

ENVIRONMENTAL ANALYSIS AND DECISION ON THE NEED FOR AN ENVIRONMENTAL IMPACT STATEMENT (EIS)

Form 1600-1

Rev. 6-2001

Department of Natural Resources (DNR)

Region or Bureau Bureau of Parks and Recreation
Type List Designation NR 150.03(5)(a)1.b

NOTE TO REVIEWERS: This document is a DNR environmental analysis that evaluates probable environmental effects and decides on the need for an EIS. The attached analysis includes a description of the proposal and the affected environment. The DNR has reviewed the attachments and, upon certification, accepts responsibility for their scope and content to fulfill requirements in s. NR 150.22, Wis. Adm. Code. Your comments should address completeness, accuracy or the EIS decision. For your comments to be considered, they must be received by the contact person **before 4:30 p.m., June 2, 2006.**

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Applicant: Department of Natural Resources

Address: 810 W. Maple Street, Spooner, WI

Title of Proposal: Acquisition, Development, and Management of the Nicolet State Trail – Forest and Florence Counties

Location: Forest and Florence County - This project includes the rail corridor as it enters the southern border of Forest County near Carter, continues north through Wabeno and ends in Laona. The project corridor starts again in Forest County near the intersection with County Highway G in the Town of Cavour and continues north through Newald, across the Popple River and into Florence County near Long Lake. In Florence County, the corridor runs through Long Lake north to Tipler and ends at the Wisconsin-Michigan border. (Refer to Appendix A for the description of trail location.)

PROJECT SUMMARY

1. Brief overview of the proposal including the DNR action (include cost and funding source if public funds involved)

For the past several decades, Wisconsin has been active in acquiring abandoned railroad rights-of-way and establishing the grades for trail purposes. The Wisconsin Department of Natural Resources (WDNR) is a national leader in the conversion of rail-to-trail projects with over 1,600 miles of trails developed on abandoned rail corridors. The WDNR acquired from the Wisconsin Department of Transportation (WisDOT) approximately 27 miles (two segments) of abandoned Chicago & Northwestern rail line in Forest County and approximately 14 miles in Florence County. The WDNR intends to partner with the Forest County Forestry Department (Forest County) and Florence County Forestry and Parks Department (Florence County) to establish the Nicolet State Trail (NST). Developing the Forest and Florence County segments of the Nicolet State Trail will create a near continuous 85-mile trail from Gillett, Oconto County to the Wisconsin-Michigan border.

In Forest County, the trail would make available year-round use that would provide for two-way traffic for hiking, biking, snowmobiling, and ATV use. Similarly, the trail in Florence County would provide for two-way traffic to accommodate snowmobiling, cross country skiing and ATV use in the winter conditions, and hiking, biking, ATV use, and horseback riding in non-winter conditions.

Forest and Florence County signed a Memorandum of Understanding and a Cooperative State Trail Easement with the Department identifying each county's responsibilities for the development, operation, and maintenance of the respective multi-

purpose trail segments. Both counties applied for and received funding approval from WDNR Outdoor Motorized Recreation Trail Aids, All-Terrain Vehicle Aids. Forest County proposes to surface the Nicolet State Trail with gravel including grading stone ballast, gravelling, grading, crowning, and compacting the trail surface. Florence County proposes to develop the trail with surface stabilization, culvert installation, and trail head construction.

2. Purpose and Need (include history and background as appropriate)

The *Wisconsin State Trails Strategic Plan* (1993) clarifies the Wisconsin Department of Natural Resources' role and mission of providing all types of trails, and discusses strategies for carrying out this mission. It describes a vision of a statewide network of interconnected trails into which smaller state, partnership, county, municipal, and private trails feed. The *State Recreational Trails Network Plan* (amendment to *Wisconsin State Trails Strategic Plan*) approved by the Wisconsin Natural Resources Board in January 2001, provides a blueprint for implementing the strategy. This plan identifies a series of potential trail corridors across Wisconsin linking existing trails, public lands, natural features, and communities. The *State Recreational Trails Network Plan* provides authorization for the WDNR to pursue acquisition of abandoned rail rights of way and other corridors identified in the plan. The Nicolet State Trail, Segment 2 from Forest County to the Michigan state line, is identified in the potential trail network for the Northern Region.

The Chicago and Northwestern Transportation Company abandoned the rail corridor in 1979. Wisconsin DOT bought the corridor under its freight rail preservation program. WisDOT made several attempts to restore the rail service, but there were not enough customers to support continued rail operations on the line. Thus, DOT salvaged the rail and deeded the corridor to WDNR with provisions that the conveyance is subject to future restoration and reconstruction of the right-of-way for rail purposes.

Both Forest and Florence County entered a Memorandum of Understanding (MOU) with the WDNR regarding the acquisition, development, and operation of the abandoned rail property known as the Nicolet State Trail. The portion of the trail discussed in this EA starts at the Forest/Oconto County line in southeastern Forest County and proceeds north to the Town of Laona. The trail restarts in the Town of Cavour (north side of County Highway G) and proceeds north to the Forest/Florence County line. The fourteen-mile Florence County segment extends from the county line north through Long Lake and Tipler to the Brule River, the border with the State of Michigan. The entire NST is approximately 85 miles long and includes 44.5 miles in Oconto County.

In accordance with the terms of the MOU, the WDNR would convey by easement to each County the right to develop, maintain, repair, and operate a recreational trail as a component of the state trail system. The Department would designate the trail as a "State Trail" under section NR 51.73, Wis. Administrative Code. The WDNR would work with Forest County and Florence County to identify and provide funding sources for the development and repair of the trail. Additionally, the counties would be responsible for the development, operation, and maintenance of the trail.

Forest County:

Forest County collaborated with the Department and a variety of trail advocates and user groups to draft a property master plan. Two public meetings were held to assess public interest in desired uses for the recreation trail. The information gained from the public meetings, in combination with information and input from other sources, provided the basis for the proposed recreational trail uses. The Forest County Forestry Committee approved the *Nicolet Recreational Trail Master Plan* in December 2004. A third public meeting was held in August 2005 to amend the master plan and include ATV use as an approved trail use. As described in the property master plan, the goal is to provide and preserve the railroad corridor known as the Nicolet State Trail and make available, year round use that will provide for two-way traffic for hiking, biking, snowmobiling, and ATV use.

Snowmobile trail aids (WDNR) have been utilized to relocate a snowmobile trail onto the abandoned railroad grade, convert railroad trestles into bridges, gate the corridor to prevent travel by motor vehicles, and sign and brush the corridor. In April 2005, Forest County submitted to the WDNR an Outdoor Motorized Recreation Trail Aids Application, All-Terrain Vehicle Trail Aids, to surface the corridor to provide a safe, smooth trail surface for hiking, biking, and future ATV use. In July 2005, the County received funding approval of \$195,000 to surface 13 miles of the NST starting at the Forest/Oconto County line and proceeding to the Town of Laona (South Segment). The County also received funding approval of \$180,000 for similar work starting at County Highway G in the Town of Cavour and proceeding north for a total of 12 miles to the Forest/Florence County line (North Segment). Refer to "Proposed Physical Changes" section for details.

Florence County:

Similarly, Florence County drafted their *Nicolet Recreational Trail Master Plan*, approved by the Florence County Board of Supervisors at their September 2004 board meeting. As described in the property master plan, the goal is to provide and preserve a 14-mile (approximate) long recreational trail to link with Forest County and the State of Michigan. The Nicolet State Trail would make available year round use that would provide for two-way traffic to accommodate snowmobiles, ATVs, and cross-country skiers in the winter seasons and ATVs, hikers, and bikers in the non-winter seasons. The trail would accommodate horseback riding and would provide reasonable access to the physically impaired through proper design, construction and management.

While the master plan proposes developing the entire 14-mile corridor in the future, it's important to note that at this time the

Department does not propose developing north of Wisconsin Creek Road to the Michigan border, approximately 2 miles. The Brule River separates Wisconsin and Michigan. A bridge over the Brule River is still in place. However, a wooden trestle over the Wisconsin Creek north of Tipler leading to the bridge was burned during a fire many years ago. Further, the Michigan-side of the corridor still belongs to the railroad company. Until the Michigan-side is purchased, the Department does not intend to replace the burned trestle.

In 2004, Florence County received Snowmobile Aids to relocate a snowmobile trail onto the abandoned railroad grade, deck and rail several trestles, and install barriers at both ends of the Pine River Bridge to prevent motorized access to the River. In April 2005, Florence County Forestry and Parks Department submitted to the WDNR an Outdoor Motorized Recreation Trail Aids Application, All-Terrain Vehicle Trail Aids, to develop the Nicolet State Trail in Florence County for ATV use. The County received funding approval of \$131,329 to develop 12.1 miles of the trail. Refer to "Proposed Physical Changes" section for details.

3. Authorities and Approvals (list local, state and federal permits or approvals required)

As agreed to in the MOU between Forest and Florence Counties and the Department, each County shall secure and comply with all federal, state and local permits and licenses required for construction, installation, operation, maintenance, repair, reinstallation, and replacement of the recreation trail. Authorities and approvals include, but are not limited to, the following:

- Section 404 of the Federal Clean Water Act
- Chapter 30, Wis. State Stats. – Navigable Waters, Harbors and Navigation
- Chapter NR 27, Wis. Adm. Code – Endangered and Threatened Species
- Chapter NR 103, Wis. Adm. Code – Water Quality Standards for Wetlands
- Chapter NR 302, Wis. Adm. Code – Management of Wisconsin's Wild Rivers
- Chapter NR 320, Wis. Adm. Code – Bridges In or Over Navigable Waterways
- Section 23.09(2)(h), Wis. Stats., The Department may enter into cooperative agreements with other units of government.
- Section 23.11(1), Wis. Stats., The Department is granted such further powers as may be necessary or convenient to perform the duties required of it by Chapter 23, Stats.
- Section 23.33(8)(a), Wis. Stats., The Department shall encourage and supervise a system of all-terrain vehicle routes and trails, and establish standards and procedures for certifying designated routes and trails.
- Section 27.01(2)(e), Wis. Stats., The Department may grant leases or easements in the state parks.
- Section 27.01(1)(m), Wis. Stats., The Department may take actions as may be deemed advisable for the development of the state park system.
- Section 23.175(2)(a), Wis. Stats., The Department may designate a system of state trails as part of the state park system.

PROPOSED PHYSICAL CHANGES (more fully describe the proposal)

4. Manipulation of Terrestrial Resources (include relevant quantities - sq. ft., cu. yard, etc.)

As an existing railroad corridor for nearly 100 years, relatively little physical changes to the terrestrial resources would result from the proposed trail acquisition, development, use, and maintenance. Proposed trail development changes consist primarily of surfacing and brushing the existing corridor. Florence County also proposes trail head construction of a parking area and pit toilet in the Town of Tipler. A small amount of land would be disturbed and all construction activities would follow the guidelines of the signed MOU and land use agreement. Soil stabilization practices as described in the Department's Best Management Practices Field Manual would be used to prevent soil erosion and subsequent sedimentation into streams, lakes, and wetlands (WDNR BMP 2003).

Forest County :

- Brush trail bed from the current 12 feet to a maximum of 16 feet wide. The corridor would be signed to regulate traffic and control user speeds in accordance with the WDNR Trail Signing Handbook, PUB-CF-0232004.
- Forest County proposes surfacing the 13-mile South segment from the Forest/Oconto County line to the Town of Laona including grading stone ballast, hauling and spreading gravel, grading, crowning, and compacting gravel. Graveling at 5"-6" deep X 12' wide X 13 miles long at \$15/yd (assuming 1000yds/mile) yields an estimated total cost of \$195,000. [ATV Trail Aids pending]
- Forest County proposes surfacing the 12-mile North segment from County Highway G in the Town of Cavour to the Forest/Florence County line including grading stone ballast, hauling and spreading gravel, grading, crowning, and compacting gravel. Graveling at 5"-6" deep X 12' wide X 12 miles long at \$15/yd (assuming 1000 yds/mile) yields an estimated cost of \$180,000. [ATV Trail Aids pending]

Florence County :

- Install barriers at both ends of the Pine River bridge to prevent motorized access to the River. [Snowmobile Aids \$91,660, Project #S-3028]

- Stabilization of rock ballast (9,200 yards) on surface of railroad bed from Tipler to Long Lake (7.8 miles). [ATV Trail Aids pending]
- Place between 75-100 large rocks as barriers along Long Lake beach area to keep vehicles off. [ATV Trail Aids pending]
- Brush (using tractor/brush hog) the northern eight miles. [ATV Trail Aids pending]
- Sign trail – total 12.1 miles of trail. [ATV Trail Aids pending]

Trail maintenance would involve mowing the area immediately adjacent to the trail surface, trimming brush and trees so they don't interfere with trail grooming or use, grading and compacting the trail surface to maintain a smooth operating surface. Applying dust suppression material may be needed to prevent nuisance dust conditions for trail users and neighboring property owners. Herbicide application may be needed to control growth of plants on the trail surface and for invasive species control. Note that neither County's master plan specifically recommends herbicide use. Each County has the authority to make that decision. If used, Round-up is the only permitted herbicide application. Hand removal and controlled burning may be required to control invasive species in some locations, particularly near wetlands and surface waters where herbicide use must be limited. Erosion control measures such as soil replacement, planting grasses and shrubs, and placing erosion control matting or silt fencing would be required where trail users who stray from the trail surface create erosion problems. Rocks or other obstacles should be placed as needed to discourage trail users from straying from the trail surface. Beaver activity is likely to cause some problems with blocked culverts, requiring attention.

