

Chapter 5 Agricultural, Natural And Cultural Resources

66.1001(2)(e) Wis. Stat.:

Agricultural, natural and cultural resources element. A compilation of objectives, policies, goals, maps and programs for the conservation, and promotion of the effective management, of natural resources such as groundwater, forests, productive agricultural areas, environmentally sensitive areas, threatened and endangered species, stream corridors, surface water, floodplains, wetlands, wildlife habitat, metallic and nonmetallic mineral resources consistent with zoning limitations under s. 295.20 (2), parks, open spaces, historical and cultural resources, community design, recreational resources and other natural resources.

Section 5.1 Introduction

The agricultural, natural and cultural resources of the Town of Dewey are perhaps the single most important reason why people choose to live here. Substantial natural areas, waterways, wildlife habitat, and farmland all come together to create a desirable rural setting.

The residents of the Town of Dewey recognize the value of their unique landscape and understand that it supports and sustains a way of life they are proud of. For those who choose to farm the land here, the community supports their efforts and works to minimize barriers that impede this important industry. This section contains a description of the existing conditions of the agricultural resources in the Town along with the goals, objectives and policies for maintaining or enhancing these valued resources.

Section 5.2 Agricultural Resources

A. Soil Capability for Agriculture

The overall agricultural capability of soils in the Town of Dewey is extremely limited. Soil wetness is the major limiting factor for farming, although this limitation has been overcome in some areas through the use of surface drains. Generally speaking, however, surface drainage patterns are poor and subsurface drainage is extremely limited due to a shallow depth to bedrock in many areas. Those highly productive agricultural parcels that do exist are not concentrated in large blocks.

The equalized value of farmland (excluding improvements) in the Town of Dewey ranks 15th out of 17 towns in Portage County.

B. Agricultural Soils (See Map 5.1)

Prime soil types with slope information found in the Town of Dewey are as follows:

Prime:

Dunnville very fine sandy loam, 2-6% slope
Mosinee sandy loam 2-6% slope
Wyocena sandy loam 2-6% slope
Rockers loamy sand, 1-3% slope
Rozellville loam, 2-6% slope

Prime if Drained:

Point sandy loam 1-3% slope
Sherry Silt loam
Meadland loam 1-3% slope
Dunnville very fine sandy loam,
mottled subsoil variant
Altford silt loam

Prime if Irrigated

Friendship loamy sand 0-3% slope
Richford loamy sand 0-2% slope
Richford loamy sand 2-6% slope

C. Other Local Influences on Agriculture

The Dewey area has historically not seen great pressure for the development of rural residential properties, except near Lake DuBay. However, increased interest in Dewey can bring more homes onto the agricultural landscape, which in turn could lead to increased potential for life-style conflicts; increased assessed value of non-farm lands; and most importantly, an increase in the sale price per acre of land beyond the point of being economically viable for purchase as farmland. Other factors include: the completion of the upgrade to an aging agricultural workforce; and a desire to subdivide small portions of farmland.

In addition, low profitability of farming operations in this area is causing operators to look to other means to make a living. This often means selling the land for residential, recreational or other types of development.

D. Farming Systems, Demographics, and Land Tenure

The agricultural landscape of the Town of Dewey can best be described as a “coming together” of farming systems. The Town is located on the edge of two major farm regions in Wisconsin. First and most prominent is the dairy region. In Wisconsin, dairying is most concentrated in a belt that begins near Hudson (St. Croix County), heads east to Wausau and Green Bay (Brown County), then turns southwest through Fond du Lac, Madison and ends near Dubuque (Iowa County). Wisconsin Department of Agriculture 2005 permit information list eleven (11) active dairy farms (4 of which are Grade A) operating in the Town of Dewey. To the south in Hull, according to the 2002 permit information there are two (2) farms; to the west in Eau Pleine, there are twenty-one (21); and to the east in Sharon, there are twenty-one (21). The second farming region that Dewey is on the border of is that of fresh vegetable production. The irrigated sands of the “golden sands” region of Wisconsin are lay between Amherst and the Stevens Point area. The Community is on the northwest edge of this large irrigated plain and there are a number of producers who have scattered vegetable operations within the Town. While no exact acreage numbers are available, the presence of pivot irrigation rigs is one key indicator of vegetable production. There were irrigation pivots in Dewey in 2000. Some of these fields may not be used for vegetable production, but odds are the majority have been used for this industry.

