Chapter 6
CORRIDOR'S AFFECTED ENVIRONMENT

F. LOCATION AND DESCRIPTION OF WAUSHARA COUNTY

The Ice Age NST's proposed corridor is located within Waushara County in the central part of the state. Waushara County is approximately 70 miles north of Madison, the state capital, 100 miles northeast of Milwaukee, and nearly 200 miles northeast of Chicago. I-39 (formerly U.S. 51), which runs north-south through the western portion of the county, provides strategic state-wide access. State Route 21 crosses both the county and the proposed Ice Age Trail corridor in an east-west direction.

Farmland interspersed among woodlands is the predominant land use in rural Waushara County. Boom-irrigated potato farming is common in the northwestern part of the county while corn and vegetables are primary crops in other areas. Another important crop is the production of Christmas trees. The undulating glacial terrain, which is most predominant in the west central and north central portions of the county, is generally more wooded and contains most of the county's 136 lakes. This area also serves as the headwaters for numerous trout streams. These natural features create a landscape which makes Waushara County an attractive area for seasonal residences and a popular area for day-use recreational activities.

With over 18,000 acres of public and an additional 4,000 acres of private open space, abundant opportunities exist for hiking, biking, fishing, hunting, golfing, cross-country skiing, snowmobiling, and other recreational activities. The WDNR, with over 16,000 acres under management, is the largest public landowner in Waushara County. Its holdings include two wildlife areas, numerous holdings designated as state fisheries areas, and several designated natural areas. The county's park system totals over 700 acres among its 16 sites.

Wautoma, the county seat of Waushara County, is the largest community near the corridor (about five miles east) with a population of 2,000. Other nearby communities (Wild Rose, Coloma, Hancock, and Plainfield) each have less than 1,000 residents. Many county residents commute to nearby urban centers in adjacent counties for employment opportunities.

Four certified segments of the Ice Age NST currently exist in Waushara County. Three are located on WDNR State Fisheries near the southern border of the county along Chaffee and Wedde Creeks, two important trout streams, and the highly scenic Mecan River. The Chaffee Creek segment is accessible from the southbound I-39 rest area, where an information kiosk is available. The fourth and longest segment follows the undulating topography of the Almond Moraine in the west central portion of the county. This trail segment features one of the deepest kettles found in the county.

G. CORRIDOR'S PHYSICAL RESOURCES

Geology

Beginning about 2 million years ago the climate began to periodically cool and warm. During the colder periods, averaging 100,000 years each, ice sheets as much as three miles high at their

centers formed in the Hudson Bay region of Arctic Canada and spread outward across northern North America, including Wisconsin. During warmer periods, averaging 10,000 years in duration, most of the ice sheets melted away. This cyclical process occurred as many as two dozen times during the 2 million years of the Pleistocene Epoch. It is likely that portions of Wisconsin were blanketed many times by these ice sheets, but evidence of these events is mostly buried beneath the deposits left by the most recent glaciation.

The several glacial advances of the late Pleistocene and the last part of the Wisconsin Glaciation left a landscape in Waushara County that is largely defined by glacial features such as moraines, drumlins, waterlain sediments, kames, kettle depressions, and drainage and tunnel channels. These last advances began about 25,000 years ago. The strongly linear Hancock and Almond Moraines in western and north central Waushara County and, further east, the multi-phase Elderon Moraines are products of the several distinct glacial advances during this period. These features mark the greatest extent of the Green Bay Lobe of the Wisconsin Ice Sheet about 16,000 years ago. A flat outwash plain extending outward from the Hancock moraine defines the topography in the far western portion of the county. Distinctive tunnel channels through both the Hancock and Almond Moraines are significant landscape features today in Waushara County. Created by meltwater flowing westerly under the glacial ice, these linear valleys are characterized by a series of small lakes and ponds such as those near Hancock and Plainfield.

The more recent Elderon Moraines were formed about 13,000 to 14,000 years ago, as a result of the glacier melting back from the Almond Moraine, pausing and then advancing a number of times. The advance and retreat of the glacier during the formation of these moraines result in their having a less linear configuration than the Hancock and Almond Moraines. Channels cut through these ridges by westward flowing glacial meltwater give both the hills and the valleys of this landscape a strong east-west orientation. Several kettle lakes and a hummocky terrain add to the scenic character of this young glacial landscape. Further east, the flat to gently rolling topography of the eastern and southeastern part of Waushara County was formerly the basin of Glacial Lake Oshkosh.