Proper use of the designated trail should not result in any additional manipulation of terrestrial resources. However, trail users who stray from designated trails sometimes impact the surrounding landscape causing erosion and damage to plant communities, animal habitat and public and private property. Measures are described below to discourage such illegal and destructive activity.

5. Manipulation of Aquatic Resources (include relevant quantities - cfs, acre feet, MGD, etc.)

Relatively little change to the aquatic resources would result from the proposed trail acquisition, development, use, and maintenance. Securing the areas around the Wild Rivers would benefit the resource by preventing motorized access. Short-term changes may occur on the tributary to Wisconsin Creek in Florence County during the culvert installation. Florence County received the necessary stream crossing permit and will install a culvert that is designed, constructed, and maintained to safely handle expected vehicle loads and to minimize disturbance of streambanks, channels and, ultimately, aquatic organisms as described in the Department's Best Management Practices Field Manual (2003).

Forest County :

- One 36" concrete culvert is located just north of the Town of Wabeno (unnamed water crossing – basically drainage area). All other water crossings are steel frame bridges with wood decks and hand rails. All of the crossings have WDNR-approved Chapter 30 Water Crossing permits. (Refer to Table 1, page 6, for listing of water crossings.)
- Secure the area around the Popple River Bridge (Designated Wild River) to slow traffic speed and prevent motorized access to the waterway. Access to the waterway by motor vehicles would be prevented using large rocks spaced about 30" apart starting at each corner of the bridge and ending at the nearest tree line.

Florence County :

- Installation and fill of culvert on tributary to Wisconsin Creek that crosses trail (T40N R15E Section 9). Florence County received a permit from the WDNR to install the culvert. [ATV Trail Aids pending]

Grading the rail corridor to achieve the required trail width would normally involve grading material from the existing surface onto the banks of the rail grade. This practice would not be allowed on this grade for trail sections running beside or through wetlands, or beside surface waters, so as to avoid deposition of material from the rail grade into adjacent wetlands or surface waters. Instead, material removed from sections of the grade adjacent to wetlands or surface waters would be placed on upland sections of the trail.

Erosion control during trail construction must meet current stormwater permit requirements and best management practices. Practices, based on on-site conditions, would include placement of silt fencing, straw bale filters, and rock fill structures. Run-off channels and catchment basins may be required to prevent stormwater runoff to surface waters and wetlands. Such structures can be designed to handle run-off both from construction and future trail maintenance.

Maintenance activities would need to be managed so as not to impact the extensive wetland and surface water systems along the trail. Erosion control measures would be required to prevent stormwater run-off from carrying suspended solids into wetlands or surface waters when the trail surface is graded. The least cost approach would simply be to grade and compact the trail surface during dry weather. However, silt fencing or construction of run-off channels and catchment basins should be considered for sections of trail with very steep sides adjacent to wetlands and surface waters. As noted above, structures designed for trail construction could serve for trail maintenance as well. Ongoing attention to maintenance of stormwater run-off structures will be an important part of trail maintenance.

Erosion of trail-side banks could occur if trail users stray from the trail, resulting in sedimentation in wetlands and streams. Trail users who stray from the trail can damage wetlands, surface water features, and aquatic habitat by causing erosion and sedimentation. Measures such as trail signing, fencing, and strategic placement of rocks along the trail should be part of trail design and construction. Trail user training, cooperation of recreational clubs, peer pressure, guidance from courtesy patrol members, and enforcement efforts should include an emphasis on the importance of staying on the designated trail.

Dust created by trail users will settle in surface waters, as will emissions from motorized recreational vehicles. It is not anticipated that such deposition of materials would result in impacts in excess of water quality standards, with the possible exception of sediment deposition due to erosion. Removal of sediment from surface waters may be required if this were to occur. Since such removal is costly and not entirely effective, prevention is the best approach.

6. Buildings, Treatment Units, Roads and Other Structures (include size of facilities, road miles, etc.)

Forest County :

- Nicolet State Trail, South (2002-2003): Forest County relocated 13 miles of snowmobile trail onto the abandoned railroad grade. The Forest County south segment begins at the Forest/Oconto County line and continues north to Laona. The project included decking and railing 4 trestles, and installing gates. [Snowmobile Aids \$133,400, Project # S-2882]
- Nicolet State Trail, North (2002-2003): Forest County relocated 12 miles of snowmobile trail onto the abandoned railroad grade. The Forest County north segment is linked to the south segment by the existing 100 Mile Snow Safari Trail starting in Laona then reconnecting to the abandoned railroad grade north of County Hwy. G in Cavour. The trail then continues north to Popple River Road. The project included decking and railing seven trestles and installing 24 gates. [Snowmobile Aids \$153,500, Project #S-2883]
- Nicolet State Trail, Popple R. N. (2003-2004): Forest County relocated approximately two miles of snowmobile trail onto the abandoned railroad grade. The segment begins at Popple River Road and continues to the Florence County Line. The project included decking and railing on 92' X 12' trestle crossing the Popple River and installing barriers at both ends of the bridge to prevent motorized access to the River. [Snowmobile Aids \$23,200, Project #S-3029]

Florence County :

- Florence County relocated approximately 7 miles of snowmobile trail onto an abandoned railroad grade to extend the Nicolet State Trail. The segment begins at the Florence/Forest County line and continues to Wisconsin Creek Road. The project included decking and railing 4 trestles: (1) No Name Creek south of Long Lake 52'X12'; (2) Pine River 183'X12'; (3) Johnson Creek, South 78' X 12'; (4) Johnson Creek, North 78' X 12'. [Snowmobile Aids \$91,660, Project #S-3028]
- Provide gates in Town of Long Lake to slow ATVs and keep larger vehicles off trail [ATV Trail Aids pending]
- Trail head construction in Tipler to include: parking area (20 trucks/trailers – 600 yards); ramp (10ft X 3ft X 15ft); pit toilet (2 stalls) handicap accessible. [ATV Trail Aids pending]

7. Emissions and Discharges (include relevant characteristics and quantities)

Forest County proposes surfacing, grading, and crowning the trail corridor. Limited erosion or sedimentation could occur during this process, as could localized air quality impacts associated with dust. Florence County proposes trail head construction near Tipler and reinstallation of a culvert, which could contribute to soil erosion or compaction. Construction stormwater run-off may occur to wetlands and creeks, and would require proper permitting, erosion control measures, and management. Sedimentation of wetlands and water bodies may also result from trail use and inappropriate off-trail use. Air emissions would occur from construction machinery.

Trail use on both the Forest and Florence County segments includes motorized uses. Snowmobiles and ATVs can create adverse noise impacts and contribute to adverse air quality from exhaust emissions, and from ATV-generated dust. However, new EPA rules for motorized recreational vehicles would help to reduce air emissions in the future.

While no deposition of materials in wetlands or surface waters is planned, some may occur due to stormwater runoff during construction, maintenance, or as a result of trail use. Aquatic habitat may be damaged and sedimentation may occur if trail users stray into wetlands or water bodies. Erosion of trail-side banks could also occur if trail users stray from the trail, resulting in sedimentation in wetlands and streams. Dust created by trail users would settle in surface waters, as would emissions from motorized recreational vehicles. It is not anticipated that such deposition of materials would result in impacts in excess of water quality standards, with the possible exception of sediment deposition due to erosion. Removal of sediment from surface waters would be required if this were to occur.

8. Other Changes

None

9. Identify the maps, plans and other descriptive material attached

Appendix A: Select bibliography

Appendix B: Legal description of trail location (Township/Range/Section)

Appendix C: Maps showing trail location

AFFECTED ENVIRONMENT (describe existing features that may be affected by proposal)

10. Information Based On (check all that apply):

Literature/correspondence (major sources identified in footnotes)

Personal Contacts (identified in footnotes when appropriate)

11. Physical Environment (topography, soils, water, air)

The project area, an abandoned rail corridor located in northeastern Wisconsin in Forest and Florence Counties, lies within the WDNR North Central Forest Ecological Landscape (WDNR Ecological 2004). Landforms are characterized by end and ground moraines with some pitted outwash and bedrock controlled areas. Kettle depressions and steep ridges are found in the northern portion. Soils consist of sandy loam, sand, and silts. Many small drainages and lakes are found throughout this Ecological Landscape. Larger lakes along the trail corridor include Trump Lake and Scattered Rice Lake in Forest County, Long Lake on the Forest/Florence county line and Fay Lake in Florence County. The trail crosses a number of creeks. Major rivers in Forest and Florence Counties include the Pine and Popple Rivers.

Table 1: Nicolet State Trail Bridge Inventory (WDNR September 2003).

County	Feature Under	Sec/Twn/Rng	Length (ft)	Width (ft)
Forest	Torpee Creek	21/34N/15E	92	12
Forest	Range Line Creek	8/34N/15E	118	10
Forest	N Branch Oconto River	7/34N/15E	193	10
Forest	Camp Creek	6/35N/15E	65	10
Forest	Swanson Creek	6/35N/15E	77	10
Forest	Stream 30-12	25/37N/14E	77	10
Forest	Peshtigo River	24/37N/14E	193	10
Forest	Kersten Creek	12/37N/14E	52	10
Forest	Little Popple Creek	23/38N/14E	90	10
Forest	Little Popple Creek	13/38N/14E	78	10
Forest	Little Popple Creek	12/38N/14E	90	10
Forest	Popple River	1/38N/14E	89	10
Florence	Coldwater Creek	30/39N/15E	52	10
Florence	Pine River	5/39N/15E	182	10
Florence	Johnson Creek	5/39N/15E	77	10
Florence	Johnson Creek	5/39N/15E	78	10
Florence	Brule River	25/41N/15E	Bridge collapsed-only center steel span remains	

The Nicolet State Trail crosses two WDNR designated Wild Rivers [Chapter 30.26(2), Stats.], the Popple River in T38N R14E Section 1 and the Pine River in T39N R15E Section 5. As Wild Rivers, the Popple and Pine receive special management to assure their preservation, protection and enhancement of the natural beauty, unique recreational and other inherent values in accordance with the guidelines outlined in Chapter 30, Wisconsin Statutes. The special management provisions associated with Wild Rivers are in place to preserve the rivers in a free flowing condition and protect them from development. However, the Department may not prohibit the crossing of a bridge over a wild river by an all-terrain vehicle traveling on an all-terrain trail, as defined under s. 23.33(1)(d), or by a snowmobile traveling on a snowmobile trail, as defined under s. 350.01(17), such as those along the Nicolet State Trail where the trail crosses the existing railroad trestle over the Pine and Popple Rivers. The Wild River status guided additional conditions and restrictions agreed to in the Cooperative State Trail Easement (Refer to "#15. Physical" under "Environmental Consequences" section for additional discussion on wild river conditions).

The U.S. Environmental Protection Agency has developed the Air Quality Index (AQI) for reporting monitored levels of ozone and other common air pollutants. EPA "translates" the pollutant concentrations to the [standard] AQI index, which ranges from 0-500. The higher the AQI value for a pollutant, the greater the health concern. On January 7, 2006 the AQI for Forest County (Potawatomi Site) was 15, representing good air quality. Florence County does not have a monitoring site, but air quality is assumed to be of similarly good quality.

12. Biological Environment (dominant aquatic and terrestrial plant and animal species and habitats including threatened/endangered resources; wetland amounts, types and hydraulic value)

The vegetation of the North Central Forest Ecological Landscape is mainly forest, with many wetlands and some agriculture. Historically, the vegetation was primarily hemlock-hardwood forest dominated by hemlock, sugar maple, and yellow birch. Currently, forests cover approximately 80% of this Ecological Landscape. The northern hardwood forest is dominant, made up of sugar maple, basswood, and red maple, and also includes some scattered hemlock and white pine pockets within stands. The aspen-birch forest type group is also relatively abundant, followed by spruce-fir.

A variety of wetland community types also are present, both forested and non-forested. Of Forest County's 649,053 total surface area acres, 24.8% (161,056 ac.) is mapped as wetland. Based on interpretation of the WDNR Wetland Inventory maps, the south segment of the Nicolet State Trail in Forest County is a forested scrub/shrub wetland including Tamarack, Cedar and Black Spruce. Similar vegetation exists in T37N R14E of the north segment. Some bog and persistent emerging vegetation exists in T38N R14E, returning to forested scrub/shrub in T39N R14E. Of Florence County's 312,373 total surface area acres, 16% (49,974 ac.) is mapped as wetland (WDNR WI Wetlands 2005). In Florence County, vegetation along the trail includes forested coniferous-deciduous wetland with some scrub/shrub wetland.

