DEPARTMENT OF NATURAL RESOURCES

RECORD OF DECISION

In the Matter of the Determination of the Need for an Environmental Impact Statement for the UPM Blandin ATV/OHM Trail project in Aitkin and Itasca Counties, Minnesota

FINDINGS OF FACT, CONCLUSIONS, AND ORDER

FINDINGS OF FACT

1. Itasca County proposes to create a managed, continuous right-of-way, Grant-in-Aid trail authorized for Class I and Class II All Terrain Vehicle (ATV) and Off Highway Motorcycle (OHM) use in Itasca and Aitkin Counties. The proposed 32-mile trail will use existing and new corridors on state, private and industrial forestlands.

2. The proposed project, a recreational trail, requires preparation of a State Environmental Assessment Worksheet (EAW) according to the rules of the Minnesota Environmental Quality Board (EQB) and the Minnesota Environmental Review Program (*Minnesota Rules*, part 4410.4300, subpart 37, items A and B).

3. The Environmental Review Program rules designate the Minnesota Department of Natural Resources (MDNR) as the Responsible Governmental Unit (RGU) for conducting environmental review for recreational trails funded, in whole or part, by grant-in-aid funds administered by the MDNR (*Minnesota Rules* part 4410.4300, subpart 37).

4. The MDNR prepared an EAW for the UPM Blandin ATV/OHM Trail project, pursuant to *Minnesota Rules* part 4410.4300, subpart 37, items A and B.

5. The EAW is incorporated by reference into this Record of Decision on the Determination of Need for an Environmental Impact Statement (EIS).

6. The EAW was filed with the EQB and a notice of its availability was published in the EQB *Monitor* on May 18, 2009. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by the Department to be interested in the proposed project, and to those persons requesting a copy in writing. A press release announcing the availability of the EAW was sent to newspapers, and radio and television stations statewide. Copies of the EAW were also available for public review and inspection at the MDNR Library (St. Paul), MDNR Northeast Regional Headquarters (Grand Rapids), Minneapolis Public Library, Arrowhead Regional Library (Duluth Public Library), Grand Rapids Public Library and Aitkin Public Library. The EAW was also made available to the public via posting on the MDNR's website.

7. The 30-day EAW public review and comment period began May 18, 2009 and ended June 17, 2009, pursuant to *Minnesota Rules*, part 4410.1600. The opportunity was provided to submit written comments on the EAW to the MDNR by U.S. Mail, by facsimile, or electronically by email.

8. During the 30-day EAW public review and comment period, the MDNR received written comments on the EAW from the following agencies or individuals. A copy of the comments are attached to this Record of Decision as Attachment A.

    1. Tamara Cameron, representing the U.S. Army Corps of Engineers (USCE),
    2. Karen Kromar, representing the Minnesota Pollution Control Agency (MPCA),
    3. Dennis A. Gimmestad, representing the Minnesota Historical Society, State Historic Preservation Office (SHPO),
    4. John Reynolds,
    5. Willis Mattison,
    6. Paul Stolen, and
    7. Lois Norrgard and Annah Gardner, representing the Sierra Club North Star Chapter

9. Comments received during the public review and comment period addressed the following topics:

    a. Project Design
    b. Treadway Improvements
    c. Maintenance
    d. Projected Trail Use
    e. Enforcement, Off-Trail Travel, Gating, and Trail Closing
    f. Reroutes
    g. UPM Easement
    h. Permits
    i. Invasive Species
    j. Habitat Fragmentation
    k. Noise and Other Environmental Effects of Project on Wildlife
    l. Species in Greatest Conservation Need (SGCN)
    m. Endangered, Threatened, and Sensitive Species
    n. Snowmobile and Skid Trail Suitability
    o. Steep Slopes
    p. Wetlands
    q. Stream Crossings
    r. Toxic Chemicals
    s. Noise (Residents and Other Non-motorized Forest Users)
    t. Cumulative Effects - Forestry *vs* ATV/OHM Trails
    u. Cumulative Effects - Climate Change

10. The comments and MDNR's response are organized by topic. The written comments received are listed below, as compiled and summarized from the comment letters. Where multiple comments on one specific issue were received, those comments are combined in a summary form that represents the essence of the comment. The MDNR's response follows each comment.

a. Project Design

Comment: Commenter #6 states that discussion of linear facility locational trade-offs is not present in the EAW. The commenter states that there are trade-offs implicit in siting any linear facility and that an EIS is needed to insure proper discussion of the issue.

Response: The locational trade-offs were considered as part of project development as part of defining the route that was ultimately proposed in the EAW. The proposed trail route was carefully and thoughtfully identified by a multi-disciplinary team consisting of representatives from Itasca and Aitkin Counties, MDNR, UPM Blandin Paper Company (UPM Blandin), and other Local Governmental Units (LGUs). The areas of expertise and experience included: ecologists, foresters, hydrologists, wetland specialists, wildlife specialists, fisheries specialists, soil scientists, trail technicians, and natural resource supervisors and managers. The team worked together for several years evaluating this trail route, including site visits and visual inspections, resulting in numerous adjustments before collectively agreeing that the proposed route is in its best possible location to avoid sensitive, unique or significant resources.

Additional locational trade-offs were included in the EAW. EAW Item No. 6b discussed the Quadna Spur portion of the trail that compares an existing road to the steeper power line route. EAW Item 12 discussed the stream crossing of Unnamed creek (T54, R26, S34) that resulted in an additional crossing being needed to avoid a large wetland area.

b. Treadway Improvements

Comment: Commenter #6 requests a better description of the treadway improvements that would be implemented and what conditions of the trail would require them.

Response: Description of treadway improvements were discussed in response to EAW Item 6b and clarification of the topic is provided here. Natural surfaced treadways are composed of suitable substrates that would generally support motorized ATV/OHM traffic but may require additional minor improvements. Some portions of the existing corridors, such as skid trails or snowmobile trails, will require maintenance, repair or improvements before they are deemed suitable for the proposed uses. Treadway improvements will include techniques such as: grading, brushing, filling, hardening (or armoring), signing, resurfacing, tread crowning or out-sloping, placement of ground fabrics, installation of small culverts; or the installation of water management structures such as: water bars, grade or tread dips, sediment traps, or vegetated buffer strips. In general, any effort that improves the strength or stability of the treadway is considered a

treadway improvement. Other examples are directing drainage away from the treadway and in situ elevating of the treadway by supplementing it with materials graded up from ditches. One of the most widespread treadway improvements proposed for the UPM Blandin ATV/OHM Trail is referred to as hardening, which involves surfacing the treadway with gravel or other aggregate material. Hardening of the treadway is effective in stabilizing areas prone to compaction, displacement, and erosion. Examples of special techniques used at stream crossings and for some wetland areas will include the use of geotextile materials (ground fabrics) and/or crushed rock to stabilize the treadway.

c. Maintenance

Comment: Commenter #6 states that project sponsors will have difficulty effectively responding to trail damage and the need for control of invasive species.

Response: The commenter is presumably implying that environmental effects described in the EAW will be greater due to the difficulty of trail maintenance. The environmental effects described in the EAW represent a reasonable level of trail maintenance that is achievable by the project sponsor. The goal of OHV Trails Assistance Program, known as the Grant-In-Aid (GIA) program, is the creation and maintenance of locally initiated trails, which are fostered and administered through financial assistance from the State of Minnesota. The GIA program requires that local club volunteers proposing a GIA trail seek and establish sponsorship from a local unit of government, which along with the MNDR, provides the necessary oversight to the project. As part of acceptance of the grant application, the trail sponsor/proposer agrees to construct, operate, and maintain the proposed trails in accordance with the current Minnesota OHV Trails Assistance Program Instruction Manual. Additional recommendations are provided in MDNR's 2007 report, "*Trail Planning, Design, and Development Guidelines*." Club volunteers have a wide range of knowledge and skills, from little previous experience to highly skilled, such as engineers or independent contractors. MDNR staff provides information and training on a case-by-case basis or during annual meetings for clubs involved in the OHV GIA program. The MDNR is aware of other corridors that have required ongoing repairs. Repeated treadway deterioration on the UPM Blandin ATV/OHM Trail can be avoided and/or minimized by using technical assistance provided by MDNR staff and local units of government to improve planning, design, and development strategies. Existing mechanisms monitor the work the club performs and to remedies performance issues identified through regular audits. Site visits and periodic financial audits ensure that performance reporting is accurate, and that all fiduciary and land management responsibilities are properly executed. Grants are subject to suspension or cancellation if performance issues or reporting discrepancies are identified.

d. Projected Trail Use

Comment: Commenter #6 recommended an EIS be prepared to project traffic levels for the trail to better assess environmental effects from wear and tear on the trail (and need for repair and maintenance), pollution levels and effects on adjacent vegetation, illegal off-trail activities, collision mortality, and disturbance effects on wildlife.

