

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NORTHERN HIGHLAND  
AMERICAN LEGION  
STATE FOREST

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ATV TRAIL FEASIBILITY / SUITABILITY  
ASSESSMENT

JAN 2008

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## INTRODUCTION AND BACKGROUND

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### **NHAL Master Plan**

In October of 2005 the master plan for the Northern Highland-American Legion (NHAL) State Forest was approved by the Natural Resources Board (NRB). At that time the possibility of all-terrain vehicle (ATV) use in the forest remained an unresolved issue. While the master plan authorized use of ATV's on designated trails, no trails were designated for use. The master plan further directed the Department to work on identifying potential locations suitable for ATV use. This effort included the establishment of a citizen's stakeholder group to identify trail alternatives and make recommendations to the Department. Over the course of a year, the stakeholders group met to evaluate potential trail locations and any related environmental, social, economic, and safety issues. Their work was completed in June of 2007 when they delivered a report to the Department titled, *The Northern Highland-American Legion State Forest Sustainable ATV Trail Alternatives*.

Master Plan Policy: The Department supports statewide and regional ATV riding opportunities on appropriate trails, particularly trails that contribute to regional trail networks. Trails would have to be sited according to established ATV trail policies and standards. (See NHAL Master Plan, pp. 165-166).

### **Feasibility / Suitability Assessment Purpose**

This assessment is intended to determine the preliminary feasibility/suitability of the two ATV trail alternatives identified through the efforts of the NHAL ATV stakeholders group. The trails, one in Oneida/Vilas Counties and the other in Iron County, have both issues in common and notable differences. In addition, this document includes a summary of public comments on the two trail alternatives.

### **Scope**

This assessment examines the two trail alternatives using the Department's seven criteria for evaluating potential ATV trails. The assessment of the trail alternatives is based upon best available information and technical analysis. It is not intended to be a complete Environmental Analysis (EA). The assessment identifies potential broad impacts and implications for each trail alternative to determine if a detailed trail plan and associated EA is warranted. The intent of this assessment is to determine the impacts of the trail alternatives, including the public benefits and costs.

### **Study Considerations and Criteria**

DNR staff determined the scope of this study and identified issues/parameters that would facilitate and guide the NRB in evaluating the relative feasibility of the ATV trail alternatives. This study examines the proposed alternatives, identifies existing conditions, and highlights the improvements or changes that would be necessary to provide sustainable ATV use on the proposed alternatives. The study also identifies what costs may be associated with these changes. This report does not make specific recommendations.

This study is intended to gauge the feasibility of pursuing a more detailed assessment and development of a trail plan for summer season ATV use on the two trail alternatives

proposed. If a decision is made to proceed with developing a specific trail plan, including some or all of the identified segments, potential project effects will be evaluated within the context of an EA and pursuant to the Master Plan amendment process, which is required prior to any significant change in trail use. Each of these administrative processes provides for public notice, public comment, and public appeal of project plans or decisions.

Other factors that logically influence suitability determinations include cost/benefit analyses, physical and technical feasibility, degree of environmental manipulation, and the relative need or demonstrated demand for ATV use. Legal, administrative, and logistical considerations also play a pivotal role. Together, these factors help define plausible options and alternatives. All of these factors will play a role in reaching a final decision.

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## FEASIBILITY / SUITABILITY ASSESSMENT

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The Department's guidance lists seven elements to evaluate when considering siting ATV trails on Department land:

1. The property designation or funding source
2. Potential effects on the resources
3. Social considerations
4. Economic considerations
5. Safety
6. Local support and cooperation
7. Management and administrative criteria

### **1. Property Designation or Funding Source**

The two proposed trails are completely within the boundaries of the Northern Highland-American Legion State Forest (NHAL). The NHAL State Forest is managed according to state statute 28.04 and the masterplan was approved by the Natural Resources Board in October 2005.

State Statute 28.04 generally states; State Forests are to be managed to provide the full range of ecological, economic, and social benefits for current and future generations. Presently there are no trails designated for summer or winter use of ATVs on the NHAL. Other properties designated as state forests (Brule River, Flambeau River, Governor Knowles, Black River, and Peshtigo River) have designated trails authorizing ATV use for specific seasons. In all cases, ATVs are only authorized on designated trails. No off trail use is permitted anywhere on state forests.

