# **CHAPTER 3 - EXISTING CONDITIONS**

# A. ANTICIPATED DIRECTION OF AGRICULTURE IN THE COUNTY

Growing potatoes and cranberries are two of the main agricultural enterprises in Oneida County. Additional enterprises include beef production, Christmas tree growing, maple syrup production.

Current trends in Oneida County show that potato production will continue as it has for over 50 years, centered around the Town of Sugar Camp. Potato development is supported by the Rhinelander Agricultural Research Station, also known as the UW Lelah Starks Potato Breeding Farm, located in the Town of Cassian, and two commercial seed potato research farms operated by Frito-Lay, one in the Town of Stella and the other in the Town of Three Lakes. Sowinski Farms has a seed potato farm in the Town of Stella. All of the machinery, repair services, growing inputs, and crop storage necessary for potato production are available in the Rhinelander area and the Towns of Stella up through Three Lakes in Oneida County. Potato storage exists and is projected to continue in the Town of Sugar Camp into the foreseeable future. All potato processing is projected to continue outside of Oneida County.

Cranberries are grown in the Towns of Newbold, Three Lakes, Cassian, and Stella, with most of the machinery, inputs, crop storage, and processing originating in Wood County. Oneida County projects that cranberry production will increase wherever beds can be developed, so with much of the county having a shallow depth to groundwater, then many places throughout the county are possible for new bogs.

# B. NATURAL RESOURCES AND ENVIRONMENTAL PRESERVATION

#### 1. Landscape

Oneida County is located in northeastern Wisconsin and is bounded on the north by Vilas County, on the east by Forest County, on the south by Langlade and Lincoln Counties, and on the west by Price County. The county is approximately 779,235 acres in size, with about 68,447 acres of surface water. The county contains 1,129 lakes and 830 miles of rivers and streams.

Oneida County is divided between two ecological landscapes; the Central Sand Plains Landscape and the Western Coulee & Ridges Landscape. The Northeast portion of the county is characterized by flat, sandy plains that were once the bed of Glacial Lake Wisconsin. The southwest portion of the county is characterized by highly eroded, unglaciated topography. Steep valleys are heavily forested. Agricultural activities, primarily dairy and beef farming are typically confined to valley floor and ridge tops. Soils are typically silt loams and sandy loams in the uplands and alluvial or terrace deposits in the valley floors. Much of the soil is very sand in nature which provides for excellent infiltration during periods of heavy rainfall and snow melt.

Oneida County's landscape is the result of several glacial advances and retreats that took place over northeastern and central Wisconsin some 12,500 to 20,000 years ago. As a result of this activity, there are numerous and inconsistent soil variations, numerous unique geologic and topographic features emerged, such as extensive ground moraines in the southeastern and southwestern parts of the county, a remnant end moraine near Rhinelander, and a number of parallel ridges adjacent to drumlin fields in Forest and Langlade Counties. The physical landscape is defined not only by forest, wetlands, streams, woodlots, hills, and other natural features, but perhaps most by the density of the lake area in the northern part of the county, which, with Vilas County, is one of the most extensive lake districts in the world.

# 2. Natural Resources

Groundwater quality in Oneida County is generally good. The impact of development and agriculture may cause deterioration or contamination of the groundwater. However, some areas have exceeded the preventative action limit for Nitrogen. Some common sources of nitrate contamination include individual septic systems, sewage treatment plants, fertilizers and animal waste. Ninety five percent of the 606 private well samples collected in Oneida County between 1990 and 2006 met the health-based drinking water limit for nitrate-nitrogen.

Oneida County has 1,129 lakes covering over 68,000 acres, and over 830 miles of streams. The general water quality is good; however, eutrophication is an issue during the summer months. A number of the waters are classified as Outstanding and Exceptional Resource Waters and a few are classified as Impaired Waters.

Oneida County has a variety of environmentally sensitive landscapes. Steep slopes, wetlands, habitat for threatened and endangered species, and floodplains are all sensitive to development activity. The ecological functions served by these are important and may be difficult or impossible to replace.

Based on data contained in Wisconsin's Natural Heritage Inventory, there are 51 known rare or endangered plant and animal species and natural communities in Oneida County. The Nicolet National Forest and the Northern Highlands—American Legion State Forest contain the densest population of these species with scattered populations existing in the rest of the County. Some of the unique and protected species that can be found include bald eagles, osprey, spruce grouse, American marten, and wood turtle.