A query of the Department's Natural Heritage Inventory on-line database returned 46 elements in Forest County and 52 elements in Florence County with a location too sensitive to map at a level more detailed than county. An Endangered Resources Planning and Protection Specialist conducted an environmental review of the project area for the proposed Nicolet State Trail in Forest and Florence Counties (WDNR Endangered Resources 2006). Of importance are numerous stream crossings that contain listed or special concern aquatic species and a number of diverse natural communities that occur in proximity to the railroad corridor. While a number of state or federally listed species or special concern species are known to occur in proximity to the rail corridor or in the Nicolet National Forest adjacent to the rail corridor, none are known to occur within the existing rail corridor. Complete results of the Natural Heritage Inventory review are on file with the Department property manager.¹

13. Cultural Environment

a. Land use (dominant features and uses including zoning if applicable)

Much of Forest County is in public ownership (59%) with the Nicolet National Forest playing a major role. Of the private lands, 84% is forested and 5% is designated for agricultural usage. Forest County has a population of 10,024 (based on 2000 census), and 9.9 persons per square mile compared to the statewide 98.8 persons per square mile. The south segment of the trail runs through the areas of Carter, Wabeno, Padus, Blackwell Junction and Laona; the north segment runs through Newald. Much of the trail length is within the National Forest boundaries. The landscape along the Nicolet State Trail includes some rural residential with an estimated 60 residents visible from the corridor (excluding those residents located within the towns).

Florence County has the second smallest population of Wisconsin's 72 counties, and is the only county with no incorporated cities or villages in the State of Wisconsin other than Menominee County. Florence County has a population of 5,088 (based on 2000 census) and 10.4 persons per square mile. Eighty percent of Florence County is forested; 43% is in public ownership. The Nicolet National Forest represents the largest percentage of public ownership (60.7%) followed by the County (26.9%), State (9.6%) and Township (2.7%) (Florence County 2005). The Nicolet State Trail runs through Long Lake and Tipler. The trail is largely within the National Forest boundaries.

b. Social/Economic (including ethnic and cultural groups)

The 13-mile South Segment of the Nicolet State Trail runs from the Forest/Oconto County line north toward Wabeno, a town of population 1,264. The Trail continues north to the Town of Laona, population 1,367. The North Segment starts at County Highway G in the Town of Cavour and proceeds north for a total of 12 miles to the Forest/Florence County line. The Towns of Wabeno and Laona are among the largest municipalities of the county. The South Segment of the trail runs through a portion of the Potawatomi Indian Reservation, which encompasses almost 12,000 acres. The total Tribal enrollment is around 999 with slightly more than half living on the reservation (Forest County 2005). The majority (86.2%) of residents in Forest County

¹ Natural Heritage Inventory Data is exempt from State of Wisconsin Open Records Law. The data is considered sensitive for several reasons and thus not appropriate for general public distribution.

are white, while 10.7% are American Indian and Alaska Native (Based on U.S. Census Population Characteristics Estimates, 2002). Among the "Top 10 Industries in Forest County" are: executive, legislative, and general government; amusement, gambling and recreation industry; educational services; and wood product manufacturing (DWD Forest County 2004).

In Florence County, the trail runs from the Forest/Florence County line northeast through Long Lake (estimated Township population of 197). Several cabins, homes and a sawmill are located in Long Lake. The trail continues through Tipler (estimated Township population of 205) toward the Wisconsin-Michigan border. Among the "Top 10 Industries in Florence County" are: wood product manufacturing; food services and drinking places; and executive, legislative, and general government.

c. Archaeological/Historical

A search of the Wisconsin Historical Society's Archaeological Site Inventory and Architecture and History Inventory identified 19 known historic properties that are in or directly adjacent to the former railroad right-of-way in Forest and Florence Counties. Four additional sites are located in T34 R15E section 28. However, data is not available due to the tribal land block. In the late 1800s the Chicago & Northwestern railroad was developed in the area. Sawmills and towns were soon developed along the tracks. Many of the known historic sites represent logging camps and sawmills established during this time. The Chicago & Northwestern Land Office in Wabeno (T34 R15E section 7) is identified as an historic building site and is listed in the National Register of Historic Places. One trestle in Florence County is listed as an archaeological site; no trestle or other structures are listed in the Architecture and History Inventory (Dirst 2005).

14. Other Special Resources (e.g., State Natural Areas, prime agricultural lands)

The majority of the corridor is located within the Nicolet National Forest. There are no known wildlife sanctuaries or refuges in the vicinity of the project which would be affected. No prime or unique farmland will be irreversibly converted to non-agricultural use. The corridor crosses two WDNR Designated Wild Rivers, the Pine and Popple.

ENVIRONMENTAL CONSEQUENCES (probable adverse and beneficial impacts including indirect and secondary impacts)

15. Physical (include visual if applicable)

As an existing rail corridor since the late 1800s, little physical change would result from the proposed trail development, maintenance, or use activities in Forest or Florence Counties. Installing decking and railing on trestles, installing gates and barriers, signing, brushing the trail, and surfacing the corridor are the primary development activities proposed for Forest County that could affect the physical environment. The decking, railing, and installing of gates is complete with no significant impacts. Brushing the trail bed from its current 12 feet to a maximum 16 feet wide would not have a significant impact on the physical environment nor the visual character. The entire corridor is currently covered with stone ballast. Forest County would grade and level the ballast to provide a level, stable trail base. The added 6" of road gravel would be graded, crowned, and compacted to shed water and provide a smooth, compacted trail surface. As stated in the terms of the MOU, the County agrees the trail would meet or exceed WDNR trail standards as outlined in Chapter 30 of the Department Design Standards Handbook, Handbook #8605, DNR Bureau of Parks and Recreation.1.

There is a potential for short-term, localized erosion or sedimentation caused by maintenance vehicles during the brushing, grading, and crowning activities. Impacts would be minimized by following WDNR erosion control standards. Surfacing of the trail involves spreading a small quantity of gravel at slow speeds. Development-related impacts to air quality caused by dust would be short-term, localized, and minimal.

Trail use would impact the physical environment by generating dust and causing erosion on the trail surface. The use of dust suppressants may be needed. The degree to which trail users comply with rules for trail use would determine the extent and degree of impacts. Experience elsewhere shows that trail users will stray from the trail in some locations, causing erosion on the adjacent landscape and destruction of vegetation. This damage can create stormwater run-off problems and result in sediment damage to wetlands and streams along the trail. Low level impacts are associated with winter trail use. Motorized trail use by snowmobiles and ATVs may have an adverse impact on noise levels and air quality that could affect other users, neighbors, or wildlife. Dust may be created by ATV use during the non-winter months, which may adversely impact localized air quality.

Florence County proposes installing gates and barriers, surfacing, brushing and signing the corridor, installing a culvert, and constructing a parking area, ramp, and pit toilet at the trail head in Tipler. The current grade material (river round rock) is a loose rock that is not stable. The corridor is adjacent to many wetlands and construction material must be kept out of them. In August 2005, Department staff noted two areas from the trail crossing at Wisconsin Creek north to the trail crossing at Wisconsin Creek Road where the grade is eroded into the wetlands, possibly due to ATV traffic or steep grade. Florence County proposes

stabilization of the rock ballast on the surface of the railroad bed from Tipler south to Long Lake (~8 miles). Resurfacing with a more stable rock would help to keep the grade material out of the adjacent wetlands. Reinstallation of a culvert on a tributary to Wisconsin Creek would be south of Wisconsin Creek Road and north of Tipler about 2.5 miles (T40N R15E Section 9). Florence County received from the WDNR a permit to install the culvert. Construction at the trail head in Tipler would include a parking area (20 trucks/trailers), a ramp (10 ft. X 3 ft. X 15ft.), and a handicap accessible 2-stall pit toilet. Adverse impacts associated with construction, such as soil compaction, sedimentation, and erosion, would be minimized by following Department Best Management Practices.

A bridge inventory conducted by the DNR (September 2003) identifies 17 water crossings in Forest and Florence Counties. All of the crossings have WDNR-approved Chapter 30 Water Crossing Permits. Most bridges are wood beam; the Pine River bridge is a combination steel/wood beam. The bridge over the Brule River was also steel/wood beam; however, the bridge inventory indicates the bridge has collapsed. Only the center steel span remains. Refer to Table 1: Nicolet State Trail Bridge Inventory, page 6.

In the case of the Popple River crossing in Forest County and the Pine River crossing in Florence County, Assembly Bill 530 directs the WDNR that it may not prohibit the crossing of a bridge which was constructed before September 16, 2003 over a wild river if the crossing is done by a person on an all-terrain vehicle traveling on an all-terrain vehicle trail or a person on a snowmobile traveling on a snowmobile trail (Wisconsin Legislative Council 2004). When drafting the Cooperative State Trail Easement, the Department and the counties agreed to a number of additional conditions and restrictions to address the wild rivers issue (Refer to the *Nicolet Recreational Trail Master Plan* to review complete details).

Included in the easement are restrictions on trail path development and use within the recreational trail corridor, the Wild River Protection Zone, as defined in Chapter NR 302.02(4), Wisconsin Administrative Code. The trail path is designated as that area within the trail corridor that was previously improved with plank and rails to facilitate rail transportation. Trail surfacing shall consist only of natural materials such as crushed rock, and bridges will be maintained with wood or steel rails and wood decking. Each county would construct and maintain barriers extending back from the bridges over the Pine and Popple Rivers to prevent motorized recreational vehicles from leaving the trail path and accessing the shoreline of the river. Authorized motorized recreational vehicle use would be strictly limited to the trail path. Speed limits would be posted and will need to be enforced. Wetland and shoreline habitats are highly sensitive to environmental damage, especially that caused by illegal off-trail ATV use. Potential impacts include soil compaction, rutting, and damage to vegetation, which lead to possible long-term changes to the hydrology by reducing or altering water flow and changing the infiltration capacity of the soil. However, minimal adverse impacts are expected if conditions and restrictions agreed to in the MOUs and Cooperative State Trail Easements are followed.

The proposed trail developments contribute to a number of beneficial impacts. Barricading all town roads and access points to the trail prevents unauthorized vehicle use on the trail. Securing the area around the Popple River Bridge (designated Wild River) and the Long Lake beach area would slow traffic speed and prevent motorized access to the waterway. Providing a system of signs would help regulate traffic and control user speeds. Developing the recreation trail on the existing corridor would provide a lower impact on soils than alternative trail locations. Surfacing the corridor provides a safe, smooth trail surface for hiking, biking, and future ATV use. Gravel for the surfacing projects must be from a clean source void of invasive species seeds to prevent adverse impacts to native vegetation.

16. Biological (including impacts to threatened/endangered resources)

As with past rail-to-trail projects, the Department does not anticipate significant negative environmental impacts associated with the trail development of this abandoned rail corridor. The proposed development activities are limited to the existing corridor and should have limited adverse impact. Some management would be practiced to promote aesthetics, enhance wildlife, and protect trail users and facilities. No significant changes to the vegetative management are proposed.

There is potential for short-term, localized impacts, such as sedimentation, erosion, or compaction, to vegetation adjacent the corridor during the grading, crowning, and maintenance activities. If used, herbicides could result in impacts to the biological environment if application were to result in herbicides being applied directly to wetlands or surface waters. Some herbicides applied to aquatic environments have been shown to reduce species richness, diversity, and biomass. Impact on amphibians has been shown to be a problem if some herbicides are incorrectly applied and end up in the aquatic environment. These problems can be avoided by selection of the proper herbicide based on needs of the site, and proper application. Herbicide use would be beneficial where it discourages growth of invasive exotic plant species. Herbicide application is part of the approach to reducing the impact of invasive plants. Additional information on the environmental effects of herbicides can be found in, "The impact of insecticides and herbicides on the biodiversity and productivity of aquatic communities" (Relyea 2005).

Materials applied to the trail surface for dust control could also result in biological impacts if over applied, applied to surface waters or wetlands, or if long-term application results in materials leaching into groundwater or entering surface waters with stormwater. Potential impacts include increased surface run-off rates, water pollution impacts due to dissolved oxygen depletion, acidity or corrosivity, ammonia, phenols, dissolved salts, and heavy metals. Some dust control materials can harm vegetation and reduces

seedling growth. Some can cause discoloration or foaming if they get into surface waters. Information on dust control materials can be found in the U. S. Forest Service, Dust Palliative Selection and Application Guide (NM Environment Department 2006).

Research suggests that long term exposure to noise can cause stress that is harmful to health of wildlife species and their reproductive fitness. Responses have the potential to cause injury, energy loss, decrease in food intake, habitat avoidance or abandonment, and reproductive losses. Losses due to predation can be increased if birds are frightened off their nest by noise. Any potential for adverse noise effects on wildlife from snowmobiles and ATVs would only occur near the right-of-way.

There is also potential for environmental damage caused by illegal, off-trail ATV use. Adverse impacts could include disturbance of vegetation, soil compaction, rutting, and increased soil erosion rates.