### **Compliance / Consistency with the NHAL Master Plan**

The NHAL master plan states that ATV trails may be permitted on designated trails if a suitable location can be found. The plan directed the Department to establish a stakeholders' group to investigate trail alternatives. The master plan also stated that no trail would be designated for ATV use unless a suitable location could be found. Given the complexity of the ATV issue, the NRB requested that the NHAL ATV Trail Stakeholders' Report, as well as the Department's suitability assessment, be shared with the NRB. The NRB further stated that they would guide future decisions on ATV trails on this state forest.

### **Vilas/Oneida County Trail Alternative**

The Vilas/Oneida trail alternative traverses several land management classifications, including three forest production areas, two native community management areas, one scenic management area, and one recreation management area. Each land management classification is further divided into a unique land management area, and in some cases is reduced further to a site. Each land management area describes the desired future condition and specific management provisions of the area. Below is a list of the land management classifications and area specific considerations for the Vilas/Oneida trail alternative.

***Hemlock Hardwood Native Community Management Area (Master Plan Area 9)***

A one-mile section of the Vilas/Oneida trail alternative is located in the Hemlock Hardwood Native Community Management Area – Sweeney Lake Site. A portion of the Sweeney Lake Site (60 acres) through which the trail passes is passively managed and classified as an Ecological Reference Site, a designation that provides a long-term benchmark for ecological conditions. The land management objectives for the area generally focus on maintaining and enhancing old-growth hemlock hardwood communities. Specific access provisions include maintaining existing levels of public use and access. The trail would be located on an un-paved woods road currently open to vehicle use.

***Bittersweet Recreation Management Area (Master Plan Area 21)***

The proposed trail is not located within the Bittersweet Recreation Management Area itself, but along the eastern boundary of the area. The Area is 2,553 acres in size and the eastern boundary is 3 miles long. The Bittersweet Area is a complex of small, scenic, undeveloped wild lakes. This area is classified as a Type 2 and Type 3 recreation use setting, both of which generally focus on remote, non-motorized recreation experiences. Type 2 recreation use setting is the more restrictive setting, and it surrounds the core of the lakes within the area. The trail borders the Type 2 setting within the area. The masterplan authorizes closure of an existing road and opening of a currently closed road to allow public use around the perimeter, including snowmobiles and licensed vehicles. The ATV trail would be located on the newly re-opened road.

***Lake Laura Loamy Hills Native Community Management Area (Area 8)***

The trail segment between Sayner and Star Lake lies predominately in the Lake Laura Loamy Hills Native Community Management Area (8,268 acres). The trail segment extends 5 miles through this area. The trail within this Area is on existing forest roads that are open during the winter for snowmobile use and closed to vehicle use the rest of the year.

One mile of the trail is located adjacent to and directly crosses highway K. The area within 200 feet on each side of Highway K is classified as a Scenic Management Area – Rustic Road (Area 16). Master plan goals for this Scenic Management Area are to protect and enhance the scenic beauty of the rustic road corridor. Forest roads in this area are directed to be designed to have minimal visual impact. A trailhead and most of the trail in this area would be new construction. Due to topography and the intent of the masterplan designation, measures would need to be taken to minimize visibility of the trail from highway K.

The remaining 39 miles of trail are located in Forest Production Management Classifications (Master Plan Areas 4, 5, and 6). Generally, forest production areas allow the full range of recreational opportunities, including motorized recreation.

## **Iron County Trail Alternative**

The Iron County trail alternative traverses three master plan land management classifications, including one forest production management area, two native community management areas, and one scenic management area.

### ***Manitowish River Scenic Management Area (Master Plan Area 15)***

The trail would cross the Manitowish River Scenic Management Area in two locations. The master plan objective for this area is to "... maintain and enhance the natural appearing, undeveloped, and highly scenic Manitowish River corridor..." and "provide opportunities for high quality, non-motorized recreation and education in a generally undeveloped river setting." The crossing would be on bridges (one existing), perpendicular to the river. The crossings are estimated at 205 feet and 70 feet. The longer bridge is parallel to the Highway 47 bridge, and the shorter bridge is located at the Highway 51 wayside and would be placed at the site of a former bridge.

