

Ham Lake Salvage Harvest Project

Preliminary Categorical Exclusion

Superior National Forest
Gunflint Ranger District

PURPOSE OF THE ACTION

The Gunflint Ranger District, Superior National Forest, is proposing about 200 acres of salvage harvest of dead trees in the Ham Lake Salvage Project. The purpose of this project is to harvest timber for use in forest products. Timber harvest is proposed for trees killed in the Ham Lake Fire (see Map 1: Vicinity Map).

The Ham Lake Fire started on May 5, 2007 and burned approximately 75,000 acres in the United States and Canada (see Map 1: Vicinity Map). Within the Superior National Forest, the fire burned about 13,000 acres outside the Boundary Waters Canoe Area Wilderness (BWCAW) and about 16,000 acres inside the BWCAW. A Burned Area Reflectance Classification (BARC) analysis of the Ham Lake Fire revealed a mosaic pattern of burning. Some areas within the fire perimeter were not burned, while other areas were burned to varying degrees of severity.

According to BARC analysis, there are about 850 acres of burned, mature timber that might be salvaged outside the BWCAW. The Ham Lake Salvage Project proposes harvest for about 200 acres of dead trees on Superior National Forest lands outside the BWCAW. This project would contribute to providing forest products and achieving economic sustainability in the region while maintaining environmental sustainability. Timely harvest of salvageable timber would capture value for forest products since this value will diminish over time due to damage by insects and weather. Implementation would be anticipated for the winter of 2007/2008.

Reforestation activities connected to this proposed action are addressed herein. A separate proposed action to be issued in the fall of 2007 will address additional reforestation activities across the entire Ham Lake Fire area.

DECISION TO BE IMPLEMENTED

The locations of stands proposed for salvage harvest are shown in Maps 2a and 2b. Table 1 summarizes the proposed treatments for each stand. The column marked 'Treatment Acres' is the estimated number of acres that would receive treatment. The column marked 'Stand Acres' is the total number of acres that comprise the stands in which treatments would be conducted shown in Maps 2a and 2b. Field observations and BARC analysis indicate that Treatment Acres would be more than 50% less than Stand Acres. This is due to the patchy nature of the Ham Lake Fire and other considerations such as soils, water quality, wildlife, operability and access. In any case, no more than 250 acres would be treated.

All units except for 016-034 would be salvaged and the timber with merchantable value removed. Slash would be retained on site and scattered. Any dead trees without merchantable value that would benefit wildlife would be left as reserve trees. Live trees would not be cut except in the case of removal incidental to the creation of skid trails and landings.

Stand 016-034 at Trail's End Campground would be treated to remove the few hazard trees threatening a water tank and associated infrastructure located on top of the hill at the center of the campground. Dead trees that do not pose a hazard would be reserved. No live trees would be cut and skid trails would not be created during operations inside Stand 016-034 at Trail's End Campground.

The proposed treatments would occur on about 172 acres of jack pine, 15 acres of lowland black spruce and 11 acres of aspen (with red and white pine inclusions).

Field observations indicate that jack pine stands proposed for treatment are regenerating to jack pine. The same is the case for lowland black spruce stands. The prescription for these stands would be natural regeneration. Aspen stands with a red and white pine component that are proposed for harvest would be interplanted with red and white pine to retain this component.

The stands in this project are adjacent to existing National Forest System, Cook County and unclassified roads. Construction of new roads would not be required.

A temporary bridge would be installed to cross a stream at the end of an unclassified road that begins at the Gunflint Trail (CC 12) in order to access Units 014-004, 014-009, 014-012, 014-073, 014-077 and 014-084. This unclassified road is proposed in the Travel Management Environmental Assessment for conversion to a National Forest System Road to be maintained at Maintenance Level 2 up to the stream. Beyond the stream, the road continues as an old road corridor and runs through State of Minnesota land and continues adjacent to these Units.

A portion of a snowmobile trail between Forest System roads 1349 and 1322 would be used to access Units 016-013, 016-022, 016-031, 016-032, 016-049, 016-057 and 016-900. This snowmobile trail would be designated for dual use while harvesting operations occur and mitigation measures to ensure safe use of the trail would be listed in the unit cards.

Unit 007-001 would be accessed via CC 51 and an existing road across State of Minnesota land.