There were 31 persons employed in an agriculturally related field in the Town of Dewey in 2000 (Table 1.10, Issues and Opportunities section). This represented 5.5% of employment for the Town. This is down from the 1980 figure of 43 persons (13%). Dewey has a slightly lower percentage of agriculture-related employment when compared to the Town average in Portage County of 6.9% for 2000. Decreasing farm employment is not a unique trend by any means. Farm numbers are down where ever you look, while acreage per farm is up. Farm consolidation is a common practice in this industry.

The amount of land dedicated to agricultural production does change regularly from year to year. In 2000, the Portage County Planning and Zoning Office analyzed aerial photography for the Town of Dewey to identify active farmland within the Community. The land in farms was broken down by presence of irrigation, 641 acres; use for row crops or hay, 3,496 acres; and permanent pasture, 92 acres. Total agricultural acres identified for 2000 were 4,229.

Section 5.3 Agricultural Programs

Conservation Reserve Program (CRP)

The Conservation Reserve Program, administered through the Farm Service Agency (FSA), is a voluntary program for agricultural landowners. Through CRP, one can receive annual rental

Map 5.1 Productive Ag Soils

payments and cost-share assistance to establish long-term, resource conserving covers on eligible farmland. Participants enroll in CRP for 10 to 15 years.

Environmental Quality Incentives Programs (EQIP)

The Environmental Quality Incentives Program (EQIP) is a voluntary conservation program. It supports production agriculture and environmental quality as compatible goals. Through EQIP, farmers may receive financial and technical help with structural and management conservation practices on agricultural land.

EQIP may pay up to 75 percent of the costs of eligible conservation practices. Incentive payments may be made to encourage a farmer to adopt land management practices, such as nutrient management, manure management, integrated pest management, and wildlife habitat management.

Section 5.4 Agricultural Issues

- A. The number of farms are decreasing.
- B. Potential runoff from pesticides and/or fertilizers.
- C. NR rule 328 could have a negative cost impact to farmers.
- D. Conflicts between farm and non-farm uses.
- E. There are wetland and floodplain areas in Dewey that have historically been farmed. How can these farmed lands be protected?

Section 5.5 Agricultural Goals, Objectives, and Policies

- A. Goal 1: Support agriculture as an important economic activity and recognize its role as a major element in the Town's rural landscape.
- B. Objective: Encourage a diversity of farming practices.
- C. Policies:
 - 1. Work to limit the acquisition of farmland by the DNR, including additions to the Dewey Marsh Area, where such acquisitions would cause productive croplands and forest lands to be taken out of agricultural use. It is also the desire of the Town Board to be notified by the DNR prior to any proposed land acquisitions in the Town.
 - 2. Insure farm operations can continue within Dewey, and that this plan will allow for creation of new and varied farm operations and practices in the future.
 - 3. Existing farming operations in prior converted wetlands and floodplain areas should be protected, where appropriate.
 - 4. Minimize conflicts between farm and non-farm uses by taking into consideration existing and potential agricultural uses when planning residential development next to farmland.
 - 5. Minimize conflicts between mining operations and farmland.
 - 6. Support reasonable but limited regulations so as to not create a negative impact on an individual's ability to farm.

Section 5.6 Natural Resources Inventory

Natural resources in the Town serve as the foundation for residents physical and economic well being – from groundwater quality to land suitability for agricultural, residential, or commercial development. According to the results of the 2001 Comprehensive Planning and Zoning Survey, Town residents favored managing the natural resources that support and sustain them.

This section will describe the existing natural resources inventory and state the issues, goals, objectives, and policies that were identified and adopted by the Town of Dewey Plan Commission and Town Board.

A. Geomorphology

The present Portage County landscape primarily reflects the last or Wisconsin stage of the pleistocene or glacial epoch (Holt, 1965). The glacial ice transported large amounts of rock debris known as drift. The drift is called till if deposited directly by the ice, and outwash if placed by glacial melt water.

Glacial presence is less noticeable in the drift-crystalline rock province in the northwestern portion of the County, which includes the Town of Dewey. Although this area is mapped as part of the driftless or unallocated area of Wisconsin, there is thin, heterogeneous till and outwash deposits of clay, silt, sand, and gravel from an earlier glacial period. The average thickness of these materials is only four feet. The topography is controlled primarily by the shallow granitic bedrock, and soil properties reflect the underlying bedrock residuum and the loamy, silty nature of the unconsolidated materials.

Areas identified as alluvium are post-glacial deposits of materials eroded from uplands and accumulated in lower areas such as marshes (organic-rich clay, silt, sand, and peat) and stream valleys (well-sorted silt, sand, and gravel). These alluvial deposits range from a few feet to over 60 feet in thickness.

