
	1. Utilize NRCS programs to provide cost sharing for wetland restorations.		NRCS, DNR			
C. Protect small wetlands within municipalities.						
	a. Educate local units of government on the importance of protecting wetlands within their community.		NRCS, DNR			
	b. Work with Ducks Unlimited and other groups to explore educational possibilities.		NRCS, DNR			

**Goal 6: Protect lake ecosystems from the degradation from recreational pressures.**

**(Anticipated Outcome --)**

JUNE 2006 DRAFT

<i>Objective</i> (Highest priorities in bold)	<i>Activities</i> (Highest priorities in bold)	<b>Anticipated Outcomes</b>	<b>Responsible Agencies</b> (Lead agency in bold)	<b>Estimated Staff Hours/Cost Needed</b>	<b>Estimated Cost-Share Needed</b>	<b>Time Frame</b>
A. Reduce user conflicts on lakes.						
	1. Encourage town governments to adopt boating ordinances to reduce user conflicts and boating pressure.		<b>P&amp;Z, DNR</b>			
	2. Encourage countywide lakes association to take the lead on this issue by establishing courtesy codes on lakes.		<b>UWEX, LWCD</b>			

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B. Educate boaters on proper boating techniques to prevent damage to sensitive lake ecosystems.						
	1. Educate boaters through local media.		<b>DNR, UWEX</b>			
	2. Encourage boaters' safety courses to include a section on environmental stewardship.		<b>DNR, UWEX</b>			
	3. Work with Lake Association to identify environmentally sensitive areas on lakes.		<b>DNR, UWEX</b>			

**Goal 7: Utilize computer technologies to make resource information more readily available to the public.**

**(Anticipated Outcome --)**

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<i>Objective</i> (Highest priorities in bold)	<i>Activities</i> (Highest priorities in bold)	<b>Anticipated Outcomes</b>	<b>Responsible Agencies</b> (Lead agency in bold)	<b>Estimated Staff Hours/Cost Needed</b>	<b>Estimated Cost-Share Needed</b>	<b>Time Frame</b>
A. Establish a natural resources webpage.						
	1. Provide information about Land & Water Resource Management and educational information relating to all the goals in the plan.		<b>LWCD, ITS, UWEX</b>			
	2. Establish county webpage for LWCD services.		<b>LWCD, ITS, UWEX</b>			
	3. Provide links to UWEX shoreland restoration site and other sites with relevant information.		<b>LWCD, ITS, UWEX</b>			
	4. Provide a contact list of resource professionals.		<b>LWCD, ITS, UWEX</b>			

**Goal 8: Minimize impacts on our natural resources from mining activities.**

*(Anticipated Outcome --)*

JUNE 2006 DRAFT

<i>Objective</i> (Highest priorities in bold)	<i>Activities</i> (Highest priorities in bold)	<b>Anticipated Outcomes</b>	<b>Responsible Agencies</b> (Lead agency in bold)	<b>Estimated Staff Hours/Cost Needed</b>	<b>Estimated Cost-Share Needed</b>	<b>Time Frame</b>
A. Reclaim abandoned non-metallic sites for wildlife habitat, improved aesthetics, and other post-mine uses.						
	1. Work with surrounding counties and bring together EPA and necessary state agencies to change laws on reclamation of non-metallic mining sites.		<b>P&amp;Z, Solid Waste, NRCS, DNR</b>			

**Goal 9: Slow the spread of invasive species.**

**(Anticipated Outcome --)**

JUNE 2006 DRAFT

<i>Objective</i> (Highest priorities in bold)	<i>Activities</i> (Highest priorities in bold)	<b>Anticipated Outcomes</b>	<b>Responsible Agencies</b> (Lead agency in bold)	<b>Estimated Staff Hours/Cost Needed</b>	<b>Estimated Cost-Share Needed</b>	<b>Time Frame</b>
A. Control aquatic invasive species.						
	1. Seek DNR grant to fund a full-time aquatic invasive species position to coordinate county activities.		<b>LWCD, UWEX, DNR</b>			
	2. Organize a group of stakeholders to address this issue.		<b>LWCD, UWEX, DNR</b>			
	3. Educate shoreland owners and boaters on Aquatic Invasive Species issues.		<b>LWCD, UWEX, DNR</b>			
	4. Sponsor Clean Boats-Clean Waters workshops, and program publicity.		<b>LWCD, UWEX, DNR</b>			
	5. Assist DNR with obtaining volunteers to monitor lakes in the county.		<b>LWCD, UWEX, DNR</b>			