Response: The proposed UPM Blandin ATV/OHM Trail project will generate a moderate amount of trail use by ATV/OHM riders, primarily from local users, and a minimal amount of additional highway vehicle traffic on public roads. Being a linear trail with separate termini, as compared to a loop trail, the level of usage is not expected to grow rapidly. MDNR considers the design and engineering specifications for the UPM Blandin ATV/OHM Trail are appropriate for the moderate level of use anticipated. Management controls and treadway improvements will be applied post-hoc, should traffic estimates prove inadequate or the level of trail damage prove unacceptable. Actual traffic counts will only be possible following project completion. Trails are designed to be sustainable, whether use is low or high; although with high usage, additional maintenance would be anticipated. The variation in the levels of trail use are expected to be within a range that will not measurably change the level of effects including pollution, disturbance of vegetation, collision mortality, and other disturbances affecting wildlife that are described in the EAW.

e. Enforcement, Off-Trail Travel, Gating, and Trail Closing

Comment: Commenters #4, #6, and #7 state that enforcement is inadequate and will result in an unacceptable amount of environmental damage, private and public property trespass, travel on blocked roads, off-road travel, and conflicts with traditional forest users. For these reasons, commenter #7 requests the completion of an EIS.

Response: Additional environmental effects of off-trail travel are expected to be minor because it is an illegal activity. Those who venture off-trail or onto unauthorized gated or blocked trails illegally, whatever the reason, or those who knowingly or unknowingly trespass, or cause rutting, erosion or damage to vegetation and wetlands, will be subject to citation. Enforcement has grown commensurate with increased numbers of riders and registered vehicles. Increased enforcement has been assigned to recently reclassified forests to boost compliance with new riding restrictions and trail designations. The MDNR has initiated 'Special Work Details' to address chronic or localized enforcement problems. The MDNR works closely with other law enforcement agencies, notably County Sheriff's Offices, to address OHV-related issues, safety training, and field enforcement.

MDNR created an OHV Safety and Conservation Program, known as the Trail Ambassador Program. Although volunteers of the Trail Ambassadors Program are not delegated enforcement responsibilities, they provide valuable eyes and ears in the forest and will assist in trail monitoring and incident reporting.

Following completion of the 2003-04' statewide trail inventory and institution of the WHEELS database, which is used to store and track route data, the MDNR is well positioned to monitor and enforce off-trail OHV travel on state lands. The MDNR believes that its focus on off-highway vehicle monitoring and enforcement will make a substantial, lasting difference in terms of rider compliance with state law.

f. Reroutes

Comment: Commenter #6 states that the EAW is not complete because the location of the trail is not yet known in some sensitive areas and it will likely be moved to avoid additional wetland impacts.

Response: On-the-ground assessments during the planning and review process improve the likelihood that the final trail alignment is suitable after environmental review is completed. Wetland delineation will occur prior to trail construction and, to avoid wetland impacts, only minor trail reroutes outside of the 20-foot right-of-way are anticipated. Of the 4.1 acres of potential wetland impacts, no trail reroutes are anticipated for 3.6 acres of the total wetland impact because they are situated on existing corridors. Of the new corridor segments, only 0.5 acre of wetland disturbance is anticipated. Of this, only 0.2 acre of wetland occurs within natural forest communities. The other 0.3 acre occurs within Hill City, forest opening, powerline clearing, along roadway edge, or within/adjacent to a spruce plantation. Trail adjustments within these already disturbed habitats will result in minor additional impacts. Therefore, only about 0.2 miles of treadway has a higher potential of causing a reroute and could have an impact on sensitive areas. Any reroute that is necessary will be designed to limit possible environmental effects on sensitive natural resources.

g. UPM Easement

Comment: Commenter #5 questions how the establishment of the trail would affect the current or future establishment of non-motorized trails in the UPM conservation easement.

Response: UPM Blandin and the MDNR currently have a draft agreement on 187,000 acres of UPM Blandin lands in the vicinity of the proposed UPM Blandin GIA ATV/OHM Trail. A portion of the proposed UPM Blandin GIA ATV/OHM Trail and several other recreational trails, including a segment of the non-motorized North Country National Scenic Trail, are included in the draft easement. These trails are consistent with the draft easement and future development of trails is not prohibited. The establishment of the UPM Blandin GIA ATV/OHM Trail will not affect establishment of non-motorized trails within the UPM Blandin lands.

h. Permits

Comment: Commenter #1 notified the project proposer of federal Clean Water Act requirements (CWA Section 404) and provided contact information. Commenter #2 states that the project will require Clean Water Act Section 401 Water Quality Certification or waiver from the Minnesota Pollution Control Agency (MPCA) to verify compliance with state water quality standards. Commenter #2 requests additional response on strategies for meeting additional stormwater management requirements pertaining to Trout Streams under Appendix A of the NPDES/SDS Construction Stormwater Permit (MN R100001).

Response: As noted in the EAW, permits and approvals associated with the proposed project were addressed in Item No. 8. Regulations of the Clean Water Act, Section 404, administered by the USCE, and Section 401, administered by the MPCA, will be followed during the permitting phase of the project. Representatives of the regulatory agencies, including the USCE, MPCA, and local county officials will be apprised of the status of trail development regarding wetlands and stream crossings. The USCE 404 permits and MPCA Water Quality Certification or waivers will be sought on activities requiring such permits. Project managers will continue to coordinate with MDNR staff for their recommendations on design and construction techniques applied at stream crossings. Wetland and stream crossing mitigation will be incorporated into project designs and described in the permit applications.

A Storm Water Pollution Prevention Plan (SWPPP) will be developed that incorporates the additional requirements applicable to special waters (trout streams), as noted in General Permit Authorization to Discharge Stormwater Associated with Construction Activity under the National Pollutant Discharge Elimination, which was issued August 1, 2008.

Comment: Commenter #3 states that Attachment C provided in the EAW specifically notes that the material in the appendix only includes previously inventoried archaeological sites and that additional research, including field survey, may be necessary to adequately assess the area's potential to contain historic properties.

Response: As was stated in the EAW in response to Item No. 25, no known sites will be disturbed and there is no specific indication that sites are present in the 6 miles of new trail located on previously undisturbed locations. The MDNR requires archaeological and historical cultural resource investigations and field surveys, if necessary, for all land management projects proposed or funded by the department to assess the potential effects of these projects on sites of architectural, historical, or archaeological significance and to assure the MDNR is in compliance with applicable State and Federal laws. The MDNR will coordinate with Itasca County, the project proposer, and the State Historic Preservation Office (SHPO) to assure all applicable requirements have been met. The review process includes the identification of cultural properties, assessment of potential project effects, site evaluation, and consultation with all appropriate agencies, including but not limited to the Minnesota State Historic Preservation Office (SHPO), the Office of the Minnesota State Archaeologist (OSA), and the Minnesota Indian Affairs Council (MIAC), prior to project development. An objective of the MDNR is to avoid effects to cultural resource sites or data through avoidance, including project redesign and facility relocation when and where feasible. If avoidance is not possible, the MDNR and/or Itasca County will consult with the SHPO, the OSA, and the MIAC to determine the nature and scope of any potential site mitigation.

i. Invasive Species

Comment: Commenters #6 and #7 state that the project will increase the spread of invasive species and the EAW does not describe the methods to control spreading infestations, nor does it provide an assessment of potential impacts should there be infestations of invasive species.

Response: MDNR fully assessed the environmental effects of invasive species in the response to Item No. 11 of the EAW. Additional clarification of the topic is presented here. Most of the existing corridors are already at risk to the spread of invasive species. The limited amount of new trail will not measurably increase this risk. The trail sponsor/proposer will construct, operate, and maintain the proposed trails according to the Minnesota OHV Trails Assistance Program Instruction Manual. The Trail Ambassadors, who volunteer as club representatives to monitor the trail, are educated and trained in how to identify invasive and non-native species. The MDNR gives technical assistance to the local unit of government, upon request, and provides guidance to the trail sponsor and trail club, including policies to be used for pest control, pesticide procurement, and protocols for managing equipment and materials related to pest control, as described in '*Discipline Guidelines for Invasive Species Management* (Operational Order #113). Proposers and local units of government, such as trail sponsors, have access to the expertise of county agricultural inspectors, who assist with plant identification; recommend strategies for dealing with nuisance plants; and enforce the Noxious Weed Law (*Minnesota Statutes*, sections 18.75 to 18.88, and *Minnesota Rules*, parts 1505.0730 to 1505.0760).

j. Habitat Fragmentation

Comment: Commenter #6 and #7 state that additional analysis is needed to describe the project's effects on habitat fragmentation. Commenter #7 states that an EIS is needed to explore cumulative effects of habitat fragmentation from the new trail segments and increase in motorized traffic.

Response: This matter was addressed in the EAW in Item No. 11. Additional clarification of the topic is presented below. Habitat fragmentation will be avoided and limited by using existing corridors. Of the 6 miles of new trail alignment, approximately one-third is located in already disturbed habitat of urbanized, forest opening, powerline clearing, and roadway edge; one-third is located within or along the edge of spruce plantations; and one-third is located through hardwood forest. Trail widths will be kept to the minimum allowable for safe travel and sufficient access for maintenance equipment. Vegetation will be cleared to a height of 10-feet and, only a limited number of trees will be removed along new segments, allowing the existing overhead canopy to remain relatively intact.

k. Noise and Other Environmental Effects of Project on Wildlife

Comment: Commenters #6 and #7 request additional information on effects to wildlife from noise and pollution from the project. Both commenters request the preparation of an EIS to address these concerns for wildlife.

Response: As was described in response to Item No 11a of the EAW, the construction, use and management of the UPM Blandin ATV/OHM Trail has the potential to produce vehicle noises that would affect less tolerant species by increasing stress, interfering with communications, modifying behavior, etc. While noise disturbance could affect wildlife along the 32 mile corridor, this disturbance is unlikely to result in a significant increase in mortality or loss of habitat. The bird and mammal species along with other resident animals are somewhat acclimated to motorized traffic that is already present on the local road and trail system. Amphibians use wetlands, wetland buffers, and mesic habitats. Precautions that are described in the wetland and stream crossing discussions provide some measure of protection for many of the wetland birds, amphibians, some reptiles, fishes, mollusks and snails. Some reptiles and amphibians occur in wetlands and uplands. Traffic could affect these individuals but should not isolate or decrease their populations to any extent.