### ***Native Community Management Areas (Master Plan Area 9 and 10)***

Option A: This option runs north of State Highway 51, and passes through two different Native Community Management Areas—Peatlands and Wetlands (Master Plan Area 10), and Hemlock Northern Hardwood (Master Plan Area 9). West of Circle Lily Lake, 2 miles of the trail would extend through the Dupage Lake and Toy Lake Swamp Sites, both of which are part of the Peatlands and Wetlands Native Community Management Area. Much of Area 10 is designated for passive management and the majority is designated as a State Natural Area (SNA). The trail would not enter the SNA, but would border it for 2 miles. The area is generally managed to maintain limited, low-impact public access. The majority of the trail is on roads owned and maintained by the township. The trail would also travel one mile on town roads through the North Bass Lake Hemlock Hardwoods Native Community Management Area (Area 9).

Option B: This option is located in Hemlock Hardwood Native Community (Master Plan Area 9) and Peatlands and Wetlands (Master Plan Area 10). The option borders the North Bass Lake State Natural Area before crossing Highway J and traveling Cedar Lake Road until it joins with option A just west of Cedar Lake. The area near Woodson Lake is designated a Type 1 recreational use setting and motorized use is prohibited within ¼ mile of the lakeshore. The trail as proposed is on the boundary of this ¼ mile zone.

The remaining 19 miles of trail are located within the Manitowish Peatlands Forest Production Management Area, which is 49% unforested wetlands, and the Winegar Moraines Forest Production Area. The amount of wetlands in this area will require sections of boardwalk to be constructed, increasing the construction and maintenance cost of the trail.

## **2. Potential Effects on Resources**

The NH-AL is located within a globally significant ecological landscape with a high concentration of kettle lakes, including several rare lake types. Twenty seven percent of the

Northern Highland ecological landscape is wetland. There are few other places on earth that have the same concentration of lakes, wetlands, and accompanying ecological communities.

### ***Invasive Species***

Invasive species pose a threat to forest ecosystem health by outcompeting native species and inhibiting forest regeneration, decreasing the abundance and diversity of native species, and disrupting ecosystem function. Management systems to identify control and track invasive species on the NHAL continue to develop. Activities being tracked under these systems include current uses such as hiking and biking trails, camping, forest management activities, roads, and water access points. Many recreational uses, including ATVs, hold the potential to introduce and spread invasive species. Reducing the introduction and spread of invasives is an increasing challenge for most nature-based recreational use. ATVs, just as motorized water craft, are particularly challenging since they can travel great distances and may unintentionally carry plant material and seeds to un-infested locations. Mitigation techniques to reduce the introduction and spread of invasive species have been met with variable success. Some techniques that have been used include educating recreation users with trail signs, prevention methods like washing stations, trail construction techniques, continuous monitoring, and active control programs.

### ***Wildlife Habitat***

The NHAL provides habitat for the highest concentration of goshawks, eagles, and osprey in Wisconsin. Disturbances near nesting sites, particularly for osprey and goshawks, can cause adults to abandon nests or unsuccessfully rear young birds. Disturbance of nests by current uses on the state forest appears to be at acceptable levels for existing populations. NHAL staff provides protection measures on timber sale contracts by prohibiting harvest activity near nests or during critical breeding times. Current levels of motorized access are low enough to not disturb the nests. Development of the trail proposals would need to include plans to locate the trail away from nests and schedule trail opening and closing dates to avoid disturbance during nesting periods.

The corridors suggested for the ATV trails are used by a number of wildlife species for both travel and habitat needs. Habitat specialists, such as turtles, are known to rely on some of the proposed trail segments for nesting sites. The current level of motorized travel on most of the corridors is light and does not significantly disturb these activities. Allowing expanded ATV use may affect certain species, but it is not known if significant detrimental impacts will occur.

### ***Ecological Communities***

One of the many unique ecological features found along the fringe of both proposed trail segments are wetland communities known as peatlands. Peatland systems are formed by the gradual build-up of sphagnum moss and other bog vegetation over the course of several thousand years. The resulting 'bog mat' is soft and spongy partially decayed vegetation, and is extremely vulnerable to disturbance. Off-trail ATV use is prohibited on the full length of the trail alternatives. However, trails adjacent to peatlands may need to be fenced to restrict off-trail ATV operation, and would require diligent monitoring.

For new stream and wetland crossings, the preferred action is to construct bridges and boardwalks. Construction would require authorization by federal, state and local permits.