Over 213,790 acres of the County are defined as wetlands (27% of the total land area). Wetlands provide habitat for wildlife, store water to prevent flooding, and protect water quality, yet they continue to be destroyed and degraded as they are drained and filled for agriculture and development.

Oneida County has 18 State Natural Areas and two State Wildlife Areas. Both distinctions are designated by the Department of Natural Resources. State Natural Areas are set to protect outstanding examples of native natural communities, significant geological formations, and archaeological sites, while State Wildlife Areas preserve habitat for wildlife.

See Map 2: Natural Resources.

3. Soils

The soils of Oneida County are primarily sandy and loamy soils which are suited to, and do support, forested/woodland uses. Due to the sandy and droughty nature of the soils, most are of relatively low agricultural value; in addition, the growing season in the county is rather short.

The many different soils found in Oneida County have been grouped into nine major soil associations which have distinct soil patterns, relief, and drainage features. The nine associations found in Oneida County are: Magnor-Greenwood-Cable, Goodman-Monico-Cable, Greenwood-Dawson-Carbondale, Padus-Goodman, Au Gres-Croswell-Kinross, Sayner-Vilas, Padus-Pence, Keweenaw-Vilas, and Goodman-Keweenaw. See the Oneida County Soil Survey for detailed descriptions of each soil type, including tables to determine suitability and limitations.

See Map 3: Soils.

# C. POPULATION, HOUSING, AND MUNICIPAL EXPANSION

NCWRPC Note: See Demographics in attached Oneida County ORP document.

#### D. UTILITIES AND INFRASTRUCTURE FACILITIES

Additional community facilities relating to water, solid waste, public works, public safety, health care, and education exist in *Chapter 5—Utilities & Community Facilities* of the Oneida County Comprehensive Plan.

#### 1. Energy

The Wisconsin Public Service serves the largest part of the County. Xcel Energy serves many areas in the western part of the County and Price Electric Co-op serves part of the Town of Lynne. The ANR Pipeline Company provides a pipeline to move petroleum through the County. Wisconsin Public Service provides natural gas to the City of Rhinelander along with all towns except Cassian, Little Rice, and Lynne.

#### 2. Water/Sewer

The City of Rhinelander, Lake Tomahawk, the Lakeland Sanitary District encompassing parts of the Towns of Minocqua, Woodruff, and Arbor Vitae in Vilas County, and the Three Lakes Sanitary District #1 provide water supplies for domestic and commercial use to the town centers. There are 184 high-capacity wells licensed in the County.

A municipal wastewater treatment facility serving the City of Rhinelander is located on the south side of the city along the Wisconsin River. Wastewater treatment facilities serve the Lakeland Sanitary District #1, the Lake Tomahawk Sanitary District, and the Three Lakes Sanitary Districts #1 and #2. The remainder of the County relies on privately owned wastewater disposal systems.

# 3. Transportation

Although the County is rural, it is also very accessible and the existing transportation elements are adequate for the foreseeable future. The County road network is in relatively good shape. The future land use plan shows a low level of new development so no new major road improvements have been identified for the future.

Many highways crisscross Oneida County: US highways 8, 45 and 51, state highways 17, 32, 47, and 70, as well as a network of county highways. There are two types of WisDOT designated truck routes within Oneida County—1) Designated Long, and 2) 65 foot Restricted. The Designated Long truck routes are USHs 8, 45, and 51 and STHs 17, 47, and 70. STH 32 east of US 45 is a 65 foot Restricted truck route.

The problem that arises is with the larger farm equipment on the smaller rural roads there can be a conflict between farm versus non-farm traffic. Some of the equipment can take up the whole road. If this plan is going to preserve farm land and give people the right to farm, then information and education needs to be done with the non-farmer population on the conflicts that arise with these types of issues.

The Canadian National Railroad (CN) operates on tracks running east to west through the southern and central portion of the County. Freight can be loaded/unloaded at the rail yard in downtown Rhinelander, and service is also provided to industrial sites west of the City.