Pollution from ATV/OHM exhaust will dissipate rapidly and have little effect on wildlife.

l. Species in Greatest Conservation Need (SGCN)

Comment: Commenter #6 states that the EAW asserts SGCN species are like common species and no analysis is needed. Commenter #7 believes that much more analysis is needed on how the project would affect SGCNs.

Response: The EAW did not assert that SGCN are like common wildlife species, but rather that SGCNs, which represent a subset of all wildlife in the area, will be affected similarly. The extent that SGCN species would have additional effects beyond other wildlife can be evaluated using "*Tomorrow's Habitat for the Wild and the Rare*," which defines Minnesota's Comprehensive Wildlife Conservation Strategy. The report provides general guidance on species presence and conservation recommendations at the scale of the ecological subsection. Additional information on SGCN species is presented below.

The report contains subsection profiles that identify the goals and priority conservation actions necessary to successfully manage SGCN species over the next ten years and recommends stabilizing and increasing SGCN populations by maintaining, enhancing, and protecting key habitats identified for each subsection. Key habitats for the two subsections in which the UPM Blandin ATV/OHM Trail is proposed are as follows: 1) upland coniferous red-white pine forest, 2) lowland coniferous forest, 3) nonforested wetland, 4) stream, and 5) deep lake habitats. The strategy used to avoid environmental effects to lowland coniferous forest and nonforested wetlands, when selecting the alignment for the UPM Blandin ATV/OHM Trail, was to establish a majority of the trail

on existing corridors, avoid crossing wetlands, and, when wetland disturbance was unavoidable, restrict the width of the corridor to eight feet. Over eighty percent of the trail is located on existing corridors. Most wetland disturbances are expected to occur in the non-key, lowland hardwood forest habitat. Of 4.1 acres of wetland disturbance, approximately 0.2 acre of wetlands are located along new trail segments with intact wetland habitats. The remaining wetlands are found along existing corridors or along new trail segments that travel through developed or semi-developed areas, where, in most cases, wetlands and/or surrounding habitats have already been partially disturbed. Trail segments that pass through upland pine forest habitats will be located on existing corridors. Conservation priority actions for the 'stream' key habitat include maintaining good water quality and stream connectivity to associated habitats. A minor amount of riparian habitat will be disturbed at new stream crossings. Design and construction of approaches and stream crossings will produce minor amounts of sedimentation and will have minor effects on the course, current or cross-section of any stream in the project area (See Findings 11g).

m. Endangered, Threatened and Sensitive Species

Comment: Commenter #7 is concerned with the environmental effects of the project on sensitive species and suggested that it would be advantageous to prepare an Environmental Impact Statement (EIS). The commenter also wanted to know why only three of the nine species that were identified within a one-mile radius of the project area were considered to be potentially affected by the project.

Response: The degree to which the project will affect threatened, endangered or sensitive species is addressed in response to EAW Item No. 11b. Standard species review techniques, using Natural Heritage Information System (NHIS) data, were employed to determine potential environmental effects on endangered and threatened species and species of special concern found in the project area. Distance thresholds and species behavioral characteristics are key attributes used for determining potential effects on a species. Distance thresholds were applied to other species to determine that the species were not potentially affected by the project.

The white adder's-mouth and club-spur orchids are found in conifer swamps. Ecologists worked with trail planners to modify the location of the trail to avoid rare plant populations and potential habitats. Ecologists familiar with species habitat requirements determined that the potential effects of the proposed project will be minor. Mesic hardwood forests were avoided to reduce effects on potential salamander populations. The project corridor occurs in mature forests that are typically used for foraging and nesting by Red-shouldered Hawks. With minimal clearing of mature trees, the project will have minimal effect on the hawk.

n. Snowmobile and Skid Trail Suitability

Comment: Commenters #6 and #7 stated concerns about the suitability of snowmobile and skid trails to be used as ATV/OHM trails with respect to wetland impacts and soil suitability.

Response: The EAW addressed wetland impacts of converting snowmobile and skid trails to ATV/OHM trails in response to Item No. 12. The EAW also addressed the environmental effect from converting snowmobile and skid trails to ATV/OHM trails associated with soil suitability in response to Item No. 19. Additional clarification of the topic is presented below. Approximately 7 miles of snowmobile trails and 3 miles of skid trails will be used in the construction of this 32-mile trail. While the re-use and/or retro-fitting of existing corridors is less expensive, easier, and preferable to clearing new routes through the forest, not all existing corridors are suited to summer ATV/OHM use in their current condition. The segments of existing trail that were included in the final project proposal have all been evaluated by the review team and deemed suitable for ATV and OHM travel. Sections of snowmobile/skid trail that have extensive wetlands were eliminated from further consideration. Segments that were selected will require some treadway improvement or modification; all will be made sustainable for ATV and OHM travel prior to trail operations. For instance, one segment of a snowmobile trail that crossed a large wetland was rejected as an ATV/OHM trail. The trail was re-routed along a new corridor that will require construction of a new bridge. Existing water crossings will be carefully inspected and replaced or improved as necessary.

o. Steep Slopes

Comment: Commenter #6 states that side-hilling of trail will widen the trail more than what was presented in EAW. Commenter #7 recommends that no trails should be built on or near steep slopes.

Response: The majority of the steep slopes identified along the proposed trail corridor are located along the power line corridor of the Quadna Spur, which contains slopes ranging from 12% to 40%. The power line alternative will not be used if permission is granted to use the existing forest road alignment, which is the preferred route. If permission to use the forest road is not granted, the power line corridor is not likely to be used due to safety concerns as well as high costs associated with developing and maintaining a sustainable route through the area. Besides the Quadna Spur segment, only one other segment, which is approximately 200-feet long, will need some side slope construction. The treadway along this segment will be 7-feet to 8-feet wide, and construction, including any side sloping, will not exceed the proposed 12-foot construction zone. Construction along this segment will proceed along a rolling grade, which employs a design pattern that creates a series of dips, climbs and crests, drainage crossings, and edge buffers that are intrinsically linked and purposefully designed to form a sustainable trail. The rolling grade design pattern takes many variables into consideration, including: tread material and compaction, displacement, and erosion

forces; types and amount of use; wet and dry conditions; topography and drainage patterns and flow rates; site vegetation; tread width and grade; and user safety.

p. Wetlands

Comment: Commenter #7 states concerns about how the proposed project would affect wetlands including how the project complies with the Wetland Conservation Act Commenter #6 states that wetland delineation is needed to assess wetlands impacts including: 1) number of linear feet proposed to be crossed, based on delineation; 2) type of wetlands crossed and crossing methods; 3) BMPS for avoiding wetlands and buffering and length of trail within an ecological significant zone.

Response: The maximum 4.1 acre wetland impact was described in response to EAW Item No. 12. Additional clarification and information of the topic is presented below. Estimates of wetland effects were developed from examining the Natural Resource Conservation Service (NRCS) county soil survey-GIS layer for location of soils classified 'hydric' and those with hydric inclusions. It is not a standard requirement for projects to have wetlands delineated prior to completion of an EAW. The EAW is developed on the basis of existing information available at the time the environmental analysis is conducted. Preliminary trail alignment investigations indicate that most of the wetlands disturbed by trail construction are classified as hardwood swamp, (Type 7); a lesser area of wet meadow (Type 2) and shallow marsh wetlands (Type 3) will be affected. Only 0.5 acre of wetland is proposed to be disturbed by new trail construction. No drainage of wetlands will occur. On corridors potentially needing fill, such as snowmobile and skid trail segments, it is estimated that an additional 3.6 acres will be disturbed. It is prudent to use existing corridors whenever possible; however, using existing corridors can, in some cases, result in wetland disturbances. By using existing corridors for designing the alignment of recreational trails, the amount of forest fragmentation and vegetation and soil disturbance can be minimized. To further minimize impacts on wetlands, the width of the trail crossing wetlands will be kept to eight feet. Geotextile blankets, used to reduce soil disturbances at wetland crossings, would also improve treadway stability. As noted in the EAW under Item No. 12, wetland sequencing requirements of the Wetlands Conservation Act (WCA) will be followed during all phases of project development. WCA permits require field delineation of affected wetlands. When unavoidable impacts are identified, the impact will be minimized and wetland losses will be mitigated according to WCA requirements. Administration of WCA is through Local Governmental Units (LGU), which administer the review and approval of wetland delineations and determinations, wetland exemption/no-loss applications, and wetland replacement plan applications.

q. Stream Crossings

Comment: Commenter #7 had questions about measures being taken to protect streams at stream crossings and it appears certain conservation measures were understood to not have been considered at Pokegama Creek and Smith Creek.