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B. Control terrestrial invasive species.						
	1. Distribute educational materials for general public regarding terrestrial invasive species.		LWCD, UWEX, Forestry			
	2. Provide information thru presentations and/or press releases to media.		LWCD, UWEX, Forestry			

**Goal 10: Reduce wildlife conflicts.**

*(Anticipated Outcome --)*

<u>Objective</u> (Highest priorities in bold)	<u>Activities</u> (Highest priorities in bold)	<u>Anticipated Outcomes</u>	<u>Responsible Agencies</u> (Lead agency in bold)	<u>Estimated Staff Hours/Cost Needed</u>	<u>Estimated Cost-Share Needed</u>	<u>Time Frame</u>
A. Reduce wildlife damage to crops.						
	1. Promote and educate the public on Wildlife Damage Program issues.		LWCD, DNR			
	2. Provide technical assistance to commercial landowners on abatement measures to reduce or prevent wildlife damage to crops.		LWCD, DNR			
	3. Crop damage assessment.		LWCD, DNR			

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B. Provide input to DNR & Conservation Congress about hunting and harvesting goals for large game.						
	1. Annually attend DNR meeting prior to the spring Conservation Congress meeting.		LWCD, DNR			
	2. Attend Conservation Congress Meeting to express concerns and vote on issues presented.		LWCD, DNR			

# **REGULATIONS**

## **Chapter 7**

### **Regulation Types**

(Regulations will be added in July 2006.)

# MONITORING & EVALUATION

## Chapter 8

### Introduction

This chapter addresses both water quality monitoring and briefly summarizes the plan for progress and evaluating the effectiveness of the Land and Water Resource Management Plan.

The Oneida County Land and Water Resource Management Plan is intended to be a working document. The Plan will be reviewed and updated annually by the Land & Water Conservation Committee and staff to track progress in accomplishing the goals and actions of the Work Plan. Monitoring and evaluation of specific resource issues can be accomplished in many different ways. Some of the methods to track the progress of the Land and Water Resource Management Plan are:

#### 1. Performance Standards and Prohibitions Monitoring and Evaluation

GIS technology will be used as a tool to track and monitor landowner compliance with the performance standards and prohibitions. In addition, all data regarding landowner compliance with the performance standards and prohibitions will be kept in hard copy format in the landowner file.

#### 2. Water Quality Monitoring

Currently 61 lakes are being monitored by citizen volunteers through the Self-Help monitoring program. Of these 61 lakes, 36 are currently being monitored for chemistry, 51 lakes are being monitored for clarity, 33 lakes are being monitored for Eurasian Watermilfoil, 32 for Curly leaf pondweed, and 4 for purple loosestrife.

Oneida County supports this monitoring program and will continue to encourage lake associations and lake property owners to voluntarily participate in this program. Unfortunately, due to limited staff, water quality monitoring on our rivers and streams is minimal. Oneida County will continue to pursue River Planning and Protection Grants to fund monitoring projects on our streams and rivers.

#### 3. Phosphorus Loading

Nutrient loading can adversely affect water quality by promoting excessive plant growth. In order to reduce nutrient loading by animal waste, all newly installed barnyard systems will be evaluated to ensure compliance with the Waste Water Treatment Strip Standard, which requires phosphorus reduction. The Wastewater Treatment Strip and BARNY spreadsheet will be used to determine compliance with the standard.

#### 4. Nutrient Management

In cooperation with DATCP, Oneida County will monitor and measure nutrient management progress by tracking Nutrient Management Plan Checklists with the acres and planner and performing periodic plan review to monitor compliance with soil test levels.

## **5. Annual Reporting/Spotchecks**

As required, Oneida County will report to DATCP and DNR on progress towards implementation of the performance standards and prohibitions as well as other soil and water resource activities. In addition, DATCP and NRCS conduct annual engineering and conservation planning spotchecks to ensure compliance with all applicable technical standards.

# GLOSSARY

## Chapter 9

**303(d) Waters** – Also called **List of Impaired Waters**. This list identifies waters that are not meeting water quality standards, including both water quality criteria for specific substances or the designated uses. It is used as the basis for development of Total Maximum Daily Loads (TMDLs) under the provisions of section 303(d)(1)(C) of the Clean Water Act, U.S. Environmental Protection Agency (EPA). EPA requires that the DNR update its list every 2 years.