The Department has not conducted the site specific “alternatives analysis” necessary for wetland permits, so the exact crossing requirements for trail alternatives are unknown. If reasonable alternatives exist to avoid constructing a new wetland crossing, then the wetland crossing may not be permitted. An example of an alternative would be the existence of an ATV route which provides access to the same general area.

To mitigate any potential water quality problems such as erosion, sedimentation, and to prevent rutting and degradation of the trail surface, the trail surface would need to be “hardened” with gravel or other surfacing materials. Diversion ditches, water bars, and other drainage structures would be installed to keep runoff and sediment from lakes, rivers, and wetlands.

In wetlands, the flow of subsurface water can be disrupted by rutting, which mixes the wetland soil, channelizes surface water flow, or damages vegetation. This can lead to some areas of wetlands becoming “swamped out” as water pools and other areas of wetlands dry out as their water source is cutoff. Plants which were at the limits of their soil moisture range may begin to die out in wetter areas, and plants may begin to move into drier areas, pushing out the wetland species. Off-trail ATV operation would need to be controlled in order to avoid negative impacts to wetlands.

### **Vilas/Oneida County Trail Potential Effects on Resources**

Where the trail is proposed adjacent to the Rainbow Flowage, extra effort would be necessary to prohibit ATV access to lakebed that is exposed at low water levels. This would be done by trail design, fencing, education, and enforcement.

The trail is proposed to cross Birch Springs, a relatively remote and undeveloped area with a spring that forms the headwaters of a trout stream. The crossing would require an elevated 1500-foot boardwalk and fencing at the approaches to protect water resources.

There are several sections along this proposed trail that have steep slopes and would require construction of new trail or redesign of the existing trail to reduce the slope and mitigate possible erosion. These steep slopes may also provide the opportunity to experiment with other engineering solutions including surfacing, grading, and other innovative approaches to reduce erosion.

Plum Creek, a Class I trout stream, has been the focus of trout stream habitat improvement projects. Visitor use, both pedestrian and motorized, will need to be carefully managed to avoid degrading this high quality fishery.

#### ***Endangered/Threatened/Special Concern Species and Native Communities***

The following is a list of rare species (endangered, threatened, or special concern) that occur one or more times within the 15 meter wide corridor surrounding the proposed Vilas-Oneida trail segment. This data was gathered from Wisconsin’s Natural Heritage Inventory database.

- Bald eagle
- Boreal chickadee
- Bullfrog

- Casemaker caddisfly
- Cerulean warbler
- Diving beetle
- Eastern floater (mussel)
- Elktoe (mussel)
- Hooker's orchid (wildflower)
- Lake emerald (dragonfly)
- Large round-leaved orchid (wildflower)
- Osprey
- Purple clematis (wildflower)
- Tiger beetle

In addition to the above rare plants and animals, Wisconsin's Natural Heritage Inventory lists the following plant communities as occurring within the corridor of the proposed Vilas-Oneida trail segment:

- Northern Mesic Forest
- Northern Dry-Mesic Forest
- Northern Wet Forest
- Black Spruce Swamp
- Open Bog
- Poor Fen.

Placement of a trail within the Vilas/Oneida corridor would require additional site inspections to identify a trail location that avoids disturbance of protected species. If certain impacts are unavoidable, the Department will need to apply for any incidental take permits.

### **Iron County Trail Potential Effects on Resources**

Along the railroad route of Option A, a boardwalk would need to be constructed over the wetland area, and structures would need to be developed to prevent off-trail use and damage to wetland resources.

Circle Lily Road and Sandy Beach Road would become designated ATV routes in Iron County. These roads are nearly level with the adjacent peatlands and wetlands. Sandy Beach Road is of special concern due to the degraded town road surface. The Department would encourage the townships to maintain these roads to ensure they are sustainable for both vehicles and ATVs.

The approaches and embankments to some of the existing snowmobile trail bridges on this proposed route are eroding. This trail proposal suggests re-locating the snowmobile bridge west of Lance's Repair to resolve some of the re-occurring problems related to this erosion. Additionally, many of the wetland fills on the proposed route would benefit from additional culverts to restore natural wetland function. Some existing culverts are plugged or incorrectly placed and should be included on a regular maintenance schedule.

Option B would require the construction of over 3,000 feet of boardwalk across two large wetland crossings. This portion of the route is currently a designated snowmobile trail, allowing use only in winter during frozen conditions. During winter, frozen ground

conditions limit negative effects on the wetland. Boardwalk construction, education, and enforcement would reduce off-trail riding and mitigate damage to wetland resources along this route.