Response: Measures to protect streams at stream crossing locations was addressed in response to EAW Item No. 12. Additional clarification of the topic is presented below. Rapid stabilization measures will be employed at treadway approaches to prevent runoff from flowing into the creek bed. The treadway will be designed with a slope or crown to shed precipitation away from the pathway towards the naturally vegetated areas nearby. The trails approaches will be buffered by natural forest vegetation and positioned above stream channels to prevent affecting stream flow patterns. Crushed rock will be applied to approaches to improve their stability. Crushed rock is advantageous to gravel because it contains fewer fine particles that could erode and provides more resistance to erosive forces and displacement caused by ATV/OHM traffic. Geotextile fabric could be applied below the crushed rock on some areas that show higher erosion potential. Exposed areas will be reseeded after construction is completed and mulch will be applied to improve soil stability. After the treadway has been constructed, monitoring and repairs will be necessary to insure soil compaction and displacement do not form drainage catchments or erosion channels.

Pokegama Creek and Smith Creek crossings already have existing treadways and bridgeworks in place. Pokegama treadway is situated on an abandoned forest road segment that had previously been graveled. Some additional aggregate will be applied to approaches at this location. The Smith Creek crossing will use an existing snowmobile trail. The approach is gentle but, due to organic content of soils, would require hardening to prevent rutting. The gentle slopes would allow treadway runoff to be diverted into existing vegetative buffers. Although numerous culverts will be used to prevent water from settling and/or flowing along the treadway, only bridges will be installed at stream crossings. Bridges are least intrusive of crossing options available because little, if any, soil displacement would occur within the stream channels. The bridges will be positioned on supports that are constructed and placed over the stream channel.

r. Toxic Chemicals

Comment: Commenter #7 states that more study is needed on toxic effects of extended use of the trail by ATVs/OHMs.

Response: The only potential toxic material released to the environment by ATV/OHM use is exhaust and a small risk of potential spills from refueling or after accidents, which would occur infrequently.

s. Noise (Residents and Other Non-motorized Forest Users)

Comment: Commenter #7 states that Minnesotans seeking a quiet outdoor experience will be negatively affected by the noise from increased ATV/OHM traffic.

Response: This topic was addressed in the response to EAW Item No. 24 and additional clarification of the topic is presented below. Vehicle noise is an 'existing' condition and regular occurrence over one-half of the proposed 32-mile trail. Additional noise will be generated by the project from project-related construction and during regular trail

operations. As trail traffic increases, an increase in noise over current conditions can be expected. Some may find the ATV/OHM engine sound objectionable, especially given the low ambient noise levels typical of rural areas.

Under normal operating conditions, neither the MPCA's Daytime Ambient Noise Standards L_{50} (level exceeded 50% of the time) of 60 dB(A) nor L_{10} (level exceeded 10% of the time) of 65 dB(A) will be exceeded by trail users. There are very few (3) 'sensitive noise receptors' (e.g., occupied dwellings) located within 150 feet of the proposed trail. Where the trail is within that range of an occupied dwelling, the residents have expressed support for the trail project and, in some cases, granted permission to align the trail through their property. Noise propagation will be partially mitigated by dense understory vegetation and foliage on trees. Leaves are typically fully developed by the middle of the season and have fallen during the months of October and November, the typical end of the trail season. Topography, wind and distance between noise source and receiver will act to attenuate and 'muffle' vehicle generated noise.

In most cases designated OHV trails are spatially separated from designated non-motorized use areas to reduce the potential for visitor conflict or displacement. Non-motorized forest users benefit from many other areas that are specifically designated for non-motorized use, e.g., WMAs, SNAs, State Parks, Motor-Limited or 'Closed' State Forest areas. The proposal does not provide motorized access to these areas, which are generally reserved for non-motorized recreation. The likelihood of experiencing motor disturbance in these areas is low. Over the long term, OHV noise levels, in the aggregate, are expected to decline as quieter machines are introduced.

t. Cumulative Effects – Forestry *vs* ATV/OHM Trails

Comment: Commenters #4 and #6 state that the EAW includes an inaccurate comparison of impacts of logging operations to designated ATV trails. Commenter #6 states that cumulative impacts need to be defined further because the comparison of impacts of forestry practices with impacts of ATV/OHMs is not accurate.

Response: The discussion comparing forest management activities with ATV trail construction and use was an effort to indicate the cumulative effects of timber management and recreational trails on a given landscape. A comparison of environmental effects caused by ATV trail developments to those caused by forest management is reasonable considering the necessity of developments related to timber harvest, such as harvest haul roads, skid trails, log landings, wetland crossings, etc. Although individual stands of timber are managed over short- or long-term rotations, with stands entered approximately every thirty to fifty years, mills operate continuously and require a continuous supply of timber or pulp materials. On a landscape or watershed scale, harvesting is a continuous occurrence, as is evident by the need to upkeep many forest roads. In comparison, an ATV trail would be treated in a similar fashion as a forest road, with a need for regular maintenance as wear occurs.

Managed forested habitat encompasses the trail alignment. Forests are being managed under multiple use concepts and within principles of sustainable forestry, as certified through the Forest Stewardship Council or the Sustainable Forestry Initiative. In a 2008 MDNR report on "*Timber Harvesting and Forest Management Guidelines on Public and Private Forest Land in Minnesota, (Monitoring for Implementation 2004, 2005, 2006 with Results Compared to Baseline Monitoring Report)*" by Richard Dahlman, the results of monitoring implementation of Minnesota Forest Resources Council's (MFRC) timber harvest/forest management guidelines on public and private forestlands are presented. An evaluation of environmental effects of forest harvests on certified forests was presented. Guidelines indicated that basic infrastructure of roads, skid trails, and landings that collectively occupy less than three percent of each harvest is acceptable. Forty percent of forest roads remain active after completion of harvest, with those active after harvest used for many other activities besides forest management. Essentially all environmental effects related to ATV recreational trails are exhibited in the forest management industry, albeit the temporal nature of each is variable, and therefore in that sense, is less comparable.

u. Cumulative Effects - Climate Change

Comment: Commenter #7 states that the project will contribute to climate change and make forest ecosystems more vulnerable to climate change (causing some fragmentation). The commenter wants to know how this project would meet the requirements of the Minnesota 2007 Next Generation Energy Act.

Response: Under 2008 *Minnesota Statutes* 296A.18, apportionment of tax lists allocations for motorboat and snowmobile use was 2.5 percent and OHM use was 0.046 percent. The release of carbon dioxide from ATV/OHMs within Minnesota is minor when compared to the carbon dioxide release from other recreational venues, and minimal relative to combustion sources of other economic sectors. The release of carbon dioxide from ATV/OHM's during rides conducted on the UPM Blandin ATV/OHM Trail will be a very small percentage of the total released by these vehicles throughout the state. The loss of forest cover and wetlands, which would make forest ecosystems more vulnerable to climate change, has been minimized through the use of existing corridors for over eighty percent of the trail's length.

Next Generation Energy Act establishes two overall energy goals for the state: to reduce per capita use of fossil fuels by 15 percent by 2015 and to derive 25 percent of the total energy used in the state from renewable power sources by 2025. The study does not establish any specific goals for each sector of the State's economy.

11. Based upon the information contained in the EAW, provided in the written comments received, and based on the responses to comments provided in Findings 10, the MDNR has identified the following potential environmental effects associated with the project.

    a. Project Design, Construction, Management and Maintenance
    b. Invasive Species

c. Habitat Fragmentation
d. Wildlife including Species in Greatest Conservation Need
e. Endangered, Threatened, and Sensitive Species
f. Erosion and Sedimentation
g. Aquatic Resources
h. Wetlands
i. Traffic and Vehicle Related Emissions
j. Release of Toxic Substances
k. Noise - Nearby Human Receptors
l. Odors and Dust
m. Compatibility with Plans, Land Use Regulations, and Nearby Resource Management Areas
n. Archeological, Historical, and Architectural Resources
o. Cumulative Environmental Effects

a. Project Design, Construction, Management and Maintenance

This topic is addressed in the EAW in Item No. 6, Item No. 9, and Item No. 11a. The UPM Blandin Trail will extend approximately 32 miles from Itasca County Road (CR) 449, 7 miles southwest of Grand Rapids, in a circuitous route to the intersection of US Highway (US) 169 and Trunk Highway (TH) 200 in Hill City, Minnesota. The trail corridor crosses both public and private lands, with the majority under UPM Blandin ownership and lesser amounts under county, state, and private non-industrial ownership. New trail segments and existing corridors have been selected and jointed to create the UPM Blandin ATV/OHM Trail alignment. The Trail's route will include approximately 6 miles of new trail construction and 26 miles of existing corridor--10 miles of forest roads, 3 miles of skid trails, 7 miles of GIA snowmobile trails, and 6 miles of the Rabey Line GIA ATV/snowmobile Trail, referred to as the Rabey Line Trail.

The new alignment will require clearing pathways through semi-disturbed natural or managed vegetation and improving the treadway appropriate to the character of the substrate. Existing corridors are classified into four types of treadway already in place: forest road, skid trail, snowmobile trail, and ATV trail. Existing corridors contain active or previously active compacted pathways that had already been partially cleared of natural vegetation.

Two alternatives are being considered for a two-mile segment, referred to as the Quadna Spur, which would extend southward from the Rabey Line Trail to the Quadna Mountain area. The preferred alternative would use an existing road (former forest road), if permission from the landowner can be secured. The powerline alternative has steep slopes that are unfavorable for trail development and will require extra resources to make the treadway sustainable. The EAW included the powerline alternative in the evaluation of the environmental effects for the project. No improvements along the forest roads and the Rabey Line Trail corridors will be necessary. The project crosses a portion of Hill River State Forest. The project area is generally rural and composed of heavily forested

lands interspersed with wetlands. The corridor will transect several small streams and public roads.