**Animal Waste Management Program** – This regulatory program, administered by the DNR via NR 243, seeks to identify and correct animal waste-related water quality problems.

**ATCP 50** – The chapter of Wisconsin’s Administrative Code that implements the Land and Water Resource Management Program as described in Chapter 92 of the State Statutes. It identifies those conservation practices that may be used to meet performance standards.

**Best Management Practices (BMPs)** – The most effective conservation practice or combination of conservation practices for reducing nonpoint source pollution to acceptable levels.

**Chapter 92** – Portion of Wisconsin Statutes outlining the soil and water conservation, agricultural shoreland management, and animal waste management laws and policies of the State.

**Conservation Plan** – A record of decisions and intentions made by land users regarding the conservation of the soil, water and related natural resources of a particular unit of land.

**Conservation Reserve Enhancement Program** – An add-on to the CRP program, which expands and builds on CRP’s success in certain areas of the state.

**Conservation Reserve Program (CRP)** – A provision of the federal Farm Bill that takes eligible cropland out of production and puts it into grass or tree cover for 10-15 years.

**Cooperator** – A landowner or operator who is working with, or has signed a cooperative agreement with, a county LCC.

**County Conservationist** – County Land Conservation Department head, responsible for implementing programs assigned to the LCD and for supervising LCD staff.

**Critical Sites** – Those sites that are significant sources of nonpoint source pollution upon which best management practices shall be implemented as described in s. 281.65(4)(g) 8.am., stats.

**Department of Agriculture, Trade and Consumer Protection (DATCP)** – The state agency responsible for establishing statewide soil and water conservation policies and administering the state’s soil and water conservation programs. The DATCP administers state cost-sharing funds for a variety of LCC operations, including support for staff, materials and conservation practices. Referred to in the LWRM plan guidelines as the “department”.

**Department of Natural Resources (DNR)** – The state agency responsible for managing state owned lands and protecting public waters. DNR also administers programs to regulate, guide and assist LCCs, LCDs and individual land users in managing land, water, fish and wildlife. The DNR administers state cost-sharing funds for priority watershed project, Targeted Runoff Management (TRM) grants, and Urban Nonpoint Source Construction and Planning grants.

**District Conservationist (DC)** – NRCS employee responsible for administering federal conservation programs at the local level.

**Environmental Protection Agency (EPA)** – The agency of the federal government responsible for carrying out the nation’s pollution control laws. It provides technical and financial assistance to reduce and control air, water and land pollution.

**Environmental Quality Incentives Program (EQIP)** – Federal program to provide technical and cost-sharing assistance to landowners for conservation practices that provide water quality protection.

**Farm Service Agency (FSA)** – USDA agency that administers agricultural assistance programs including price supports, production controls and conservation cost sharing.

**Farmland Preservation Program (FPP)** – A DATCP land-use program under Chapter 91, Wisconsin Statutes, that helps preserve farmland through local planning and zoning, promotes soil and water conservation and provides tax relief to participating landowners.

**Forestry** – The Forestry, Land, & Outdoor Recreation department of Oneida County. This term used in the Work Plan.

**Geographic Information System (GIS)** – A computerized system of maps and layers of data about land including soils, land cover, topography, field boundaries, roads and streams. Such geographically based data layers improve the ability to analyze complex data for decision making.

**Health** – The Health department of Oneida County. This term used in the Work Plan.

**Impaired Waters List** Same as the 303(d) list.

**ITS** – Information Technology department in Oneida County. This term used in the Work Plan.

**Land and Water Conservation Board (LWCB)** – Composed of 3 local elected officials, 4 appointed by the Governor (1 shall be a resident of a city with a population of 50,000 or more, 1 shall represent a governmental unit involved in river management, 1 shall be a farmer and 1 shall be a member of a charitable corporation, charitable association or charitable trust) and leaders from DNR, DATCP, and DOA. The LWCB oversees the approval of county land and water management plans (s.92.04, stats.).

**Land and Water Resource Management Plan (LWRM plan)** – A locally developed and implemented multi-year strategic plan with an emphasis on partnerships and program integration. The plan includes a resource assessment, identifies the applicable performance standards and related control of pollution from nonpoint sources, identifies a multi-year description of planned activities, establishes a progress tracking system, and describes an approach for coordinating information and implementation programs with other local, state and federal agencies, communities and organization (s. ATCP 50.12).