As described in the Endangered Resources report (WDNR 2006), there are numerous stream crossings that contain listed or special concern aquatic species that could be impacted by siltation during culvert or bridge work or disturbance at existing crossings. Impacts to the listed aquatic species can be avoided by implementing best management practices during any ground disturbing activity. Additionally, a number of diverse natural communities occur in proximity to the railroad corridor. To avoid impacts to these sensitive natural communities, care should be taken that all trail activities are kept on the trail.

The report further notes the most important potential impact to threatened, endangered, or special concern species in proximity to the proposed trail development is the spread of invasive species, particularly plants. Invasive species can be spread during the construction of the trail by materials or equipment, or during its use upon completion of the trail. To minimize this impact, equipment used in the construction of the trail should be cleaned of all mud and vegetation prior to use within the project corridor. Materials used, such as gravel, should be free of invasive seeds or vegetation prior to use on site. The Department's Environmental Review Specialist recommends checking the right-of-way for invasive species as part of the trail maintenance. The spread of invasive species by ATV tires would be minimized by keeping the vehicles on the trail.

17. Cultural

a. Land Use (including indirect and secondary impacts)

The proposed trail development activities are consistent with the Forest and Florence County property master plans and with the Department's *State Recreational Trails Network Plan (2001)*, and should not cause significant adverse impacts. Neighboring land use along the trail corridor includes the Nicolet National Forest, forested, rural residential, and several small towns. Along the corridor, there are some encroachment trespass issues, especially along Long Lake. The Department generally defers to their trail crossing policy and land use agreements in addressing right-of-way disputes. As stated in each County's MOU, "boundary disputes, trespass, and other claims shall be the responsibility of the county." Methods for reducing trespass include signage, fencing, public education, and enforcement.

Recreation trail development has the potential to enhance tourism development opportunities and to provide for multi-county links to trails. Developing these segments of the Nicolet State Trail contributes to the larger benefits of providing a nearly contiguous 85-mile trail from Gillett in Oconto County, Wisconsin to the Brule River in Florence County near the Wisconsin-Michigan border. The Nicolet State Trail also contributes to other trails within the statewide trail network and those recreation opportunities offered on the Nicolet National Forest.

b. Social/Economic (including ethnic and cultural groups, and zoning if applicable)

Considering the Nicolet State Trail is not officially open for year round use, it's difficult to determine the social and economic impacts of trail development, maintenance, and use. However, a study conducted by the Department of Tourism on the Elroy-Sparta Trail, La Crosse River Trail, the 400 State Trail and Great River Trail indicated that cycling visitors spend an average of \$26 per person per day. Cyclists stay an average of three nights in paid lodging accommodations, dine in area restaurants, shop in local stores, and visit local attractions (Wisconsin Department of Tourism, 2005). Once the trail is developed and officially open for use, Forest and Florence Counties may experience a similar positive economic impact to local businesses associated with tourism and trail users. Following are additional examples from the Department of Tourism regarding the economic impact of recreation and tourism:

Snowmobilers Spent \$249.5 Million in Wisconsin in 2000-2001 Season (Tourism 2006)

- The Department of Tourism, with the assistance of the Department of Natural Resources, surveyed 1,359 snowmobilers who registered a snowmobile or purchased a snowmobile pass from January-April, 2001.
- During the 2000-2001 snowmobiling season, 222,447 Wisconsin residents and 73,963 non-residents registered snowmobiles in the state. In addition, 59,623 non-residents purchased a Wisconsin snowmobile pass.
- Fifty-two percent of snowmobile visitors stayed in unpaid accommodations while 38 percent stayed in paid lodgings. The remaining visitors were day trippers.

- The average number of nights traveling snowmobilers spent away from home was three.
- Overnight visitors were just as likely to stay at a hotel/motel/resort (32 percent) as they were at a vacation home/cabin/condominium that they own (32 percent).

Per Day/Per Snowmobiler Expenditure:		
	Traveling Snowmobiler	Local Snowmobiler
Food/beverage	28.54	18.77
Recreation	18.47	7.36
Shopping	13.60	3.46
Transportation	11.63	10.17
Lodging	5.83	0.00
Other	0.16	0.00
TOTAL	\$78.23	\$39.76

Economic & Demographic Profile of Wisconsin's ATV Users (Tourism 2004)

- Over half of the ATV riders were in the area to specifically ride the trails; 21% were attending an ATV event as well as riding the trails; 17% were attending an ATV event and 5% were on a leisure trip.
- The average total per person per trip was \$523.33. Taking into consideration Wisconsin's ATVer's stayed an average of 3.2 nights, the average daily expenditure was \$163.54.
- The individual per spending (\$523.33) patterns were expanded to include total spending using estimates of the total number of ATV registrations by state, the number of ATVs owned per individual, the number of trips taken per individual and regional incidence of trail use and the respective trail mileage. Based on this analysis, the annual total spending by all ATV users was \$295,285,693.

2004 Economic Impact Fact Sheet: Forest County (Tourism Forest County 2006)

- Travelers spent an estimated \$32 million in Forest County in 2004.
- Fourteen percent of all expenditures were made in the winter, which amounted to \$5 million; 18% were made in the spring (\$6 million); 40% in the summer (\$13 million) and 27% in the fall (\$9 million).
- Local revenues (property taxes, sales taxes, lodging taxes, etc.) collected as a result of travelers amounted to an estimated \$1.4 million in 2004, an increase of 8.6% from 2003.

2004 Economic Impact Fact Sheet: Florence County (Tourism Florence County 2006)

- Travelers spent an estimated \$18 million in Florence County in 2004.
- Thirteen percent of all expenditures were made in winter, which amounted to \$2 million; 18% were made in the spring (\$3 million); 41% in the summer (\$7 million); and 27% in the fall (\$5 million).
- Local revenues (property taxes, sales taxes, lodging taxes, etc.) collected as a result of travelers amounted to an estimated \$754,222 in 2004, compared to \$591,719 in 2003.

Each of the counties worked to draft a master plan for the trail. The proposed development activities are consistent with the approved master plans. Potential social impacts could include noise impacts on adjacent landowners, other trail users and wildlife, safety issues, and conflicts between motorized and non-motorized users. Adverse impacts to neighboring land owners are especially likely in more residential areas such as Wabeno, Laona, and Long Lake. Further, a report discussing the environmental and social effects of ATVs and Off-road Vehicles identified the following potential effects: air quality, soils, erosion and vegetation impacts, impacts on wildlife, forest-related research impacts, and recreation impacts on participants and user experiences (Stokowski et al 2000).

The proposed project would also have the positive effect of providing a recreational trail for residents of Forest and Florence County as well as the state and region. This benefit would be enhanced by the proposed trail being connected to a larger network of public trails. The extent of benefits and impacts of trail use would depend on the number of trail visitors. It is difficult to accurately estimate trail use levels by type of activity, as extensive use monitoring has not been done in Wisconsin and conditions vary for different trail locations. Assuming that use levels would be similar to the Tuscobia State Trail, we might anticipate in the neighborhood of 35,000 to 45,000 visitors per year initially (WDNR State Park 2005). As infrastructure improvements are made over time (particularly parking) further trail connections are made and marketing efforts undertaken, we might anticipate use levels closer to 80,000 to 100,000 per year. Based on input from the Department trail manager, the Tuscobia Trail has an estimated 45,000 ATV and 30,000 snowmobile visits per year. A similar estimate for the Wild Rivers Trail suggests winter use at about 500 snowmobiles and ATVs per day on week-ends and 20 to 50 per day during the week. Summer use is estimated at about 100 ATVs per day on the week-end and 20 to 50 on a weekday. These are estimates only, based on managers' experience. While there is some use of these trails by hikers, cyclists, and equestrians, use estimates are not available.

Members of the public cite concerns about noise from recreational vehicles. Summer ATV use may especially be a concern

for some, as neighbors to the trail may be spending more time outdoors and have windows open. Some may be concerned about impacts on other forms of recreation. Others may simply value the peace and quiet they find in this rural area. As the impact of noise is reduced with distance from the source, most of the impacts noted here are likely to affect only neighboring properties closest to the trail. Hearing loss may be a risk for recreational vehicle operators who have long term continuous exposure to higher noise levels, but would not be an expected impact on neighboring landowners. For neighbors within about a mile of the trail but not directly adjacent, noise may be considered a nuisance as opposed to a health issue.

Concerns have been expressed about the safety of non-motorized users sharing the trail with ATVs. High speeds and size of machines are cited as concerns, along with lack of experience of some operators, as well as operators who don't comply with regulations. Snowmobile and ATV riders who go off the authorized trail pose hazards for neighbors. Dust and rocks kicked up by ATVs are a concern for people who would share the trail. Observance of speed limits should reduce concerns for safety. Chapter NR 64.07(2) Wis. Admin. Code requires that an ATV operator must yield the right-of-way and slow to 10 mph when within 100 feet of a person not on an ATV, snowmobile or motorcycle. Trail use courtesy is considered to be essential, and law enforcement presence important for a multiple use trail to be successful.

Some members of the public suggest that motorized and non-motorized trail recreation may be incompatible due to noise, dust, speed, trail damage, and safety concerns. Some believe that ATV use precludes other uses of a trail and question whether multiple use is practical. Experience on other trails shows that ATV traffic does appear to reduce non-motorized trail use. Some trail managers share concerns about compatibility of motorized and non-motorized uses.

A number of health professionals and others comment that the opportunities and encouragement to exercise that trails afford are important given current public health concerns such as the incidence of obesity. Trail recreation, especially walking, running and cycling, provide significant health benefits.

It has also been suggested that trail development and use could create health risks. If soils contaminated by historic spills or pesticide use along the rail corridor are disturbed by trail construction or trail use, human exposure might occur. Dust created by ATV use on the trail may subject users to respirable particle exposure in excess of the National Ambient Air Quality Standard. Dust-related concerns can be minimized through regular maintenance and use of dust suppressants to avoid the dispersion of subsurface soils.

The U.S. Environmental Protection Agency has adopted new emission standards for recreation vehicles and some other off-road engines. Frequently Asked Questions information available on the EPA website succinctly concerns with recreation vehicles (US EPA, 2002). Individually, these vehicles can have a very high emission rate. The EPA information compares emissions from unregulated recreational vehicles with those of an automobile meeting current National Low Emission Vehicle (NLEV) emission standards. An unregulated two-stroke off-highway motorcycle can emit as much pollution in one hour as over 20 automobiles operating for one hour. Similarly, an un-regulated two-stroke snowmobile can emit as much as nearly 100 automobiles.

EPA notes that engines covered by the new standards contribute to ozone formation, ambient particulate matter, and carbon monoxide (CO) levels and emit mobile source air toxics. There are health concerns associated with these emissions. Increased ozone concentrations have been associated with increased hospitalizations for people with asthma, and chronic exposure can cause permanent lung damage. Children and people with compromised respiratory systems are particularly at risk. Carbon monoxide enters the bloodstream and reduces delivery of oxygen to the body's organs and tissues. Health threats are most serious for people who suffer from cardio-vascular disease, with healthy people affected only by higher levels. Exposure to elevated CO is associated with impairment of visual perception, work capacity, manual dexterity, learning ability, and performance of complex tasks. High CO concentrations generally occur in areas with elevated mobile-source emissions. Peak concentrations typically occur in the colder months when mobile-source CO emissions are greater and nighttime temperature inversions occur more frequently. Mobile source air toxics include benzene, toluene, 1,3-butadiene, formaldehyde, acetaldehyde, and acrolein, which cause a variety of health-related problems. EPA's information states, "Users of these engines and vehicles may experience high levels of personal exposure to these substances. For example, snowmobile riders and those directly exposed to snowmobile exhaust emissions can be exposed to benzene levels two to three orders of magnitude greater than the 1996 national average benzene concentrations. These elevated levels are also known as toxic 'hot spots,' which are of particular concern to EPA."

With full implementation of new emission standards for recreational vehicles, recreational marine diesel engines and industrial spark-ignition engines, EPA expects an overall 71-percent reduction in hydrocarbon emissions from these engines, 80-percent reduction in nitrogen oxides and 57-percent reduction in carbon monoxide by 2020. EPA information states, "These controls will help reduce ambient concentrations of ozone, CO, and fine particulate matter. In addition, they will reduce personal exposure for people who operate, work with or are otherwise close to these engines and vehicles."

The Wisconsin Department of Natural Resources has conducted some monitoring to address potential concerns with snowmobile operation. In January, 2000, monitoring was conducted at Northland Pines School District buildings in Eagle River and in very close proximity to the Eagle River Snowmobile Derby track (WDNR 2000). Monitoring showed carbon

monoxide levels to be well below national ambient air quality standards. Concentrations of constituents for which no ambient standards existed were compared to concentrations at other monitoring locations. Most volatile organic compounds were not detected. Most detected were within the range of concentrations measured in other Wisconsin urban locations (Green Bay, Milwaukee and Wisconsin Rapids). However, 1, 1, 1 Trichloroethane and toluene were at higher concentrations. Acetone, acetaldehyde, and formaldehyde were detected with concentrations within the range measured at other urban locations.