### ***Endangered/Threatened/Special Concern Species and Native Communities***

Following is a list of rare species (endangered, threatened, or special concern) that occur one or more times within the 15 meter wide corridor of the proposed Iron County trail segment. This data was gathered from the Natural Heritage Inventory database

- Arrowgrass (wildflower)
- Eastern purple bladderwort (wildflower)
- Greater redhorse (fish)
- Lake darter (dragonfly)
- Marsh willow-herb (wildflower)
- Osprey
- Perlodid stonefly
- Pugnose shiner (fish)
- Round pigtoe (mussel)

In addition to the above rare plants and animals, Wisconsin's Natural Heritage Inventory lists the following plant communities as occurring within the corridor of the proposed Iron County trail segment:

- Northern Mesic Forest
- Northern Sedge Meadow
- Hardwood Swamp
- Open Bog, Stream - fast, hard, warm

Placement of a trail within this corridor would require additional site inspections to identify a trail location that avoids disturbance of protected species. If certain impacts are unavoidable, the Department will need to apply for incidental take permits.

### **3. Safety**

Most of the proposed trail segments would be shared with hikers, bikers, motorcycles, and other motor vehicles, including logging trucks and equipment. In order to provide the safest experience for all users, the trail would be constructed wide enough to allow vehicles to pass both directions. Sections of the trail may need to have reduced speed limits posted to ensure user safety. Staff would be required to patrol the trail for emergency service and enforcement. The trail would need to be regularly inspected in order to alert users of un-safe conditions, or to initiate prompt repair.

The trails pass through a number of forest production areas where logging is frequently taking place. ATV safety would be promoted much like snowmobile safety is promoted on the trail. Trail users would be alerted by warning signs of the logging activity and the hazards of falling trees and logging equipment operation. Loggers would similarly need to keep aware of the trail and trail users. Loggers would be required to deck their logs remotely from the trail to reduce the hazard of equipment operation on the trail; to remove the attractive nuisance of climbing and riding on log piles adjacent to the trail; and to prevent collision

with the log piles. Off-trail wood decking will require additional areas be cleared on timber sales to provide the room to operate the logging equipment and trucks.

### **Vilas/Oneida County Trail Potential Safety Issues**

The Department of Transportation (DOT) expressed concern with the number of times the trail is proposed to cross Highway 47 south of Lake Tomahawk. Because of private ownership of the abandoned railroad grade, the snowmobile trail has been re-routed and there are a total of five state highway crossings proposed. During the snowmobile season there is less vehicle traffic on the highway than during the summer.

The proposed trail utilizes a snowmobile trail which passes through the Village of Lake Tomahawk, adjacent to residential backyards and businesses. Speed limits would need to be posted and strictly enforced. Dust treatment of the trail would improve visibility for the ATV riders as well as mitigate the neighbor concerns about dust.

### **Iron County Trail Potential Safety Issues**

The proposed trail crosses Highway 51 at two locations, including near the intersection of Highways 47 and 51. The Department of Transportation has expressed concerns for safety at these crossings.

Development of the proposed ATV trail would improve safety for snowmobilers and other vehicles by moving snowmobiles off of Circle Lily Rd.

## **4. Social Considerations**

ATV trail riding is an increasingly popular recreational activity in Wisconsin. More than 244,000 ATVs have been registered in Wisconsin for use on public land—four times the number registered in 1993. According to the Statewide Comprehensive Outdoor Recreation Plan (SCORP), 23.4% of Wisconsin residents operated an ATV sometime over the last two years. Other research suggests that slightly less than 6% of Wisconsin residents are active ATVers. The SCORP also reports that the ATV market is projected to become saturated by 2010, and use is expected to level off at that time.

According to the 1999 Socioeconomics Forest Assessment, 66% of NHAL regional households (the six counties surrounding the NHAL) indicated their outdoor recreation was primarily passive, as compared to motorized (12%) and hunters (21%).

A survey by the Minocqua, Arbor Vitae, Woodruff Area Chamber of Commerce indicated that 56.6% of residents “completely” or “somewhat” disagree with the statement “I would like to see ATV trails made available in the area.” 29.2% agreed either completely or somewhat with this statement.

