

**DECISION NOTICE
and
FINDING OF NO SIGNIFICANT IMPACT
For the
SHORES ENVIRONMENTAL ASSESSMENT**

Hiawatha National Forest
Mackinac County, Michigan
St. Ignace Ranger District
USDA Forest Service, Region 9

I. INTRODUCTION

This document describes my decision and the rationale for the implementation of a series of land management activities for the Shores Project on the St. Ignace Ranger District, Hiawatha National Forest (HNF). The decision and finding of no significant impact are based on an environmental assessment (EA) of the Proposed Action and the No Action Alternative.

These actions will treat vegetation on 1,577 acres of National Forest System lands; remove approximately 2,000 invasive Scotch pine trees; decommission 11 miles of roads; construct 6.3 miles of system roads; construct 2 miles of temporary roads; construct 20 log landings, and install gates for summer closure of 3.4 miles of snowmobile trails. The legal description of the project area is T40N, R4W sections 1- 5, 8- 12 and 15; T41N, R2W sections 2, 3, 10 and 11; T41N, R3W sections 4-8, 18, 19, 30 and 31; T41N, R4W sections 1, 11- 14, 18- 20, 21 and 23-36; T41N, R5W sections 3- 6, 8-16, 22-27 and 36; T42N, R2W sections 1- 27 and 34-36; T42N, R3W sections 2-4, 8-21, 28, 29 and 31- 33; T42N, T4W section 36; T42N, R5W sections 29- 33; T43N, R2W sections 4, 8, 9, 16, 17, 20, 21, 27-33; T43N, R3W section 34.

The Shores EA was prepared by an interdisciplinary team (IDT) of Forest Service resource specialists as required by the National Environmental Policy Act. The EA describes the purpose and need for action, the alternatives considered, the public involvement process, the affected environment, and the environmental effects.

This EA analyzed the Proposed Action and the No Action Alternative, as well as one alternative that was eliminated from detailed analysis (Section 2.1). The range of alternatives, the No Action and Proposed Action alternatives, adequately addressed the purpose and need (Section 1.3, pp. 2-4), the issues raised during the initial scoping (Section 1.7), and the comments received during the required 30-day notice and comment period (Section 1.7 and Appendix A – Response to Comments).

The EA contains the resource management activities that comprised the Proposed Action (Section 2.2.2). These activities were identified and designed by the IDT to address the purpose and need for action.

II. PUBLIC INVOLVEMENT

Scoping for this project began with an October 19, 2009 mailing of over 1,200 letters describing the Proposed Action to adjacent landowners and to individuals and organizations on the HNF Eastside mailing list. Twenty-three responses were received (project file).

The IDT used this public input to develop two relevant issues. They are Issue 1 – Closing roads will

restrict motorized and non-motorized access to HNF for hunting, berry picking, and enjoyment by the elderly and people with disabilities and Issue 2 – Clearcutting and cutting Scotch pine will create a larger visual impact than the acres treated (EA, Section 1.7, pp. 6-7).

The EA was completed and released to the public for the 30-day notice and comment period on May 20, 2011. Forty-seven comments were received as a result of this comment period. The comments, along with the Forest Service responses, are in Appendix A of the EA.

III. DECISION AND RATIONALE FOR THE DECISION

A. AUTHORITY

As Deputy District Ranger, I am authorized to make site-specific decisions to manage the HNF in accordance with applicable laws and regulations that govern National Forest System lands. This authority includes the power to decide between alternatives for the site-specific harvest of timber, the transportation system necessary to access and transport forest products, and recreation use projects. This authority is delegated to me through agency policy described in Forest Service Manual 1236.51.

B. DECISION

Based on analysis documented in the Shores Project EA and comments received during initial scoping and the 30-day notice and comment periods, it is my decision to implement the Proposed Action (EA, Section 2.2) and all the design criteria associated with the Proposed Action (EA, Section 2.2.2). These management activities will occur over a 5 to 7 year period beginning in 2012.

C. RATIONALE FOR THE DECISION

Implementation of the Proposed Action will move the project area closer to the desired condition described in the HNF Land and Resource Management Plan of 2006 (Forest Plan) for Management Areas (MAs) 1.2, 6.4, 7.1 and 8.1 (i.e. road closure). No actions will occur in MAs 4.2, 4.5, 5.1, 6.2 and 8.4.2 from this decision.

D. DECISION CRITERIA

As with all land management decisions, the overall goal is to achieve the project objectives while avoiding adverse impacts to the resources. With this goal in mind, the decision is based on the following criteria:

1. Degree to which the decision addresses the purpose and need and responds to public issues.

The purpose and need for action for the Shores Project Area are based on Forest Plan goals, objectives and standards. With exception of the No Action Alternative, the proposed alternative results in progress towards desired future conditions (DFCs) of the Forest Plan. I have reviewed the proposed action in terms of direction, goals and objectives, standards and guidelines specified in the 2006 Forest Plan. The purpose and need for the project included seven elements that are listed in Chapter 1 of the EA (Section 1.3). The rationale for these elements are listed as follows:

a. Manage both vegetation composition and vegetation structure to meet the vegetation composition goals of MA 1.2 and 6.4.

The Proposed Action will move the vegetation composition and structure closer to Forest Plan goals for the affected MAs. The EA displays the acres to be treated to accomplish this goal (Table 3-17, p. 45) and

the Forest-wide change in Ecological Land Types (ELT) and seral class compared to the Forest Plan goals (Table 3-18, p. 52). Table 3-18 shows that 13 categories of ELT/seral class will be moved closer to the desired Forest Plan percentages.

b. Reduce the risks of potential wildfire by managing vegetation in areas of concern, such as the Brevoort Lake Campground, underground pipelines, and a utility line.