The topography of the Town is generally flat and includes a large number of lowland wet areas, and creeks. Elevation ranges from 1,260 feet above sea level in the northern part of the Town to 1,120 feet above sea level in the southern part of the Town (see Map 5.2). Depth to bedrock throughout the majority of the Town is less than 50 feet, while the depth in the southeast portion varies between 50-100 feet.

B. Soils

The following soils analysis is derived from the Soil Survey of Portage County, prepared by the U. S. Soil Conservation Service in 1978. This discussion is focused at the broad "soil association" level, which is particularly useful for generalized analysis of large areas (Map 5.3).

1. Soil Associations:

Point-Dancy-Mosinee Association: The loamy soils of this association occupy 58% of the Town, and are absent only in the central and southeast areas. Bedrock occurs at depths of 4 to 20 feet. Depth to seasonal high groundwater ranges from 0-1 foot for Dancy soils, 1-3 feet for Point soils and greater than 5 feet for Mosinee soils. The predominantly wooded character of this area reflects its inherent limitations for agriculture, i.e. wetness. Likewise, wetness renders these soils marginal for residential development or other uses requiring on-site sewage disposal systems and/or basements.

Markey-Seelyeville-Cathro Association: The muck soils (organic deposits over sand or loam) of this association occupy 22% of the Town and are confined to the central area known as the Dewey Marsh. Depth to seasonal high groundwater 0-1 foot, with frequent ponding or flooding. This area exists in a natural state and exhibits a combination of forest, shrub and grassland cover types. With the exception of small islands of uplands, this association is unsuitable for structural development. The agricultural potential of these soils is extremely limited due to wetness and poor natural drainage, although production is possible with artificial drainage. Fortunately,

Map 5.2: Topography

Map 5.3: Generalized Soils Associations

public ownership of much of the Dewey Marsh ensures that its greatest value, as wetlands and wildlife habitat, will be preserved.

Plainfield-Friendship Association: The deep, sandy soils of this association occupy 11% of the Town and are confined to the southeast, in the area between Hay Meadow Creek and the Plover River. Depth to seasonal high groundwater ranges from 3-5 feet for Friendship soils to a depth greater than 5 feet for Plainfield soils. The predominance of agriculture in this area reflects its productive potential, particularly with irrigation. While these soils are generally suitable for on-site sewage disposal, the Friendship series presents the risk of flooding and related damage to structures with basements.

Roscommon-Meehan-Markey Association: The soils of this association are confined to a narrow corridor along a portion of Hay Meadow Creek. This poorly drained group of soils occupies about 7% of the Town. This association exists on sand plains, although the surface layer may include muck (organic deposits) in places. Depth to seasonal groundwater ranges from 0-1 foot for Roscommon and Markey to a depth of 1-3 feet for Meehan soils. The majority of this area is wooded or covered by wetland vegetation. Wetness limits the agricultural potential, except where drainage is possible. Likewise, shallow depth to groundwater renders Meehan soils marginal and Roscommon and Markey soils unsuitable for residential development or other uses requiring on-site sewage disposal and/or basements.

Alluvial Land, Wet-Dunnville Association: The soils of this association are confined to a very narrow corridor along the eastern shore of the Wisconsin River/Lake DuBay and constitute only 2% of the Town. These soils are in oxbows and drainage ways that lead to the river, as well as on the river terraces. This group of soils is generally associated with the floodplain. Many areas of this association are not suited to crops. Areas that are subject to flooding are unsuitable for structural development. Areas of Dunnville soils located on higher standing terraces are marginal for development.

Soil testing by a certified soil tester is strongly recommended for more detailed, site specific information.

2. Soil Capability for On-Site Waste Disposal

Soil capability for on-site sewage systems is generally poor and is a major limiting factor in the location of residences in the Town, in the absence of a public sewer system. High groundwater, slow permeability, and high bedrock were found to be the primary limiting factors for on-site systems. In addition, on-site sewage systems are generally prohibited within the 100 year floodplain.

Approximately 58% of the Town contains soils which are considered "marginal" for residential development. These are soils which are generally unacceptable for conventional on-site sewage systems, but may be acceptable for mound or fill systems. About 31% of the soils in the Town are considered "unsuitable" for residential development, being generally unsuitable for even mound or fill systems. Only about 11% of the Town contains soils which are generally acceptable for conventional on-site sewage systems. NOTE: The use of holding tanks for new development is prohibited in Portage County.

Local research, including the County's Groundwater Management Plan, indicates that lot sizes of at least 2 acres are critical in preventing groundwater pollution from on-site sewage systems.

C. Surface Water, Wetlands, and Floodplains

The major surface water bodies present in the Town include Lake Du Bay, an impoundment of the Wisconsin River that is 6,700 acres in size and located in the northwest corner of the Town, and the Wisconsin River. The Wisconsin River flows south out of Lake Du Bay and serves as the western boundary of the Town (see Map 5.4).