The Waushara County Ice Age Trail corridor selected by the Core Team is generally located in a swath that extends in a northeasterly direction from the southwest corner of the county. The corridor ranges in width from one to six miles and is concentrated on the features of the Almond Moraine. The corridor has been located here because the moraine's interesting topographic characteristics are classic examples of features formed in front of, at the edge of, and underneath the furthermost advance of the glacial ice sheet. In addition to the distinct character of the terminal moraine landscape there are several outstanding examples of tunnel channels with chains of kettle lakes. The selected corridor also has high potential for creating an inviting trail experience. With the corridor's combination of undulating topography and small open areas interspersed among oak savanna and woodlands, trail users would be able to enjoy an ever-changing viewscape of distant panoramas, directed views, and confined spaces.

Locating the Ice Age Trail corridor elsewhere in Waushara County was rejected by the Core Team upon review of the totality of its glacial features. Although remnants of glacial features are found in other areas of the county, they are considered relatively insignificant and do not on their own merits justify adjusting the trail corridor. For example, there are isolated drumlins and small drumlin fields behind both the Almond and Elderon Moraines, but they pale in comparison to similar features in Waupaca County and elsewhere in the state. Similarly, the relatively

featureless topographic character of the outwash plain overlaying Glacial Lake Wisconsin west of the Hancock Moraine is not considered an attractive option for locating the trail.

Soils

During the last glacial advance, those portions of Waushara County where the Ice Age NST corridor is located were covered by Cary ground moraine and Cary end moraine. The moraines are composed of materials derived from bedrock deposits found to the north and east of the area and relocated by glacial action. Soils found in this area are largely derived from the weathering of these glacial deposits and are predominantly sands, loamy sands, and sandy loams. In some areas, boulders of granite rock presumed to have originated from the Wolf River Batholith are also found on and near the surface. Where Glacial Lake Oshkosh once existed, muck soils are common. Waushara County is underlain primarily by Cambrian Sandstone although Pre-Cambrian granite monadnocks such as Mt. Morris penetrate the sandstone bedrock in isolated locations.

According to the United States Department of Agriculture's Soil Survey of Waushara County, all eight of the major soil associations found in the county are the result of past glaciation. A soil association is a landscape that has a distinctive pattern of soils, relief, and drainage. It is typically named for the major soils even though it may contain other "minor" soil types. The Plainfield-Okee-Richford Association is by far the primary soil association found in the Ice Age NST corridor. Areas of the Plainfield-Richford-Boyer and Houghton-Adrian-Willette Association are also found.

The Plainfield-Okee-Richford Association makes up an estimated 90 percent of the proposed Ice Age NST corridor's total area and occupies virtually the entire surface of the Hancock, Almond, and Elderon Moraines. This association is described as "sloping to steep, somewhat excessively drained and excessively drained, sandy soils; on moraines and terraces". It is commonly found on the sides of ridges, knolls, and hills on moraines and terraces on slopes ranging from 6 to 30 percent. Forty percent of the association is comprised of Plainfield and similar soils, 15 percent Okee and similar soils, 10 percent Richford soils, and 35 percent soils of minor extent. These minor soils include very poorly drained Houghton soils, which are found in depressions, somewhat poorly drained Leola and Mecosta soils, which are found in drainageways, and somewhat excessively drained Meehan soils, which are found on the sides of ridges and hills. Soils in this association are better suited to pine trees than cropland due to their low available water capacity, and the hazards of soil blowing and water erosion. Most of the soils have moderate to severe limitations for trails and paths and other recreational uses because they are too sandy to hold a good turf cover under foot traffic.

The Plainfield-Richford-Boyer Association makes up about 10 percent of the corridor and is concentrated in areas directly in front of and, to a lesser extent, behind the moraines. This association is described as "nearly level and gently sloping, well drained to excessively drained, sandy soils; on outwash plains and terraces." It is commonly found on flats, ridgetops, and knolls on outwash plains and terraces on slopes ranging from 0 to 6 percent. Thirty percent of the association is comprised of Plainfield soils, 25 percent Richford soils, 10 percent Boyer soils, and 35 percent soils of minor extent. These minor soils include poorly drained Kingsville soils, which are found in depressions, and the somewhat poorly drained Leola and Meehan soils, which are found in drainageways. Most of the soils in this association are used for cropland, much of it

irrigated. The low available water capacity and the hazards of soil blowing are the main management concerns. The sandier soils have moderate to severe limitations for trails and paths and other recreational uses because they are unable to maintain a good turf cover under foot traffic.