Adjacent landowners are often concerned that trail use will negatively impact enjoyment of their property. They are concerned about dust and noise, odors and air emissions, safety concerns especially for children living near the trail, trespass, and property damage. Some would like to be able to walk, bike, rollerblade, or push children in strollers along the trail but feel that motorized use would prevent these activities. There is concern that there are not places in the rural environment for safe recreation. Timing of trail use is an important issue for many who feel motors are a nuisance on quiet evenings and beyond a nuisance when they interrupt normal sleep patterns. There is less concern about snowmobiles as they operate during times when homes are closed up and people spend less time outside. Summer ATV use is more frequently cited as a concern.

Property values may also be a concern to neighboring property owners. Some may cite increased real estate values as a benefit of a public trail. However, some may be concerned that a trail may cause a reduction in value and possibly reduce their ability to sell a home. Many studies have been done which show a positive impact of recreational trails on real estate values. However, most currently available studies considered green space, walking and bicycling trails. To gain some insight into potential property values of a motorized trail, property values near the Cattail Trail in Barron County were examined. This trail runs through the Towns of Lincoln, Clayton, Almena and Turtle Lake, and Village of Turtle Lake. Wisconsin Department of Revenue data on equalized values shows that residential property values in each of these units increased between 2004 and 2005. The Town of Clayton would be expected to have the greatest potential for impact, as the trail runs through the middle of the entire township from northeast to southwest. Residential property values in the Town of Clayton increased each year from 1999 through 2005. While this simple analysis can't predict specific impact on an individual property, it does suggest that the strong real estate market in the area is, overall, overshadowing any potential negative impact a trail may have. Some prospective buyers may be dissuaded by the presence of a motorized trail, while others may be especially attracted by such a trail adjacent to the property they are considering for purchase (WDNR Environmental Assessment 2006).

c. Archaeological/Historical

Generally, rail-to-trail projects do not result in new impacts to archaeological sites and historic properties considering the previous development and use as a rail corridor. A search of the Wisconsin Historical Society's Archaeological Site Inventory and Architecture and History Inventory identified a number of historic properties that are in or directly adjacent to the former railroad right-of-way in Forest and Florence Counties (Dirst 2005). Surfacing of the corridor should not impact the sites. Any decking and railing of the noted trestle in Florence County would require review for cultural resource compliance. However, at this time, the Department does not intend on developing the trail north of Wisconsin Creek Road, the area that includes the historic trestle. Future development is dependent on purchasing the Michigan-side of the corridor, which is still privately owned.

18. Other Special Resources (e.g., State Natural Areas, prime agricultural lands)

No other special resources have been identified in the immediate area of the proposed trail.

19. Summary of Adverse Impacts That Cannot Be Avoided (more fully discussed in 15 through 18)

Most adverse impacts of the proposed trail development and use, including soil erosion, sedimentation, compaction, and damage to vegetation, can be mitigated. Impacts that can be mitigated to a degree, but not eliminated, include noise, air emissions, odors, dust, social concerns regarding safety and user conflicts, environmental damage caused by illegal off-trail ATV use, and reduced wildlife habitat.

Noise from motorized recreational vehicles is often cited as a concern by neighboring landowners. While many newer machines are quieter, we must anticipate that there will always be some impact, especially for people living adjacent to the trail and wildlife now occupying habitat adjacent to the trail. Noise could also be reduced by instituting speed limits. The degree to which this would be effective would depend on cooperation and compliance by people using the trail.

Air emissions will always be an issue as long as recreational vehicles on the trail are powered by internal combustion engines. Impacts will be greater initially, as many machines currently in use do not meet new EPA emission standards. As machines age and are replaced, concerns with air emissions and associated odor complaints will diminish. EPA literature suggests it will take about fifteen years for this transition.

Loss of wildlife habitat that would occur with removal of brush that has grown onto the trail is considered a minor impact. It would

be more than offset by the positive impact of invasive species control, if effective measures are undertaken.

Since many of the concerns with trail use are social issues, the degree to which they can be mitigated would depend on the cooperation and good will of people in the community as well as their ability to influence behavior of visitors.

DNR EVALUATION OF PROJECT SIGNIFICANCE (complete each item)

20. Environmental Effects and Their Significance

- a. Discuss which of the primary and secondary environmental effects listed in the environmental consequences section are long-term or short-term.

Activities associated with brushing the trail bed, installing decking and railing on trestles, installing gates and barriers, signing, and surfacing the corridor would cause localized short-term physical impacts to the environment. Short-term impacts such as stormwater run-off, and dust and equipment exhaust emissions may be associated with trail and trail head construction. The potential for land use impacts and user conflicts would continue as long as the trail is in use. Control of invasive plant species along the trail would likely be an ongoing concern.

Potential long-term impacts may be associated with inappropriate off-trail use, especially by ATVs. The corridor is adjacent to wetlands, which are fragile ecosystems. Damage to these areas could alter the hydrology and take years to repair. There is also potential for long-term soil loss impacts and increased soil erosion rates associated with ATV use. Exhaust and noise from ATVs and snowmobiles, and dust from ATVs would be continuing issues for users and trail neighbors.

The Pine and Popple Rivers, DNR designated Wild Rivers, could potentially be impacted by off-trail use. Precautions are in place via the added restrictions in the easement defining the Wild River Protection Zone. Barriers are in place at the Pine and Popple Rivers to prevent ATV and snowmobile access to the wild river area. Additionally, all road access to the trail has been blocked by steel gates to prevent vehicle use on the trail. Those gates that are being driven around would have additional large rocks placed from the post of the steel gate to the nearest tree line to prevent access around the gate.

- b. Discuss which of the primary and secondary environmental effects listed in the environmental consequences section are effects on geographically scarce resources (e.g. historic or cultural resources, scenic and recreational resources, prime agricultural lands, threatened or endangered resources or ecologically sensitive areas).

No cultural resource impacts are anticipated with surfacing of the trail. A number of historic sites are noted along the rail corridor. Development outside of the immediate right-of-way must be compatible with the cultural resource search results. Future repair of one trestle in Florence County, a noted archaeological site, would require review for cultural resource compliance. The trail does not impact prime agricultural lands and is consistent with county and WDNR trail plans. While there are a number of rare species occurring in proximity to the rail corridor or in the Nicolet National Forest adjacent to the rail corridor, none of the state or federally listed species or special concerns species listed are known to occur within the existing railroad corridor.

- c. Discuss the extent to which the primary and secondary environmental effects listed in the environmental consequences section are reversible.

Impacts associated with trail development and operations are generally reversible. Adverse impacts to wetlands caused by inappropriate off-trail use may be reversible, however, the impacts would take years to repair.

21. Significance of Cumulative Effects

Discuss the significance of reasonably anticipated cumulative effects on the environment (and energy usage, if applicable). Consider cumulative effects from repeated projects of the same type. Would the cumulative effects be more severe or substantially change the quality of the environment? Include other activities planned or proposed in the area that would compound effects on the environment.

Developing the Forest and Florence County segments of the Nicolet State Trail contributes to a positive cumulative effect of creating a near contiguous 85-mile, multi-county trail. Development would not substantially change the quality of environment as the trail exists on an abandoned rail corridor. Cumulative effects on the environment caused by trail development are not expected to be significant. However, popularity of the trail would be expected to increase with expanded opportunity for long distance touring.

Currently Forest County offers approximately 8 miles of looped ATV trail on county forest lands three miles south of Crandon. Florence County offers 38 miles of ATV trail with additional ATV operation permitted on roads and highways as authorized by town

and county boards under Wisconsin State Statutes. The Nicolet-side of the Chequamegon-Nicolet National Forest does not have any immediate ATV opportunities. ATVs would be allowed once site-specific trail and route planning and construction are completed. The revised National Forest Plan allows for up to 185 additional trails for the entire National Forest (USDA 2006). Increased ATV use on the Nicolet State Trail could result in additional impacts from noise, dust and air emissions. If mitigation measures are undertaken, cumulative effects should not substantially change the quality of the environment.

22. Significance of Risk

- a. Explain the significance of any unknowns that create substantial uncertainty in predicting effects on the quality of the environment. What additional studies or analysis would eliminate or reduce these unknowns?

Developing the Nicolet State Trail is a low overall potential for risk to the environment since this was a graded rail corridor. Most environmental impacts associated with the corridor occurred during the original construction.

The unknown of inappropriate trail use creates uncertainty in predicting effects. Motorized use, especially off-trail and on non-frozen ground, could negatively impact the numerous wetlands adjacent to the trail corridor. The Department is in the process of researching the environmental impacts of ATV use. Information from this report will be useful in developing motorized use recreation trails, educating trail users, and protecting the natural resources. Further, although both county master plans call for "safe, two-way traffic" of motorized and non-motorized use, the combined uses create a degree of risk and uncertainty in predicting user safety. The significance of risk among motorized uses in the winter months is low considering few ATVs use the trail in the winter months. The significance of risk among motorized and non-motorized uses in the non-winter months is more uncertain considering the limited history of trail use. The impacts on trail use, user numbers and experience may also depend on future connections with the Nicolet State Trail in Oconto County. Monitoring trail use would help identify user patterns and potential conflicts.

- b. Explain the environmental significance of reasonably anticipated operating problems such as malfunctions, spills, fires or other hazards (particularly those relating to health or safety). Consider reasonable detection and emergency response, and discuss the potential for these hazards.

Spills of fuel could occur as a result of accidents involving recreational vehicles or as machines are refueled. Such spills are likely to be minor due to the small capacity of fuel tanks.

Accidents involving motorized and non-motorized trail users, such as collisions or people being struck by stones or debris kicked up by a recreational vehicle are a concern.

23. Significance of Precedent

Would a decision on this proposal influence future decisions or foreclose options that may additionally affect the quality of the environment? Describe any conflicts the proposal has with plans or policy of local, state or federal agencies. Explain the significance of each.

Converting an abandoned rail line and developing it as a recreation trail is not precedent setting. Developing the Nicolet State Trail is consistent with Forest and Florence County's *Nicolet Recreational Trail Master Plans* and with the Department's *State Trails Network Plan*. Completing the Forest and Florence County portions of the Nicolet State Trail would extend the trail and create a near-continuous trail from Gillett (Oconto County) to the Wisconsin-Michigan border in Florence County. Additionally, the trail contributes to the recreation opportunities provided by the Nicolet National Forest.

A conflict arose regarding the development of trail crossings over WDNR designated wild rivers, specifically the Popple and Pine Rivers. The resulting Assembly Bill 530 "directs the DNR that it may not prohibit the crossing of a bridge which was constructed before September 16, 2003 over a wild river if the crossing is done by a person in an all-terrain vehicle traveling on an all-terrain vehicle trail or a person on a snowmobile traveling on a snowmobile trail (March 2004)." The Cooperative State Trail Easement signed by the Department and the counties addresses the additional conditions and restrictions regarding recreational trail development and use in the Wild River Protection Zone.

The Department is in the process of developing ATV trail citing criteria and design standards. This report will be useful in the future to avoid potential user conflicts and impacts on the resources.

24. Significance of Controversy over Environmental Effects

Discuss the effects on the quality of the environment, including socio-economic effects, that are (or are likely to be) highly controversial, and summarize the controversy.

Trail development statewide generally leads to controversy regarding designated uses, especially between motorized and non-motorized uses, and the impacts those uses would have on neighboring landowners. Development of the trail in both counties is in accordance with the approved property master plans. Each plan includes ATV use. Minimal socio-economic effects are expected on neighboring landowners considering much of the trail runs through the Nicolet National Forest. There may be conflicts between trail users and neighboring land owners in areas with residential development. However, only relatively small residential areas are located along the corridor. The additional conditions and restrictions resulting from the Wild River crossing must be followed to ensure preservation and protection of the Pine and Popple Rivers.

ALTERNATIVES

25. Briefly describe the impacts of no action and of alternatives that would decrease or eliminate adverse environmental effects. (Refer to any appropriate alternatives from the applicant or anyone else.)

No Action

Not developing the Nicolet State Trail is contrary to the MOU and Cooperative State Trail Easement agreed upon between Forest and Florence Counties and the WDNR. No action also precludes completing the multi-county trail linking Oconto-Forest-Florence Counties. Forest and Florence County's *Nicolet Recreational Trail Master Plans* are based on comments received during public meetings and information describing the resources and recreational needs. The goal within each plan is to make the trail available for year-round use. Further, each county has been successful at applying for and receiving WDNR sponsored funding in the form of Snowmobile Aids and ATV Trail Aids. The proposed trail development is consistent with the master plans and with the approved grant applications.

Alter Trail Use Activities

Considering the low level impact associated with motorized winter trail use, one alternative to decreasing the adverse environmental effects would be to eliminate motorized use during the non-winter months or at least during the spring or other wet periods. This would help in decreasing the impacts of erosion, damage to vegetation, soil compaction and rutting, and the impacts of dust in the drier summer months. This alternative is not consistent with the counties' trail master plans. Fewer funding sources would be available for trail development and operation if motorized recreation were not allowed.