Other surface water features in the Town include: Slough Lake, 23 acres in size; Hay Meadow Creek, 14 miles long, which starts in the Dewey Marsh and flows south into the Town of Hull before flowing into the Wisconsin River; and the Little Eau Claire River, 3.5 miles long and flows west into the Wisconsin River. Areas adjacent to the creeks and rivers are subject to frequent flooding from major storm events and meltwater from the spring thaw.

The majority of the Town is situated in the Little Eau Claire River watershed, while the far eastern edge is situated in the Plover River watershed. A watershed can be defined as an interconnected area of land draining from surrounding ridge tops to a common point such as a lake or stream confluence with a neighboring watershed (WI DNR).

Wetlands are areas covered by shallow water or subject to intermittent flooding and slow drainage. Wetlands provide habitat for wildlife, reduce surface water runoff and soil erosion, and help maintain water quality by acting as filters. Certain wetlands can also be productive for farming, with improvements such as drainage.

Based on wetland inventory mapping completed by the Wisconsin Department of Natural Resources (DNR) in 1992, there are approximately 10,000 acres of wetlands in the Town of Dewey. The majority of these wetlands are found in the Dewey Marsh (see Map 5.5).

Portage County's Shoreland Zoning Ordinance regulates the use of certain wetlands throughout the County, as mandated by Wisconsin Administrative Code NR115. This Ordinance regulates only those wetlands within 300 feet of navigable rivers and streams (or to the landward side of the floodplain), and within 1,000 feet of navigable lakes, ponds and flowages. The U.S. Army Corps of Engineers also regulates the use of wetlands, both inside and outside the shoreland areas, under Federal authority.

The Shoreland Zoning Ordinance, in addition to regulating wetlands, also sets a 100 foot structural setback from the water and regulates clear-cutting of trees and grading/filling/dredging at the water's edge.

Wetlands are an important part of the watershed, as they act as a filter system for pollutants, nutrients, and sediments, along with serving as buffers for shorelands and providing essential wildlife habitat, flood control and groundwater recharge. Wetlands in Dewey are comprised of three general types: forested, scrub or shrub, and emergent/wet meadow.

1. Forested wetlands are the predominant type – including bogs and forested floodplain complexes that are characterized by trees 20 feet or more in height such as, tamarack, white cedar, black spruce, elm, black ash, and silver maple. These wetlands are located throughout the entire town.
2. Scrub/shrub wetlands, the second most abundant type – which include bogs and alder thickets, are characterized by wood shrubs and small trees such as: tag aster, bog birch, willow and dogwood. These are also found primarily in the central part of the Town, with inclusions scattered throughout the northeast and southeast parts of Dewey.

Map 5.4: Surface Water and Floodplain

Map 5.5: Wetlands

3. Emergent/wet meadow is the third primary type of wetland and consists of areas that may have saturated soils more often than having standing water. Vegetation includes: sedges, grasses and reeds as dominant plants, but may also include: blue flag iris, milkweed, sneezeweed, mint and several species of goldenrod and aster. These types of wetlands are found throughout the central part of the Town primarily along intermittent and ephemeral drainage ways, with inclusions along the far eastern and far western edges of Dewey.

Floodplains provide many benefits including: natural flood and erosion control, water quality maintenance, groundwater recharge, and fish and wildlife habitat. Some of these areas are also desirable for residential development due to aesthetic reasons, and agricultural development due to the presence of nutrient rich soils. If development in these areas increases, the benefits listed above will decrease. A floodplain is the land area immediately adjoining a stream, which periodically stores or carries flood waters. In addition to this vital role, floodplains often provide valuable wildlife habitat.

A floodplain is defined as that which has been or may be covered by floodwater during the regional flood. The floodplain includes the floodway and flood fringe areas. A 100-year Flood is defined as a flood event having a one percent chance of reaching the 100-year flood elevation in any given year. Contrary to popular belief, it is not a flood occurring once every 100 years. A 100-Year Floodplain then is the area adjoining a river, stream, or watercourse covered by water in the event of a 100-year flood. During a regional flood, the flood fringe is the area of standing water, while the floodway is the area of rapidly flowing water. According to maps prepared by the Federal Emergency Management Agency (FEMA), flood fringe in the Town of Dewey is associated with Hay Meadow Creek, the Little Eau Claire River and portions of the Wisconsin River/Lake DuBay shoreline. Floodway exists along the Wisconsin River, south of the DuBay dam and broadens to encompass a large portion of Sections 26, 35 and 36.