Within the proposed Ice Age NST corridor, the Houghton-Adrian-Willette Association is found in only one small isolated area. This association is described as "nearly level, very poorly drained, mucky soils; on outwash plains, in glacial lake basins, and on moraines". It is found in depressions on outwash plains, in glacial lake basins, and on moraines on slopes ranging from 0 to 1 percent. Thirty-five percent of the association is comprised of Houghton soils, 30 percent Adrian soils, five percent Willette and similar soils, and 30 percent soils of minor extent. These minor soils include poorly drained Keowns, Kingsville, Poy, and Poygan soils, which are found in depressions slightly higher on the landscape than the major soils in this association. Most of the acreage in this association is used for native vegetation while a few areas are drained and used for corn or specialty crops. The soils in this association are unsuitable for trail development because of ponding and wetness.

Water Resources

The drainage divide separating the Wisconsin River watershed from the Fox-Wolf River watershed bisects Waushara County in the general location of the Almond Moraine. As a result, the county serves as the headwaters for numerous small streams, which flow both easterly and westerly from this region. These streams, as well as most lakes and marshes in the area, are fed by numerous seeps and springs from the upper levels of a glacially deposited sand and gravel aquifer. The abundance of the area's registered trout streams is a testament to the high quality of the groundwater seepage from this aquifer. The proposed Ice Age NST corridor contains about a quarter of Waushara County's 136 lakes and ponds. None of these are as large as 50 acres and nearly all are small individual kettle lakes or associated with a tunnel channel.

In addition to the sand and gravel deposits, the sandstone bedrock is also considered to be a good aquifer. Its lower boundary generally lies less than 400 feet below the surface, where it interfaces with granite bedrock. The supplies of groundwater are sufficiently ample in the northwestern corner of the county that thousands of acres of cropland can be spray-irrigated without seriously drawing down groundwater levels. At the same time, these areas are highly susceptible to groundwater contamination due to the inability of the highly porous soils to remove residues from applied pesticides and fertilizers as the water percolates back into the groundwater stream.

Other threats to the surface water and groundwater quality include soil erosion due to land development and agricultural practices, potential supply depletion from over-irrigation or extraction, and various other point and non-point sources. Groundwater extraction for bottling purposes is a relatively new threat that recently came to light and promises to return. A recent permit to establish a bottling operation, which would have removed thousands of gallons of groundwater per day from the aquifer, was denied. Loss of wetlands due to development activities also threatens the water system. A number of basin and watershed management plans and best management practices are in place, however, to help safeguard these valuable resources. Waushara County is also attempting to provide greater protection of surface water by encouraging landowners to maintain native vegetation along streambanks and lakeshores.

Air Quality

The ambient air quality within the proposed corridor is generally good and could be characterized as "fresh country air." For the most part, ozone is not an air quality concern in this area. Airborne dust mobilized by plowing or wind erosion of bare soil in agricultural fields at times may be a problem.

Visual Resources

When a corridor for the Ice Age NST is first defined, the geologic features as well as the aesthetic values such as the foreground scenery, distant views and natural environments, are taken into consideration. The corridor must contain elements that create a visually diverse hiking experience since the Ice Age Trail is foremost a National Scenic Trail. Most of these elements are contained within the corridor, but some are located outside of it and can be seen from high vantage points within the corridor. During the planning process, geologic features, high points, and places of scenic beauty such as kettle ponds and high quality plant communities are identified and mapped. Conceptual trail routes are then designed to connect these various features. These collective view-scapes are the heart of the Ice Age NST. They tell the story, first-hand, of how the glacier shaped the landscape of Wisconsin and created its diverse biological ecosystems and water resources. Also, they act as landmarks for hikers who consciously or subconsciously use these features as a map or way-finding system to identify where they are along the route of the trail.