The width of the project's right-of-way was set at twenty feet for the length of the trail corridor. The width is set large enough to allow adjustments in trail placement, improve safety, and avoid damaging trees or other natural features. This width for the entire route results in maximum area of impact of 77 acres. The actual construction zone will require no more than a twelve foot wide corridor. The width of the construction zone will range from a minimum of seven feet, to accommodate standard trail construction and maintenance equipment, to a maximum of twelve feet in areas requiring additional grading and trail bed work. The treadway will average approximately eight-feet wide.

New corridors will be flagged and cleared of brush to the width of the construction zone. Construction will be necessary on new corridors, skid trails, and snowmobile trail segments to improve treadway conditions and prepare wetland/poor soil areas. Treadway improvements on existing trail surfaces will include: general treadway upgrading, such as filling ruts and holes; correcting persistent trail potholes, rutting, erosion hazards and other conditions that reduce the stability of the trail bed. Some new corridors and sections of skid trails and snowmobile trails will require increasing the treadway elevation, out sloping of the trail bed, installing or modifying culverts, surface blading and, in some cases, installing geotextile construction fabric or geocells. Small load bearing trucks and dozers will be used for trail construction. Trail hardening materials will be available from nearby gravel pits. UPM Blandin has several existing borrow pits in close proximity to the trail that would be exclusively used for segments crossing UPM Blandin lands. Private or public pits will be used for supplying aggregate to the surface of non-company segments.

The UPM Blandin ATV/OHM Trail project was proposed to help reduce potential damage on unmanaged areas and non-designated routes. Volunteer Trail Ambassadors, under the MDNR's program authorized and funded by the Minnesota legislature, will be organized by local clubs to assist in monitoring trail use and condition of the UPM Blandin ATV/OHM Trail.

b. Invasive Species

This topic is addressed in the EAW in Item No. 11a. Trail construction and trail users could contribute to the spread of invasive species. Additional spread of invasive species will be avoided and minimized to a large extent by using existing corridors. Only nineteen percent of the corridor will be on new alignment. Of the 6 miles of new alignment (nineteen percent of the trail), approximately one-third is situated in disturbed habitat of urbanized, forest opening, powerline clearing, and roadway edge; one-third within or along the edge of spruce plantations, and one-third through hardwood forest. Trail widths will be kept to the minimum allowable for safe travel and sufficient access for maintenance equipment. The UPM Blandin ATV/OHM Trail will be monitored for invasive species during the first year after construction and periodically thereafter. The GIA designation of the trail will encourage users to ride on its monitored corridor and

consequently will reduce the potential of spreading invasive species along less monitored trails and through other woodlands.

The use of fill material from borrow pits could create an opportunity for invasive species to be moved or introduced into new areas. Top organic layers will be removed prior to excavating fill materials so that only mineral soils will be distributed along the treadway. Borrow pits will be situated as close to the work site as allowable. The borrow pits and access routes will not be located near natural areas.

In February 2009, the Division of Parks and Trails adopted '*Discipline Guidelines for Invasive Species Management*' (per MDNR Operational Order #113). Referenced within the guidelines are division policies to be used for pest control, pesticide procurement and associated protocols for managing equipment and materials related to pest control (Operation Order #59 and the divisional supplement, Pesticide and Pest Control Guidelines). The orders apply to all MDNR resource management activities and all actions the MDNR permits, funds or regulates, including GIA trails. Expertise of county agricultural inspectors will be available to assist with the identification of invasive species, the development of strategies dealing with nuisance plants and the enforcement of the Noxious Weed Law (*Minnesota Statutes*, sections 18.75 to 18.88, and *Minnesota Rules*, parts 1505.0730 to 1505.0760).

c. Habitat Fragmentation

This topic is addressed in the EAW in Item No. 11a. Habitat fragmentation is caused by humans when native vegetation is cleared for human activities. Habitats that were once continuous become divided into separate fragments. Habitat fragmentation effects to wildlife habitat are: decreased total habitat area, decreased amount of interior habitat, increased amount of habitat edge and increased isolation of certain habitats.

Habitat fragmentation effects from this project are associated with the 6 miles of new trail corridor that is proposed on naturally vegetated land. Approximately 2 miles of new trail segments will cross relatively intact hardwood forest habitats.

Trail widths are proposed to be kept at the minimum allowable for safe travel and sufficient access for maintenance equipment. Vegetation will only be cleared to a height of 10-feet, and through careful siting of the trail, only a limited number of trees will be removed along new segments. This would allow the existing overhead canopy to remain relatively intact. Habitat fragmentation from the proposed trail was avoided and minimized to a large extent by using existing corridors.

d. Wildlife including Species in Greatest Conservation Need

This topic is addressed in the EAW in Item No. 11. Wildlife may be disturbed by human activity and the noise associated with trail use. Effects on wildlife are possible from trail construction and traffic generated by regular trail use and maintenance of the 32 mile trail corridor. Breeding and nonbreeding ranges and forage and nesting ranges, etc., could

change somewhat as a result of project implementation. Disturbance factors that influence species behavior could cause displacement of some wildlife species. Some species are less tolerant to human intrusion and/or are more sensitive to noise. The consequence of an increase in intra-specific competition could increase stress among some individuals. Species less tolerant to noise or human intrusion would adjust their behavior and usage of lands adjacent to the trail. The adjustments in behavior could place additional stress on certain individuals, causing them to be less competitive and possibly less productive. Some of the less mobile creatures, such as salamanders, snakes, and frogs, etc., could be affected by the additional habitat fragmentation and have an increased risk of being crushed when crossing the trail.

The present distribution and behavior of wildlife represent adjustments that occurred prior to project development and are influenced by traffic on the existing road and trail system. Most wildlife species identified in the U.S. Fish and Wildlife Service Gap Analysis Program (GAP) and SGCN analysis already tolerate some measure of human activity along the existing roads and trails. Many of the existing trail segments of the proposed alignment already support motorized traffic, which on occasion reaches moderate to high levels. Avoidance measures taken for endangered, threatened, and sensitive species, as described below, will provide coincidental benefits to GAP and SGCN species requiring similar habitats. The portion of the UPM Blandin ATV/OHM Trail located within Hill River State Forest, which has been identified as an important area for SPGN species, only utilizes existing corridors, including the Rabey Line Trail.

e. Endangered, Threatened, and Sensitive Species

This topic is addressed in the EAW in Item No. 11b. The MDNR Natural Heritage and Nongame Research Program NHIS database for the project was determined to possibly affect three rare species: blunt-lobed grapefern (Endangered), four-toed salamander (Special Concern), and Red-shouldered Hawk (Special Concern). A planning team composed of MDNR staff, including species conservation specialists, representatives from Aitkin and Itasca Counties, and UPM Blandin determined whether potential conflicts with the species could be reduced or eliminated.

The project will avoid affecting these species by changing the trail route and minimizing clearing of trees along new segments. Many other planning activities, such as avoiding wetlands and limiting the amount of new trail construction, helped to reduce the effects on potential habitat for these species. The proposed trail route was moved to avoid plant communities that are recognized habitats of the grapefern. Environmental effects to local salamander populations have been minimized by: 1) routing the trail around habitats such as mesic northern hardwood forest communities, swamps, and wetlands that support the salamanders; 2) maintaining the treadway at or slightly-above the level of the forest floor; and 3) selecting/implementing trail alignments with the least amount of wetland impact. No new trail construction is proposed along the corridor that passes through the Hill River State Forest, which contains suitable habitat for salamanders. The project corridor occurs in mature forests that are typically used for foraging and nesting by Red-

shouldered Hawks. With minimal clearing of mature trees, the project will have minimal effect on the hawk.

f. Erosion and Sedimentation

This topic is addressed in the EAW in Item No. 7, Item No. 10, Item No. 16, and Item No. 19. The impervious nature of the trail and exposure of soil during construction and operation of the trail will result in increased runoff and erosion. With a 20-foot right-of-way, the 32 mile trail is 77 acres in size. Existing impervious surfaces of the project area cover 33 acres; 36 acres are amply vegetated uplands or wetland. The existing skid trail surface is considered to be partially impervious, having vegetated borders and compacted soils. Skid trails cover an additional 8 acres. After project completion, an additional 21 acres of impervious surface will be created and dispersed along the linear corridor. Hardened surfaces, especially gravel road or hardened trail treadways, can act like impervious surfaces, but they are not true impervious surfaces such as asphalt, concrete, or buildings.

The calculated number of cubic yards of soil moved, estimated at 31,163 cubic yards for the 16 miles of trail needing work, is a conservatively large estimate. The estimate is based on the maximum width of the construction zone (12-feet) and the average depth of fill (10-inches) for new corridors, existing skid trail corridors, and snowmobile trail segments. The actual amount of fill is anticipated to be considerably less. For instance, not all segments will require upgrading, and scraping/berming will occur only on stretches that require treadway upgrades. Some natural surfaces will be suitable for establishing a sustainable treadway requiring only minor additional grading. Soil disturbance would likely be greatest along new segments, including the powerline segment of the Quadna Spur, if completed, and less along existing corridors and snowmobile trails, where some trail surface hardening has already occurred.