The majority of public comments received about the two trail proposals were opposed to the development of ATV trails on the NHAL. However, the collection of public comment was not set up to be a statistically valid survey. Rather, the public comment was intended to collect qualitative comments and personal value preferences on the placement of ATV trails on this state forest.

Much of the trail in the two proposals is currently used by a variety of recreational visitors. Hunters use the trail both directly, by walking, and indirectly as truck access to more remote areas of the forest. SCORP suggests “highly competitive or antagonistic” conflict is expected between ATVers and hunters. Two state forests that currently operate ATV trails during the summer close their trails at the end of October or mid-November to accommodate hunters. SCORP also found “highly competitive or antagonistic” interaction between ATVs and horseback riders, mountain bikers, cross country skiers, linear trail bikers, hikers, wildlife watchers, and campers. The only group that did not have this level of conflict with ATVs was snowmobiling, which rated “moderately to mildly competitive.” SCORP suggests separating antagonistic activities and managing the interactions with law enforcement. The Department would need to further examine this conflict potential if the trail is built.

A frequent comment from ATVers statewide is that trails are in poor condition due to heavy use and they need more trails in order to disperse the level of use and minimize trail degradation. Not all riders want improved trails, and some prefer the challenge of riding off established trails. The Department is committed to building only sustainable trails that have minimal negative environmental impacts. These trails may therefore not meet the desires of some ATV riders who want off-road experiences.

During the development of the NHAL master plan, ATV trails were considered at several stages. A six mile loop was suggested in the preferred alternative, which triggered significant public commentary with nearly all of the comments opposed to the development of a loop trail. ATV advocates did not support a small loop trail, but instead sought opportunities for connector trails to other systems.

### **Vilas/Oneida County Trail Social Considerations**

The trail as proposed passes near a number of homes in the Village of Lake Tomahawk. Residents are concerned that the trail will raise dust. The residents accept snowmobile use because it occurs in the winter when their windows are closed, so they don't hear the machines and dust is not an issue. The ATV trail would need to have dust control applied as needed, and speed limits enforced.

The Town of Plum Lake recently passed an ordinance to prohibit ATV use on their town roads and there has been significant opposition to ATVs in the community. The trail as proposed would enter the Village of Sayner but stay on state forest land. ATVs would not be permitted to travel the town road to access services. No trailhead has been proposed for the Sayner terminus, however if the trail is developed, consideration should be made to accommodate a place to park an ATV so trail users could access town services.

Public comments on the ATV trail proposals are summarized in a separate section of this report. It should be noted, however, that comments from the community of Star Lake were opposed to development of a trail in that area.

The northern portion of this proposed trail terminates in Vilas County. In February 2004, Vilas County placed the following countywide question to referendum: “Do you favor allowing the operation of All Terrain Vehicles on Vilas County Forest lands and County-owned land in Vilas County?”. The vote was 5,457 opposed and 3,200 in favor (63% to 37%).

This vote, while it was specific to county owned land, was viewed by many as a gauge of public opinion towards ATVs on state forest land as well. That vote margin was similar to the level of opposition seen in the public comment regarding the proposed trails on NHAL property.

The NHAL master plan designated the Bittersweet Recreation Area as a semi-remote area. Visitors will likely arrive with some expectation of quiet solitude. Though the area is adjacent to Highway 70, the public remained concerned about the sound created by ATV use, either on the designated trail or by illegal operation.

### **Iron County Social Considerations**

Iron County is generally supportive of ATVs and actively promotes itself as a destination for trail riding and rallies. Hurley, 25 miles north of Mercer, promotes two large rallies each year, which attract hundreds of ATV riders. Iron County also links their ATV trails to trails in the State of Michigan.

In Vilas County, The Town of Manitowish Waters voted several years ago to close their town roads to ATVs. Option A for the Iron County enters the town of Manitowish Waters but does not use town roads.

Residents along Circle Lily Road were approached about the possibility of allowing ATVs to cross their property as an alternative to boardwalk construction on the west side of the road. They were opposed to ATV use on their private property.

### **5. Economic Considerations**

Research by the Department and University of Wisconsin in 1996 indicated that motorized recreationists spend more than four times as much money as passive recreationists. However, due to their predominance in the NHAL region, 38% of regional recreation spending in the region is by passive users, as opposed to 33% by hunters, and 29% by motorized recreationists. These figures are based on current opportunities. Research was focused on the 6-county region around the NHAL and indicates motorized users annually spent just over \$1 million as compared to \$1.3 million for passive users and \$1.2 for hunters.