Floodplain development in Portage County is regulated in accordance with Wis. Administrative Code NR116 and the County's Floodplain Zoning Ordinance. These regulations allow certain types of construction within the flood fringe under specific conditions, but prohibit new construction within the floodway. Floodplains in Dewey are illustrated on Map 5.4.

D. Groundwater

The Town of Dewey is located in a geologic province known as the drift-crystalline rock province. The drift-crystalline rock province is considerably different from the rest of the County in that the basement granitic bedrock is close to the surface, and the unconsolidated aquifers above it are very limited. The depth to bedrock is generally less than 20 feet, and the depth to groundwater is generally less than 10 feet. Seasonally, depths to groundwater can decrease to less than one foot. Groundwater flow is shown on Map 5.6 based on the most current data at the time this plan was written. Data collection for groundwater monitoring is an on-going process and the Town should work with the County and other research organizations to maintain the most current information possible. Knowing groundwater flow can be a helpful piece of information when determining proper siting of well and on-site waste systems.

All Town residential water use comes from groundwater; therefore, protection of this resource is important. Given the very thin or nonexistent unsaturated zone, there exists little or no second line defense against pollutants regardless of the nature of the subsurface materials. Although some of the soils ranked moderate to good in pollution attenuation, this area of the County

should be considered vulnerable overall given the shallow depth to groundwater and bedrock. Extra care should be taken around mining operations to protect ground water.

Potential pumping yield rates for groundwater are generally less than or equal to 20 gallons per minute throughout most of the Town. This rate is low when compared to most other areas south and east of the Wisconsin River where rates can exceed 500 gallons per minute.

In March, 2004 the Portage County Board of Supervisors adopted the Portage County Groundwater Management Plan. The Plan outlines goals and specific action recommendations for groundwater protection and management in the County, along with providing a technical basis and justification for the recommendations based on the best available information. Contact the Portage County Planning and Zoning Department for more information about obtaining a copy of the plan.

The bedrock which underlies much of the Town of Dewey provides only limited amounts of groundwater, estimated at 20 gallons or less per minute. The sand and gravel aquifer in the southeast part of the Town, however, yields 10-500 gallons per minute. This aquifer is used by some farmers for irrigated vegetable crops.

1. Groundwater Quality

Overall groundwater quality in the Town of Dewey is good. However, protecting groundwater quality has become a significant concern throughout the County. There are many potential sources of groundwater pollution, including municipal, agricultural, industrial and residential sources. Sandy soils are particularly vulnerable to contamination due to their coarse-textured, highly permeable nature, which allows pollutants to leach rapidly downward into the groundwater. Agricultural irrigation further increases the leaching process.

Perhaps the most widespread groundwater problem in the County involves the presence of elevated levels of nitrates in wells. Nitrate levels above 10 mg/l are considered to be a health hazard. Groundwater testing data compiled by the County indicate that 22% of samples tested in the Town of Dewey had nitrate levels greater than 10 mg/l, as compared to 17% for the entire County. Some 7% of samples in the Town exceeded nitrate levels of 20 mg/l, as compared to 4% for the County. Studies suggest that intensive agricultural activities are responsible for the highest nitrate concentrations, but that septic systems and residential fertilization also contribute significantly to the problem.

Local research indicates that proper lot size is a critical factor in preventing groundwater pollution from on-site sewage systems. The traditional acre lots utilized in many parts of the County in previous years have been found to provide insufficient area to prevent degradation of groundwater quality. It has been determined that lot sizes of two acres or more are needed to minimize future problems.

2. Atrazine Prohibition Areas

The U.S. Environmental Protection Agency (EPA) is researching the health effects of atrazine in water. Drinking water that contains atrazine will not cause an immediate sickness or health problems (acute toxicity). However, consuming low levels of atrazine over time may cause health problems (chronic toxicity). The EPA is also concerned that atrazine may be an endocrine disruptor which can cause unintentional hormone-like activity in the body.

Map 5.6: Groundwater Flow

Map 5.7: Nitrate and Atrazine Information

The Wisconsin Department of Agriculture, Trade and Consumer Protection is responsible for protecting Wisconsin's groundwater from contamination by pesticides and fertilizers. Their authority to restrict the use of a pesticide that is contaminating groundwater at levels above health-based standards is found in the Wisconsin Groundwater Law, Chapter 160 of the Wisconsin Statutes, and by department rule in ATCP 31, Groundwater Protection Program.

The rules for restricting the use of atrazine and other pesticides in Wisconsin are part of ATCP 30 - Pesticide Product Restrictions and the county maps showing the location of the prohibition areas can also be found in the rule in ATCP 30.