Landforms, scenic views, and natural areas or plant communities have been designed into the proposed corridor plan, because of their aesthetic and educational value. The undulating topography of the Almond Moraine and the less prominent Elderon Moraine, the bisecting tunnel channels, and numerous kettle ponds and dry kettles are the significant glacial features in the corridor. Walking along the Ice Age Trail through the rolling hills and scattered open spaces and woodlands of Waushara County will provide a continually changing and delightful experience to the hiker. The juxtaposition of land uses (crops, farm buildings) upon the corridor's topographic features offers variety as well as a pedestrian scale to the landscape. Depending on the eventual trail location, scenic overlooks across the Glacial Lake Wisconsin basin to the west as well as glimpses of Mt. Morris, a prominent monadnock to the east, may be available. The proposed corridor also has an abundance of significant plant communities such as oak savannas, prairie remnants and prairie restorations, Mecan Springs and other headwaters fens and wet prairies, several high quality coldwater trout streams, and related streamside plant communities.

H. CORRIDOR'S BIOLOGICAL RESOURCES

Ecosystem

The vegetative cover of Waushara County is divided relatively evenly between cropland and woodland. Woodlands account for 162,000 acres, 40 percent of the county's land area, while cropland is estimated at 133,000 acres, or 33 percent of the total area. The county's 59,000 acres of wetland occupy about 15 percent of the land area. Woodlands reach their greatest concentration in a 20-mile wide band that runs from southwest to northeast across the county,

generally in conjunction with those portions of the county where moraines and other topographic relief are common. In these areas, woodlands comprise nearly two-thirds of the total acreage. The proposed Ice Age NST corridor occupies a portion of this band. There are fewer and generally smaller woodlands in the flatter northwestern and southeastern corners of the county, where more of the land is in agricultural production. Irrigated farmland dominates the sandy northwestern part of the county while drained agricultural acreage is common on the heavy soils found in the southeastern portion.

Pre-settlement vegetation in much of Waushara County ranged from a mixture of oak forest species to more open oak forest and oak openings with an understory of prairie grasses and other prairie plants. Two sizable grassland areas were also found, one in the area east of the present village of Plainfield and the second west of the present village of Coloma. Today, upland woods dominated by tree species in the oak-hickory association, often interspersed with pines, are found in much of the county. In the western part, where the proposed Ice Age NST corridor largely lies, the jack pine-scrub oak association is common, with aspen and birch found in nearby lower areas. Stands dominated by maple, basswood, elm, and ash are less common, and are generally found on the heavier soils in the eastern third of the county. While remnant stands of white pine exist in scattered locations, most of the larger coniferous stands today are comprised of red pine, a species that was initially introduced to be grown in plantations or serve as windbreaks. Several thousand acres are presently allocated to the growth and harvest of Christmas trees, which may be considered an agricultural crop. As this business wanes, the larger growers have begun to sell off some of their acreage to buyers seeking recreational acreage or wooded homesites. This activity has reduced the number of large contiguous holdings and raised land costs on a per acre basis.

The proposed corridor for the Waushara County segment of the Ice Age NST contains several plant communities that are considered unique for their geographic location. These communities typically occur in isolated sites and are generally the result of unusual micro-climatic factors, which extend the community's "normal" range. Unique plant communities found in or near the proposed corridor include a onstick s fen, springs and spring runs, a deep hard seepage lake community, a southern mesic forest, a dry prairie community, an emergent aquatic community, and oak savannas.

Invasive Species

According to Executive Order 13112, the "Invasive Species Act," an invasive species is "a species that is: 1. non-native (or alien) to the ecosystem under consideration and 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health."

As noted above, the Ice Age NST will traverse a variety of ecosystems, including dry oak hickory woodlands and prairies. According to WDNR land managers, the primary invasive species of concern for open areas are spotted knapweed and wild parsnip. Problematic species for wooded areas are buckthorn, honeysuckle, and most recently, garlic mustard.

Wildlife

Wildlife is abundant in the study area. The mixture of woodlands, croplands, and wetlands provides excellent habitat, cover and food source for many species, both game and non-game. Wildlife inhabiting Waushara County in the area of the Ice Age Trail include white tail deer, grey squirrel, fox squirrel, cottontail rabbit, coyote, fox, weasel, lowland furbearers, ruffed grouse, woodcock, pheasant, wild turkey, a variety of native and migratory song birds, raptors, and waterfowl, and numerous reptilian and amphibian species. Reports of black bear and wolves making their way into the area have also surfaced.