The erosion hazard analysis from the Aitkin and Itasca County Soil Surveys indicated that a majority of the trail segments are situated on soils with "slight" or "moderate" erosion hazard rating. A small proportion of the construction zone has been rated as "severe" (13%). The OHM trails suitability analysis indicated that a majority of the trail segments are not limited to OHM trail development. Short portions of the trail exhibit a "somewhat limited" rating for OHM trail development due to ponding, high sand content or steep slope limitations. Approximately eight percent of the trail exhibits a "very limited" rating because of water erosion and steep slopes. Soil ratings for forest road development indicated that a majority of the trail soils are highly or moderately favorable for trail construction. A good to fair performance of the soils along these trail corridors can be expected. Soils with fair performance have one of the following limitations: moderate slope, sandiness, or low strength limitations. The "poorly suited" segments, approximately thirteen percent of the construction corridor, indicate that the soil has one or more unfavorable properties and requires special design, extra maintenance, and costly alterations. The potential for rutting analysis indicated that rutting is considered a problem for some segments due to low soil strength.

When properly designed and constructed, the additional impervious surfaces will yield a small amount of additional sediment in runoff, mostly along the steeper segments. The increases in erosion will occur across a long narrow corridor that passes through an otherwise mostly vegetated landscape, which will act as a buffer to capture most of the runoff.

Where limitations are identified along any portion of the trail, best management practices will be used to create a sustainable treadway that will be regularly monitored and maintained. For segments that exhibit a moderate-to-severe erosion hazard, best erosion control techniques will be applied. Trail erosion is minimized through a combination of good design, treadway placement (in relation to slope or side-slope), the proper use of soil materials, and/or treadway hardening techniques that resist compaction, displacement, and erosion. Reducing treadway slope and the size of each segment's local watershed help to minimize the erosion hazard. Treadway designs that are implemented in erosion hazard areas include: installing dips and crests or rolling sloped treadways, revegetating all exposed soils surfaces, and installing water bars.

Trail use results in some compaction and/or displacement of treadway surface materials. The trail needs an established maintenance program because of the trails exposure to weathering events and wear from routine ATV/OHM traffic. Stipulations of the GIA trail program require that the UPM Blandin ATV/OHM Trail have a maintenance agreement in place to insure long-term sustainability of the trail bed. If problem areas are identified, erosion control measures will be implemented and, if necessary, the trail segment will be reshaped and/or hardened to reduce the hazard.

Construction related erosion and sedimentation will be minimized by preparation and adherence to a SWPPP that is required as part of the General Stormwater Permit for Construction Activities Permit application materials will include engineering plans that show details of appropriate best management practices for the project area.

g. Aquatic Resources

This topic is addressed in the EAW in Item No. 11a, Item No. 12, Item No. 14, and Item No. 16. The UPM Blandin ATV/OHM Trail crosses numerous minor watersheds within the following two major watersheds--the Mississippi Headwaters and the Mississippi Grand Rapids Watersheds. The proposed trail crosses seven Public Waters (PWI), two of which are designated trout streams. These crossings include, starting from the Northern Terminus: Pokegama Creek (T54, R26, S27) (designated trout stream), Unnamed Creek (T54, R26, S34), Smith Creek (T53, R26, S1) (designated trout stream), Cook Creek (T53, R25, S17), Split Hand Creek (T53, R25, S21), Unnamed Tributary to Willow River (T52, R25, S23), and Hill Lake (1-142P) (T.52, R.26, Sec 13). The Pokegama Creek crossing will require no bridge construction or culvert placement. The existing snowmobile trail in the area is built on a ten-foot wide treadway crossing that has a 36-inch culvert already in place. Crushed rock will be added to the treadway over the culvert to minimize the erosion and sedimentation. Smith Creek, a designated trout stream, will require no bridge or culvert placement. Minor improvements of the existing

bridge, such as the application of additional crushed rock on the approaches, will minimize the potential for erosion and sedimentation. Split Hand Creek will require no new bridge or culvert. Only minor improvements to the existing snowmobile bridge will be necessary. The Unnamed Tributary to Willow River (T52, R25, S23) will require no new bridge or culvert placement. At this location the UPM Blandin ATV/OHM Trail follows the existing Rabey Line Trail, which already has suitable bridges and culverts in place. No repairs or upgrades will be necessary. The Hill Lake (1-142P) crossing will use the existing TH 200 bridge, which is wide enough to accommodate ATV and OHM traffic in both directions. Minnesota Department of Transportation (Mn/DOT) has agreed to permit recreational vehicle use of the bridge.

The Unnamed Creek will require a new bridge. The bridge will be built across a wetland drainage channel along a new segment of trail to avoid a large wetland. The alignment around the wetland will require one-half mile of new trail. The proposed bridge will be approximately 24-feet long. Cook Creek will require a new twenty-foot bridge. Crushed rock may need to be added to the bridge approaches to minimize the potential for erosion and sedimentation.

Three additional drainageways, which are not recognized as PWI waters, will be crossed by the UPM Blandin ATV/OHM Trail: (1) Unnamed Creek (T.54, R.26, S34) will require a new thirty foot bridge to cross a seasonal drainage channel; (2 and 3) Drainage Ditches (T.52, R.25, Sec. 22/23 and T.52, R.25, Sec. 29) will require no new crossings.

By their position, construction sites near/at stream crossings have a higher risk of affecting surface waters and precautions are necessary to achieve minimal erosion and sedimentation in shoreland areas. Best management practices will be defined in the permitting process and may include rapid stabilization methods such as vegetated buffers, soil mulching, soil blankets, rapid establishment of vegetation, planning to minimize disturbed area, and diversion of water from exposed surfaces through temporary downdrains.

Other measures will be used to trap sediments after they are detached. They include silt fences, fiber logs, grade breaks, and compost or filter bags. Crushed rock will be added to the treadway from the top of the down-slope to the stream on each side of the crossing. Trail developers will consult with MDNR staff to determine whether additional protective design and construction measures are needed at stream crossings. Fish passages will be maintained and construction will be designed to minimize any disturbance at stream crossings. Bridges will be constructed at appropriate times to avoid affecting fish during spawning runs. Natural obstacles will be placed at trail crossings or other controls will be implemented where necessary to prevent off-trail access to water bodies.

Regulations of the Clean Water Act (33 U.S.C. 1344), Section 404, administered by the USCE, and Section 401, administered by the MPCA, will be followed during the permitting phase of the project. Representatives of the regulatory agencies, including the USCE, MPCA, and local county officials will be apprised of the status of trail

development regarding wetlands and stream crossings. The USCE 404 permits and MPCA Water Quality Certification or waivers will be sought on activities requiring such permits. A Storm Water Pollution Prevention Plan (SWPPP) will be completed as required for approval of the NPDES/SDS permit. This plan will address requirements for special waters, as pertaining to trout streams, noted in Appendix A, part B8, of the General Permit Authorization to Discharge Stormwater Associated with Construction Activity. A MDNR Public Waters Work permits may be required for constructing new stream crossings.

h. Wetlands

This topic is addressed in the EAW under Item No. 12. The length of the trail passing through wetlands was estimated to be about 4 miles. A total of approximately 4.1 acres of wetland will be affected. Most of the wetlands disturbed by trail construction are classified as hardwood swamp, Type 7 wetlands. Smaller areas of wet meadow (Type 2) and shallow marsh wetlands (Type 3) will also be affected. The wetland estimates available at this time are reliable for providing the general location, type, and extent of wetland crossings. Actual area of wetland impact will be identified during on-the-ground determinations by wetland scientists.

Approximately thirty-seven, mostly small twelve-inch diameter culverts will be necessary to improve drainage along segments of the trail proposed for construction. Trail surveying activities conducted according to wetland sequencing requirements, i.e., avoidance, minimization, and mitigation, will confirm the need and location of the proposed culvert placements. Culverts will be placed along small ephemeral drainages and in areas subject to seepage or runoff to prevent water ponding and erosion of the trail treadway.

To minimize the detrimental wetland effects existing corridors were selected as the best alternative route for a majority of the trail corridor. However, some of the existing skid trail and snowmobile trail segments cross wetland features. Of the 4 miles of wetland crossings, 3.6 miles occur on existing skid trails or snowmobile trails and 0.5 mile occurs along new corridors. Maximum width of the treadway where it crosses wetlands will be restricted to eight feet. Wetland sequencing requirements of the Wetlands Conservation Act (WCA) will be followed during all phases of project development. When unavoidable impacts are identified, the impact will be minimized and wetland losses will be mitigated according to WCA requirements. Wetland mitigation will be in-place and in-kind, where possible. Restoration of previously degraded wetlands will be given consideration.

i. Traffic and Vehicle Related Emissions

This topic is addressed in the EAW in Item No. 21 and Item No. 22. The project will result in additional traffic to trail access points and several ATV/OHM crossings of US 169 and TH 200. The UPM Blandin ATV/OHM Trail crosses US 169 once and TH 200 twice. The trail is proposed to run along the highway's right-of-way and use the TH 200

Bridge crossing Hill Lake. Mn/DOT has agreed to allow ATV/OHM use of these crossings. Appropriate signage and sight lines will be established for highway crossings. Three established parking areas--Shingle Mill Road at County Road 449 lot, Smith Creek Trail lot, and Fingerhut Road lot—will serve the existing road and trail systems of UPM Blandin and State Forest lands. Additional parking areas at businesses or private locations may be established in the future. The parking needs of trail users will be accommodated.