The Rhinelander-Oneida County Airport is a commercial airport with scheduled passenger service and freight movement year-round. The Lakeland Airport/Noble F. Lee Memorial Field is cooperatively owned and operated by the Towns of Woodruff, Minocqua, Arbor Vitae, and Lac du Flambeau, and is located within Arbor Vitae. This transport/corporate airport serves corporate jets, small passenger and cargo jet aircraft used in regional service, and small airplanes used in commuter air service. The Three Lakes Municipal Airport has a lighted grass runway, but is closed in the winter. This facility is classified as a basic utility airport for smaller aircraft.

# 4. Communications

Cellular telephone service and wireless internet service have become important tools in today's farming climate. However, concerns over the locations of wireless service facilities and their possible impact on property values and health have led some municipalities to develop restrictions on the location, placement and appearance of

wireless service facilities. Three communications providers (Frontier Communications, Verizon North, and Century Tel) provide telephone and wireless service the County. There is a lack of major broadband providers in rural Wisconsin and the best solution in providing reliable, high-speed service is often left to municipally-owned cooperatives.

# 5. Waste Management

The City of Rhinelander contracts with a private firm to operate a weekly curbside pickup of solid waste and recycling for residents. Some Towns have transfer stations where residents can drop off their garbage and recycling. The Oneida County Landfill, located in the Town of Woodboro, no longer has active landfilling, but still handles disposal, recycling, and composting of waste within Oneida County. Solid waste from Oneida County is hauled to the Lincoln County Landfill and a corporate landfill in Wood County.

The Oneida County Solid Waste Department operates a year round hazardous waste collection at the Oneida County Landfill. This service helps local farmers and landowners dispose of waste that is potentially dangerous to keep on hand.

# E. PUBLIC AND TRIBAL OWNERSHIP

Ownership is an important factor to consider related to comprehensive planning. Different levels of government throughout the County own various lands.

See Map 4: Public Ownership.

1. Federal Ownership

Lands in the county owned by the federal government total approximately 10,236 acres (about one percent of land in the county). This federal land is primarily part of the Nicolet National Forest and found in the Town of Three Lakes. The Nicolet National Forest covers over 661,000 acres in Vilas, Florence, Forest, Langlade, Oconto, and Oneida counties in Wisconsin. The forest not only provides abundant recreational opportunities, but is also a working forest, which provides for timber production.

2. State of Wisconsin Ownership

Within the County, the State of Wisconsin owns approximately 111,454 acres, or 14 percent of total land in the County. Much of this land is part of the Northern Highland American Legion State Forest. This forest occupies more than 232,000 acres in Iron,

Oneida, and Vilas counties. The forest provides employment and economic support to rural and urban communities through the production of forest products, recreation, and tourism.

3. Oneida County Forest

Oneida County owns approximately 82,115 acres, or 10 percent of all land in the County. The Department of Forestry and Outdoor Recreation manages most of this land as part of the Oneida County Forest. The forest is open to the public for recreational activities and is also a working forest for timber production.

4. Town Ownership

Primarily town-owned land is used for town facilities such as administration buildings, community centers, garages/maintenance buildings, fire stations, etc.

5. Tribal Lands

The Lac du Flambeau Tribe owns approximately 686 acres within Oneida County in the Town of Minocqua. The majority of the Lac du Flambeau Reservation is in Vilas County in the Town of Lac du Flambeau.

# F. EXISTING LAND USE

While the vast majority of the county is forested and rural in character with scattered low-density residential uses, there are some areas of higher-density development (lakeshores) and areas where development pressures for higher densities are increasing. Residential development is concentrated around many of the larger lakes and scattered along town and county roads. See Map 1

Table 3: Existing Land Use, 2010				
Land Use	Acres	Percent		
Agriculture	16,703	2.11%		
Commercial	2,179	0.28%		
Cranberry Bog	1,351	0.17%		
Governmental	938	0.12%		
Industrial	1,281	0.16%		
Open Lands	13,833	1.75%		
Outdoor Recreation	2,018	0.26%		
Residential	21,954	2.78%		
Transportation	6,198	0.78%		
Water	74,046	9.36%		
Woodlands	650,167	82.23%		
Total Acres	790,667	100.00%		

Table 3: Existing Land Use, 2010

Source: NCWRPC 2010 Land Use Cover

and Table 3 which show existing land use.

Woodlands were identified as the largest land use in the county. Over 82 percent of the County is considered woodlands, although some of this is also wetlands. Residential uses make up less than three percent of the total land.