Treating Jack pine stands will move them from Jack pine to white pine and oak by two-aged shelterwood establishment and removal cut with reserves (EA, Section 3.4). Wildfire burns in Jack pine in less than 50 year return intervals and with moderate to high intensities. In contrast, white pine and red oak are more desirable in these areas, as they are long-lived species with much greater fire return interval (160 years) and with low to moderate fire intensities. 96 acres of Jack pine will be converted to early mid-seral classes. Approximately 117 acres near Brevoort Lake Campground and the gas pipeline will be clearcut, mechanically site prepared, and planted with red pine. Red pine is a longer lived species than Jack pine and has a longer, fire return interval. The average rotation age of red pine is 160 years where Jack pine is 70 years. Conversion of these sites to white pine and oak, as well as red pine from predominately Jack pine stands will reduce the intensities of wildfire and make control efforts more effective in the event of a wildfire ignition.

c. Improve wildlife habitat conditions with vegetation composition goals by retaining or regenerating hemlock and white pine, as well as enhance the diversity of mast species.

The effects to wildlife habitat are disclosed in the EA (Section 3.11) and the BE (Appendix E). This decision affects wildlife by; 1) increasing habitat for early successional species, 2) decreasing snags, dens, and woody debris, 3) increasing wildlife disturbance in some areas due to road construction, and 4) decreasing wildlife disturbance by decommissioning road in other areas (EA Section 3.11.5.1).

Early successional aspen habitat creation will result from about 520 acres of aspen clearcut and regeneration, benefitting ruffed grouse reproduction, snowshoe hare, deer and other species adapted to young aspen forest (EA, 3.11.5.1, pages 80-81). About 490 acres of shelterwood and seed tree harvest will begin the slow process of moving early successional forest types (mainly jack pine) into a later seral habitat type (white pine, oak, and hemlock), which will restore habitat components that were historically more abundant in this region. Two hundred acres of selection harvest will increase understory growth and improve habitat for species such as chestnut-sided warblers and mourning warblers. Forty acres of thinning (primarily aspen/conifer) will increase understory growth (nesting/forage habitat) and favor more mature tree species such as white pine, cedar, and spruce. Road decommissioning will reduce disturbance to animals.

The overall improvement to wildlife habitat outweighs the negative effects resulting from harvesting.

d. Improve stands to reduce the impacts from insects and diseases such as spruce budworm, jack pine budworm, beech bark disease, and emerald ash borer.

A single stand of approximately 40 acres comprised mostly of balsam fir will be thinned to about 70 square feet basal area, favoring white pine, black spruce, white spruce, and northern white cedar as leave trees. This will result in improved stand quality allowing residual trees to increase in size and value due to increased availability of soil nutrients, moisture and sunlight. This stand is mostly balsam fir and will remain as M4 (Mid-seral, 9" to 17.9 dbh). The remaining balsam fir within the stand should have increased vigor and should be able to survive an infestation of the spruce budworm (EA, Section 3.8.5.1.).

e. Control the spread of Scotch pine, a non-native invasive species, along the dune areas of US 2.

Removing Scotch pine will result in the reduction of a non-native invasive species (NNIS) and its seed source. The removal will also improve the habitat for Pitcher's thistle, long-stalked stitchwort, Lake Huron tansy, and four moonwort species along this section of Lake Michigan dunes by reducing the threat to the open habitat these species require. Suitable habitat will be protected from an invasion of Scotch pine as a result of the project. Scotch pine removal and increased sunlight may result in increased survivorship and reproduction the rare species listed above. These beneficial effects will be seen in the short-term (within 5 years) since open habitat may become available in the growing season immediately after project implementation (EA, Section 3.10.2).

f. Manage an efficient transportation system through construction, reconstruction, and decommissioning of roads, especially related to vegetation MAs.

As part of the analysis process, the IDT analyzed the existing transportation system. This analysis looked at individual road segments and determined whether the road was needed and whether additional roads are needed for the vegetation management proposal. This was a sound procedure and fundamental to timber harvest planning, as well as necessary for protection of other resources.

This decision has no perceivable net change to the road density in MAs 6.2 or 6.4 and a decrease of 0.2 miles per square mile in MA 8.1 (EA, Section 3.17.1, and Table 3-48). No other road development, road closure or road decommissioning occurs within MAs 4.2, 4.5, 5.1 and 8.4.2. Reducing road density lowers the potential for soil erosion, sediment loading in streams, and alterations to the natural hydrology from roads. The road decommissioning will move the area toward the Forest Plan guidelines for road density (EA, Section 3.17.5.1).

g. Provide fiber and timber products to the regional economy, as identified in the Forest Plan (pp. 3-5 and 3-31).

Implementing the Proposed Action will deliver approximately 9 million board feet of timber products to the local economy, valued at about \$438,800. The Shores project will provide tangible and intangible benefits to consumers of forest products and local government in terms of wood fiber and payments to counties (EA, Section 3.18.4.1, Table 3-52).

2. Summary of Effects on the Resources under the Proposal

a. Soils Resource

The EA discloses the effects to the soils resources that indicate some soil displacement, rutting, erosion, and impacts to subsurface drainage may occur (EA, Section 3.5.1). The design criteria included as part of the decision will protect the soils and wetland resources (EA, p. 12, 32-36).

The Proposed Action will follow Forest Plan standards and guides, including State of Michigan Best Management Practices (BMPs) for soils during road building, timber harvesting, site preparation, and other ground disturbing project implementations (EA, Appendix B). Implementing these procedures will result in little or no cumulative structural impairment to long-term soil productivity (EA, Section 3.5, p. 32-37).

b. Hydrology Resource

The design criteria for soil and wetlands protection, including the application of BMPs, Forest Service Handbook 2509.18, and Regional Soils guidelines will protect the hydrology of the area. The Proposed Action will meet the purpose and need of the area while protecting the hydrology (EA, Section 3.6, p. 37-40).

c. Wetlands

The effects to wetlands are described in the EA (EA, Section 3.7). Decommissioning and closing roads that run through wetlands in the project area will increase the total amount of wetlands by 16.6 acres (EA, p. 43, Table 3-15). The design criteria will protect the wetland resource adequately (EA, pp.40-45 and Appendix B), while allowing for management activities that will move the Shores area closer to the Forest Plan vegetation composition and size goals.

d. Vegetation

Approximately 49% (18,850 acres) of the Shores project area is considered suitable for timber production. Approximately 93% (17,508 acres) of the suited acres are in MA 6.4. The vegetation component of the Proposed Action is based on the forest wide desired vegetation composition goals for MA 6.4 (Forest Plan p. 3-33) (EA, Section 3.8.4).