Other Trail Uses

Based on comments from the public meetings, the tone has always been in favor of a mix of motorized/non-motorized trail use. Some trail uses suggested, but not selected, include: snowshoeing, dirt bike riding, and horseback riding (Forest County Board voted no).

Proposed Action with Mitigation of Impacts

The following mitigation efforts might be considered to reduce negative impacts:

- Protection of wetlands and other sensitive areas – Large boulders could be placed along the grade in sensitive habitat locations in order to keep trail riders on the trail. Specific locations of these boulders should be determined on-site in order to use as few as necessary.
- Spread of Non-Native Invasive Plants – Brushing operations for trail development may include treating some of the grade with an herbicide. This would help, but would not eliminate all invasive plants. Any use of the grade, whether by motorized or non-motorized recreational vehicles or simply walking, can spread the plants along the entire grade and beyond. An invasive plant management plan could be prepared for the grade that includes an outreach component to inform adjacent landowners and all user groups about invasive plants and recruit their help in eradication efforts. All three available methods (mechanical, chemical, and fire) should be considered for control of invasive plants.
- Noise – Noise is considered a nuisance problem during daytime hours, especially during months when houses are open to the outdoors. It can be a more serious problem for people living near the trail at night if sleep is disrupted. Noise can also impact wildlife and farm animals. Noise could be reduced by imposing speed limits for motorized recreation. If speed limits do not adequately address the problem with sleep disruption, hours of operation could be set to eliminate night-time use.
- Safety and Non-Compatible Uses - Safety of non-motorized users and neighbors due to speed and size of motorized machines might be addressed to some degree by speed limits. Alternatively, trail paving could be considered to reduce dust and flying gravel.
- Dust – Managers of other trails have gained valuable experience in dust suppression. Quality of the material used for trail surfacing is the first opportunity to deal with dust. Material selected should have enough fines to allow good compaction, but not so much as to generate excessive amounts of dust. Application of dust suppression materials could be done routinely and in response to complaints. Dust would be expected to be less of a problem if speed limits are established. It may be appropriate to set lower speed limits in areas near homes and where non-motorized recreation is more popular. Alternative

trail surfacing materials that might be considered include traprock and rotten granite. The blocky physical characteristics of traprock cause it to compact well. However, experienced trail managers find that limestone with a specific amount of fine grained material provides a superior surface for walking and bicycling. Asphalt paving could nearly eliminate concerns with dust, but at greater cost both initially and for long term maintenance.

- Health Impacts – Sampling of the trail corridor is recommended to determine if there is a risk of previous soil contamination. If contaminants are found to be present, then trail surfacing and dust control during trail construction and future trail use would minimize exposure risks.
- Nuisance Odors – New EPA rules will help reduce odor problems over time. Education efforts by government agencies and recreational vehicle clubs which encourage proper maintenance can help to somewhat reduce the problem. Trail access points should be designed so that machines are not idled near homes. Signing and local education efforts should emphasize the importance of not idling near a home.
- Trespass and Property Damage – Fencing or placement of rocks along the corridor may be appropriate, especially in residential areas and where high quality natural plant communities occur. Fencing could include maintenance of existing fenced right-of-way. The County could consider offering to fence the right-of-way adjacent to residential areas with a style of fence as chosen by the neighboring property owner (e.g. split rail or traditional white). Education and enforcement, including active involvement of courtesy patrols, should help to reduce problems.

State Operation

In addition to the alternatives described above, there is the alternative of operation as a State trail in lieu of a cooperative agreement with the counties. Any of the use options described above could be implemented as part of this alternative and associated mitigation of impacts would be required.

SUMMARY OF ISSUE IDENTIFICATION ACTIVITIES

26. List agencies, citizen groups and individuals contacted regarding the project (include DNR personnel and title) and summarize public contacts, completed or proposed).

WDNR Parks and Recreation Specialist Terry Jordan, Forest County Forest Administrator David Ziolkowski, and Florence County Forest Administrator David Majewski provided invaluable information regarding the history, proposed uses, conditions, and alternatives for the Nicolet State Trail. Each has past experience with the site and has been involved with aspects of the field analysis.

Forest County:

Two public meetings were held in Forest County to assess public interest in desired uses for the recreation trail. Forest County approved their *Nicolet Recreational Trail Master Plan* in December 2004 with a trail goal to make available year-round use that will provide for safe two-way traffic for hiking, biking and snowmobiling. A third public meeting was held on August 8, 2005 to amend the master plan to include ATV use as an approved trail use. The amended master plan was approved on August 2005.

In August 2005, Department staff completed an ATV Trail Screening Checklist in response to Forest County's ATV Trail Aids application. A number of concerns were raised regarding the corridor's location adjacent to environmentally sensitive areas, deer concentration areas, and eagle nest sites. Staff noted concerns of ATV use. A note was also made that barriers must be placed at the Pople River to prevent ATV and snowmobile access to the wild river area.

Florence County:

A public comment form dated March 19, 2002, summarizes the results of 77 comments received. The three favored trail uses in order of importance are snowmobiling, ATV, and hiking. Those responding would like to see snowmobiling, ATV, and hiking/biking uses on the proposed trail. The majority of respondents were representing business owners, followed by ATV Club and Snowmobile Club. Forty-seven were not in favor of a fee for trail use. Twenty were in favor of trail use fees; two were undecided. The majority (61 out of 69) responded they owned land in Florence County; 40% responded their land adjoined the proposed trail.

A subsequent public comment form dated July 15, 2004, summarizes the results of 23 comments received. Similarly, snowmobiling and ATV use were the favored uses. ATV, snowmobiling and biking were among the uses people would like to see on the proposed trail. Those responding were representing ATV and snowmobile clubs and business owners, and were largely against charging a trail use fee. Nearly all the respondents owned land in Florence County (95%); 76% owned land adjoining the proposed trail.

Comments from both summaries identified potential conflicts between motorized and non-motorized users, noise and dust in the Town of Long Lake, trespass issues, and erosion from off-trail non-legal use. They cite snowmobile and ATV use as compatible as well as motorized uses and horses assuming users obey the State laws for safe use. Noted special facilities include parking,

signing, trail maps, trash containers, ADA compatibility, and access to local communities. Special needs identified include parking, law enforcement of State and County ordinances, speed limits, stable surfaces, barriers to wetlands and water, and the need to have preventative measures taken near the sawmills in Long Lake and Tipler because of log landings near the corridor. These comments along with additional information were used in drafting the *Nicolet Recreational Trail Master Plan* for Florence County, which was approved in September 2004.

In August 2005, Department staff completed an ATV Trail Screening Checklist in response to Florence County's ATV Trail Aids application. Staff noted the corridor is adjacent to environmentally sensitive areas (wetlands) and there are areas where the grade material is eroded into wetlands. Other comments referenced the need for permits for bridges and waterway crossings, the need for barriers on the Pine River, and possible right-of-way issues in Long Lake.

DECISION (This decision is not final until certified by the appropriate authority)

In accordance with s. 1.11, Stats., and Ch. NR 150, Adm. Code, the Department is authorized and required to determine whether it has complied with s.1.11, Stats., and Ch. NR 150, Wis. Adm. Code.

Complete either A or B below:

A. EIS Process Not Required



The attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion, therefore, an environmental impact statement is not required prior to final action by the Department.

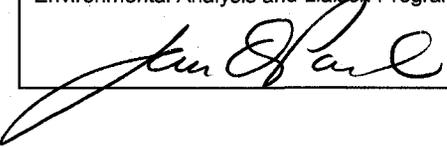
B. Major Action Requiring the Full EIS Process



The proposal is of such magnitude and complexity with such considerable and important impacts on the quality of the human environment that it constitutes a major action significantly affecting the quality of the human environment.

Signature of Evaluator 	Date Signed 05/12/06
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Number of responses to news release or other notice: 13

Certified to be in compliance with WEPA	
Environmental Analysis and Liaison Program Staff 	Date Signed 06/15/06

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to sections 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Note: Not all Department decisions respecting environmental impact, such as those involving solid waste or hazardous waste facilities under sections 144.43 to 144.47 and 144.60 to 144.74, Stats., are subject to the contested case hearing provisions of section 227.42, Stats.

This notice is provided pursuant to section 227.48(2), Stats.

APPENDIX A

Select Bibliography

- Department of Workforce Development. 2004. *Forest County Workforce Profile*. State of Wisconsin, Department of Workforce Development, Office of Economic Advisors. OEA-10613-P.
- Dirst, Victoria. 2005. Department of Natural Resources – Cultural Resources Coordinator. Personal communication, 9 November.
- Florence County. 2005. "Florence County Demographics." <http://www.florencewisconsin.com/Pages/demogr.htm>
- Forest County. 2005. "Potawatomi Community." <http://www.forestcountywi.com/springsumm/potawatomisum.htm>.
- Majewski, David. 2004. *Nicolet Recreational Trail Master Plan – Florence County, Wisconsin*. Compiled by David Majewski (Florence County Forestry Administrator) with direction from the Florence County Forestry and Parks Committee.
- New Mexico Environment Department. 2006. "Fugitive Dust Control Techniques and Businesses." Air Quality Bureau. http://www.nmenv.state.nm.us/aqb/dust_control.html.
- Relyea, Rick A. 2005. "The Impact of Insecticides and Herbicides on the Biodiversity and Productivity of Aquatic Communities." *Ecological Applications: Vol. 15, No. 2, pp. 618-627*. <http://www.esajournals.org/esaonline/?request=get-abstract&issn=1051-0761&volume=015&issue=02&page=0618>.
- Stokowski, Patricia A. and Christopher B. LaPointe. 2000. "Environmental and Social Effects of ATVs and ORVs: An Annotated Bibliography and Research Assessment." School of Natural Resources, University of Vermont. Burlington, VT.
- United States Department of Agriculture. 2006. "ATV Use on the Chequamegon-Nicolet National Forest: Frequently Asked Questions." USDA, Forest Service. <http://www.fs.fed.us/r9/cnnf/rec/atv/index.html>.
- United States Environmental Protection Agency Office of Transportation and Air Quality. 2002. "Frequently Asked Questions: Environmental Impacts of Newly Regulated Nonroad Engines." EPA/420-F-02-033.
- Wisconsin Department of Natural Resources. 2005. "EPA's Air Quality Index." <http://dnr.wi.gov/org/aw/air/health/AQIbasics.htm>.
- Wisconsin Department of Natural Resources. 2003. Wisconsin's Forestry - *Best Management Practices for Water Quality Field Manual*. Division of Forestry, PUB FR-093. <http://dnr.wi.gov/org/land/forestry/publications/pdf/FR-093.pdf>.
- Wisconsin Department of Natural Resources. DATE. *Department Design Standards Handbook*. Handbook #8605.1. DNR Bureau of Parks and Recreation.
- Wisconsin Department of Natural Resources. 2004. "Ecological Landscapes of Wisconsin: North Central Forest." http://dnr.wi.gov/landscapes/no_cen_forest.htm.
- Wisconsin Department of Natural Resources. 2006. "Endangered Resources Information Review." Bureau of Endangered Resources, Log Number 05-324, 6-January-2006.
- Wisconsin Department of Natural Resources. 2006. *Environmental Assessment for Acquisition, Development and Management of the Amery to Dresser State Trail*.
- Wisconsin Department of Natural Resources. 2000. "Results of Air Monitoring in Eagle River." Bureau of Air Management. <http://www.dnr.state.wi.us/org/aw/air/MONITOR/eagleriver.htm>.
- Wisconsin Department of Natural Resources. 2005. "State Park, Forests, and Trail Annual visits." <http://www.dnr.state.wi.us/org/land/parks/reports/visits.html>
- Wisconsin Department of Natural Resources. 2001. *State Recreational Trails Network Plan*. Parks and Recreation, Wisconsin Department of Natural Resources. <http://dnr.wi.gov/org/land/parks/reports/trails/contents.html>.
- Wisconsin Department of Natural Resources. 1996. *Trail Signing Handbook*. PUB-CF-0232004.
- Wisconsin Department of Natural Resources. 2005. "Wisconsin Wetlands: County by County Acreage." <http://dnr.wi.gov/org/water/fhp/wetlands/acreage.shtml>

Select Bibliography (con't.)

Wisconsin Department of Tourism. 2004. "Economic & Demographic Profile of Wisconsin's ATV Users: Results of an economic survey conducted between June and October 2003." Co-op Research Program in conjunction with Wisconsin ATV Association and the Department of Urban & Regional Planning, University of Wisconsin-Madison/Extension.

Wisconsin Department of Tourism. 2005. "The Recreational Bicyclist."
http://agency.travelwisconsin.com/Research/MarketResearch_Active/biking.shtm.

Wisconsin Department of Tourism. 2006. "2004 Economic Impact Fact Sheets: Florence County."
http://agency.travelwisconsin.com/Research/EconomicImpact_Active/04countyprofiles/Florence_County_2004.pdf.

Wisconsin Department of Tourism. 2006. "2004 Economic Impact Fact Sheets: Forest County."
http://agency.travelwisconsin.com/Research/EconomicImpact_Active/04countyprofiles/Forest_County_2004.pdf.