**Land & Water Conservation Committee (LWCC)** – The unit of county government empowered, by Chapter 92 of the Wisconsin Statutes, to conserve and protect the county’s soil, water and related natural resources. Referred to in the LWRM guidelines as the “committee”.

**Land & Water Conservation Department (LWCD)** – The department of county government responsible for administering the conservation programs and policies of the Land & Water Conservation Committee.

**List of Impaired Waters** – Also called **303(d) Waters**. This list identifies waters that are not meeting water quality standards, including both water quality criteria for specific substances or the designated uses. It is used as the basis for development of Total Maximum Daily Loads (TMDLs) under the provisions of section 303(d)(1)(C) of the Clean Water Act, U.S. Environmental Protection Agency (EPA). EPA requires that the DNR update its list every 2 years.

**May** – The term “may” in the guidelines represents suggested components in a LWRM plan.

**Natural Resources Conservation Service (NRCS)** – Part of USDA, NRCS provides soil survey, conservation planning and technical assistance to local land users.

**Nonpoint Source Pollution (NPS)** – Pollution from many small or diffuse urban and rural sources. Livestock waste finding its way into a stream and causing water pollution is an example of non-point source pollution.

**Nonpoint Source Pollution Abatement Program** – A DNR water quality program under Chapters 120 and s. 281, Wisconsin Statutes, that provides technical assistance and cost-sharing to landowners to develop and maintain management practices to prevent or reduce nonpoint source water pollution in designated watersheds.

**NR 151** – DNR’s administrative code that establishes runoff pollution performance standards for non-agricultural facilities and transportation facilities and performance standards and prohibitions for agricultural facilities and practices designed to meet water quality standards.

**Nutrient Management Plan** – The Nutrient Management Plan means any of the following: (a) A plan required under s. ATCP 50.04 (3) or 50.62 (5) (f). (b) A farm nutrient plan prepared or approved, for a landowner, by a qualified nutrient management planner.

**ORW/ERW** – DNR classifies streams as Outstanding Resource Waters (ORW) and Exceptional Resource Waters (ERW) as listed in NR 102.10 and NR102.11. ORW waters have excellent water quality and high-quality fisheries and do not receive wastewater discharges. ERW waters have excellent water quality and valued fisheries but may already receive wastewater discharges.

**P&Z** – Planning & Zoning department in Oneida County. This term used in the Work Plan.

**Priority Farms** – Farms identified by the county for having excessive runoff from soil erosion and/or manure resulting in existing or potential water quality problems.

**Shall** – The term “shall” in the guideline represents components of a LWRM plan that are required in law and rule.

**Soil and Water Resource Management Program (SWRM)** – DATCP program that provides counties with funds to hire and support Land Conservation Department staff and to assist land users in implementing DATCP conservation programs (ATCP 50).

**Soil Loss Tolerance (“T”)** – Erosion rate in tons per acre per year of soil field could lose and still maintain productivity.

**Soil Survey** – NRCS conducts the National Cooperative Soil Survey and publishes soil survey reports. Soils data is designed to evaluate the potential of the soil and management needed for maximum food and fiber production.

**Solid Waste** – The Solid Waste department of Oneida County. This term is used in the Work Plan.

**United States Department of Agriculture (USDA)** – Branch of federal government with responsibilities in the areas of food production, inspection, and storage. Agencies with resource conservation programs and responsibilities, such as FSA, NRCS, and Forest Service and others are agencies of the USDA.

**University of Wisconsin-Extension (UWEX)** – The outreach of the University of Wisconsin system responsible for formal and informal educational programs throughout the state.

**Watershed** – The geographic area that drains to a particular river, stream or water body providing its water supply.

**Wetlands Reserve Program (WRP)** – A provision of the federal Farm Bill that compensates landowners for voluntarily restoring and protecting wetlands on their property.

**Wildlife Habitat Incentives Program (WHIP)** – Federal program to help improve wildlife habitat on private lands.

**Wisconsin Land and Water Conservation Association (WLWCA)** – Membership organization that represents the state’s 72 County Land & water conservation committees and Departments.

**Work Plan** – A 5-year plan of federal/state/local agency activities based upon Citizens Advisory Committee developed goals and objectives.