Fisheries

The waters of the study area contain a variety of cold and warm-water fish species. Warm-water species such as northern pike, bass, panfish and carp are found in the lakes, ponds and slow moving streams of the area. Winterkill is a common problem with smaller, shallow lakes, like many of the kettle ponds. Cold water species such as brook trout, brown trout, and rainbow trout are generally found in the deep spring-fed lakes and faster flowing streams that have a temperature of less than 75° F.

Nearly all the headwater streams that emanate from the moraines found in the western third of the county – the general location of the proposed Ice Age NST corridor – are considered to be Class I trout streams. Among these are portions and tributaries of the Mecan, Pine, and White Rivers, and portions and tributaries of Chaffee, Lunch, Wedde, and Little Pine Creeks. Class I trout streams are those which have completely natural reproduction and do not need supplemental stocking to sustain a viable trout fishery. These are all highly valuable streams with good water quality.

Threatened and Endangered Species

The NPS began informal consultation with the U.S. Fish and Wildlife Service in January 2002. According to the U.S. Fish and Wildlife Service, the only federally-listed endangered species known to exist in Waushara County is the Karner Blue Butterfly. Habitat for this species is found in several locations in and near the proposed Ice Age NST corridor. Fassett's locoweed, which is identified as a threatened species at the federal level and as an endangered species at the state level, is found in at least four locations in the Town of Oasis.

In addition to those species identified to be endangered or threatened, there are plant communities and several plant and animal species found in and near the corridor that have been identified to be of special concern at the state level. The plant communities include Calcareous Fen, Dry Prairie, Crooked Lake, and Chain Lake—Inland Beach. Plant and animal species consist of Cuckoo flower, Manyheaded sedge, Slim-stem Small-reedgrass, Tufted Hairgrass, Capitate spikerush, Tufted Hairgrass, Rock Stitchwort, Many-headed Sedge, Small-flowered Woolly Bean, Few-flowered Spikerush, Yellow Screwstem, Tiger Beetle, Gorgone Checker Spot Butterfly and the Northern Goshawk. These are known to occur at isolated locations in the county but a more thorough inventory of the county's plant and animal communities would likely expand the number of areas where most or all of these species could be found.

I. CORRIDOR'S CULTURAL RESOURCES

Waushara County is rich in archeological and cultural resources, those included in or eligible for the National Register of Historic Places. The county itself is named for a Ho-Chunk chief and means Fox or Big Fox.

According to the Archeological Site Inventory (ASI) maintained by the Wisconsin State Historical Society, several mound groups dating from the Woodland and Late Archaic Periods are located within the "preferred" alternative. These known sites include the Spaulding Mounds located in the Town of Deerfield, and the Macywski and Hudsiak mound groups located in the Town of Rose along with several village and camp sites. The proposed corridor in the Town of Richford, particularly in the area of Mecan Springs, encompasses a large number of sites including the Potter, Langseth, Schmudlach, Eberts mound groups, prehistoric camps and village sites. The Towns of Oasis, Wautoma and Coloma also have mound groups, however there are no documented sites within the proposed corridor.

Some of the most well-known mounds are in the Village of Hancock, located on the western border of Waushara County. These Native American mounds were constructed during the late Woodland Period dating back to 650-1200 A.D. Considerable work has been done at Whistler Mounds Park on Sixth Avenue where several mounds have been cleared of brush, making them move visible. The area was mapped in 1916 by archeologists and Whistler Mounds are listed in the National Register of Historic Places.

First settled in 1854, the Village of Hancock's original wood-framed buildings on Main Street were destroyed by fire in 1893 and 1894. The village was quickly rebuilt using red brick obtained from Steven's Point. Many of these early structures are still in use today including the historic firehouse which now serves as the village library.

The first settlers in Wild Rose traveled from Rose, New York in 1859. They named the first township they established Rose. When the village was organized in 1874 it was called Wild Rose to distinguish it from the township. Many of the town's early structures remain. The Upton House, built in 1880 as an inn is still in use as the Wild Rose Hotel. The Wild Rose Historical Society maintains a Pioneer Museum which consists of an eight building complex of restored structures. The collection includes the 1884 Elisha and Jane Stewart Home and the 1853 Pioneer Hall located on Main Street, an 1884 schoolhouse, barn, blacksmith shop, and Carriage House. The State of Wisconsin Department of Natural Resources fish hatchery located just outside Wild Rose contains fourteen structures dating from the 1930's through the 1950's which are considered eligible for listing in the National Register of Historic Places according to the Wisconsin Architecture and History Inventory (AHI) maintained by the Wisconsin State Historical Society including the egg house, mess hall, and information booth.

