

**DECISION MEMO  
Pitcha Fuels Reduction Project**

**USDA Forest Service, Region 9  
Superior National Forest  
Kawishiwi Ranger District  
Lake and Saint Louis Counties,**

Township 60N Ranges 10W and 11W and Township 59N Range 10W

**I. DECISION TO BE IMPLEMENTED**

**A. Description of Decision**

The Kawishiwi Ranger District of the Superior National Forest is proposing 194 acres of prescribed underburning and 236 acres of mechanical fuels reduction in the Pitcha Fuels Reduction Project. A prescribed underburn may be a secondary treatment following mechanical fuels reduction.

There may be a ¼ mile or less of new temporary roads built to improve access to project areas. Once the need for access has expired, the roads will be decommissioned and allowed to return to a more natural state once reforestation objectives have been met (Forest Plan, 2-50). Existing roads will be maintained in their current condition during and after operations.

The location of the Pitcha Fuels Reduction Project is displayed on the attached maps. Table 1 summarizes the proposed primary treatments.

**B. Existing Conditions**

Currently, the areas identified in the Pitcha Project Area have large amounts of live and dead balsam fir accumulating in the understory. The combination of this volatile understory fuel and contiguous conifer overstory would allow a surface fire to get into the crown and become a high severity crown fire. This type of wildfire is difficult to manage and potentially devastating to the stand.



*These 2 photos were taken within the Pitcha project area where large amounts of balsam fir have accumulated in the understory.*

Historically, low intensity surface fires removed dead and down fuels, kept balsam fir and spruce regeneration to a minimum, and helped minimize insect and disease outbreaks in older red and white pine stands. These fires burned under the canopy of red and white pine forests without killing the older trees. Eighty years of wildfire control has resulted in the establishment of balsam fir and spruce regeneration in the existing pine stands and an accumulation of potential fuel for wildfires. The high fuel loading has put many pine stands at risk for intense crown fires that could devastate the stands. Private landowners adjacent to these stands would be threatened by large wildfires.

The area is in Fire Regime III and the stands are presently in Condition Class 2 or 3. Fire Regime is a classification of the natural role fire would play across a landscape without human intervention. Fire Regime III is classified as fires with a severity in which 75 percent or less of the dominant overstory vegetation is replaced every 35 to 100 plus years. Vegetation within Condition Class 2 is described as being moderately altered from its historic conditions. Condition Class 3 is described as being significantly altered from its historic conditions.

### **C. Purpose of Decision**

The purpose of this project is to break up the continuity of the fuel hazard by creating a mosaic patchwork within the project area by using mechanical treatments and prescribed fire. In the event of a wildfire the treated areas would burn with less intensity than non-treated areas allowing safer conditions for fire personnel to manage and suppress it. Balsam fir and other potentially hazardous fuels would be reduced or removed by mechanical fuels reduction, prescribed burning, and biomass removal.

In addition this proposal would help achieve the desired conditions, stated below, from the Forest Plan:

Establish, maintain or improve the condition of vegetation using prescribed fire, mechanical treatments, and other tools (p. 2-19, O-ID-2).

Reduce fuels and control vegetation in the understory of stands that had naturally occurring low intensity surface fires (p. 2-19, O-ID-4).

Treat areas of highest fire risk (Condition Class 2 and 3 and in Fire Regime I, II, and III areas) to minimize effects of unwanted wildland fire (p. 2-19, O-ID-3).



*This picture was taken 5 years after a prescribed underburn. There is minimal risk to this stand from a hazardous fire as much of the ladder fuels were eliminated and there is minimal balsam fir regeneration.*