The defined geographical area for direct and indirect effects as well as cumulative effects analysis for Forest Plan vegetation composition goals is the HNF boundaries for MA 6.4. The rationale is based on Forest Plan direction that vegetation composition goals are forest wide. There are no vegetation composition goals for lands other than HNF. Management Area 6.4 is exclusively on the Eastside of HNF. The Proposed Action includes one stand of 29 acres in MA 1.2. This EA discusses the effects of treating this stand, but not how treating this stand would affect the Forest vegetation composition goals for MA 1.2 since only 29 acres would be affected because it is so small (EA, Section 3.8.3).

The following table from the EA summarizes the acres of vegetation treated by activity:

Summary of Resource Effects Table (EA, Table 3-17)

Activity or Measure	Proposed Action
Acres of aspen moved to mid and late seral classes	212
Acres of jack pine moved to mid and late seral classes	562
Acres of mid seral moved to aspen and late seral classes	217
Acres of A3 or A4 to A1	45
Acres of J3 or J4 to J1	80
Acres of L3 or L4 to L5 or L4	97
Acres of M4 to M1	247
Total acres changing either seral class or size class	1,460

Where A = Aspen, J = Jack Pine, M = Mid Seral and L Late Seral (Appendix D, page D-1, Forest Plan).

The Proposed Action would include use of overstocked, disease/insect infested and mature trees as wood

fiber. Single tree selection and commercial thin harvests would result in improved stand quality and tree vigor, allowing residual trees to increase in size and value due to increased availability of soil nutrients, moisture, and sunlight (Smith 1962). Shelterwood with reserve trees and seed tree with reserve trees harvests would result in ideal growing conditions for white pine, hemlock, and/or red oak. These species are considered highly desirable in the Forest Plan (2-10), and would increase forest diversity throughout the project area (*Need 3). Clearcut harvests would result in ideal growing conditions for aspen, jack pine, and/or red pine (Needs 1, 3, and 7). Natural regeneration is the preferred method of regeneration, however when a good seed source is not available planting would occur. Additional planting may occur if National Forest Management Act (NFMA) standards are not achieved due to failed natural regeneration. Conversion of Jack pine stands to long lived tree species near and around recreation sites would provide for safer, healthier vegetation (Need 2). Proactive treatment of hardwood stands that include ash could minimize damaging effects of Emerald Ash Borer (EAB). Removal of beech trees in hardwood stands could provide growing space for other more desirable tree species such as hemlock, yellow birch, and red oak (Needs 3, 4, and 7) (EA Section 3.8.5.1, page 49).

*Needs identified (EA, Chapter 1, section 1.3) that relate to vegetation are:

- Need 1. Move the vegetation within the project area towards Forest Plan vegetation composition goals
- Need 2. Reduce the risks of potential wildfire by managing vegetation in areas of concern
- Need 3. Retain or regenerate hemlock, white pine, and mast species (red oak)
- Need 4. Manage stands to reduce impacts from insects and disease
- Need 7. Produce timber products

e. Non-Native Invasive Species (NNIS)

Table 3- 1. Non-Native Invasive Species Summary of Effects (EA, Table 3-19)

Activity or Measure	Proposed Action Effects
Canopy removal activities	Increases open, sunny conditions favorable to NNIP establishment by approximately 1,577 acres.
Mechanical site preparation	Disturbs soil and creates ground for NNIP to establish in approximately 762 acres.
Road construction	Creates approximately 8 miles susceptible to NNIP spread.
Road decommissioning	Stops vehicular NNIP seed spread on up to approximately 10 miles.
Construction and use of log landings or “back-ins”	Creates 20 areas susceptible to NNIP spread.
Install seasonal gate closures at two snowmobile trail entry points	Reduces soil disturbance and NNIP seed spread by OHVs on approximately 3 miles
Scotch pine removal on dunes (up to 2,000 trees)	Reduces seed source and NNIP spread

Overall, the risk of NNIP infestation resulting from the project is moderate (EA, Section 3.9.1). Although several occurrences of high priority species exist in the area, they are typically found in disturbed settings and along roadsides. Preventative measures for established NNIP will occur such as cleaning of off-road

timber harvest equipment and control of invasive plants within gravel pits used for road maintenance. Additionally, ongoing and future control measures would be implemented on forest lands under the HNF NNIP Control Project (USDA 2007) and the planned site-specific 2012 NNIP Treatment Project (currently being analyzed). The Forest Plan provides NNIP direction and management guidelines.

The risk (high, moderate, or low) that each project activity poses to the introduction and spread of NNIP is analyzed in section 3.7.5.1 below and summarized in Table 3-20 of the EA. Low risk activities cause minimal ground disturbance and minimal over-story habitat alteration. As a result, low risk activities are less likely to decrease the resiliency of the landscape to resist NNIP invasion. Conversely, high-risk activities result in both ground disturbance and open canopies through over-story vegetation alteration. High risk activities provide a combination of exposed soil while increasing the available light that favors NNIP establishment and spread. Moderate risk treatments are those that lack either the ground disturbance or vegetation alteration, or that have both facets occurring in low magnitudes.

Summary of Risk of Non-native Spread (EA, Table 3-20)

Factors Contributing to the Spread of NNIP	Proposed Action
Timber harvest (includes site prep)	High
Road construction	Moderate
Road decommissioning	Low
Log landings	High
Recreation (includes OHV use and snowmobile trail gates)	Moderate
Scotch pine removal	Low

f. Threatened, Endangered, and Sensitive (TES) Plants

The effects to TES plants are disclosed in the EA (Section 3.10) and the Biological Evaluation (BE) (EA, Appendix E). There are 24 Regional Forester Sensitive Species (RFSS) documented to occur within the project area and 30 RFSS with suitable but unoccupied habitat (BE, Table 20, pages 73-75 and Table 23, pages 133-135). These species were analyzed in detail in the BE because the habitat in the project area is considered suitable. Most habitats will not be affected by project activities; however, three species do occur in activity areas (BE, pages 100-106). They are northern wild comfrey, walking fern, and calypso orchid, all of which will be avoided by the implementing the design criteria.