Operational Standards and Guidelines and Mitigation Measures

Operational Standards and Guidelines are required for all treatments listed and are intended to limit or avoid potential adverse effects. Operational Standards and Guidelines are based on 2004 Superior National Forest Land and Resource Management Plan standards and guidelines, 2005 Minnesota Forest Resources Council (MFRC) Forest Management Guidelines, federal laws and regulations, and Forest Service policies.

Operational Standards and Guidelines for the Ham Lake Salvage Project can be referenced on the web at <http://www.fs.fed.us/r9/forests/superior/projects/index.php>.

Additional mitigations may be developed for specific treatment units to further reduce impacts. Mitigation measures will be displayed on unit cards prior to making a decision on this project.

Visual Management

The Ham Lake Fire altered the scenery of the Gunflint Trail, a State of Minnesota Scenic Byway. About 20 percent of the entire Gunflint Trail contains scenery which includes burned vegetation. In some areas, new vistas were opened up. In other areas, a mosaic of burned and unburned areas provided scenery that did not formerly exist. Public opinion is varied about the aesthetics of burned areas. This project includes proposed treatment areas along the Gunflint Trail. Specific visual management would follow the Operational Standards and Guidelines that can be referenced on the web and mitigation measures described on unit cards.

PUBLIC INVOLVEMENT

There have been extensive and ongoing discussions about the Ham Lake Fire and what actions to take in the aftermath among the local community as well as relevant governmental agencies. These discussions have been considered in the course of developing this proposed action.

A letter regarding this Preliminary Categorical Exclusion has been sent to approximately 410 interested parties for public scoping and a 30 day comment period. Members of the forest wide mailing list and landowners and residents near proposed salvage areas are among this list of parties. This project, also known as the 'Ham Lake Salvage Decision Memo', has been listed in the Superior Quarterly, a newsletter published by the Superior National Forest. Interested parties are invited to make substantive comments on the Ham Lake Salvage Project proposed actions.

REASON FOR CATEGORICAL EXCLUSION

This action can be categorically excluded from documentation in an environmental impact statement or an environmental assessment because it falls under Category Number 13, in Section 31.2 of the Forest Service Handbook 1909.15-Environmental Policy and Procedures Handbook. This category is for "Salvage of dead and/or dying trees not to exceed 250 acres, requiring no more than ½ mile of temporary road construction. The proposed action may include incidental removal of live or dead trees for landings, skid trails, and road clearing." This project would treat about 200 acres for salvage harvest.

As summarized below, no extraordinary circumstances related to the proposed action exist.

1. Threatened or Endangered Species or their critical habitat

The Canada lynx is the only federally threatened species on the Superior National Forest at this time. There are no endangered species and there is no critical habitat within the project area. The bald eagle and the Great Lakes wolf population have recently been removed from protection under the Endangered Species Act. We will continue to consider project effects to bald eagles and gray wolves in our analysis of Forest Service Sensitive Species. We have documented Canada lynx on the Gunflint Trail and there is suitable habitat within the project area.

This project *may affect but is not likely to adversely affect* the Canada lynx based on our preliminary analysis. This determination is made using the following information:

- We expect minimal changes to occur in the abundance and availability of denning habitats. Lynx favor patches of older forest for denning. There would be very little change in denning resources as a result of this project.
- We expect minimal changes to occur in the abundance and availability of prey habitats. Snowshoe hares are the primary prey for lynx. Snowshoe hares use early successional habitat for feeding and cover. The project area includes early successional habitat created by the Ham Lake fire. The proposed treatments would not adversely impact and may enhance this habitat through scarification of the soil. Early successional habitat would benefit lynx by stimulating the growth of snowshoe hare populations.
- We do not expect the proposed treatments to affect travel corridors, i.e. the ability of lynx to move through the forest.
- There are no permanent roads proposed with this project so there would be no change in existing road/trail density numbers.
- Human disturbance- Timber harvest activities would not be conducted during lynx denning season. Treatment areas are adjacent to existing roads and human settlement areas. Any subsequent human recreation/movement resulting from the proposed project activities would be localized and disturbance would be concentrated.

A complete analysis and a final determination for Canada lynx will be included within the Biological Assessment for the Ham Lake Salvage Project.

2. Floodplains, wetlands and municipal watersheds:

Floodplains:

Portions of Units 013-028, 016-900 and 014-073 contain known streams. Few anticipated treatment activities would occur within or immediately adjacent to stream channels during this project. Where stream channels exist or are discovered during implementation, the Operational Standards and Guidelines described in the 2004 Superior National Forest Land and Resource Management Plan and 2005 Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines would be incorporated to minimize impacts to water and soil resources. This project would not result in significant floodplain related impacts.