**TABLE 1 - Primary Treatments**

<b>Proposed Treatment</b>	<b>Unit #</b>	<b>Acres</b>	<b>Current Condition</b>	<b>Objective</b>
<b>Prescribed Underburn</b>	1	20	Red pine stand thinned about 10 years ago.	Reduce balsam fir seed source and non-merchantable understory ladder fuels which could carry surface fire into the canopy causing mortality of the overstory pines. Restore the natural frequency of disturbance to this area.
	2	26	Jack pine with lesser amount of red pine, white pine, white spruce, aspen and paper birch.	
	3	54	Old growth white pine stand intermixed with red pine, aspen and paper birch.	
	4	42	Diverse stand mixed with mature red pine, white pine, white spruce, jack pine and paper birch and a grass drainage. The grassy drainage consists mainly of grasses and sedges with pole size black spruce and cedar along the transitional area with the uplands.	
	12	5	A mixture of white and red pine.	
	13	47	Mixture of white and red pine.	
<b>Total</b>		<b>194</b>		
<b>Mechanical Fuels Reduction</b>	8	24	Mixture of white and red pine that have been thinned in the past.	Reduce balsam fir seed source and non-merchantable understory ladder fuels which could carry surface fire into the canopy causing mortality to the overstory pines. Restore the natural frequency of disturbance to this area.
	10	18	Diverse mixture of white pine, red pine, jack pine, and some white spruce.	
	11	94		
	9	85	Diverse mixture of white pine, red pine, jack pine, and some white spruce.	Reduce understory ladder fuels that are associated with non-merchantable trees. Non-merchantable material from this unit will be removed off site as a biomass product.
	16	15	Southern part of unit is a red pine stand and remaining part of unit is a mixture of red pine, balsam fir and aspen.	Reduce balsam fir seed source and non-merchantable understory ladder fuels. Remove some of the non-merchantable horizontal fuels that resulted from blowdown in 1999.
<b>Total</b>		<b>236</b>		
<b>Total Acreage</b>		<b>430</b>		

## **II. REASONS FOR CATEGORICAL EXCLUSION**

Decisions may be categorically excluded from documentation in an environmental impact statement or environmental assessment when they are within one of the categories identified by the U.S. Department of Agriculture in 7 CFR part 1b.3 or one of the categories identified by the Chief of the Forest Service in Forest Service Handbook (FSH) 1909.15 sections 31.1b or 31.2, and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

I have concluded that this decision is appropriately categorically excluded from documentation in an environmental impact statement or environmental assessment as it is a routine activity within a category of exclusion and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment. My conclusion is based on information presented in this document and the entirety of the record.

### **A. Category of Exclusion**

I have determined this action falls under the following category of action that is normally excluded from documentation in an Environmental Impact Statement or Environmental Assessment pursuant to FSH 1909.15:

31.2 Category 10: "Hazardous fuels reduction activities using prescribed fire, not to exceed 4,500 acres, and mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,000 acres."

This project will treat 194 acres of prescribed burning and 236 acres of mechanical treatments for a total of 430 acres. In addition, this project (1) will be conducted in the wildland urban interface or in condition classes 2 or 3 and in Fire Regime Groups I, II, or III; (2) was identified through a collaborative framework as described in "A Collaborative Approach for Reducing wildand Fire risks to Communities and Environment 10-Year Comprehensive Strategy Implementation Plan"; (3) will be consistent with the Superior National Forest Land and Resource Management Plan (2004); (4) will not be conducted in wilderness areas or where activities could impair the suitability of wilderness study areas for preservation for wilderness; (5) will not include the use of herbicides or pesticides; and (6) will not involve the construction of new permanent roads or other new permanent infrastructure.

### **B. Relationship to Extraordinary Circumstances**

I have considered conclusions by resource specialist reviews of conditions at the affected sites. I find there are no extraordinary circumstances that may result in significant and adverse, individual or cumulative environmental effects to the environment.

FSH 1909.15(30.3) states that the mere presence of a resource (such as wetlands) does not preclude the use of a categorical exclusion. It is the degree of effect of a proposed action on resources that determines whether extraordinary circumstances exist.

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

1. Threatened and Endangered Species or Their Critical Habitat: The Endangered Species Act requires that federal activities do not jeopardize the continued existence of any species federally listed or proposed as threatened or endangered, or result in adverse modification to such species' designated critical habitat. All sites have been evaluated for federally listed, proposed, or sensitive species, or their critical habitat. Gray wolf, lynx, and bald eagle may be found in or near the Project Area, but the project will not result in adverse effects to habitat or individuals (Project Record, Biological Assessment).

## 2. Floodplains, Wetlands, and Municipal Watersheds:

Floodplains: Executive Order 11988 is to avoid adverse impacts associated with the occupancy and modification of floodplains. Floodplains are defined by this order as, "...the lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum, that area subject to a one percent [100-year recurrence] or greater chance of flooding in any one year."

The proposed treatments are not located in or near floodplains. This has been validated by map and site-review. This decision will not affect floodplains.