Three federally listed species have potential habitat within the project area: Pitcher's thistle, lakeside daisy, and Houghton's goldenrod. The Proposed Action is "Not Likely to Adversely Affect" these three species (BE, Table 23, pages 133-135). The US Fish and Wildlife Service (USFWS) concurred with the Biological Evaluation on August 23, 2011 (project file). The Proposed Action provides adequate protection for TES plant species.

g. Wildlife

The impacts of the proposed action on wildlife are primarily as follows:

- Increases habitat for early successional species.
- Snag/den and woody debris would decrease.
- Road construction would increase wildlife disturbance in some areas.
- Road decommissioning would decrease wildlife disturbance in other areas.

There are some common effects within stands being harvested. Within all treatment areas, some

sedentary animal species would be killed during implementation (from felling, skidding, etc). Other, more mobile, species would be displaced into adjacent habitat. Stands in the eastern portion of the project area contain rocky features, and these features provide unique habitat (crevices, talus field, etc.) for several wildlife species (Kost et al. 2007). Harvest equipment operation, tree felling/dragging, and road construction would occur directly on rocky features, so species that utilize this habitat would be killed or displaced. Additionally, potential damage from harvest equipment, loss of canopy cover, and changes in moisture level and temperature are expected to impact the future suitability of this habitat for some species.

Aside from common effects, specific harvest treatments result in unique changes to wildlife habitat. Early successional aspen habitat creation is part of the Proposed Action, so 520 acres of aspen habitat would be clearcut and regenerated (A1 and M1). For ruffed grouse, this activity would transition mature aspen stands, which currently serve as winter forage habitat, into young aspen brood and breeding cover (Gullion 1984). The conversion from mature aspen habitat also would remove canopy cover and woody debris, which would reduce American marten habitat. This harvest activity, and all other proposed activities, are not expected to impact sharp-tailed grouse habitat (EA, Appendix E - BE).

460 acres of shelterwood harvest and 30 acres of seed-tree harvest are part of the Proposed Action. Shelterwood harvest acres are currently typed as Jack pine and aspen, and the purpose of this prescription is to begin the slow process of moving an early successional forest type (mainly Jack pine) into a later seral habitat type (white pine, oak, and hemlock). However, this habitat change would not occur immediately, and these stands would still provide patches of suitable habitat for early successional species into the future. Seed-tree harvest is proposed to create early successional white pine and oak habitat. This early successional habitat would provide habitat for species such as snowshoe hare. Additionally, the early successional habitat that is created by clearcut, shelterwood, and seed-tree activities would provide stopover habitat for a variety of bird species during migration (Moore et al. 1993, 2005a, and 2005b).

The proposed selection harvest (200 acres) would result in more understory growth and increased habitat for species such as chestnut-sided warblers and mourning warblers (Jobes 2004). Additionally, the 40 acres of proposed thinning (primarily aspen/conifer) is expected to increase understory growth (nesting/forage habitat) and favor more mature tree species (white pine, cedar, and spruce). Therefore, forage habitat (understory growth) for American marten may increase. However, the removal of trees through selection and thinning harvest would remove a future source of woody debris habitat (Duvall 1999 and Goodburn 1998), which provides den and forage habitat for American marten.

Within many of the areas proposed for harvest, there are also site preparation activities proposed. The majority of the proposed site preparation would occur in even-aged management (clearcut, shelterwood, and seed tree) areas to improve natural regeneration. This would help provide more cover for woodcock and snowshoe hare. Canopy gap creation (in selection harvest areas), would help promote regeneration within stands after harvest, which would result in an increase in understory habitat for various species of mammals and birds. The proposed mechanical site preparation activities would include scarifying the soil in some areas. This activity can lead to direct mortality of some animal species (ex. ground nesting birds, small mammals, etc.) and may result in a loss of snag and woody debris habitat. However, this activity is expected to provide a more suitable condition for white pine, hemlock, red pine, oak, and Jack pine to develop, which would increase habitat diversity within the areas proposed.

The proposed hemlock, white pine, and oak planting would help restore habitat components, which were historically more abundant throughout the northern hardwood/conifer region (Mladenoff and Pastor 1993). This activity is expected to provide thermal cover for ruffed grouse, and forage habitat for

American marten.

Log landing construction also would be part of the Proposed Action. Log landings can be used as courtship areas for woodcock and can provide forage habitat for species such as ruffed grouse and deer. However, these openings would reduce habitat for species that require mature forest types such as American marten.

The proposed Scotch pine treatment would take place along the Lake Michigan shoreline, and there are several TES species that utilize habitat along the lakeshore and sand dunes (EA, Appendix E - BE). The Scotch pine trees proposed for treatment are located on upland/older portions of the dunes, and treatments would be limited to individual trees along the dune/highway corridor. One TES species, Lake Huron tansy could be exposed to scattered direct impacts (mortality) from increased foot traffic and from trees cut down on the dunes. Potential indirect effects on other species include disturbance from chainsaw noise and human presence. The dune/highway corridor provides limited habitat for the Management Indicator Species (MIS), so impacts are not expected.

Road construction activity can have several different impacts on wildlife habitat, and the Proposed Action would create about six miles of new system roads. Impacts include increased mortality from road construction, modification of animal behavior, and increased alteration and use of habitat by humans (Trombulak and Frissell 2000). However, all new temporary roads would be obliterated following proposed management activities. Additionally, proposed road decommissioning and road closures would increase habitat seclusion for species such as gray wolves and goshawks (EA, Section 3.11.5.1).

The Proposed Action provides for a range of habitat conditions that will support wildlife and that the overall improvements to wildlife habitat outweigh the effects due to harvest.