E. Wildlife Habitat and Forested Areas

When people think about wildlife, birds, fish, and mammals most likely come to mind. It is important, however, to consider all organisms that make up an ecosystem in order for that system to continue providing the maximum benefit to humans and the environment. Town residents recognize the fact that human beings play a role in protecting or restoring, as well as, degrading or destroying wildlife and its habitat. They also recognize that it will be very difficult to preserve all ecosystems in the Town from human encroachment or interaction, therefore, it is the desire of residents to protect wildlife habitat where practicable.

The biggest threats to wildlife are loss of habitat quality and quantity. These threats can be attributed primarily to fragmentation, invasive species, and pollution. Fragmentation refers to the loss of large, contiguous sections of land through subdivision into smaller parts. These subdivisions can lead to an alteration and possible degradation of the native plant and animal communities. Invasive species, both plant and animal, tend to out compete or prey on native species also altering the native ecosystem. Pollution can lead to habitat degradation and cause birth defects and increased mortality rates in animal species.

Habitat areas are important for providing food and cover for nesting, brooding, and sheltering. Farmland is one type of habitat that also provides food, as well as, travel corridors between wetlands and woodlands.

Woodlands or forested lands comprise 48% of the land area in Dewey while wetlands make up 36%. According to 2001 County survey data, 71% of residents felt that an effort should be made to identify and protect woodlands and 70% felt the same about wetlands and floodplains. Woodlands that exist now are primarily due to an inability to sustain successful agricultural practices. Loss of these habitat types can threaten the viability of certain species.

One option open to all private landowners owning ten or more acres of woodlands is the Managed Forest Law Program. The MFL program is intended to foster timber production on private forests while promoting other benefits that forested lands provide. Participants in this program have the option to choose a 25 or 50 year contract period and pay property taxes at a reduced rate on enrolled lands. A portion of the difference in property taxes is recouped by the state at the time of a timber harvest when a yield tax is imposed based on the volume of timber removed. For more information regarding specific requirements and how to enroll in this program, contact the WI Department of Natural Resources.

Threatened and Endangered Species

Known rare and endangered mammal/bird/reptile/invertebrate species identified by the Wisconsin Natural Heritage Inventory (NHI) that are located within the Town of Dewey include: Arctic Shrew, Water Shrew, Red Shouldered Hawk, Blanding's Turtle, and the

Midwestern Fen Buckmoth. Rare and endangered plant types and plant communities include: Hidden-Fruited Bladderwort, Northern Mesic Forest, Northern Sedge Meadow, Northern Wet Forest, and Stream-Slow; Soft; Warm. These elements should be taken into consideration when development and protection measures are considered. A detailed description of rare and endangered plants and animals can be obtained from the WI DNR.

F. Recreational Lands And Facilities

The Portage County Comprehensive Outdoor Recreation Plan, 2001-2006, identifies the following recreational areas and needs in the Town of Dewey.

1. Dewey Marsh County Recreation Area and Shooting Range - is located in the central part of the Town. This 319 acre wildlife preserve is owned by Portage County and includes a public shooting range.
 - a. Major activities: hunting, gun-target shooting and wildlife habitat.
 - b. Facilities: gun-shooting range (12 25-yard points, 12 100-yard points and 4 20-yard points), pit vault toilets, 2 picnic tables and snowmobile trail.
 - c. Service area: central Wisconsin.
 - d. Interest group served: gun-target shooters and hunters.
 - e. Problems/deficiencies: residential encroachment.
 - f. Usage trends: hunting and nature walking are expected to increase as more privately owned lands are posted to "No Hunting - No Trespassing".
 - g. Needs: further improve shooting range by adding a trap range.
2. Wisconsin River Recreation Area - is located along the east bank of the Wisconsin River, immediately south of DuBay Dam. All 82 acres are in a natural state and are owned by Portage County.
 - a. Major activities: nature appreciation; fishing.
 - b. Facilities: none.
 - c. Service area: northern Portage County and Marathon County.
 - d. Interest group served: naturalists, fishermen.
 - e. Problems/deficiencies: access difficult due to dirt road; potential for vandalism is high due to isolated location.
 - f. Usage trends: little used.
 - g. Needs: location on Wisconsin River provides potential for linear connection; possibility for canoeing, campsites and cross-country skiing.
3. Dewey Marsh State Wildlife Area - is located in the central part of the Town. The State (DNR) currently owns and manages 5,716 acres of marshland, which represents 19% of the total land area in the Town of Dewey. However, the DNR has identified an additional 2,107 acres for possible future State purchase, which would increase DNR ownership to 25% of the Town.
 - a. Major activities: wildlife refuge, hunting and hiking.
 - b. Facilities: 5,716 acres of State owned lands interspersed with private lands.
 - c. Service area: regional and statewide significance.
 - d. Interest group served: hunters, nature appreciation and conservation interests.