Oneida County has a small amount of land used for agriculture, at just over two percent of total land. This land is spread throughout the County, mostly in the Towns of Cassian, Crescent, Hazelhurst, Nokomis, Schoepke, Stella, Sugarcamp and Three Lakes.

# CHAPTER 4 - AGRICULTURE & ENVIRONMENT

Identifying the resources and land uses in the County are important in order to recognize areas that need to be protected, or characteristics that would limit development potential.

The following will provide a brief review of some of these resources in Oneida County.

### A. RESOURCES AND LAND USES

As seen in Table 3 from Chapter 3, agriculture accounts for a little over two percent of the existing land use in Oneida County. Woodlands make up over 86 percent of the land and residential uses another three percent. Table 6 shows how the agricultural land is divided among various agricultural uses in Oneida County. The agricultural land is quite evenly dispersed among the four uses, with agricultural woodland using slightly more land and pasture and rangeland using slightly less.

llee		Distribution		
Use	2007	2012	% Change	in 2012
Total Crop Land	13,890	12,095	-12.9%	25.4%
Total Woodland	18,101	15,872	-12.3%	33.3%
Permanent Pasture and Rangeland	6,386	7,725	21.0%	16.2%
Land in Buildings, Livestock, Facilities,				
etc.	12,298	11,990	-2.5%	25.1%
Total	50,675	47,682	-5.9%	100.0%

#### Table 6: Agricultural Land Use

Source: USDA 2012 Census of Agriculture

#### B. FARMLAND CONVERSION

The rate and speed of farmland conversion is an important factor in understanding County-wide land use trends. The Wisconsin Farmland Preservation Program, enacted in 1977 to preserve good agricultural land from development and provide income tax credit to farmers, is a helpful tool to limit where the farmland conversion can take place. Since the rate of population growth has increased, it is likely that either total farm land sold has increased, and/or the percent converted to non-farm uses has increased.

# C. PROGRAMS

With the abundance of natural resources in Oneida County and the growing pressure on both public and private lands, the need to protect these precious areas is increasingly important. There are many Federal, State and Local programs in place that offer technical assistance and cost-share funding to help preserve the environment. Some of these are as follows:

Federal Programs:

Backyard Conservation Conservation Reserve Program (CRP) Conservation Reserve Enhancement Program (CREP) Conservation Security Program (CSP) Emergency Watershed Protection Program (EWP) Environmental Quality Incentives Program (EQIP) Farmland Protection Program Forestry Incentive Program (FIP) Wetlands Reserve Program (WRP) Wildlife Habitat Incentives Program (WHIP):

#### State:

Managed Forest Law Forest Land Enhancement Program (FLEP) Stewardship Incentive Program (SIP) WI Association of Resource Conservation and Development Council (RC&D) Wildlife Damage Abatement and Claim Program WI Farmland Preservation Program (FPP) WI Forest Landowner Grant Program (FLGP) WI Non-point Source Pollution Abatement Program Potential Funding Sources for environmental preservation may come from the following:

Private Sources:

Private Foundations Individual Contributions Volunteers Conservation Organizations Outdoors Forever Trout Unlimited Ducks Unlimited Wisconsin Waterfowl Association

Local Government Sources:

County Land & Water Resource Department County Planning & Zoning Department County Forestry and Parks Department County Highway Department

State Government Sources:

Department of Natural Resources Department of Agriculture, Trade & Consumer Protection University of Wisconsin-Extension Priority Watershed Program New Nonpoint Sources Stewardship Grants Wisconsin Forest Landowner Grant Program Lakes Planning Grants Lakes Protection Grants Land & Water Management Plan Implementation Funds

# **CHAPTER 5 – ECONOMICS**

Oneida County's agricultural related industries bring a significant amount of revenue into the county. Agriculture also supports a variety of other industries such as transportation and warehousing, manufacturing, wholesale trade, retail, and service.

Data for this chapter mainly came from the Census of Agriculture, where statistics of Wisconsin Agriculture are published every five years by the Department of Agriculture's National Agricultural Statistics Service.