During construction, work crews will generate minor amounts of traffic. Diesel fuel exhaust emissions contain pollutants including carbon monoxide, nitrogen oxides, reactive organic gases, sulfur dioxide, and suspended particulate matter, all of which carry some associated health risks. Transporting vehicles to the site and usage of ATVs/OHMs on the trail will affect air quality. During trail operation, potential trail events could be organized that generate moderate levels of traffic once the trail becomes operational. Pollutants generated from ATV/OHM vehicle exhausts may concentrate and linger, possibly at intersections or where vehicles congregate. If located near sensitive receptors, these potential congregations could produce emissions that would temporarily exceed the state and federal ambient air quality standard.

Construction-related vehicle emissions arising from the use of equipment for trail upgrading and new construction will be minor and temporary in nature. Pollutants generated from transportation to trail access points will be dispersed along local and regional transportation corridors. Usage of existing motorized trails within Aitkin and Itasca Counties, such as the Rabey Line Trail, Soo Line Trail and other GIA ATV and snowmobile trails, produce pollutants and are indicative of the levels of pollutants that could be expected from operation of the UPM Blandin ATV/OHM Trail.

j. Release of Toxic Substances

This topic is addressed in the EAW in Item No. 9 and Item No. 20. Materials such as fuels, antifreeze, and hydraulic oils will be used in conjunction with construction, maintenance, and general trail usage. Project-related construction activity may require the temporary use of mobile fuel tanks for equipment operation. Some soils with high sand content would allow more rapid infiltration of petroleum products to the groundwater. Extended use of the trail will result in a small increase in the risk of potential spills from careless refueling or after accidents.

Petroleum products are effectively contained within the equipment operated along the trail. However, in the event that a leak or spill occurred, the materials will be contained and cleaned up according to approved guidelines and standards as established under the Duty Officer Program. Construction- and maintenance-related refueling will occur away from streams, wetlands, and steeply sloping areas to insure that fuel spills do not contaminate waterways. Trail construction workers will be trained in emergency spill remediation measures.

k. Noise - Nearby Human Receptors

This topic is addressed in the EAW in Item No. 24. Three rural residences areas are located at least 150 feet away from the trail. Within Hill City, several additional residences and small businesses will be in proximity to the trail. Construction activities require the operation of small diesel and gasoline powered equipment. Construction and trail use will periodically increase noise levels in the immediate vicinity of the trail. Operation of construction equipment will be limited to several weeks at any given location and will occur only during daylight hours.

Noise generated from trail usage would be the collective sound emanating from ATV/OHM vehicles, with most of the noise due to the operation of combustion engines. As usage increases, a small increase in noise frequency over current conditions will be expected. Under normal operating levels, the state standards will not be exceeded by operation of these vehicles/machines. The periodic elevated noise levels are not expected to constitute a nuisance and will occur only during brief intervals of activity. Noise propagation is partially mitigated by the presence of understory vegetation and foliage on trees. Leaves are typically fully developed by the middle of the season and have fallen during the months of October and November, the normal end of the trail season.

l. Odors and Dust

This topic is addressed in the EAW in Item No. 24. Construction-related activities and ATV/OHM tire abrasion on the treadway surface will generate airborne dust under dry weather conditions, with bare soils generating the most dust. Dust could prove to be a nuisance for some forest users and, on rare occasions, a safety issue. Exhausts from the operation of construction machinery and ATV/OHMs will produce some objectionable odors to forest and trail users if the fumes linger for extended periods. Odors caused by ATV/OHV use would vary as a function of the number and types of vehicles and weather condition at the time. Older two-stroke ATV/OHM engines will create more odors/fumes than the newer four-stroke engines. Exhaust-related odors will also be present during routine maintenance and rehabilitation activities.

Environmental effects of odors and dust generated during and after project development will be limited to the rural residences and area of Hill City adjacent to the trail. Dusty conditions are expected to be localized and restricted to a narrow zone along both sides of the trail. If dust becomes a safety issue, measures could be taken to alleviate the problem. Gravel or environmentally friendly and approved vegetable oil-based materials could be applied to the problem areas. Odors will dissipate quickly under most circumstances and weather conditions.

m. Compatibility with Plans, Land Use Regulations, and Nearby Resource Management Areas

This topic is addressed in the EAW in Item No. 27. Outdoor recreation facilities in the Hill River State Forest include public accesses on Washburn Lake, Taylor Lake, and

White Elk Lake. The Rabey Line Trail and Soo Line North GIA ATV and Snowmobile Trail cross Hill River State Forest lands. The corridors of the Soo Line and Rabey Line Trails are owned by Aitkin County where they cross Hill River State Forest lands. Moose-Willow and Washburn Marsh Wildlife Management Areas (WMA) are also located nearby. No changes are proposed for the Rabey Line Trail segment of the UPM Blandin ATV/OHM Trail that runs through the Hill River State Forest and along both WMAs for short distances. The UPM Blandin ATV/OHM Trail is compatible with the current land use management plans of both Aitkin and Itasca Counties, and the Forest Classification and Road/Trail Designations for the East Central Forests, which by MDNR Commissioner's Orders, classifies the Hill River State Forest as "Limited" for motor vehicles.

UPM Blandin and the MDNR currently have a draft agreement on a conservation easement through the Minnesota Forest Legacy Program on 187,000 acres of UPM Blandin lands in the vicinity of the proposed trail. The Minnesota Forest Legacy Program protects environmentally important forests throughout the state threatened by conversion to nonforest uses. Portions of the proposed UPM Blandin GIA ATV/OHM Trail as well as several other recreational trails, including a proposed segment of the non-motorized North Country National Scenic Trail, are located on UPM Blandin lands. These trails are consistent with the terms of the easement and future developments of trails are not prohibited. Once the project is completed, it will be part of the Minnesota GIA trail system and is subject to associated GIA rules and regulations.

n. Archeological, Historical, and Architectural Resources

This topic is addressed in the EAW in Item No. 25. Although no known archeological, historical and architectural resources will be affected by the trail; the construction of 6 miles of new trail on previously undisturbed land could have the potential to affect unknown resources of this type.

The MDNR requires archaeological and historical cultural resource investigations and field surveys, if necessary, for all land management projects proposed or funded by the department to assess the potential effects of these projects on sites of architectural, historical or archaeological significance and to assure the MDNR is in compliance with state and federal laws. MDNR will avoid environmental effects to archeological resource sites or data through project avoidance, including project redesign and facility relocation, when and where possible. The MDNR will coordinate with Itasca County, the project proposer, to assure compliance. In those cases where avoidance is not possible, the MDNR and/or County will consult with the SHPO, the OSA, and the MIAC to determine the nature and scope of any potential site mitigation.

o. Cumulative Environmental Effects

This topic is addressed in the EAW Item No. 29. The trail will be designed and promoted to attract additional riders; however, only a moderate increase in traffic along the trail is anticipated. Depending on the success of the trail in attracting riders, considering other

trails already available in region, it is likely that the proposed trail will concentrate ATV usage somewhat, rather than dispersing usage to other trails around the region. The cumulative environmental effect of ATV/OHM use is associated with location and connectivity of the UPM Blandin Trail with other trail systems in the area.

Future development of ATV/OHM trails in Aitkin County includes phase 1 of the 70-mile Trail, which is expected to be in operation in the near future. It will provide a connection to the UPM Blandin ATV/OHM Trail via the Rabey Line Trail. Phase 1 of the 70-mile Trail includes the Pengilly to Warba segment (25.5 miles), Moose River Connector (6.7 miles), Lawler Loop (14.2 miles), and the Solana Loop (14.3 miles). Phase 2 of the 70-mile Trail is expected to be completed in the next five years and consists of connecting existing routes together, including the Warba - Rabey segment (12 miles), the Soo Line North - Big Sandy segment (11.2 miles) and the Rabey Line - Soo Line North Trail segment (Swatara Trail) (10.8 miles).

The UPM Blandin ATV/OHM Trail will provide connectivity to several trail systems open to ATV/OHM. The Trail will link to some local county and township roads and some Hill River State Forest and UPM Blandin forest roads, which total 37 miles and 140 miles, respectively. The total ATV and snowmobile trail miles listed in 2006 for Aitkin County was 137 miles and 614 miles, respectively. Once UPM Blandin ATV/OHM Trail and the 70-mile Trail segments are completed, the UPM Blandin ATV/OHM Trail's North Terminus will be linked to several hundred miles on designated routes. The Swarta Trail to be built during Phase 2 of the 70-mile Trail project would connect the Rabey Line Trail to the 148 mile-Soo Line ATV Trail. This will make additional trails, such as the 25 mile Moose River ATV Trail, accessible from the UPM Blandin ATV/OHM Trail. The improved connectivity of regional trails will provider riders with a wider assortment of corridors and enable longer excursions.

Timber management and logging operations are ongoing along much of the trail. The landscape through which the trail is proposed is largely managed for the production of wood products and therefore is exposed to disturbances associated with road construction, transportation, planting, felling, skidding, hauling timber, and other operations associated to the forestry industry. Forestry operations can cause compaction, rutting, habitat fragmentation, habitat loss, disturbances to wetlands, exposure to invasive species, etc. Forestry operations could be active in the field during the year and will involve larger equipment that consumes larger amounts of fuel. Motorized recreational trails and forestry operations would both result in cumulative effects related to erosion and sedimentation, water quality, noise, dust, and odors. No other known or proposed trail projects or other development projects in the vicinity of the UPM Blandin ATV/OHM Trail, have been identified. Aitkin County anticipates an additional 50 miles of ATV/OHM trails could be designated by 2013, most of which will use existing corridors or forest roads.