The Department of Tourism, in cooperation with the Wisconsin ATV Association, surveyed ATV participants on trails in 2003. According to their research, ATVers spend an average of \$523.33 per person per trip, with a trip averaging 3.2 nights. The research expanded this economic impact to every registered ATV in Wisconsin, and an estimated number of out-of-state ATVs, to arrive at an economic impact of nearly \$300 million annually

The Minocqua, Arbor Vitae, Woodruff Area Chamber of Commerce surveyed members about their attitudes towards development of ATV trails. 46.4% of chamber members agreed either “completely” or “somewhat” with the statement “I would like to see ATV trails made available in the area.”

### **Vilas/Oneida County Economics**

The proposed trail passes through the Village of Lake Tomahawk and trail spurs are proposed to access St. Germain, Sayner, and a business near Star Lake. Several businesses in

these communities recognized some economic potential from new ATV users, while others felt that an existing customer base would be displaced by ATV activity. The communities provide gas, lodging, food, bars, and other services.

### **Iron County Economics**

There are several businesses in Mercer, and one adjacent to the proposed trail, that caters to ATV riders. These businesses include dealerships, gas and convenience stores, food, bars, and lodging, and are accessible using existing ATV routes.

## **6. Cooperation**

Through the stakeholders' process, ATV advocates pledged support and cooperation for the trail proposals. The three county governments have offered different levels of assistance with management of the proposed trails. There remains uncertainty of how much actual support would be provided by county agencies or from elected county officials. At this time it appears that the state forest would manage as well as maintain the trail.

The Wisconsin County Forest Association has stated they feel the Department has an obligation to provide trails on the NHAL, as well as other state owned lands, to acknowledge that motorized recreation is a viable outdoor recreational activity that is here to stay and to fulfill the State's mandate for providing ATV-connector routes. Trails on county forests have provided the majority of ATV trails in the northern half of the state. The association has also stated support for the department to be able to access ATV account funding for maintenance and development on state forests.

The ATV community is anxious to improve their image and has advocated for making the trails in this proposal a model for sustainable operation and development. Some clubs have offered support in the form of trail maintenance and organizing trail ambassadors to patrol the trail.

### **Vilas/Oneida County Local Support and Cooperation**

Vilas County currently has .3 miles of funded ATV trail, which connects Land o' Lakes to an ATV trail in Michigan. The proposed trail does not connect to that section. Following the Vilas County referendum, the county board voted unanimously to prohibit ATV use on county land.

Oneida County has two funded ATV trail systems. Neither is near the proposed trail. The County Forest Administrator has shared an interest in developing an ATV system in the county forest's Cassian-Woodboro block, near the south end of the proposed trail. This area has potential to link to the proposed NHAL trail.

There has been at least one meeting to try to develop an ATV club in the Lake Tomahawk area. To date there has been no such club organized.

There is an established alliance of ATV clubs in Vilas County. Several members are interested in serving as volunteer trail patrol ambassadors and in performing the maintenance on the trail.

The railroad bed south of Lake Tomahawk and north of Lyannis Road is a designated bike trail operated under agreement with the Oneida County Biking and Walking Association. The proposed trail would cross that moderately developed trail twice. The proposed ATV trail would use forest roads separated from the bike trail but roughly parallel to it.

### **Iron County Local Support and Cooperation**

Iron County has a combination of funded trail and town road route that ends near the intersection of Highways 47 and 51. They have had difficulty finding partners to maintain this trail; currently once-a-year trail grading by the county is the only maintenance occurring on the segment. Attempts to develop an ATV club in the Mercer area have not been successful. Maintenance of the proposed trail would have to be done by state forest staff if other alternatives could not be found.

Large sections of this proposed trail are on town roads, which would need to be formally designated as ATV routes by the town. A town could also vote to close its roads to use as ATV routes at some point in the future after the trail has been developed.

The state Department of Transportation has expressed an unwillingness to continue funding operation of the Highway 51 wayside at the Manitowish River crossing if ATVs will be using it as well. Early in the stakeholders' planning process, DOT expressed interest in transferring the wayside to Iron County or the Town of Mercer if the trail was built. The Iron County Board member on the stakeholders' group offered his support to accept the wayside if the trail is built.