Wetlands:

Two stands proposed for salvage harvest (Units 014-012 and 014-009) contain Lowland Black Spruce, which characteristically grows in wetland soils. In addition, wetland soils are found in portions of all of the Units proposed for salvage harvest except for Units 015-014 and 015-031. No treatment activities would occur without adhering to the Operational Standards and Guidelines described in the 2004 Superior National Forest Land and Resource Management Plan and 2005 Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines to minimize impacts to wetland resources. Examples of these practices include conducting mechanical activities during frozen ground conditions or removing the area from

treatment and prohibiting fueling of equipment within wetlands. This project would not result in significant wetland impacts.

Municipal Watersheds:

There are 2 municipal watersheds located on the Superior National Forest: Burntside Lake that serves the community of Ely and Colby Lake which serves the community of Hoyt Lakes. The project area is located 50 miles east of Burntside Lake and 72 miles northeast of Colby Lake. The distance to these municipal watersheds and drainage patterns of the affected area preclude overland effects of this project on these watersheds. This project would not result in significant municipal watershed related impacts.

3. Congressionally Designated Wilderness, Wilderness Study Area, National Recreation Area:

Units 013-028, 014-004, 014-009, 014-012, 014-073, 014-077, 014-084, 015-023, 016-013, 016-031, 016-032, 016-049, 016-057 and 016-900 are within 0.5 miles of the BWCAW border. Based on a preliminary analysis, we anticipate that proposed treatments for these Units will have minimal or no impact to wilderness values. Further analysis of impacts to wilderness values will be documented in the project record. This determination is made based on the following reasons:

- Sound impacts would occur during a portion of the winter of 2007/2008 when visitor use is lower than during the summer months. In addition, the Units within 0.5 miles of the BWCAW are not adjacent to any trails or lakes in the BWCAW on which visitors commonly travel. Thus, sound impacts will be short in duration and will be audible to very few if any wilderness visitors.
- Visual impacts occurring during salvage operations due to the presence of logging equipment would be minimal due to the limited duration of time of the salvage operations and the infrequent visitor use of the BWCAW in the areas adjacent to proposed salvage units.
- Visual impacts due to the removal of trees would be minimal. While some of the trees may stay standing (in a blackened condition) in the short term, within 10 years most would likely be blown over. Removing these trees now would have negligible effects to scenery. In addition, multiple disturbances on the landscape within and near the BWCAW including the Ham Lake Fire, other fires and the 1999 blowdown event have created scenery similar to that which would be created by project activities.
- As discussed in this document in the sections on Threatened and Endangered Species, Sensitive Species and Forest Plan Consistency, the effects of the proposed action would not have a significant impact on the plants, wildlife and ecosystem structure of the land within the perimeter of the Ham Lake Fire outside the BWCAW. There would not be a significant impact on plants, wildlife and ecosystem structure within the BWCAW either.
- Operational Standards and Guidelines would be followed and relevant mitigation measures listed on unit cards to minimize impacts to wilderness values.

- Units 018-032 and 018-033 are located adjacent to CC 47, a road which leads to a BWCAW entry point at Round Lake. More visitors may travel past these units on CC 47 on their way to the BWCAW than the units within 0.5 miles of the wilderness. However, only 5 acres is proposed for treatment in these stands and treatment is anticipated during the winter of 2007/2008 when visitor use is lower than in summer months.

There are no National Recreation Areas or Wilderness Study Areas on the Superior National Forest. Proposed salvage harvest treatments would not affect either area.

Inventoried Roadless Areas:

The selected salvage areas do not overlap any Forest Inventoried Roadless Areas or Roadless Area Conservation Rule/Roadless Area Review and Evaluation II areas. Unit 007-001 is 0.25 miles from a Forest Inventoried Roadless Area, and Units 012-002 and 018-033 are 0.38 miles from Forest Inventoried Roadless Areas. The effects from this project would be localized and would not impact the Forest Inventoried Roadless Areas.