Wetlands: Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as, "...areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds."

This decision includes activities within wetlands. This has been validated by quadrangle map and site-review. The activity within the wetlands includes the prescribed burning of grassy drainages prior to burning adjacent upland units. The grassy drainages will be burnt while adequate moisture exists in the adjacent upland areas to confine the fire to the grassy drainages. No soil disturbing activities are anticipated to control the fire. This limited activity will not change the function of the wetlands. Field review (monitoring) of similar projects validates acceptable resource effects from similar activities. This decision will not result in significant wetlands-related impacts.

To further ensure that wetlands-related impacts are minimized, the treatment activities will adhere to the standard management requirements described in the 2004 Superior National Land & Resource Management Plan and 1999 Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines (<http://www.frc.state.mn.us/FMgdline/Guidebook.html>).

Municipal Watersheds: Municipal watersheds are managed under multiple use prescriptions in land and resource management plans. 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 21 miles southeast of Burntside Lake watershed and 24 miles northeast of Colby Lake watershed. The distance to these municipal watersheds and drainage patterns of the affected area preclude overland effects of this project on these watersheds. This decision will not affect municipal watersheds.

## 3. Congressionally Designated Areas:

Wilderness: This decision does not affect wilderness. The project is not in or near Wilderness. The Boundary Waters Canoe Area Wilderness (BWCAW) is approximately 10 miles from the nearest planned treatment area. This decision, with impacts limited to the immediate area of activity, will not affect the BWCAW.

Standard smoke management techniques through prescribed burn planning and smoke modeling will mitigate smoke impacts on the wilderness air shed (Class 1). The air shed is not expected to be negatively impacted.

Wilderness Study Areas/National Recreation Areas: There are no National Recreation Areas or Wilderness Study Areas on the Superior National Forest (SNF Forest Plan ROD page 7 and D. Lula pers. comm.). Therefore, the proposed activities will not affect either area.

4. Inventoried Roadless Areas: There are no inventoried roadless areas in the decision areas (Forest Plan FEIS page 3.7-6). Based on the 2004 Forest Plan, the closest Inventoried Roadless Areas to the Pitcha Project is the South Kawishiwi River, which is about 12 miles north of the Project Area. This decision will not affect inventoried roadless areas.

5. Research Natural Areas: There are no Research Natural Areas in the decision area (Forest Plan FEIS 3-33 and 3-36). The closest Research Natural Area or Potential Research Natural Area is the Dragon Lake Candidate Research Natural Area, which is 7 miles northeast of the project. This decision, with impacts limited to the immediate area of activity, will not affect Research Natural Areas.

6. American Indian and Alaska native religious or cultural sites: The Federal government has trust responsibilities to Tribes under a government-to-government relationship to insure that the Tribes' reserved rights are protected. Consultation with tribes helps insure that these trust responsibilities are met. The Forest consulted with potentially affected tribes. No tribal concerns were identified for this project (Project Record, Tribal Consultation).

7. Archaeological sites, or historic properties or areas: Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in the National Register of Historic Places. Section 106 of the National Historic Preservation Act also requires federal agencies to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on agency undertakings. The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered on federal lands. It affords protection of archaeological resources and sites that are on public and Indian lands. The Native American Graves Protection and Repatriation Act covers the discovery and protection of Native American human remains and objects that are excavated or discovered in federal lands. It encourages avoidance of archaeological sites that contain burials or portions of sites that contain graves through "in situ" preservation, but may encompass other actions to preserve these remains and items. This decision complies with the cited Acts.

A large portion of the project area has been surveyed for heritage resources. There are several known sites in the project area and appropriate mitigations will be applied. Treatment areas not covered will be identified and surveyed for heritage resources prior to commencement of treatment activities. All resources identified through the survey process within the project area will be protected through standard management requirements. For example, if any new heritage resource sites are located during the course of the project activities, work will be immediately halted and a Heritage Resource professional will be consulted and appropriate mitigation measures would be carried out prior to restarting operations.

8. No other extraordinary circumstances related to the project were identified (Project Record, Scoping).

### **III. PUBLIC INVOLVEMENT**

The need to treat portions of this project was identified in the Lake County Wildfire Protection Plan and was developed collaboratively with the local communities. Approximately, 346 acres are located within the Slate/Birch Wildland Urban Interface (WUI). This WUI was identified as a high priority area for fuels reduction based on the fire risk and hazard assessment of this WUI. The remaining 142 acres are located in St. Louis County and have yet to be identified in a WUI area. However, these acres are in Fire Regime III with a condition class 2 or 3.