## **7. Management and Administrative Criteria**

The operation of ATV trails on other public lands has demonstrated the need for diligent monitoring and prompt, active management. This requires maintenance staff, law enforcement staff, and administration. This property has developed a significant recreational user base with an estimated 2.2 million people visiting the NHAL annually. The property currently provides nearly 20% of all campsites under Department management (including all state parks, forests and trails). The effective season for ATV trails runs from just before Memorial Day to about the end of October, the busiest seasons on the state forest. Additional personnel would be required by the property to operate and manage the proposed trails

Because the trail is almost exclusively on state forest property, it is in the best interest of the Department to staff the trail with their own law enforcement rangers. In order to monitor the trail for sustainability and provide adequate law enforcement, a minimum of two additional rangers would be needed at a salary and fringe cost of approximately \$50,000 per year per ranger. These new personnel needs cannot be reallocated from current operations. The estimated annual cost to support each ranger for vehicle miles, equipment, and supplies is \$20,000 per year.

Maintenance of non-winter ATV trails is funded by the Department at \$450/mile. Based on that rate the 63 miles included in the two NHAL trail proposals that are not on town road routes would require at minimum \$28,350 per year for grading, repairs, dust control, fencing, and other supplies to maintain the trail. Maintenance records at the Black River State Forest

suggest actual costs to be closer to \$1,400 per mile per year. Applying that figure to the proposed trails yields an estimated annual maintenance cost of \$88,200.

The total estimated annual cost to operate the two proposed trails, including two rangers and their support, and \$450 per mile maintenance costs, would be \$168,350. Under current law, state forests are not eligible for funding from the state ATV account. Shortfalls in funding for ATV trail operations would be drawn from other state forest operation allotments.

Most of the proposed trails, where they are located on state owned land, are used by other vehicles including cars, trucks, logging trucks, and license plated motorcycles and this type of use would continue. The ATV program does not fund maintenance on trails that are open to other vehicles so funding maintenance on these trails would be inconsistent with existing policy. The trail proposals include roughly 11 miles that rely on town roads in Iron County. Without a club to cover the costs of maintenance on the town roads, local towns would bear the cost to maintain the roads from their existing road maintenance funding.

The total cost to develop the two trail proposals is estimated at \$12.1 million. This estimate covers trail development costs as proposed and does not include trailheads, toilets, washing stations, loading ramps, shelters, campgrounds, or challenge courses frequently requested by riders following development of a trail. To calculate the base trail development cost, the following figures were used:

- \$35,000 per mile to clear a 30 foot corridor, crown, ditch, and surface trail.
- \$700 per foot for short bridges capable of supporting a snowmobile groomer
- \$1,000 per foot for boardwalk, which would require pilings
- \$1,500 per foot for the long span bridges, which would require significant engineering and structure.
- These figures include costs for engineering, administration, and supervision, as well as actual construction costs.

### **Vilas/Oneida County Management and Administrative Criteria**

Estimated cost for trail development by segment:

South End to Lake Tomahawk (4 miles)	\$1,580,000
Lake Tomahawk to Highway 70 (14 miles)	\$490,000
Highway 70 to Sayner (10 miles)	\$590,000
Sayner to Star Lake (15 miles)	\$2,000,000
Spur to St. Germain (6 miles)	\$700,000
Star Lake Parking Lot	<u>\$50,000</u>
	\$5,410,000

There are no existing trail systems under county or local municipal management to which this alternative connects. This linear trail would require trailheads at both ends.

### **Iron County Management and Administrative Criteria**

This trail is located in the far northwest part of the state forest more than 20 miles from the Trout Lake Headquarters. Logistically it would be difficult to administer, patrol, and maintain.

Of the total of 24.9 miles of trail proposed, 14 would be eligible for summer use funding of \$6,300 per year. The remaining 10.9 miles would be located on town road routes and the maintenance would be the responsibility of the local town, including placing and maintaining signs on town road routes.

The heavy reliance on trail-route-trail-route connections poses a risk that the trail could be closed if a future town board chose to close the town road route segments to ATVs.

Estimated cost for trail tread development by segment:

Option A

5.8 miles trail tread	\$ 203,000
Bridges and boardwalks	<u>\$3,108,700</u>
	\$3,311,700

Option B

4.7 miles trail tread	\$ 175,000
Boardwalks	<u>\$4,100,000</u>
	\$4,275,000