4. American Indian and Alaska native religious or cultural sites and archaeological sites, or historic properties or areas:

In compliance with Section 106 of the National Historic Preservation Act of 1966, as amended and the Superior National Forest Land Management Plan (2004), a heritage resource inventory would be conducted for the project area where none currently exist. The goal of this inventory would be to identify historic properties in order to protect them from project activities. Results of this inventory would be documented in the Ham Lake Salvage Categorical Exclusion Cultural Resource Reconnaissance Report and reported to the Minnesota State Historic Preservation Officer in the 2008 Superior National Forest Heritage Annual Report. Historic properties would be excluded from project activities, pursuant to S-HR-9 of the Forest Plan, which places a buffer around heritage resources to ensure their protection and avoidance from project activities.

FINDINGS REQUIRED BY OTHER LAWS:

Forest Plan Consistency (National Forest Management Act): The Superior National Forest Land and Resource Management Plan (Forest Plan) was approved in 2004, as required by the Act. This project would be consistent for the following reasons:

1. This project is consistent with the long-term Landscape Ecosystem objectives set forth in the Forest Plan. The vegetation in the Ham Lake Fire area outside the BWCAW is dominated by the Jack Pine-Black Spruce Landscape Ecosystem (LE) (8,946 acres, 77 percent). The Mesic Aspen-Birch-Spruce-Fir LE (1,095 acres, 9 percent), Mesic Red and White Pine LE (1,058 acres, 9 percent) and Lowland Conifer within other components LE (471 acres, 4 percent) comprise the remaining Landscape Ecosystems¹. See the 2004 Superior National Forest Land and Resource Management Plan for an explanation of Landscape Ecosystems.

¹ The total acreage for Landscape Ecosystems (11,571) does not match the total estimated by BARC (13,081) since they were estimated using different methods.

Within the Ham Lake Fire perimeter outside the BWCAW, the treatment acres represent of 169 of 8,946 acres (1.9 percent) of the Jack Pine-Black Spruce LE, 5 of 1095 acres (0.5 percent) of the Mesic Aspen-Birch-Spruce-Fire LE, 9 of 1058 acres (0.9 percent) of the Mesic Red and White Pine LE and 15 of 471 acres (3.2 percent) of the Lowland Conifer within other components LE. The result of the treatments would have minimal effects on LE objectives.

There would not be any anticipated change in forest types in the areas proposed for salvage harvest in the Ham Lake Salvage Project due to existing natural regeneration and planting that would be completed as a part of this project. In addition, there would not be any anticipated change in the age class of stands due to the proposed salvage harvest. Age class is determined by the age of live trees, and the Ham Lake Fire created the young age class that currently exists in stands with fire killed trees.

The proposed treatments would affect a portion of the burned, mature trees suitable for timber harvest located outside the BWCAW²:

- 172 of the approximately 326 acres (52%) of jack pine
- 15 of the approximately 117 acres (13%) of black spruce
- 11 of the approximately 77 acres (14%) of red and white pine

On a landscape scale, these percentages overestimate the proportion of mature, burned trees of these species affected by the proposed treatments. There are additional acres of burned, mature jack pine, black spruce, red pine and white pine on lands not suited for timber harvest outside the BWCAW and burned, mature conifer also exists within areas of the BWCAW burned by the Ham Lake Fire. Finally, 63,575 acres of prescribed and wildfire besides the Ham Lake Fire have occurred on the Superior National Forest since 1999, providing additional areas of burned, mature conifer on the landscape.

2. Other objectives that are consistent with the Forest Plan include:

- A. The proposed action is consistent with the Management Area direction as set forth by the Forest Plan. The project is located in the Recreation Use in a Scenic Landscape Management Area. This Management Area permits timber harvest within the context of recreational use and has a goal for a 'big tree' character to the forest. This project would have minimal effects or no measurable effects to the big tree character in this Management Area. All trees to be salvaged were killed in the Ham Lake Fire. While some of the trees may stay standing (in a blackened condition) in the short term, within 10 years most would likely be blown over. Removing these trees now would have negligible effects to scenery. In addition, the acreage proposed for treatment in this Management Area is minimal at about 200 acres out of about 54,000 acres (0.4 percent) in the Mid to Upper Gunflint Trail portion of this Management Area, and out of 155,412 acres (0.1 percent) across the Superior National Forest.
- B. The proposed action is consistent with the forest-wide goal to 'provide for sustained forest product uses in an environmentally acceptable manner' (p. 2-5). It also is consistent with

² Ham Lake Rapid Assessment Team Report, Tables 7a and 7b.

the Forest-Wide Objective O-TM-1 to ‘provide commercial wood for mills in northern Minnesota...’ (p. 2-20).