Both the EA and BE discloses the effects to TES wildlife. Of the 26 RFSS with habitat in the project area, 22 are found to occupy that habitat. The Proposed Action will have no impact, or may impact individuals but not likely to cause a trend to federal listing or loss of viability to the 22 species (BE, pages 133-135, Table 23).

The Proposed Action is not likely to adversely affect the four endangered species (Canada lynx, gray wolf, Hine's emerald dragonfly and piping plover) with habitat in the project area (BE, pages 133-135). The USFWS concurred with the Biological Evaluation on August 23, 2011 (project file). The Proposed Action provides adequate protection for TES animal species.

h. Fisheries

Proposal to harvest timber and manage roads will have little or no impact on the fisheries resource (EA, Section 2.12.6.1). This analysis was based on at least a 100 foot buffer along all streams within the project area where timber harvest is restricted. Trees growing within 100 feet of a stream provide most of the shade and large, woody debris input and also act to stabilize soil. Stream reaches protected by this buffer allow timber to remain and mature, allowing natural processes to resume. In addition, a 500 foot buffer is identified which prohibits aspen regeneration anywhere within 500 feet of cold water, high priority streams (Forest Plan, page 2-14). Some delivery of sediment to streams through runoff, culvert crossings, normal road use, and maintenance will be expected (EA, p. 86). This impact is minimized by adherence to Best Management Practices as described in *Sustainable Soil and Water Quality Practices on Forest Land* (MDNR, MDEQ 2009).

i. Transportation

The effects to the transportation system and its effects to other resources is disclosed in the EA (EA, Section 3.17.4). Constructing two miles of temporary roads and 6.3 miles of permanent roads is appropriate to effectively manage the vegetative resources while protecting other sensitive resources. The newly constructed roads, in most cases, would extend existing roads into proposed vegetation treatment areas and therefore would provide more access to these areas for the Forest Service and public. The newly constructed roads would be classified as management level (ML) 1 roads, limiting motorized access. These roads would add minimal new maintenance costs because ML 1 roads are only maintained when needed for administrative purposes. The roads would be closed with various tools such as root wads, timber slash, rocks, gates, or berms. With proper installation and monitoring, these can be effective tools to limit resource damage from motorized use and trespassing on to neighboring property (Range, Sjogren 2007, Travel Management Plan, p. 13). Some routes would be designated as winter only haul roads due to soil and moisture conditions. New construction in the Pontchartrain and Hessel quads would be designated as winter only routes. Routes adjacent to or proposed to be new sections of the snowmobile trail would be closed with gates and given seasonal restrictions opening them in the winter months. Placement, construction, closure, and decommissioning would follow Michigan and Forest Service Best Management Practices (BMPs) (DEQ BMP pp. 21-28, FS BMP pp. 21-36).

Decommissioning of 11 miles of existing roads that were not designed for all-season use is an appropriate activity (EA, page 131). Obliteration of the road includes ripping the road and eliminating the corridor for all traffic, motorized and non-motorized. The proposed roads are a mix of ML 1, ML 2, and unclassified roads (EA, Table 3-49). Roads were proposed for decommissioning if they were no longer needed for administrative purposes, if they are showing signs of resource damage due to motorized vehicles, or if the road provided access to an area receiving resource damage from motorized vehicles (Forest Plan, pp. 2-25; Travel Management Policy (TMP), p. 5).

The Proposed Action would lead to no perceivable net change in road density in MAs 6.2 or 6.4 and a decrease of 0.2 miles per square mile in MA 8.1 (EA, Table 3-48). Reducing road density lowers the potential for resource damage to roads such as soil erosion, sediment loading in streams, and alterations to the natural hydrology (Travel Management Rule, p. 10; FS BMP 33-35). The work would move the area toward the Forest Plan standards and guidelines for road density. Access would still be available up to Pointe Aux Chenes Candidate Research Natural Area (cRNA), with non-motorized access available within the cRNA.

j. Recreation Resource

The effects of the Proposed Action to the recreation opportunities are disclosed and analyzed in the EA (EA, Section 3.13). The analysis focused on the following impacts to recreationists and the recreation resources:

- Sights and sounds of harvest related activities at or near recreation sites or trails.
- The hauling of timber on access roads to developed recreation areas, dispersed sites, and non-motorized trail access on forest roads.
- Shared timber hauling with snowmobile use on snowmobile trails.
- The sights of harvest related activities were analyzed in the Visual Quality effects section (3.15).

Table 3-33 (EA, page 87-88) summarizes the effects of the Proposed Action to the above activities. The

Proposed Action makes minimal, yet acceptable changes to the recreation opportunities within the project area. Effects created by timber harvesting activities such as noise, hauling and visual impacts are temporary. Long term improvements to forest health, wildlife habitat conditions, reduced hazardous fuels near developed recreation sites and the transportation system outweigh these short-term effects.

E. Other Alternatives Considered

Alternative 1 (No Action)

This alternative will involve no new management activities in the project area. Previously approved activities will still be implemented. However, no additional activities will be implemented at this time. No timber harvests will occur. Existing road and trail conditions will remain unchanged. Needed resource attention to wetlands and wildlife habitat will not occur as quickly. Moving vegetation conditions towards Forest Plan goals will not occur. Restoring 16.6 acres of wetlands through road decommissioning will not occur. Scotch Pine along the Highway 2 dunes are will expand in both area and density.

Alternative 1 was not selected because it does not meet the purpose and need for the Shores Project.

IV. FINDING REQUIRED BY OTHER LAWS AND REGULATIONS

This decision complies with all applicable laws and regulations, which are summarized as follows:

A. Compliance with the National Forest Management Act

The Forest Service is currently operating under the 2000 Planning Rule, adopted in November 2000 at 36 CFR 219 and subsequently interpreted in an Interpretive Rule at 69 Fed. Reg. 58055 (September 29, 2004). This project is planned under the regulations at 36 CFR 219.35 (2000) and the Interpretive Rule of September 29, 2004. As required by 36 CFR 219.35, this decision is based on the best available science. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views, and, where appropriate, acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.