Public involvement included mailing a scoping packet to 300 people on February 16, 2006; publishing a legal Notice in the Ely Timberjay on March 11, 2006 and; listing the project in the Forest's Scheduled of Proposed Actions since April 1, 2006. There were 22 interested parties that responded to the scoping packet. Majority of the response letters indicated they were very supportive of the project. A few letters

had no comment but requested to remain on the mailing list. There was no letter received that opposed this project.

#### **IV. 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. I have reviewed the Forest Plan and have determined this project is consistent for the following reasons:

1. This project is consistent with the long-term Landscape Ecosystem objectives set forth in the Forest Plan. The project area is predominately in the Dry Mesic Red Pine-White Pine Landscape Ecosystem (LE). Of the 706,700 acres of this LE, 254,412 acres are federal land. The result of the treatments will have minimal effects on these objectives due to the low number of acres treated. The treatment acres represent 0.1 percent of the total area of the Dry Mesic Red Pine-White Pine LE.

There will be no conversion of forest types in this project, but there would be decrease in the amount of balsam fir which is consistent with the tree species diversity objectives for dry-mesic red and white pine LE (DRW-3, page 2-65). Reducing the amount of balsam fir would also lessen the risk of a wildfire killing an entire stand, which is consistent with maintaining or increasing the percentage of the forest types being treated (DRW-1, page 2-64).

2. Other objectives that are consistent with the Forest Plan and that will be met through the reduction of hazardous fuels include:

This decision is consistent with the Management Area direction as set forth by the Forest Plan. The project is primarily located in the Semi-primitive Motorized Recreation Area with a portion located in the General Forest – Longer Rotation Management Area.

One of the desired conditions in the Semi-primitive Motorized Recreation Management Area is to manage these ecosystems as a predominantly natural-appearing landscape, emphasizing large trees and older forest characteristics with a continuous forest canopy (D-SPM-1, page 3-25). Management activities such as management-ignited fire and mechanical fuels reduction may be used to maintain the natural appearance of the landscape, provided scenic integrity and recreation objectives are not compromised (D-SPM-2, page 3-25).

One of the desired conditions in the Longer Rotation Management Area is that natural disturbances are mimicked through the use of management activities such as harvest and prescribed fire to maintain or restore vegetation communities. Fire is also used as a tool to prepare sites for regenerating new forest and to reduce woody fuel that could cause wildfires (D-LR-5, page 3-10). This project's proposed treatments are designed to mimic natural disturbance through the use of prescribed fire and understory mechanical fuels reduction. The prescribed fire and understory fuels reduction treatments will reduce the fuel build-up on the forest floor and reduce the balsam understory, reducing the fire hazards.

Treating areas of highest fire risk to minimize effects of unwanted fires (this is directly related to Condition Class) (O-ID-3, page 2-19). The Pitcha area was chosen for treatment because it was determined to be one of the of highest fire risk areas in the Lake county Wildfire Protection Plan. Historically, this area had naturally occurring low intensity fires due to little vegetation and fuel loading in the understory and a conifer overstory. Regenerating to white pine and spruce will restore tree species to how they were historically maintained. Ultimately, this will lead to low intensity understory fires reducing the risk of high intensity crown fires.

3. I have reviewed the Forest-Wide Goals and the Forest-wide Standard Conditions, Objectives, Standards, and Guidelines in the Forest Plan (page 2-5 and page 2-6). All relevant Forest-Wide Goals and Forest-Wide Standard Conditions, Objectives, Standards, and Guidelines will be met and they have been incorporated in the Standard Management Requirements and will be incorporated in unit cards.

Sensitive Species (Forest Service Manual 2670) - This Manual direction requires analysis of potential impacts to sensitive species, those species for which the Regional Forester has identified population viability is a concern. The current Regional Forester Sensitive Species (RFSS) List for the Superior National Forest was developed for the recently revised Forest Plan (2004). Potential effects of this decision on sensitive species have been analyzed and documented in the Biological Evaluation (Project Record). This decision may impact individuals (RFSS) but is not likely to cause a trend to federal listing or loss of population viability.