# ATTACHMENT A

## Summary of the Headwaters State of the Basin Report – 2002

## Headwaters State of the Basin Report – 2002

This attachment contains major resource issues concerns and recommendations identified in the plan.

### Fisheries

- Education – Promote education/information about area waters, fish species and survey results to the general public.
- Volunteer water quality monitoring – Expand efforts in self help monitoring. This includes: adding more lakes, expanding the type of monitoring being done, promote public understanding of lake ecology.
- Exotics – Provide awareness to the public concerning exotics and participate in long-term solutions to prevent their spread.
- Shoreline Development – Increase public awareness, increase enforcement of water regulations and zoning, work with lake associations, governmental entities or others to promote shoreline preservation and restoration.
- Stocking Guidelines – Ensure that stocking provides a good return to the angler, is biologically sound, cost effective and maintains the genetic integrity of natural reproducing populations.
- Private Stocking – Develop Basin policies on private stocking and educate the public on the facts behind stocking.
- Sport Fishery Investigations – Plan fisheries surveys on a minimum of 20 lakes less than 200 acres in size to manage these waters more effectively. Evaluate current fishing regulations applicable to each lake. Plan fisheries surveys on a minimum of 20 classified trout waters to determine impacts of current regulations or to investigate the need for future regulations.
- Promoting quality fishing opportunities – Plan regulations evaluations for all waters managed under the “quality opportunity” category and report effectiveness of special regulations.
- Bioaccumulation of contaminants (mercury) – Continue to monitor fish from lakes for mercury and provide information to the public.
- Implement Baseline monitoring strategy – Collect information on lakes and streams to establish baseline conditions.
- Identify critical habitat – Identify and protect critical fish habitat through stream surveys, Sensitive Area Designations or the Northern Rivers Strategy.
- Stream Habitat Restoration/Streambank Protection – Identify sites suitable for stream habitat restoration or streambank protection.
- Beaver Control – Continue to control beaver at priority locations.
- Native Brook Trout Restoration - Restore natural reproducing native brook trout and associated cold water communities at suitable sites.
- Large River Fish Communities – Evaluate the impact of harvest and regulations on sportfish in large river systems.
- Lake Sturgeon – Preserve or enhance naturally reproducing sturgeon populations as well as reestablish populations within their original range.
- Inland Lake Trout Recovery Plan – Maintain inland lake trout populations.

- Native mussels salvage operations – Protect native mussel populations and remove native mussels if they are in danger and restock in suitable locations.
- Walleye Management Plan – Implement the plan within the basin.
- Species Evaluations – Continue surveys of northern pike, walleye, muskellunge, and bass populations in lakes.
- Northern Rivers Strategy – Protect the highest quality rivers.
- Facilities Planning – Develop a facilities plan to address maintenance or development of fisheries properties or boat landings.

#### Aquatic Habitat Protection

- Staffing – Work with Region and Bureau staff to secure additional positions and funding for aquatic habitat efforts.
- Shoreline Protection and Restoration – Restore and protect shoreline vegetative buffer zones, continue to research and document the impacts of shoreline development and provide assistance to counties on water classification systems and shoreland zoning issues.
- Oversized Piers – Provide educational material on pier placement, sizing and impact to water resources.
- Dams – Develop and prioritize inspection schedules, evaluate impact to aquatic resources, educate public on dam safety issues.
- Wetlands – Evaluate wetlands in need of protection, restoration or enhancement.

#### Watershed, Wastewater and Stormwater

- In place pollutants and wildlife health assessments – Identify contaminated sites, assess the extent of contamination and the effects of contaminants on fish and wildlife health.
- Stormwater and Construction Site Erosion – Priority issue that needs to be addressed but has no staff.
- WPDES Permit Issuance – Ensure permits are issued in a timely manner.
- Total maximum daily loads - Continue to develop TMDL modeling and monitoring program on impaired waters.
- Nonpoint source priority watershed program – Pursue funding through the Targeted Runoff Management Program for protection projects and data collection.
- Nonmetallic mining – In cooperation with County government, monitor the effects of nonmetallic mining on water resources and document water quality improvements as a result of reclamation.
- Education – Provide educational information to the general public on watershed, wastewater and stormwater issues.
- Sewer Service Area Planning – Encourage larger communities to develop plans identifying their sewer service area and direct development away from environmentally sensitive areas.

#### Drinking Water Groundwater

- Wellhead Protection – Encourage the development of Wellhead Protection Plans.
- Groundwater Contamination – Educate the general public and well drillers on practices that minimize the potential for groundwater contamination.