Three additional sites in the corridor are listed in the Wisconsin Architecture and History Inventory (AHI). The first is in the Town of Richford. It is the St. Peter Lutheran Church which was built in 1886 and was formerly known as the Evangelistic Lutheran St. Petri Kirche. Located in the Town of Oasis is the birthplace of Sir Henry Wellcome, a key figure in the

development of pharmaceutics and the promotion of medical research. Finally, constructed in the Town of Wautoma in 1905 is the August Heier Potato Cellar Warehouse.

J. CORRIDOR'S SOCIO-ECONOMIC RESOURCES

The proposed Ice Age NST corridor is located in a picturesque, rural region containing a number of small lakes and scattered tracts of public hunting and fishing lands. For years, these lakes have attracted secondary lakefront home development and, as their owners have reached retirement age, many have been converted to year-round residences. Generally, socio-economic and population growth for Waushara County has been at a slower rate then the rest of the state. Like many other rural areas, the lack of employment opportunities and good paying jobs historically has resulted in the outmigration of a sizable number of young adults. In recent years, however, an improved transportation network has shortened travel times to nearby larger employment centers, helping stem outmigration by allowing more permanent residents to remain in the area and commute to work. Similarly, new residents have been attracted to the county from these urban centers, who willingly trade a longer work commute for the ability to have the area's scenic attributes and year-round recreational opportunities at their doorstep.

Communities and Businesses

Five of Waushara County's seven incorporated communities lie within close proximity of the proposed corridor. Wautoma, with a population of 2,000, is the county seat and largest community in the county. Wild Rose, which lies within the proposed corridor, has about 800 residents. Other communities near the corridor include Coloma, Hancock, and Plainfield. Plainfield's population is about 900 while Coloma and Hancock each have less than 500 residents. All five communities are projected to experience a relatively "flat" population trend during the next two decades.

The seven unincorporated towns within the proposed corridor boundary are sparsely populated and generally have densities of fewer than 20 residents per square mile. They are collectively projected to grow by less than 400 residents, an 8.1 percent increase, between 1990 and 2020, continuing to remain among the least populous of the county's towns. Although there will be little net change in population, a continuing trend will be a decline in the number of farm residences (and farm households). This decline will be offset by new rural residential development, which will house residents working in jobs elsewhere. This pattern of growth reflects a national trend where an increasing percentage of new residential development is occurring in outlying rural areas. Families looking for a better quality of life and empty nesters looking for a desirable place to retire are largely responsible for this trend. In fact, between 1990-2020, Waushara County's elderly population is expected to increase by 62.6 percent. These influences will likely continue to contribute to the increase of land values and development within the corridor. They will also create a greater need to protect significant natural resource features as well as provide additional areas for individuals to recreate.

Wautoma serves as a service center for the county but the other communities have little commercial development. As a result, many area residents rely on larger urban centers such as Oshkosh, Stevens Point, and Wisconsin Rapids for shopping as well as employment. In recent years recreation- and tourism-based businesses have become a more important part of local economies, particularly in Wild Rose. Today, the area features specialized dining, handicrafts,

antiques, and other specialty products as well as traditional hospitality and other highway-oriented businesses. With an increased focus on attracting visitors and visitor-dollars into the local economy, the five communities located near the proposed Ice Age NST corridor may benefit economically from trail users by providing such support opportunities as grocery stores, restaurants, campgrounds, and bed and breakfasts.

Land Use and Land Ownership

Primary land uses within the proposed Ice Age NST corridor are forestry and agriculture. However, rural residential development pressures are continuing to mount, increasing raw land costs and decreasing the number of large, contiguous parcels. As these rural areas become more heavily developed, the cost of providing basic municipal services increases and the potential for land use conflicts becomes magnified. Purchase of larger tracts for hunting land is another trend that has elevated land prices. At the present time 42 percent of the corridor is in native forest while an additional 23 percent is in pine plantations or Christmas tree farms. About 14 percent is used for agricultural production while grasslands and other open space occupy 15 percent of the corridor.