### A. AGRICULTURAL ECONOMIC GROWTH

According to the Oneida County Comprehensive Plan (Chapter 6), the segment of population that is employed with the agriculture and natural resources sector accounts for 1.1% of the population. Compare this to the 2.9% on average in Wisconsin and the conclusion can be drawn that Oneida County is less agricultural than some of the other counties in the State. While 1.1% is a small percentage, it should receive special attention because of the importance agriculture plays in a rural County. Additional economic detail of all sectors in Oneida County are explained in Chapter 6 of the Oneida County Comprehensive Plan.

1. Economic Impact

In 2012, agriculture generated more than \$75 million in exports through the sale of agricultural products to customers outside of the State of Wisconsin. The agricultural industry supports a variety of additional industries like transportation and warehousing, manufacturing, wholesale trade, retail and service.

2. Farms

In 2012, there were 150 active farms in the county. Between 2007 and 2012, the total number of farms in the county decreased by 29. See Table 7 for Farm Statistics.

Land in farms decreased between 2007 and 2012, losing over 4,200 acres of farmland. The County experienced an increase in farmland in 2002, but has now decreased to below 1997 levels.

	1997	2002	2007	2012	Change: 1997- 2012
Number of Farms	117	183	179	150	28.2%
Average Size (Acres)	334	279	219	233	-30.2%
Land in Farms (Acres)	39,036	51,006	39,172	34,926	-10.5%

Table 7: Farm Statistics

Source: USDA Agricultural Census

# 3. Agriculture Production

Total sales of agricultural products from Oneida County were \$20 million in 2012 and \$17 million in 2007. The largest sectors of agricultural production are Fruits and Berries (cranberries are part of this group), and Other Crops (potatoes belong to this group). Table 8a shows the summary of farm sales by sector.

# Table **8a:** Farm Sales (in \$1,000)

Commodity	2007	2012
Fruits and Berries	7,805	8,602
Nursery and		
Greenhouse	1,820	2,010
Other Crops (Grains,		
Vegetables, Etc.)	4,925	6,562
Livestock, Poultry,		
and their products	2,973	3,071
Other Farm Sales	2,723	1
Total	17,523	20,246

Source: USDA Census of Agriculture

Table 8b separates further what commodities exist within Oneida County in 2012. Some data was suppressed by USDA in three commodity groups in Table 8b, because there were few farms that provided most of the data. NCWRPC approximated the percent of sales and identified the most likely crop producing those figures in Oneida County.

Cranberries are well suited to the climate and short growing season of Oneida County. Cranberry production accounts for about 43 percent of 2012 farm sales as shown in Table 8b. Sandy loam soils that are primarily in the Towns of Crescent, Cassian, Stella, and Sugar Camp provide an excellent substrate to grow potatoes, which are about 29 percent of farm sales. Even though the farm sales amounts are low for mainly forage crops (Table 8b: Other crops, hay, maple syrup, other), about 30 percent of farms in Oneida County grow them. There are 23 farms in Oneida County that need this forage for their cattle and calves.

Commodity	Farms	Percent Sales
Grains, Oilseeds, Dry Beans, and Dry Peas	11	1.7**
Vegetables, melons, potatoes, and sweet potatoes	11	29.3**
Berries	11	42.5
Nursery, greenhouse, floriculture, and sod	8	9.9
Cut Christmas trees and short-rotation woody crops	9	0.4
Other crops, hay, maple syrup, other	48	1.0
Poultry and eggs	14	0.1
Cattle and calves	23	0.8
Hogs and pigs	6	0.0
Sheep, goats, wool, mohair, and milk	7	0.1
Horses, ponies, mules, burros, and donkeys	4	0.3
Other animals and other animal products	7	13.8**
Total	161	100**

Table **8b:** Farm Sales in 2012

Source: \*\*NCWRPC approximation due to data suppression from USDA Census of Agriculture

Table 8b summarizes all 2012 farm sales as: \$ 20,243,000; which is only slightly different from the official USDA count of \$20,246,000 shown in Table 8a.

# 4. Livestock

In 1997 there was only a single dairy farm in Oneida County. At that time livestock sales accounted 14 percent of the market value of agricultural and were 17 percent in 2007, and data was no longer available in 2012 due to no dairy herds existing. A number of beef herds still exist in the County.

Between 2010 and 2012, the number of cattle in Oneida County remained steady at 700. No data is available on milk cows indicating there is little, if any, milk production.