This decision is consistent with NFMA requirements for timber harvest at 16 U.S.C. 1604 (g)(2)(E) and 16 U.S.C. 1604(m)(1). This finding is based on Forest Plan objectives and direction and a review of site-specific conditions by agency professionals. These specialists examined the site conditions, verified inventory data, and shared their findings before assigning a silvicultural treatment. Their field notes and supporting documentation are in the project file.

1. Forest Plan Consistency

The National Forest Management Act (NFMA) requires all site-specific project activities be consistent with direction in the Forest Plan. As required by NFMA Section 1604(i), this project is consistent with the HNF Forest Plan, including the goals, objectives, desired conditions, Forest-wide standards and guidelines (pp. 2-1 to 2-26) and MA 1.2, 6.4, and 7.1 standards and guidelines (pp. 3-5 to 3-7, 3-31 to 3-34).

Management Areas 4.2, 4.5, 5.1, 6.2, 6.4, 7.1, 8.1, are 8.4.2 are also present within the project area, but activities are only planned for MAs 1.2, 6.4, 7.1 and 8.1 (i.e. road closure). All of the impacts from this project are consistent with the expected impacts disclosed in the Final Environmental Impact Statement for the Forest Plan.

2. Appropriateness of Even-Aged Timber Management

Even-aged management has been selected as an appropriate method to meet some of the timber management and wildlife objectives in the Shores project area. The following reasons were used to determine the appropriateness of even-aged management:

- a. The selected silvicultural methods for each stand identified in the Proposed Action are consistent with the rationale for using these methods provided for in the Forest Plan (Forest Plan, Table 2400-1).
- b. The selected silvicultural methods for the stands identified in the Proposed Action will accomplish the purpose and need, including meeting Forest Plan objectives (Forest Plan, pages 2-10, 3-6, 3-7, 3-32, 3-33, and 3-34).
- c. The Proposed Action will regenerate 463 acres using the two-aged shelterwood establishment and removal cutting method (EA, p. 10). This is to move vegetation toward some of the long-term vegetation composition goals for MAs 1.2 and 6.4 (FP, pp. 3-7 and 3-33, respectively). Two-aged shelterwood establishment and removal cutting method is an appropriate method to harvest and convert mature and over-mature stands to regenerate young stands while retaining some trees to begin moving the stands toward mid and late seral classes.

3. Optimality of Clearcutting

Where clearcutting was selected, it was determined to be optimal because:

- a. Clearcutting of aspen stimulates root suckering and increases stocking and early growth. Aspen is a shade intolerant species and will not regenerate under the shade of other trees. Research has shown that for effective sprouting to occur, there must be full sunlight. Other harvest systems will not provide the conditions needed for optimal aspen regeneration (Ohmann, L.F; et al. 1978, Stone et al, 1998). Reserve islands/clumps will be utilized to meet wildlife habitat and visual quality objectives (FP, p. 2-16). Visual variety can be increased in some specific locations through the design, timing, size, and location of clearcuts.
- b. Clearcutting balsam fir-aspen-paper birch forest cover type is optimum to naturally regenerate this forest type (Ohmann, L.F; et al. 1978). It is typically managed like the aspen group due to the large percentage of aspen in this type of stand. Over-mature and high-risk stands can be salvaged. Stands can be sold commercially as a clearcut that will not sell as a shelterwood because of low volume or value per acre. Risk of windthrow is reduced. Visual variety can be increased in some specific locations through the design, timing, size, and location of clearcuts. Habitat conditions for wildlife species that utilize young growth conifer habitat are provided.
- c. Jack pine is a shade-intolerant species. Jack pine grows best in even-aged stands. Site preparation is needed for seeding, planting, or natural regeneration and is accomplished more successfully in clearcut stands. Cones of Jack pine require higher temperatures to open. These higher temperatures can be achieved with cone-bearing slash, which lies on the ground in full sunlight. Risk from insects such as Jack pine budworm is reduced by harvesting late seral Jack pine. Leave trees and snag retention guidelines will be utilized to meet wildlife habitat objectives.

4. Assurance of Restocking

Management for timber products requires that when trees are cut, the stands treated are identified as suited for timber production and the land should be restocked within five years after final harvest. This

action will be completed in compliance with all applicable federal, state, and local laws or requirements imposed for protecting the environment. Review of forest stocking records clearly shows successful restocking by applying the standard silvicultural and site preparation methods identified in this analysis. First and third year stocking surveys are scheduled for all regeneration harvests and will be conducted in the Shores project area to monitor regeneration in all harvest areas.

B. Michigan Wilderness Act of 1987

The closest proposed action to the Horseshoe Bay Wilderness is more than five miles away (EA, Section 3.14.1).

C. Endangered Species Act

This action will not have any adverse impacts on any threatened or endangered species. The US Fish and Wildlife Service (USFWS) concurred with the Biological Evaluation on August 23, 2011 (project file).

D. Clean Water Act

The design of treatment units and road corridors for the proposed action is guided by standards, guidelines, and direction contained in the Forest Plan, applicable Forest Service manuals and handbooks and design criteria (EA, pages 10-13)

E. Clean Air Act

There will be effects to air quality from the timber harvest, site preparation, road construction activities but it is not expected that these emissions will be in high enough concentrations to measure. Air quality standards will still be maintained (EA, section 3.3).

F. Federal Cave Resources Protection Act

Design criteria (EA, Page 10) requires a 200 foot buffer from road work, logging activities and other earth disturbances.

G. Executive Orders

Executive Order 11990 – This EO requires federal agencies to avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modifications of wetlands. I find that this project is designed so there will be no loss of wetlands (EA, pages 10-13). This project, by decommissioning and closing roads that run through wetlands will increase the total amount of wetlands by 16.6 acres (EA, p. 43, Table 3-15).

Executive Order 11988 – This EO requires federal agencies to avoid, to the extent possible, the long and short term adverse impacts associated with the occupancy and modification of floodplains. It is also meant to restore and preserve beneficial values provided by floodplains. This project does not result in any human occupancy of floodplains.