3. All relevant Forest-Wide Goals and Forest-Wide Standard Conditions, Objectives, Standards and Guidelines in the 2004 Superior National Forest Land and Resource Management Plan (pp. 2-5 and 2-6) would be met and they would be incorporated in the Operational Standards and Guidelines and would be incorporated in unit cards.

Guideline G-RTL-3 states that “During timber sale activities, combined use of roads or trails by logging trucks and motorized or non-motorized recreationists will generally be avoided when other routes are available.” However, a portion of a snowmobile trail between Forest System roads 1349 and 1322 is the only route available to access Units 016-013, 016-022, 016-031, 016-032, 016-049, 016-057 and 016-900. This snowmobile trail would be designated for dual use while harvesting operations occur and mitigation measures to ensure safe use of the trail would be listed in the unit cards.

Shipstead-Newton-Nolan Act

There are no Units that fall within areas designated by the Shipstead-Newton-Nolan law.

Sensitive Species (Forest Service Manual 2670)

Regional Foresters Sensitive Species are species for which population viability is a concern due to one or a combination of several factors: habitat and species rarity or poor distribution; a declining trend in population; risk to habitat integrity; and population vulnerability. The current Regional Forester Sensitive Species List for the Superior National Forest was developed for the 2004 Forest Plan and was updated in October of 2006 (<http://www.fs.fed.us/r9/wildlife/tes/>).

A Biological Evaluation is used to determine the effects of a proposal on sensitive species. Based on a preliminary analysis, we do not expect these management actions to result in a trend toward federal listing or a loss of viability. For some species we expect *no effect* as a result of this proposal. These determinations are made based on the following reasons:

- A review of the Minnesota Department of Natural Resources natural heritage database shows no known occurrences of sensitive plants within the proposed treatment units. Mammal (gray wolf) and bird populations (bald eagle, three-toed woodpecker, great grey owl) that may be within the treatment areas are mobile and can use alternate habitats if temporarily displaced.
- Patches of large red and white pine exist within some of the aspen stands proposed for salvage near Crab and Round Lakes. Dead red and white pine trees can serve as nesting structures for bald eagles and osprey. Our field review indicates that sufficient nesting structures would remain in nearby unharvested areas following treatment. Nests would be protected according to the Operational Standards and Guidelines for the Ham Lake Salvage Project.
- Forests disturbed by fire provide important habitat features for plant and animal species including a diversity of snags, cavity trees, increased food resources (insects, berries) and increased soil

nutrients. The proposed treatments would occur in stands burned during the Ham Lake fire and suitable for timber harvest; including 52% of the mature jack pine in the project area, 13% of the mature lowland black spruce in the project area and 14% of the mature red and white pine (Ham Lake Rapid Assessment Team Report, Tables 7a and 7b). Forest on unsuitable areas, such as steep slopes, includes additional burned timber. These fire-disturbed types would be minimally affected by the proposed activities when considering the remaining habitat within and outside the project area and burned forests within the wilderness.

- Alternate unburned habitat types would continue to be available for species. For example, mature spruce-fir stands would continue to provide habitat for three-toed woodpecker.
- There are no permanent roads proposed with this project so there would be no long-term disturbance due to roads for any sensitive species.

Human disturbance- Timber harvest activities would be conducted during the winter which would reduce impacts to understory plants. Disturbance would also occur outside of the nesting season for most sensitive bird species. Treatment areas are adjacent to existing roads and human settlement areas. Any subsequent human recreation/movement resulting from the proposed project activities would be localized and disturbance would be concentrated.

IMPLEMENTATION DATE: A decision is expected in fall of 2007. Implementation would be anticipated in winter of 2007/2008.

APPEAL OPPORTUNITIES: When a decision is made after the close of the 30-day comment period, it is subject to appeal in accordance with the provisions of 36 CFR 215.11. Those who provide comments during the 30-day comment are eligible to appeal the decision. The period for filing an appeal begins the first day after the publication of the legal notice for a decision in the Cook County News Herald. An appeal must be filed, and postmarked or received by the Appeal Deciding Officer by the close of business on the 45th day following publication of the legal notice of the decision on the Ham Lake Salvage Project. Contact information for the Appeal Deciding Officer will be provided with the publication of the Decision Notice for the Ham Lake Salvage Project after the close of the 30-day comment period.

CONTACT PERSON : Further information regarding this project can be obtained from Peter Taylor at 218-387-3242 or via email at prtaylor@fs.fed.us.