Wisconsin Department of Tourism. 2006. "Snowmobilers Spent \$249.5 Million in Wisconsin in 2000-2001 Season."
http://agency.travelwisconsin.com/Research/EconomicImpact_Active/snowmobiling.shtm.

Wisconsin Legislative Council. 2004. *2003 Assembly Bill 530*.

Ziolkowski, David. 2005. *Nicolet Recreational Trail Master Plan – Forest County, Wisconsin*. Compiled by David W. Ziolkowski (Forest County Forestry Administrator) with direction from the Forest County Forestry Committee.

APPENDIX B

Description of the Nicolet State Trail Location – Forest and Florence Counties:

Township-Range-Section(s):

Forest County – South Segment:

T34N R15E Sections 33, 28, 21, 17, 16, 8, 7, 6;

T35N R15E Sections 31, 30, 19, 18, 7, 6;

T36N R15E Section 31

Forest County – North Segment:

T37N R14E Sections 25, 24, 13, 12, 1;

T38N R14E Sections 35, 26, 23, 13, 12, 1;

39N R14E Section 36

Florence County

T39N R15E Sections 30, 19, 18, 17, 8, 5

T40N R15E Sections 32, 33, 29, 28, 20, 17, 9, 4, 3

T41N R15E Section 35

APPENDIX C

List of Maps Attached:

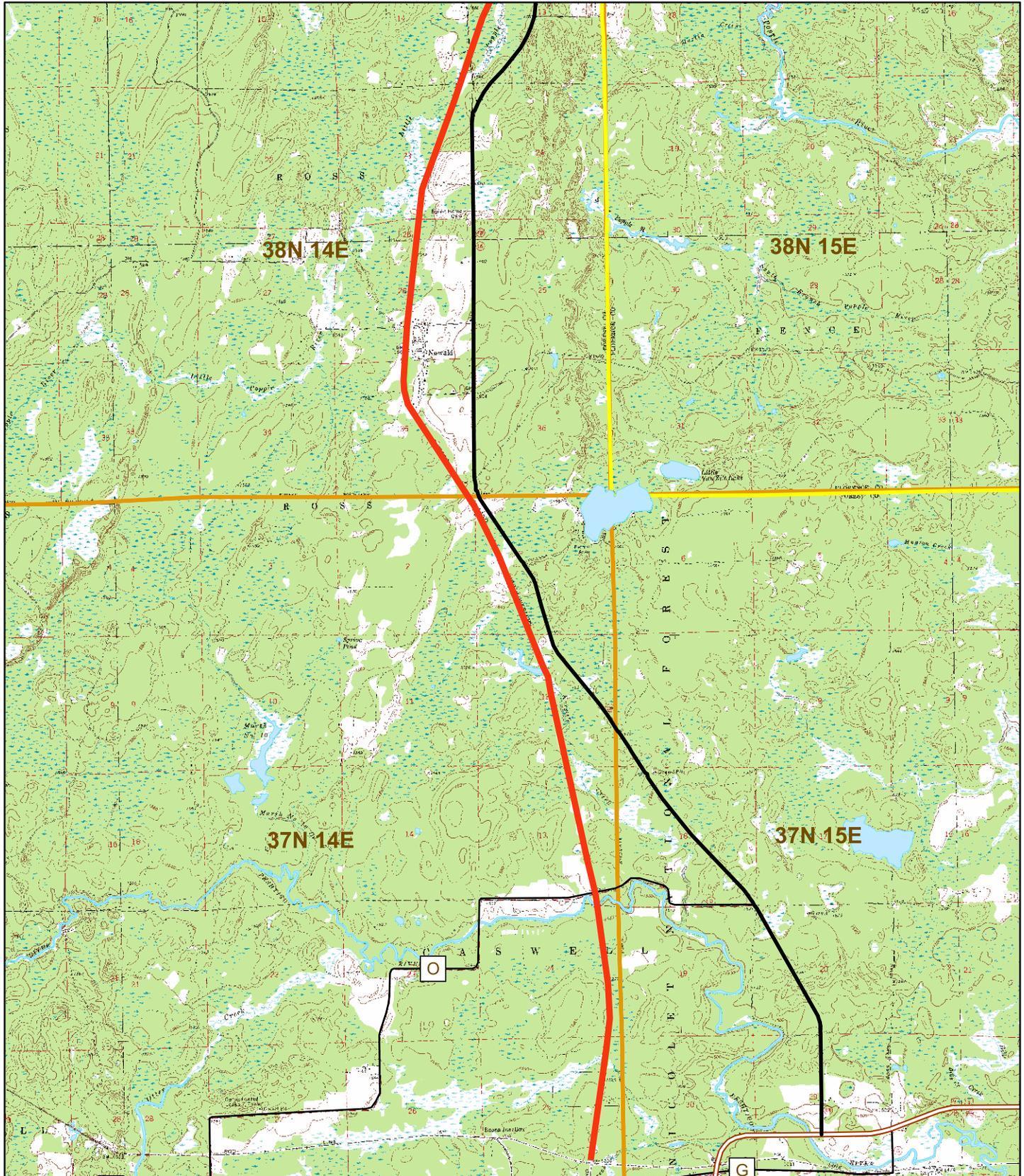
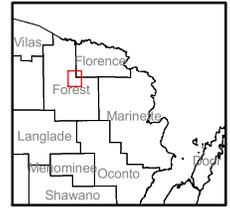
- Forest County Line North to Wabeno
- Wabeno to Laona
- Cavour to Popple River Road
- Popple River Road to Forest/Florence County Line
- Forest/Florence County Line to WI/MI State Line



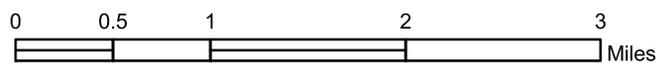
BUREAU OF FACILITIES AND LANDS
 REAL ESTATE SECTION
 MAP PRODUCED 3/7/2006

NICOLET STATE TRAIL

Cavor to Popple River Road



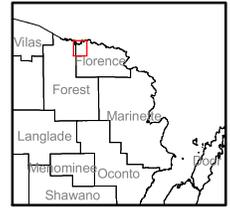
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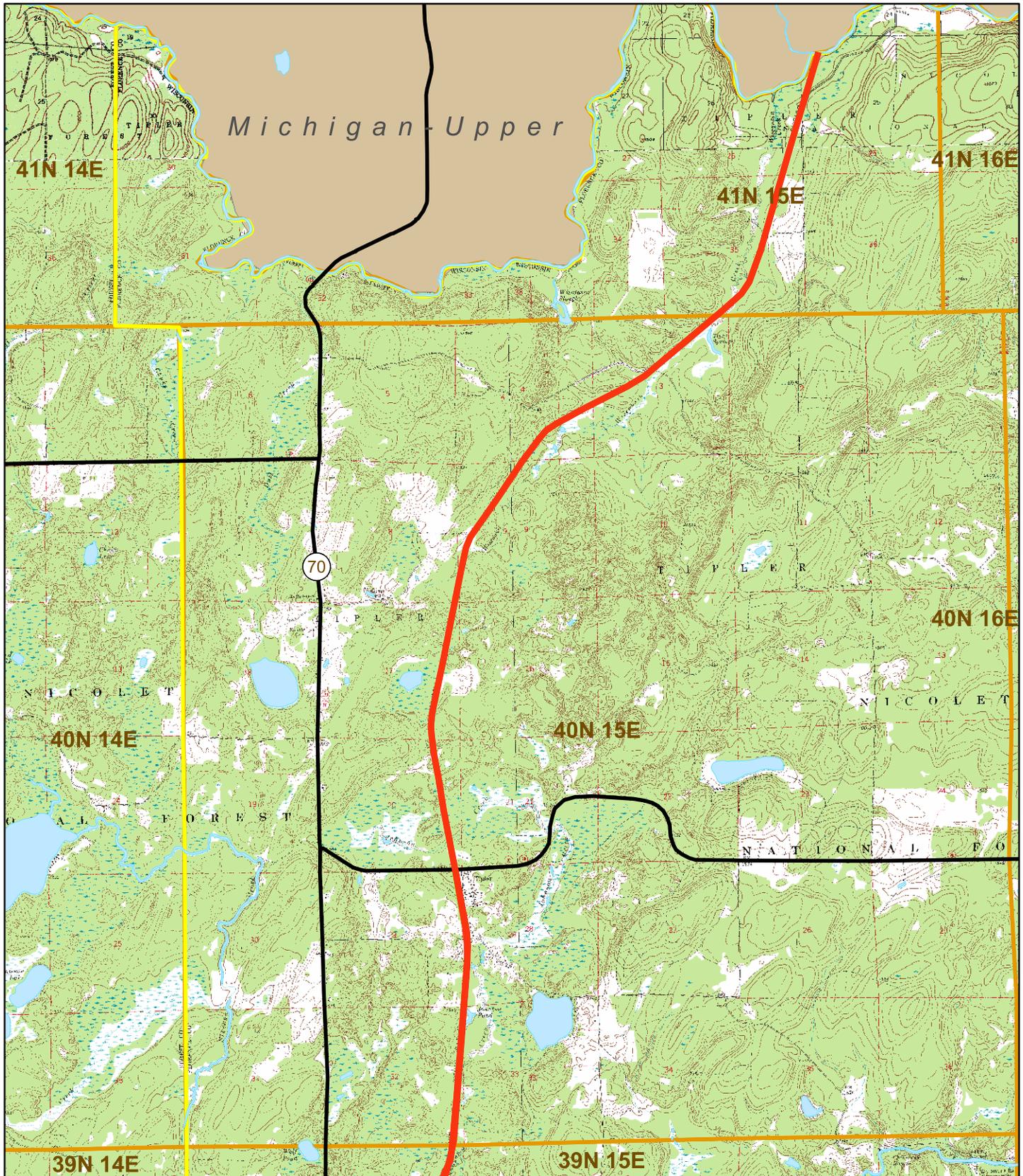


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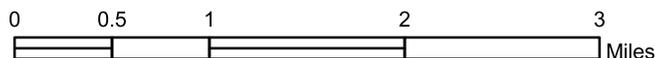


BUREAU OF FACILITIES AND LANDS
REAL ESTATE SECTION
MAP PRODUCED 3/7/2006

Forest and Florence Cty Line to WI and MI



Map Projected in:
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Transverse Mercator



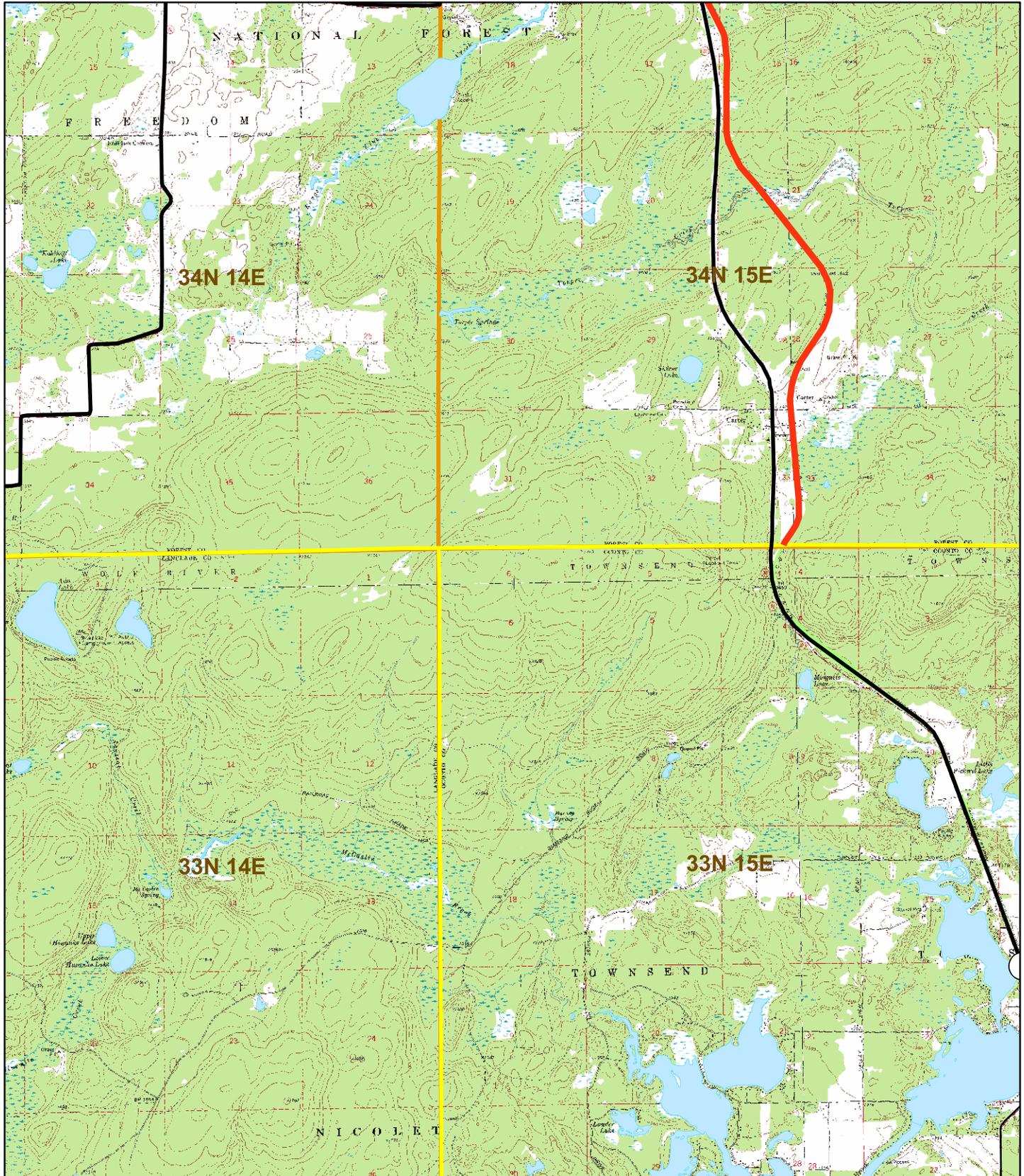
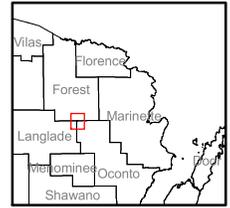
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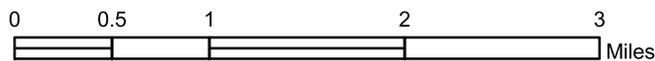
NICOLET STATE TRAIL