5. Gross Regional Product (GRP)

Total gross regional product (GRP) in Oneida County in 2012 was \$1,387,426,896, which included \$35,234,448 in revenues from NAICS 11: Agriculture, Forestry, Fishing and Hunting. In comparison to other industries, the agriculture industry generates the 9<sup>th</sup> lowest gross regional product in the county and accounts for 3 percent of the county's GRP. By comparison, the county's top producer, retail trade, accounts for \$196,893,426 or 14 percent of the county's GRP.

# 6. Exports

In 2012, Agriculture, Forestry, Fishing and Hunting accounted for over \$75 million in export revenue, or 4.24 percent of the total export revenue. Agriculture is the sixth highest export industry. Manufacturing is the largest export industry exporting over \$478 million in 2012. The location quotient for the agriculture industry decreased from 2.47 to 2.10 from 2001 to 2012. The agriculture, forestry, fishing and hunting industry is 2 times more concentrated in Oneida County than it is on average in the United States. The 2.1 location quotient indicates that the industry is an export industry and will continue to be an economic driver. However, the decrease in the quotient indicates that the industry may be struggling as positions are eliminated and the county is reducing its concentration in the agricultural industry suggesting that there may be trouble for the entire industrial economy (i.e. suppliers, ancillary businesses).

The ability to export goods and services is essential to the county's economy as it introduces new money to the economy, rather than simply circulating money that is already in the region. This influx of new revenue is redistributed throughout the economy at local restaurants, suppliers, and retailers.

# 7. Job Growth

Further evidence that the agriculture, forestry, fishing and hunting industry is struggling is shown in job growth. Oneida County decreased employment in the agriculture industry 25.94 percent from 2001 to 2012, eliminating 172 jobs, see table 7a. In 2012, the agricultural industry directly employed 491 persons. The decrease in jobs is the result of the county's unique competitiveness. Shift share analysis shows that Oneida County's competitive advantage resulted in the reduction of 150 jobs from 2001 to 2012. Based on National Growth (14 jobs) and an Industry Mix (-23 jobs), the region would expect to lose 23 jobs in this industry over the 11 year time period. The industrial mix effect represents the share of regional industry growth explained by the growth of the specific industry at the national level.

The national growth effect explains how much of the regional industry's growth is explained by the overall growth of the national economy. The regional competitive effect explains how much of the change in a given industry is due to some unique competitive advantage that the region possesses, because the growth cannot be explained by national trends in that industry or the economy as whole. As a result of the regions unique competitiveness in this specific industry, the county experienced a decrease in jobs (172 jobs). The decrease in employment combined with a decrease in location quotient identifies that the agriculture industry in Oneida County is not growing as fast as it is in the national economy and may be becoming less vital to the economy.

Table 10 shows the number of small farms increasing. The trend toward small farms is important to economic development for two reasons. First, the rapid increase in small farms demonstrates the explosion of "hobby farming". These farms may produce on a very small or local scale but they generally do not employ labor or produce food for general consumption. While these types of farms are not being discouraged, it is not this type of land that needs to be preserved by a farmland preservation plan. Second, the largest farms produce large quantities of food but often are so modernized that they require only a fraction of the labor force as previously. As farming moves towards these two extremes of very small and very large farms, the economic impact will be seen and agricultural employment will likely decline.

Acres	1997	2002	2007	2012	Change: 1997- 2012
1 to 9	6	13	13	10	66.67%
10 to 49	24	32	47	55	129.17%
50 to 179	38	70	70	47	23.68%
180 to 499	32	41	34	24	-25.00%
500 to 999	9	13	5	7	-22.22%
1,000 +	8	14	10	7	-12.50%
Total	117	183	179	150	28.21%

Table 9: Farms by Size

Source: USDA Census of Agriculture

#### B. HEALTH CARE

Easy access to quality health care is important to any community. Farming is a particularly hazardous occupation and health care is a necessary component to the overall plan of operation. Two hospitals and 4 clinics are located in Oneida County. Saint Mary's Hospital is located in Rhinelander and Howard Young Medical Center is located in Woodruff. There are two nursing homes in Rhinelander and one in Woodruff with a total capacity of over 200, as well as several in other nearby communities like Tomahawk, Crandon, and Phelps. Additionally, there are twelve Residential Care Apartment Complexes in the County.