Map 5.8 Forested Land

4. River's Edge - is a privately owned, 38 acre facility open to campers. The camp has 800 feet of frontage along the Wisconsin River, and has access to the Wisconsin River Flowage (1,125 acres) which would allow for waterskiing
 - a. Major activities: camping and water-related activities.
 - b. Facilities: 115 campsites on 15 acres, all but 5 campsites have electric and water service, showers, 15 acres of picnicking with 65 tables available,
 - c. 960 square foot swimming pool (with lifeguard), boat ramp, boat and canoe rental, playground equipment and play fields, tavern, restaurant and game room.
 - d. Service area: northern Portage County, Marathon County, and summer tourists.
 - e. Interest group served: family campers.
5. DuBay Marina - is primarily a retail outlet for boats and boating equipment. The Marina offers limited public access to Lake DuBay and offers canoes and sailboats for rent.
 - a. Major activities: sailboating and canoeing.
 - b. Facilities: boat ramp (good condition), canoe and sailboat rental.
 - c. Service area: northern Portage County and Marathon County.
 - d. Interest group served: occasional boating public.
6. South Bay Beach – is located along the east bank of Lake DuBay, just upstream from the dam. The facility offers over 90 acres of wooded lands along Lake DuBay and the Wisconsin River for land and water based recreation.
 - a. Major Activities: sailing, boating, water-skiing, fishing, swimming, hiking and x-country skiing and ice fishing
 - b. Facilities: Hard surface boat ramps (2), improved beach, water ski area, nature/hiking trails, restrooms and parking.
 - c. Service Area: Portage County and Marathon County
 - d. Interest group served: Boaters, fishing enthusiasts, water skiers, swimmers (access for snowmobilers in the winter), families.
7. Other - recreational facilities in the Town of Dewey include snowmobile trails and 2 softball fields (Range Line and St. Mary's Torun Church).
8. Town Park Improvement Program, 2001-2006

The Town of Dewey is planning the following recreational development projects:

- Cooperative improvements to the existing “Old 51” public access site (South Bay Beach Park) on Lake DuBay on property owned by Stora Enso.
 - a. Work on beach improvements.
 - b. Landscaping / general maintenance / cleanup work.
 - c. Other improvements to make the site user friendly.

- Hiking / skiing trail from River's Edge Campground to the County Park Land / Consolidated Water Power Company Property up by Lake DuBay.
- Consider cooperative agreement with County to work toward improvements at County Park Lands along the Wisconsin River in the Town of Dewey.
- Consider improvements on lands currently owned by the Town.
 - a. Picnic areas.
 - b. Rest / relaxation, nature areas.
 - c. Other improvements to make areas useable for the general public.

G. Air Quality

The following information comes from the WI DNR and the Environmental Protection Agency:

A few common air pollutants are found all over the United States. These pollutants can injure health, harm the environment and cause property damage. The Environmental Protection Agency calls these pollutants criteria air pollutants because the agency has regulated them by first developing health-based criteria (science-based guidelines) as the basis for setting permissible levels. These pollutants include: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter, and lead. One set of limits (primary standard) is designed to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly; another set of limits (secondary standard) is intended to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. A geographic area that meets or does better than the primary standard is called an attainment area; areas that don't meet the primary standard are called nonattainment areas.

All of Portage County, including the Town of Dewey, is listed as an attainment area by the WI DNR.

H. Non-Metallic Mining

The glacial and geologic history of Portage County has made conditions suitable for certain types of non-metallic mining. In Dewey, glacial deposits have resulted in some areas that are desirable for gravel and aggregate extraction as evidenced by three quarries, where sand and gravel are currently being mined (see Maps 5.9 through 5.12). This is in contrast with lands west of the Wisconsin River where soils are heavier and have a higher clay content

I. Natural Resources Programs

1. Wetlands Reserve Program (WRP)

The Wetlands Reserve Program is a voluntary program to restore and protect wetlands on private property. It is an opportunity for landowners to receive financial incentives to restore wetlands that have been drained for agriculture.

Landowners who choose to participate in WRP may sell a conservation easement or enter into a cost-share restoration agreement with USDA to restore and protect wetlands. The landowner voluntarily limits future use of the land, yet retains private ownership. The landowner and NRCS develop a plan for the restoration and maintenance of the wetland.