Clean Water Act – The intent of the Act is to restore and maintain the integrity of waters. The design of the treatment units in this decision is guided by standards, guidelines, and direction contained in the Forest Plan, and applicable Forest Service manuals and handbooks. Reasonable implementation with site-specific application and monitoring of the State of Minnesota’s Sustaining Minnesota Forest Resources Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers, and /Resource Managers is expected to comply with applicable state water quality standards.

Clean Air Act – The Clean Air Act is addressed through the State Smoke Management Plan. All burning activities will be carried out in compliance with the forest’s Fire Management Plan and the State’s Smoke Management Plan. These Plans outline how prescribed burning will be carried out so that the resulting smoke minimally affects air quality. These plans also require the preparation of burn plans. The burn plans prepared for each burn address smoke management. Burning will only be initiated on days for which the atmosphere can adequately disperse the smoke. Depending on the burn’s size and complexity, and the proximity of sensitive receptors, additional steps may be taken. Modeling may be done during the development of the burn plan to better determine what meteorological conditions are necessary to prevent adverse impacts from smoke. In addition, air quality monitoring can be done on burn day to actually measure the smoke impacts.

Based on the provision set forth in the Smoke Management Plan and the results of past projects, I determined that this decision will be in compliance with the Clean Air Act.

Environmental Justice (Executive Order 12898) - This Order requires consideration of whether projects would disproportionately impact minority or low-income populations. This decision complies with this Act. Public involvement occurred for this project, the results of which I have considered in this decision-making. Public involvement did not identify any adversely impacted local minority or low-income populations. This decision is not expected to adversely impact minority or low-income populations.

National Environmental Policy Act - This Act requires public involvement and consideration of potential environmental effects. The entirety of documentation for this decision supports compliance with this Act.

## **V. ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES**

This Decision is subject to appeal pursuant to Title 36 CFR 215. An appeal may be filed by those who have provided comment or otherwise expressed interest for the project during the 30-day comment period. The appeal must be filed within 45 days of the date that the notification of this Decision is published in the Ely Timberjay, the official newspaper of record, published in Ely, Minnesota. The publication date of the legal notice is the exclusive means for calculating the time to file an appeal. The Notice of Appeal must be sent to:

James W. Sanders, Forest Supervisor  
Superior National Forest  
8901 Grand Avenue Place  
Duluth, MN 55808-1102

Facsimile number: (218) 626-4398  
Office Hours: 8:00 AM to 4:30 PM Central Standard Time, Monday -Friday

Electronic address for email appeals: [appeals-eastern-superior@fs.fed.us](mailto:appeals-eastern-superior@fs.fed.us) Electronic File Formats: txt, html, pdf, or any file format viewable from MS Office applications.

It is the responsibility of those who appeal a Decision to provide the Deciding Officer sufficient narrative evidence and argument to show why this Decision should be changed or reversed. At a minimum, the written Notice of Appeal must:

- State that the document is a Notice of Appeal filed pursuant to 36 CFR part 215;
- List the name, address, and, if possible, a telephone number of appellant;
- Identify the decision document by title and subject, date of the decision, and name and title of the Responsible Official;
- Identify the specific changes(s) in the decision that the appellant seeks or portion of the decision to which the appellant objects;
- State how the Responsible Official's decision fails to consider comments previously provided, either before or during the comment period specified in 36 CR\$ 215.6 and, if applicable, how the appellant believes the decision violates law, regulation, or policy.

## **VI. IMPLEMENTATION DATE**

A decision is expected in summer of 2006. Implementation is scheduled to begin in the summer of 2006.

## **VII. CONTACT PERSON**

Further information about this decision can be obtained from Linda Merriman during normal office hours (weekdays, 8:00 a.m. to 4:30 p.m.) at the Kawishiwi Ranger District office (Address: 118 S. 4<sup>th</sup> AVE. E. Ely, MN 55731; Phone: voice (218) 365-7614; Fax: (218) 365-7605; e-mail: [lmerriman@fs.fed.us](mailto:lmerriman@fs.fed.us)).

**VIII. SIGNATURE AND DATE**

**/s/ Mark Van Every**  
Mark E. Van Every  
Kawishiwi District Ranger  
Responsible Official

**May 31, 2006**  
Date

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