Executive Order 12898 – This EO directs federal agencies to identify and address the issue of environmental justice, i.e., adverse human health and environmental effects of agency activities must be conducted in a discrimination free atmosphere. Contract work that may be generated from this document will include specific clauses providing civil rights protection. The Forest Service will enforce these policies. The proposed action will not cause adverse health or environmental affects that disproportionately impact minority and low-income groups.

Executive Order 12962 – This EO requires federal agencies to evaluate the effects of proposed activities on aquatic systems and recreational fisheries. The proposed action minimizes the effects upon aquatic systems through project design, application of Forest Plan direction, adherence to Best Management Practices as described in Sustainable Soil and Water Quality Practices on Forest Land (MDNR, MDEQ 2009), and site-specific design criteria.

Executive Order 13007 – In accordance with Executive Order 13007, the Tribal Council for the Bay Mills Indian Community, the Sault Ste. Marie Tribe of the Chippewa Indians,

the Grand Traverse Band of the Ottawa and Chippewa Indians, the Little River Band of the Ottawa Indians and the Little Traverse Bay Band of the Odawa Indians were consulted regarding the potential location of American Indian cultural and/or religious sites.

V. FINDING OF NO SIGNIFICANT IMPACT

In reaching this determination under 40 CFR 1508.27 that preparation of an environmental impact statement is not needed. The following factors and information was developed during the analysis of the proposal and disclosed in the EA:

A. CONTEXT

The analysis of the proposal is in a localized area with implications only for the immediate area. The cumulative effects of past management, combined with the current proposal, and reasonably foreseeable future actions are displayed in Chapter 3 of the EA. Because of those effects, the context of this decision, both from a biological and social standpoint, is localized and there will not be significant effects. This decision is consistent with the management direction outlined in the Forest Plan, applied at the project scale.

B. INTENSITY

1. Impacts that may be both beneficial and adverse.

The finding of no significant environmental effects considers both beneficial and adverse effects. Beneficial effects have not, however, been used to offset or compensate for potential adverse effects. Impacts associated with my decision are disclosed in Chapter 3 of the EA.

There are no direct, indirect, or cumulative impacts that are significant in their effects on resources, as they pertain to relevant issues analyzed in the EA. Impacts from this decision are not unique to this project alone, as previous projects have had similar activities and effects (EA pp. 27-142).

There will be no adverse direct, indirect, or cumulative adverse impacts that are significant to the issues analyzed in the Shores EA. The overall positive effect is to move the area towards the desired condition for Forest Plan MAs 1.2, 6.4 and 7.1.

2. The degree to which the Proposed Action affects public health or safety.

Based on the environmental analysis and implementation of projects similar to this in the past, there will be no significant effects to public health or safety by implementing the proposed action.

Need 2 addresses wildland fire risk of a fire dependent ecosystem and the safety of people using facilities in the area (EA, page 27).

Conversion of Jack pine stands to long lived tree species near and around recreation sites would provide for safer, healthier vegetation (Need 2) (EA, page 49).

Safety signs will be posted which identifies harvest activity in stands that the NCT passes through (EA, Page 12).

Timber sale contracts will require loggers using the snowmobile trail during the winter to place warning signs as defined in the traffic control plan (i.e. "Plowed Road Ahead" and "Logging Ahead") to alert snowmobilers of the presence of these activities. Operators will be required to slope snowbanks, where a designated snowmobile trail crosses a plowed road, to allow snowmobilers safe access to the plowed portion of the road. The sale administrator would need to remind loggers of snowmobile presence and the need for safe speeds and extra awareness on roads (EA, Page 13).

An objective of the proposed transportation system for the Proposed Action is to provide access to proposed timber harvest areas and to provide a safe and efficient transportation system (section 1.3 Need 2) (EA, Page 129).

3. Unique characteristics of the geographic area.

The EA did not identify any impacts to any unique geographic areas. Unique characteristics include "... proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas." (40 CFR 1508.27)

There are no park lands or prime farm lands within the project area.

The Carp River is a designated Wild and Scenic River. Approximately six miles of the river lie within the project area. The closest proposed management activity is more than 10 miles from the river corridor.

Ecologically critical areas are those areas that exhibit unique ecological characteristics or, if altered, may affect the viability of threatened or endangered plant or animal species. Surveys for threatened and endangered plants and animals were conducted within stands identified for treatment within the project area (EA, Section 1.3.1). The Proposed Action includes design criteria that effects were evaluated and disclosed within Chapter 3 of the EA (EA, Section 3.10; Appendix E - BE; USFWS concurrence, August 23, 2011).

A heritage resource inventory has been completed for the project area and all known resources will be protected by buffering from any management activities (EA, Section 2.2.2.2). In accordance with the Forest Plan (pp. 2-7 and 2-8) directives for heritage resources, all heritage sites located within the Shores project area that have been determined eligible to the National Register of Historic Places (NRHP), or whose NRHP status remains unevaluated, would be avoided and protected through the establishment of protection zones within which no earth disturbing activities would be permitted (EA, Design Criteria, page 11).

Wetlands comprise a large portion of the Eastside Unit of the HNF. Managing vegetation in wetlands through commercial timber harvest could cause impacts to soil resources and water flow (EA, pp. 40-45); however, Logging on wetlands would be done either during winter or when the ground is dry enough to support equipment. (Specific requirements are identified by site in Appendix B, Soils and Stream Protection Guidelines.) Any winter logging, regardless of soil type, is done with the same precaution (FP p. 2-15). If rutting occurs operations are shut down until measures are taken to prevent rutting or conditions will enable logging without rutting (EA, page 43). There will be no significant environmental effects to wetlands when implementation of the Proposed Action occurs, and that closing and decommissioning roads will result in a net increase of 16.6 acres of wetlands. (EA, p. 43, Table 3-15).

Based upon these considerations, there will be no significant effects on unique characteristics within the geographic area.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The activities in the Proposed Action will contribute towards reaching the desired condition and goals and objectives outlined by the Forest Plan. The effects of the management actions in the Proposed Action do not represent a scientifically controversial impact upon the "quality of the human environment." Based on the comments received, there is no scientific controversy with respect to the effects of implementing the Proposed Action. This EA is tiered to the Forest Plan EIS. Forest-wide effects of Forest Plan standards were disclosed in that EIS. All actions are of a similar type and intensity to activities that have occurred in the past throughout the HNF and in this area.