ATV/OHM recreation is dependent on the use of internal combustion engines, which consume petroleum products, such as motor oils and fuels. Byproducts of fuel combustion contribute to air pollution and spills and leaks can contribute to surface- and

ground-water pollution. The law defining apportionment of taxes, *Minnesota Statutes* 2008 296A.18, provides a reasonable means for comparing the magnitude of the contribution of ATV and OHM use to the cumulative pollution load attributed to transportation within Minnesota. The statute defines percentages for the following vehicle usage: motorboats (1.500%), snowmobiles (1.000%), ATVs (0.270%), OHMs (0.046%), and off-road vehicles (0.164%). However, depending on the ATV/OHM engine quality and age, the ratio of pollutants could be higher than a proportionate highway licensed vehicle. Of the proportion of usage by ATV/OHMs, only a small fraction of fuel consumption will be attributed to the UPM Blandin ATV/OHM Trail project. Additional incremental transport-related effects, including climate change, which occur while travelling to and from trail entry points on state and county highways and while riding ATV/OHMs on the trail, are considered quite small in comparison to overall statewide transportation by ATV/OHMs or by motor vehicles in the two counties.

12. In finalizing the assessment, on July 6, 2009, the MDNR requested that EQB grant an extension of the time period for completing the Record of Decision.

13. A letter describing the MDNR's determination to postpone the decision on the potential for significant environmental effects and on the need for an Environmental Impact Statement was sent on July 30, 2009 to the EQB official, members of the EAW distribution list, all other individuals sent a copy of the EAW, and to any person or group who submitted written comments on the EAW.

14. The following permits and approvals are needed for the project:

Unit of government	**Type of application**	**Status**
MPCA	NPDES/SDS Permit: Construction Stormwater General Permit Clean Water Act	 Not Applied For
	Section 401 Certification	Not Applied For
MDNR	GIA Application	Submitted Nov. 2006
	Public Waters Work Permits	Not Applied For
Mn/DOT	Special Use Permit for Three Trunk Highway Crossings	 Approval Pending
USCE	Clean Water Act Section 404 Permit	Not Applied For
Aitkin County SWCD	Wetlands Conservation Act	Not Applied For
Itasca County SWCD	Wetlands Conservation Act	Not Applied For
Aitkin County Board	GIA Trail, Itasca Co. as Sponsor	Approved (2008)

Itasca County Board	Grant In Aid ATV/OHM Trail Sponsor	Approved (2006)

CONCLUSIONS

1. The Minnesota Environmental Review Program Rules, *Minnesota Rules*, part 4410.1700, subparts 6 and 7 set forth the following standards and criteria, to which the effects of a project are to be compared, to determine whether it has the potential for significant environmental effects.

   In deciding whether a project has the potential for significant environmental effects, the following factors shall be considered:

   a. *type, extent, and reversibility of environmental effects;*
   b. *cumulative potential effects of related or anticipated future projects;*
   c. *extent to which the environmental effects are subject to mitigation by on-going regulatory authority; and*
   d. *the extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by agencies or the project proposer, including other EISs.*

2. *Type, extent, and reversibility of environmental effects*

   Based on the Findings of Fact above, the MDNR concludes that the following potential environmental impacts, as described and discussed throughout these Findings of Fact, will be limited in extent, temporary, or reversible:

   Trail construction related erosion and sedimentation impacts at stream crossings and approaches affecting aquatic resources;

   Trail construction related environmental effects, beyond the immediate stream channels and lake shores, causing erosion and sedimentation on/along the treadway and affecting wetlands and potentially, distant waters;

   Trail user generated treadway compaction and displacement resulting in erosion and sedimentation impacts that affect wetlands, surface waters, and aquatic resources;

   Trail construction, management, and maintenance and user generated environmental effects on wildlife, including species in greatest conservation need, endangered, threatened and sensitive species, and their habitats, including habitat fragmentation and spread of invasive species;

   Trail construction and user generated noise, dust, exhaust fumes, and potential releases of pollutants, which may affect wildlife, nearby receptors, resource management areas and land use designations;

   Trail construction, management, and maintenance and user generated environmental

effects on archeological, historical, and architectural resources; and

3. *Cumulative potential effects of related or anticipated future projects.*

   Besides on-going timber production or silvicultural activities, MDNR is not aware of any anticipated future projects, recently completed or specifically planned in the foreseeable future, affecting this trail corridor at this geographic location.

   There will be cumulative effects to erosion, sedimentation, noise, habitat fragmentation, and wildlife associated with timber production on forest land that contains the trail. The trail project's environmental effects are a small portion of the total effects and this small addition does not result in a significant cumulative environmental effect.

   The UPM Blandin ATV/OHM Trail may provide additional connectivity for some riders, enabling them to use a wider assortment of corridors and to venture on longer excursions. With the addition of the UPM Blandin ATV/OHM Trail to the suite of ATV trails in Aitkin and Itasca Counties, the cumulative potential effects, including erosion, sedimentation, habitat fragmentation, increase of invasive species, noise, dust, global warming emissions and other pollutants, would be proportional to the UPM Blandin ATV/OHM Trail's length and increased user numbers, which are relatively small in comparison to existing regional and local trails and levels of ATV/OHM traffic.

4. *Extent to which environmental effects are subject to mitigation by on-going public regulatory authority.*

   Based on the information in the EAW and Findings of Fact above, the MDNR has determined that the following environmental effects, as described in Findings 11, are subject to mitigation by ongoing public regulatory authority, including permits approvals, enforcement of regulations or other programs:

   Prohibited noxious weeds (invasive species) must be controlled or eradicated as required in *Minnesota Statutes*, section 18.78. The Noxious Weed Law charges county, city, and township officials to inspect land and compels owners to destroy their noxious weeds.

   Environmental effects on water resources, including construction related effects on fish and wildlife resources, water quality, and soil stability at stream crossings and approaches (erosion, siltation, and sedimentation) (MDNR Public Waters Work Permit for work in public waters; the USCE, Section 404; and MPCA Clean Water Act, Section 401 Certification and Construction Stormwater General Permit, including Appendix A, part B8, of the Authorization to Discharge Stormwater Associated with Construction Activity for trout streams as under the National Pollutant Discharge Elimination [General Permit MN R100001]).

   Loss of wetlands (Aitkin County SWCD and Itasca County SWCD in compliance with the Wetlands Conservation Act).

State Noise Standards are enforced by MPCA (*Minnesota Rules* Chapter 7030) in concert with MDNR and local governmental units.

Archeological, historical and architectural resources are protected under the rules and laws governing the Minnesota State Historic Preservation Office (SHPO), the Office of the Minnesota State Archaeologist (OSA) and the Minnesota Indian Affairs Council (MIAC), who would assist in determining the nature and scope of any effects and need for mitigation.

5. *Extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by public agencies or the project proposer, of other EISs.*

   Environmental effects related to trail design, construction, maintenance, and use of ATV/OHM trails can be anticipated and controlled as a result of the following studies.

   Hesselbarth, Woody, Brian Vachowski, and Mary A. Davies. 2007. Trail Construction and Maintenance Notebook, 2007 Edition. 0723-2806-MTDC. U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center, Missoula, MT (In cooperation with United States Department of Transportation, Federal Highway Administration) 178 p.

   Meadows, D., R. Foltz, and N. Geehan. 2008. Effects of All-Terrain Vehicles on forested lands and grasslands. USDA Forest Service, National Technology and Development Program. Report No. 0823 1811-SDTDC. 110 p.

   MDNR. 2007. Trail planning, design, and development guidelines. MDNR, St. Paul.

   The MDNR developed a manual for trail planning, design, and development in 2007. The goal of the project was to develop a consistent set of guidelines and common language for developing motorized and nonmotorized trails at the local, county, regional, and state level. The guidelines take into consideration and build upon past practices common to Minnesota attempt to fill in some of the gaps in best practices and techniques. Extensive attention is given to developing trails that are physically, ecologically, and economically sustainable. The technical guidelines for various types of trails have been extensively researched and, at times, significantly expanded to create a more complete reference. Collectively, the guidelines provide a comprehensive reference for agencies, trail advocates, and policy makers as they embark on various types of trail development projects. The limitation of the guidelines lies in the fact that each trail situation is unique and requires site-specific evaluation to determine the most appropriate design approach. Whereas the manual is an important reference, it is not a substitute for the in-the-field expertise required to make informed decisions.

   MNDR 2002. Moosewalk/Mooserun ATV Trail Designation. Environmental Assessment Worksheet and Record of Decision.

6. The Minnesota Department of Natural Resources has fulfilled all the procedural requirements of law and rule applicable to determining the need for an environmental impact statement on the proposed UPM Blandin ATV/OHM Trail project in Aitkin and Itasca Counties, Minnesota.

7. Based on considerations of the criteria and factors specified in the Minnesota Environmental Review Program Rules (*Minnesota Rules* part 4410.1700, subpart 6 and 7) to determine whether a project has the potential for significant environmental effects, and on the Findings and Record in this matter, the MDNR determines that the proposed UPM Blandin ATV/OHM Trail project does not have the potential for significant environmental effects.

ORDER

Based on the above Findings of Fact and Conclusions:

The Minnesota Department of Natural Resources determines that an Environmental Impact Statement is not required for the UPM Blandin ATV/OHM Trail project.

Any Findings that might properly be termed Conclusions and any Conclusions that might properly be termed Findings are hereby adopted as such.

Dated this 25th day of August, 2009.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

Larry R. Kramka
Assistant Commissioner