Map 5.9: General Areas of Sand and Gravel Deposits

Map 5.10: Bedrock Geology

Map 5.11: Pleistocene Geology

Map 5.12: Surficial Geology

The program offers landowners three options: permanent easements, 30-year easements, and restoration cost-share agreements of a minimum 10-year duration

2. Wildlife Habitat Incentives Program (WHIP)

The Wildlife Habitat Incentives Program (WHIP) is a voluntary program for people who want to develop or improve wildlife habitat on private lands. It provides both technical assistance and cost sharing to help establish and improve fish and wildlife habitat.

Landowners agree to prepare and implement a wildlife habitat development plan. The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) provides technical and financial assistance to implement the wildlife habitat restoration practices.

3. Groundwater Guardian Program

The Wisconsin Groundwater Guardian Program (GG Program) is a program of The Groundwater Foundation, an international non-profit organization dedicated to educating and motivating people to care for and about groundwater. This is a voluntary membership program where participating communities gain information for proactive steps toward comprehensive groundwater protection.

Section 5.7 Natural Resources Issues

- A. Wetland and floodplain areas within Dewey are very valuable to maintaining a strong natural resource base in the Town. There are instances, however, where wetlands have previously been converted to farming, and where farming operations have been established in the floodplain. These existing agriculture operations are also important to the Town, and care should be taken to safeguard the ability to continue operations, while still protecting natural resources.

Section 5.8 Natural Resources Goals, Objectives, and Policies

- A. Goal: Preserve significant environmental resources, including floodplains, wetlands, surface waters and associated shorelands, groundwater, large forested blocks of land and areas offering prime opportunities for recreation and wildlife habitat. Maintain and improve the Town's recreational facilities.

B. Policies:

1. Preserve designated Environmental Areas (wetlands, etc.) through the application of the County's Conservancy Zoning District.
2. Existing farming operations in prior converted wetlands and floodplain areas should be protected, where appropriate, with zoning allowing this use.
3. Cooperate with the County and the City of Stevens Point to protect its municipal wellhead recharge area, a portion of which lies within the Town of Dewey.
4. Maintain consistency with the adopted Outdoor Recreation Plans for the Town and County.
5. Encourage or require where possible, land use practices which protect air, land, and water quality, as well as the scenic value of the Town.

6. The Town should continue to work with the Department of Natural Resources in managing issues related to the Dewey Marsh.
7. Discourage the sale of wetlands to the DNR to preserve the Town's tax base.
8. Encourage proper forest management.

Section 5.9 Cultural Resources

How can you know where you're going if you don't know where you've been? Cultural and historic resources often help link the past with the present and can give a community a sense of place or identity. These resources can include historic buildings and structures along with ancient and archeological sites.

Burial sites are one example of a resource that can add to a community's sense of history as well as provide a great deal of genealogical information. Formally catalogued burial sites are protected from disturbance in Wisconsin and are given tax treatment equal to that of operating cemeteries.

Information regarding cultural and historic resources in the Town is constrained to limited financial and human resources. This section will provide goals and policies that promote the effective management of historic and cultural resources.

A. Cultural and Historic Resources Inventory

A wide range of historic properties have been documented that help create Wisconsin's distinct cultural landscape. Descriptions of existing locations are identified on the list of historic places by the Wisconsin Historical Society. Keep in mind many of the properties included in this inventory are privately owned and not necessarily open to the public, so please respect the rights of private property owners. At this time however, there are no listings in the Town of Dewey. Another source of information comes from the National and State Register of Historic Places. There are currently fourteen sites listed throughout Portage County, however, none of them are located in the Town.

There is one cemetery located in the Town of Dewey: St. Mary's Cemetery, located at the intersection of Dewey Drive and Pioneer Road, across from St. Mary's Church on Dewey Drive.

B. Cultural Resource Programs

At the state level, the Wisconsin Historical Records Advisory Board (WHRAB) works in association with the Wisconsin Historical Society. The Board's activity falls primarily into three areas: it provides guidance and assistance to archives and records management programs in Wisconsin, promotes the value of historical records as keys to our cultural heritage and works through partnerships with statewide organizations whose purpose and goals support that end, and to bring federal grant funds to Wisconsin for improving access and preservation of historical records.

Section 5.10 Cultural Resource Issues

The following issues or concerns were identified by the Town of Dewey Plan Commission in the summer of 2003:

- A. There is a desire to develop and maintain a written history of the community.
- B. Citizens would like to replace the historical marker by the boat landing.

Section 5.11 Cultural Resource Goals, Objectives, and Policies

- A. Goal: Identify and protect the history and cultural resources with the objective of making them an integral part of the community.
- B. Objective: Work with the Portage County Historical Society and interested residents to develop historic archives for the Town.