Based upon these considerations, there will be no significant effects on the quality of the human environment that are likely to be controversial.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The actions included in this decision are similar to many past actions, both in this project area and in adjacent areas. The analysis shows the effects are not uncertain and do not involve unique or unknown risks. The timber sales will involve common harvesting practices and standard contractual requirements.

The IDT that conducted the analysis used the monitoring of past actions as a frame of reference and combined that knowledge with scientifically accepted analytical techniques and the best available science to estimate effects of the proposal.

There are no unique or unusual characteristics about the area, which have not been previously encountered, that will constitute an unknown risk upon the human environment.

6. The degree to which the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.

This is not a precedent setting decision with significant effects to the environment. Similar actions have occurred in the local area. Effects of this project are minor and short term.

This action does not establish precedence for future actions with unknown adverse impacts to the environment.

7. Whether the action is related to other actions with individually insignificant but cumulative significant impacts.

Chapter 3 of the EA discusses the effects of this project with other past, present, and reasonably foreseeable future actions. The analysis convinces me there will not be significant cumulative impacts from this action individually or in concert with other related past or present actions or those anticipated in the foreseeable future beyond what has already been disclosed in the Forest Plan FEIS.

Based on the Chapter 3 of the EA, there are no cumulative significant impacts.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause

loss, or destruction of significant scientific, cultural, or historical resources.

A heritage resource inventory was conducted in the area. Thirty-three heritage sites were identified in the analysis of effects for the Proposed Action. Eight of these sites have been determined “not eligible” for National Register of Historic Places (NRHP) and do not require protection. Consequently, a remaining 25 sites will need to be protected through the implementation of heritage site avoidance measures. The Proposed Action includes design criteria that will require these heritage site avoidance measures (EA, p. 11). Implementation of this design criteria for similar projects has shown that it is successful in protecting these types of sites (HNF M&E Reports – 1992-2009, project record). As a result, no significant impacts are foreseen on any proposed or listed NHRP, nor any loss or destruction of any scientific, cultural, or historic places. Standard timber sale contract clauses and the design criteria will also protect heritage resources that may be discovered during project implementation.

Based upon this information, this action will not cause loss or destruction of significant scientific, cultural, or historic resources.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Three federally listed plant species have potential habitat within the Project Area: Pitcher’s thistle, lakeside daisy, and Houghton’s goldenrod. The Proposed Action is Not Likely to Adversely Affect these three plant species (BE, pages 133-135, Table 23). The Proposed Action is not likely to adversely affect the four endangered animal species with habitat in the project area (Canada lynx, grey wolf, Hine’s emerald dragonfly, and piping plover) (BE Table 23). The USFWS has concurred with the Shores Project Biological Evaluation (concurrence letter, August 23, 2011, in project file). The Proposed Action provides adequate protection for TES plant species.

10. Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

Activities follow standards and guidelines mandated by the Forest Plan. The FEIS and Record of Decision for the Forest Plan indicate the consistency of the Forest Plan with laws or requirements imposed for environmental protection (FP pp. 1-1 to 1-3). Specific analysis has been conducted to determine compliance with federal and endangered species act, heritage resource protection laws, and other resource protection requirements (Section IV A-G, above).

This action does not violate federal, state, or local laws, regulations, and requirements designed for the protection of the environment (Section IV A-G, above).

Based on this discussion, this project complies with statutes imposed for the protection of the environment.

C. Finding

I find, based upon the analysis disclosed in the Shores EA and my evaluation of the factors described in 40 CFR 1508.27, that this is not a major federal action, either individually or cumulatively, that will significantly affect the quality of the human environment; therefore, an environmental impact statement is not needed.

VI. APPEAL RIGHTS

This decision is subject to appeal in accordance with 36 CFR 215. An appeal may be filed by individuals and organizations that provided comments or otherwise expressed interest during the 30-day notice and comment period. The appeal must have an identifiable name attached or verification of identity will be required. A scanned signature may serve as verification on electronic appeals.

To appeal this decision, a written Notice of Appeal must be postmarked or received within 45 calendar days after the date of the legal notice of this decision. The publication date in The Evening News (Sault Ste. Marie, Michigan), newspaper of record, is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

It is the appellant's responsibility to provide sufficient project-specific or activity-specific evidence and rationale, focusing on the decision, to show why the Responsible Official's decision should be reversed. At a minimum, an appeal must include information as specified in 36 CFR 215.14(b). The Notice of Appeal should contain a subject line "Shores."

Written Notice of Appeal on the project must be delivered (via mail or by hand) to USDA, Forest Service, 626 E. Wisconsin Avenue, Milwaukee, WI 53202, ATTN: Appeals Deciding Officer, Jo Reyer. The office business hours for those submitting hand-delivered appeals are 7:30 am - 4:00 pm CT, Monday through Friday, excluding holidays. The Notice of Appeal may alternatively be faxed to 414-944-3963; Attn: Appeals Deciding Officer, Jo Reyer. The Notice of Appeal may be submitted electronically to appeals-eastern-regional-office@fs.fed.us, Attn: Appeals Deciding Officer Jo Reyer. Acceptable formats for electronic comments are text or html email, Adobe portable document format, and formats viewable in Microsoft Office applications.

VII. IMPLEMENTATION DATE

If no appeal is received, implementation of this decision may occur on, but not before, five business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for fifteen days following the date of appeal disposition.

VIII. CONTACT

The detailed planning records for the Shores EA are available for public review at the St. Ignace Ranger Station, W1900 West US-2, St. Ignace, MI 49781. For additional information concerning this decision or the Forest Service appeal process, contact the Responsible Official, Jim Ozenberger, St. Ignace District Ranger, W1900 West US-2, St. Ignace, MI 49781, or call (906)-643-7900, ext. 157.

/s/ Jim Ozenberger

12/19/2011

JIM OZENBERGER
Deputy District Ranger

Date