BUREAU OF FACILITIES AND LANDS
REAL ESTATE SECTION
MAP PRODUCED 3/7/2006

Forest County Line North to Wabeno



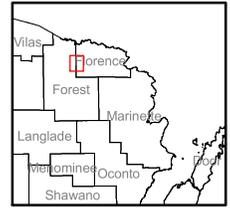
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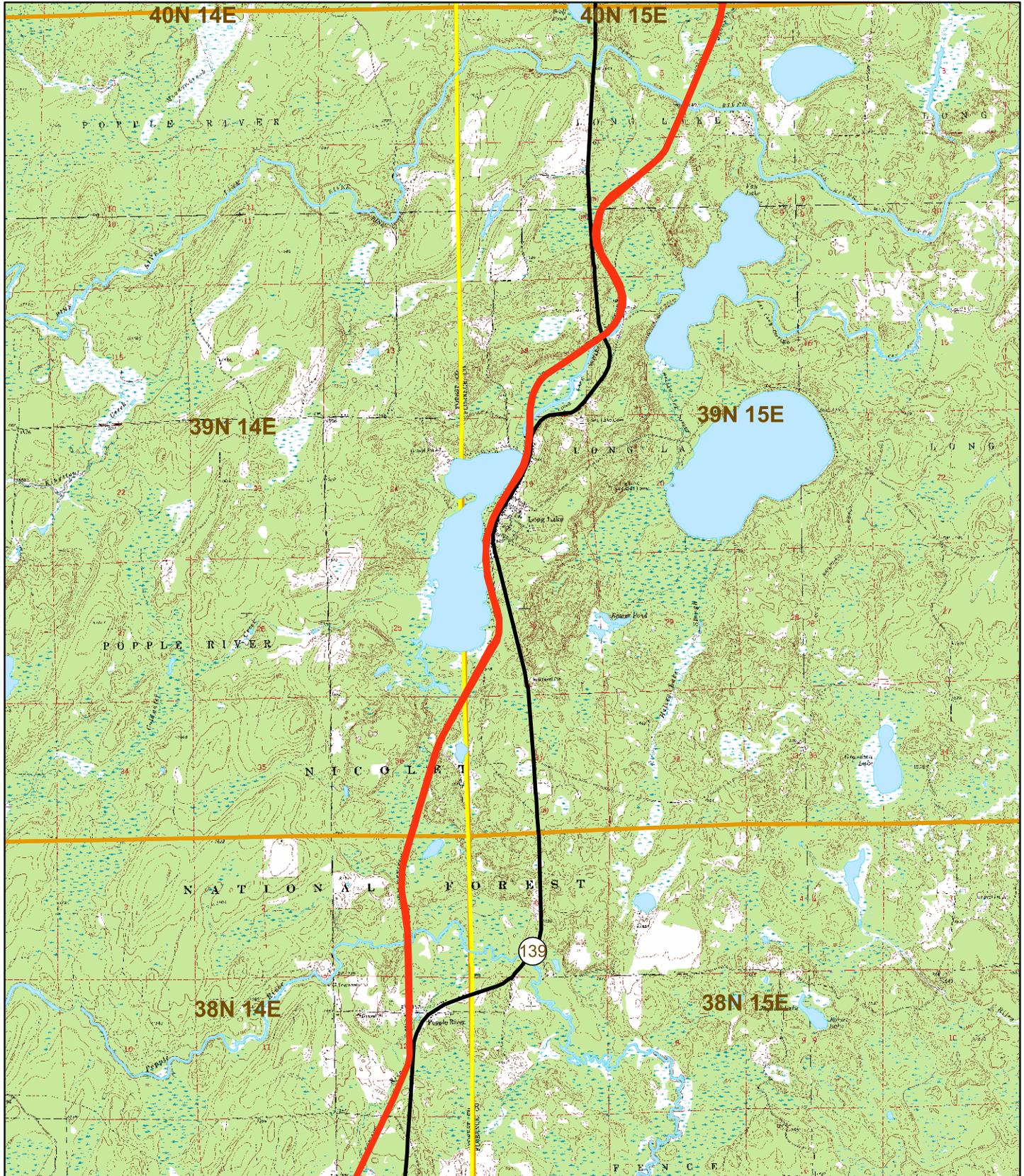


NICOLET STATE TRAIL

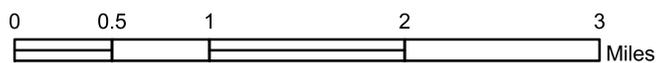


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REAL ESTATE SECTION
MAP PRODUCED 3/7/2006

Popple River Road to Forest and Florence Cty Line



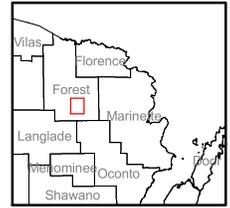
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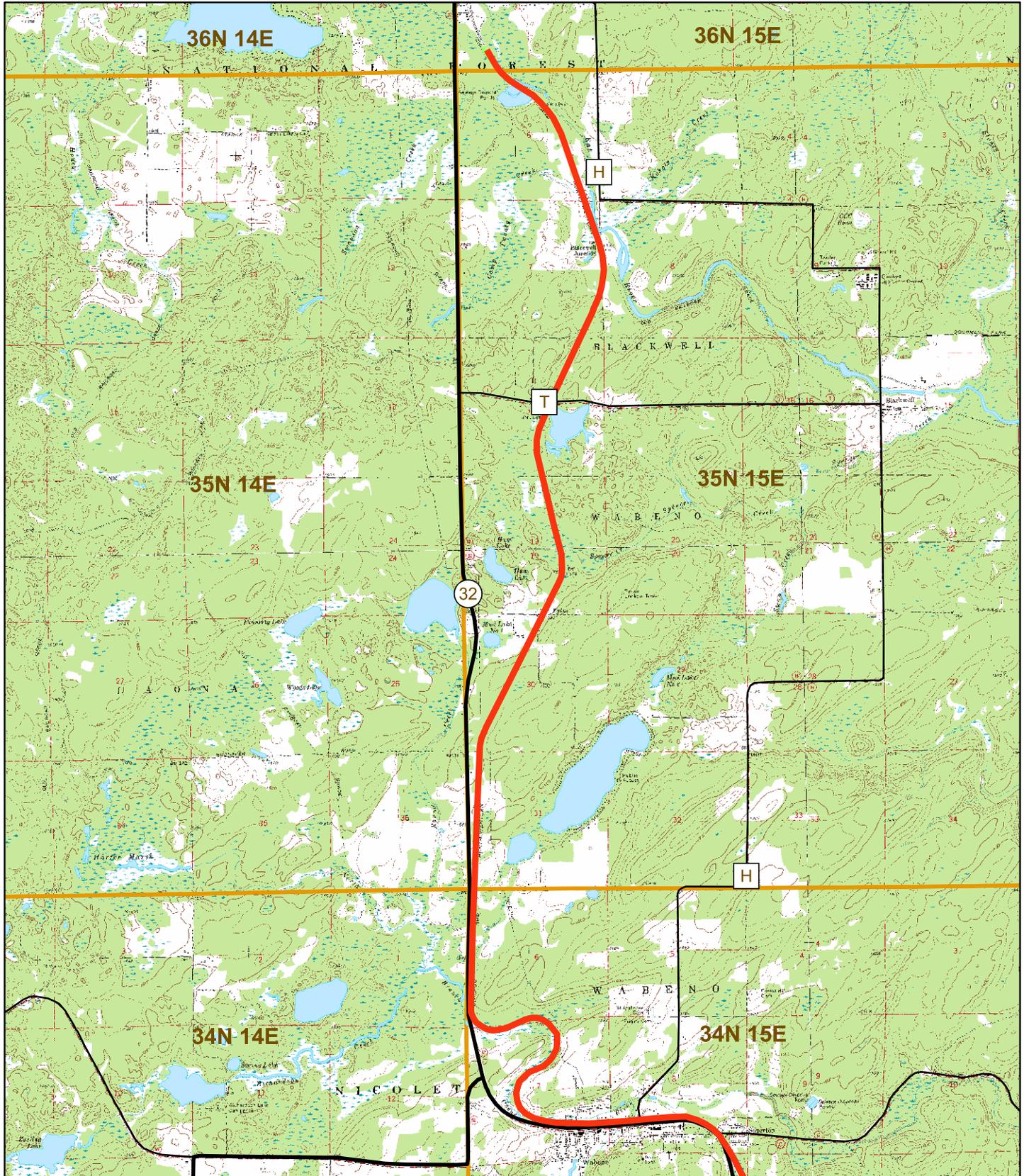


NICOLET STATE TRAIL

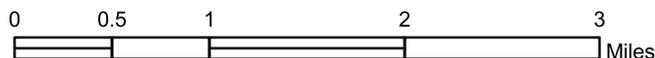


BUREAU OF FACILITIES AND LANDS
REAL ESTATE SECTION
MAP PRODUCED 3/7/2006

Wabeno to Laona



Map Projected in:
NAD 1983 HARN -
Transverse Mercator



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→ Jim Perdee - 5/17

NEWS RELEASE



Wisconsin Department of Natural Resources Northern Region

810 W Maple St., Spooner, WI 54801
Phone: (715) 635-2101 TDD: (715) 635-4001
107 Sutliff Avenue, Rhinelander, WI 54501
Phone: (715) 365-8900 TDD: (715) 365-8957
dnr.wi.gov www.wisconsin.gov

DATE: May 12, 2006

CONTACT: Terry Jordan

SUBJECT: Nicolet State Recreational Trail Proposal Being Reviewed

Spooner, WI – The Department of Natural Resources (DNR) is proposing to acquire, develop, and manage a former railroad grade as a state recreational trail from the southern end of Forest County near Carter northward to the Wisconsin-Michigan border in Florence County. The purpose of this project is to address recreational needs in the local area as well as regional recreational demand from Wisconsin residents and visitors.

The proposed project would connect with an existing recreational trail to the south in Oconto County and create a nearly continuous 85-mile recreational trail from Gillett in Oconto County north to the Wisconsin-Michigan border. The trail would provide a wide variety of recreational uses over different segments. As part of this project, the department would purchase about 41 miles of Chicago and Northwestern Railroad Company abandoned rail line from the Wisconsin Department of Transportation, enter into a memorandum of understanding and cooperative state trail easement with Forest and Florence Counties, and approve master plans prepared by each county for development, maintenance, and operation of the trail system.

Before a decision can be made on plans for the proposed trail development and management, an Environmental Assessment (EA) must be completed. This notification ensures the chance for public input on that analysis.

Once the EA process is completed, the department will then complete a final review and decision on the trail proposal. The analysis developed in the EA will be considered along with any other pertinent information as part of those final decision making steps on the project.

This project is not anticipated to result in significant adverse environmental effects. The department has prepared an EA on this project proposal and made a preliminary decision that an environmental impact statement will not

The following counties are in the Northern Region: Ashland, Barron, Bayfield, Burnett, Douglas, Florence, Forest, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn.
The Public Affairs Manager for DNR Northern Region is Jim Bishop, (715) 635-4242.

be required. This recommendation does not represent approval from other DNR sections which may also require review of the project. Copies of the draft EA can be obtained from Terry Jordan, Parks & Recreation Specialist, WDNR, 810 W. Maple Street, Spooner, WI 54801, 715/635-4121, or by e-mail at Terry.Jordan@dnr.state.wi.us. Comments on the proposed project and preliminary assessment are welcome and should be received by Mr. Jordan no later than 4:30 p.m., Friday, June 2, 2006. Comments may be submitted verbally, electronically, or in hard copy written form.

-30-