- Improper application of wastes – Provide information to the general public on potential impacts of improper application of wastes.
- Chemical spills – Monitor spills for potential impacts to groundwater.

### Wildlife

- Lack of knowledge regarding wildlife by the public – Provide the public with informational and educational programs pertaining to wildlife and the science of wildlife management.
- Loss of wildlife habitat – Protect, maintain and restore both terrestrial and aquatic habitats from fragmentation, degradation and destruction.
- Deer herd population goals – Manage deer herd and related issues to ensure goals are biologically and socially acceptable.
- Loss of opportunity for public to recreate – Actively pursue conservation easements and land acquisitions.
- Lack of Staffing – Ensure staffing is adequate to meet public demands and land management needs.
- Protection of endangered resources – Continue to monitor, protect and improve habitats for endangered resources.
- Property Management – Develop an integrated plan of wildlife properties that includes working relationships with all partners.
- Wildlife Population Management – Continue to monitor and manage wildlife populations.

### Recreation

- Silent Sport vs. Motorized Sports – Continue to work with diversified sport interests to meet recreational demands.
- Crowding – Work towards providing more recreational opportunities while maintaining the expected quality of experience.
- Personal Safety – Address public concerns about personal safety while recreating.
- Camping and campground amenities – Ensure that campgrounds are developed and maintained for diversified camping needs.
- Timber Harvest – Consider recreational activities when planning for timber harvesting.

### Forestry

- Lack of knowledge by individuals using forests – Work with partners to encourage private landowners to work with professional foresters on forest management issues. Provide forestry information and education to the general public regarding silvicultural practices.
- Lack of Forest Management Planning on non-industrial private forests – Work with private landowners to develop integrated resource management plans for their property.
- Conflicting demands on public owned forestlands – Identify and address conflicting demands on public land.

# **ATTACHMENT B**

## **Oneida County Outstanding and Exceptional Resource Waters**

## Oneida County Outstanding and Exceptional Resource Waters

<b>Waterbody Name</b>	<b>Portion Within ORW/ERW Classification</b>	<b>Status</b>
Big Carr Lake	All	ORW
Clear Lake	All	ORW
Little Tomahawk Lake	All	ORW
Noisy Creek	Jct with Camp 6 Creek upstream to S21 T35 R9	ORW
Tomahawk Lake	All	ORW
Two Sisters Lake	All	ORW
Wolf River	All	ORW
Bearskin Creek	From Tomahawk River to Little Bearskin Lake	ERW
Creek 12-8 T36N R4E	All	ERW
Creek 18-1 T36N R4E	All	ERW
Creek 18-3 T37N R4E	All	ERW
Creek 18-4 T37N R4E	All	ERW
Creek 2-13 T35N R11E	All	ERW
Creek 20-11 T38N R5E	All	ERW
Creek 21-14 T35N R9E	All	ERW
Creek 21-8 T35N R9E	All	ERW
Creek 22-16 T35N R11E	All	ERW
Creek 26-13 T37N R7E	All	ERW
Creek 26-4 T37N R7E	All	ERW
Creek 27-7 T37N R6E	All	ERW
Creek 28-1 T37N R6E	All	ERW
Creek 28-2 T37N R6E	All	ERW
Creek 28-6 T36N R4E	All	ERW
Creek 29-8 T36N R4E	All	ERW
Creek 3-7 T38N R58E	All	ERW
Creek 30-3 T37N R4E	All	ERW
Creek 31-15 T36N R8E	All	ERW
Creek 34-10 T38N R6E	All	ERW
Creek 34-14 T37N R5E	All	ERW
Creek 34-6 T36N R4E	All	ERW
Creek 7-13 T36N R4E	All	ERW
Gudegast Creek	Bridge S 16 & 17 (T37N R10E) to Jennie Webber Creek	ERW
Jennie Creek	All	ERW
Langley Creek	All	ERW
Lela Creek	All	ERW
Little Willow Creek	All	ERW
Outlet Creek	All	ERW
Palm Springs and Creek	All	ERW
Pine Creek	All	ERW
Planert Creek	All	ERW
Radtke Spring	All	ERW
Slaughterhouse Creek	All	ERW
Starks Creek	All	ERW
Stony Creek	All	ERW
Walczak Creek	All	ERW

Source: WDNR website accessed June 2006.