All towns in the proposed corridor are currently under county zoning and most of the land is zoned for agriculture. Stand-alone single family residences or minor subdivisions are a permitted use in this zoning district, making it easy for those wishing to build in rural areas. Re-zonings to Residential generally accompany platted subdivisions, but this type of development is rare with the exception of lakeshore areas. Future subdivision activity is expected to be minimal in the proposed corridor as it is difficult to market these relatively small parcels when opportunities to acquire larger rural homesites are prevalent.

The Ice Age NST is a permitted use in all zoning classification (ss. 236.292 Wis. Stats.).

Table 1
EXISTING LAND USE
Proposed Ice Age Trail Corridor

LAND USE CATEGORY	ACRES (acres)	% OF TOTAL
Agriculture	4,531	14.0
Non-irrigated cropland	(2,341)	(7.2)
Irrigated cropland	(2,007)	(6.2)
Farmsteads (House and outbuildings)	(184)	(0.6)
Forest	22,996	64.8
Unplanted woodlots	(13,547)	(41.8)
Planted woodlots	(7,450)	(23.0)
Grasslands/Brushland/Vacant Open Space	4,986	15.4
Residential	422	1.3
Commercial	68	0.2
Industrial (including active quarries)	67	0.2
Parks/Recreation	153	0.5
Public Facilities/Utilities	0.4	0.0
Transportation (includes road rights-of-way)	823	2.5

Water Features (surface water)	205	0.6
TOTALS	32,400	100.0

Recreation Resources

The proposed Ice Age NST corridor contains about 3,100 acres of DNR lands. Its largest holding is the 1,438-acre Greenwood Wildlife Area near Hancock. The remaining tracts are portions of the much larger Mecan River and Pine River State Fisheries Areas, which collectively comprise over 8,000 acres. The DNR also maintains a fish hatchery north of Wild Rose. The fisheries areas experience heavy use during the opening weekend of trout season. Use thereafter is consistent but never to the point of overcrowding. It is estimated that DNR lands within the proposed corridor provide approximately 10,000 annual recreation days.

George Sorenson Recreational Area is a 78-acre parcel recently purchased by Waushara County. Located on a kettle lake within the proposed corridor, the site is planned to provide low impact recreational opportunities and is being viewed as a potential node on the Ice Age Trail. The county is seeking to acquire an adjacent 40-acre parcel to gain ownership of nearly 100 percent of the lake's shoreline. Since development of this site will be limited, it is expected that use will be relatively modest.

Three other county parks totaling 27 acres are in close proximity to the proposed corridor. Marl Lake Park, at 24 acres, provides a limited amount of recreational opportunities and its swimming beach generates considerable use during summer weekends; the other two parks serve primarily as public access points to Huron and Curtis Lakes.

Village parks in Wild Rose, Hancock, and Coloma provide a range of basic recreational opportunities and facilities. The park in Hancock includes a campground and an interpretative archeological site.

Other significant public open space within the proposed corridor includes adjacent parcels owned by the Town of Rose and the Wild Rose School District. These two tracts total about 550 acres and their location on the Portage County line is adjacent to the southern terminus of the Waupaca/Portage Counties' Ice Age NST corridor.

Collectively, there is a relatively good and diverse supply of support facilities to accommodate a range of low and moderate impact recreational activities within and near the proposed corridor.

Public Health

The Ice Age NST will contribute to public health and well being. "Walking for Pleasure" is the most popular recreation activity in Wisconsin. It is enjoyed by an estimated 85% of the population. Completion of the Ice Age NST in Waushara will provide an opportunity for people to obtain regular exercise.

Tax Base

In 2004 the collective tax base of the seven towns through which the proposed Ice Age NST corridor passes was $463,000,000. This included about $190,000,000 in land value and an additional $273,000,000 in improvements. Based on the proportion of each town's land area actually lying within the corridor boundary, it is estimated that the total tax base of corridor lands is approximately $87,000,000, including $35,000,000 in land and $52,000,000 in improvements. With the land within the corridor estimated at about 50.6 square miles, the gross average assessed value of land was slightly over $1,150 per acre. For the county as a whole (excluding incorporated communities), the gross average assessed value was about $1,825 per acre.