Stony Project Decision Notice and Finding of No Significant Impact

Introduction

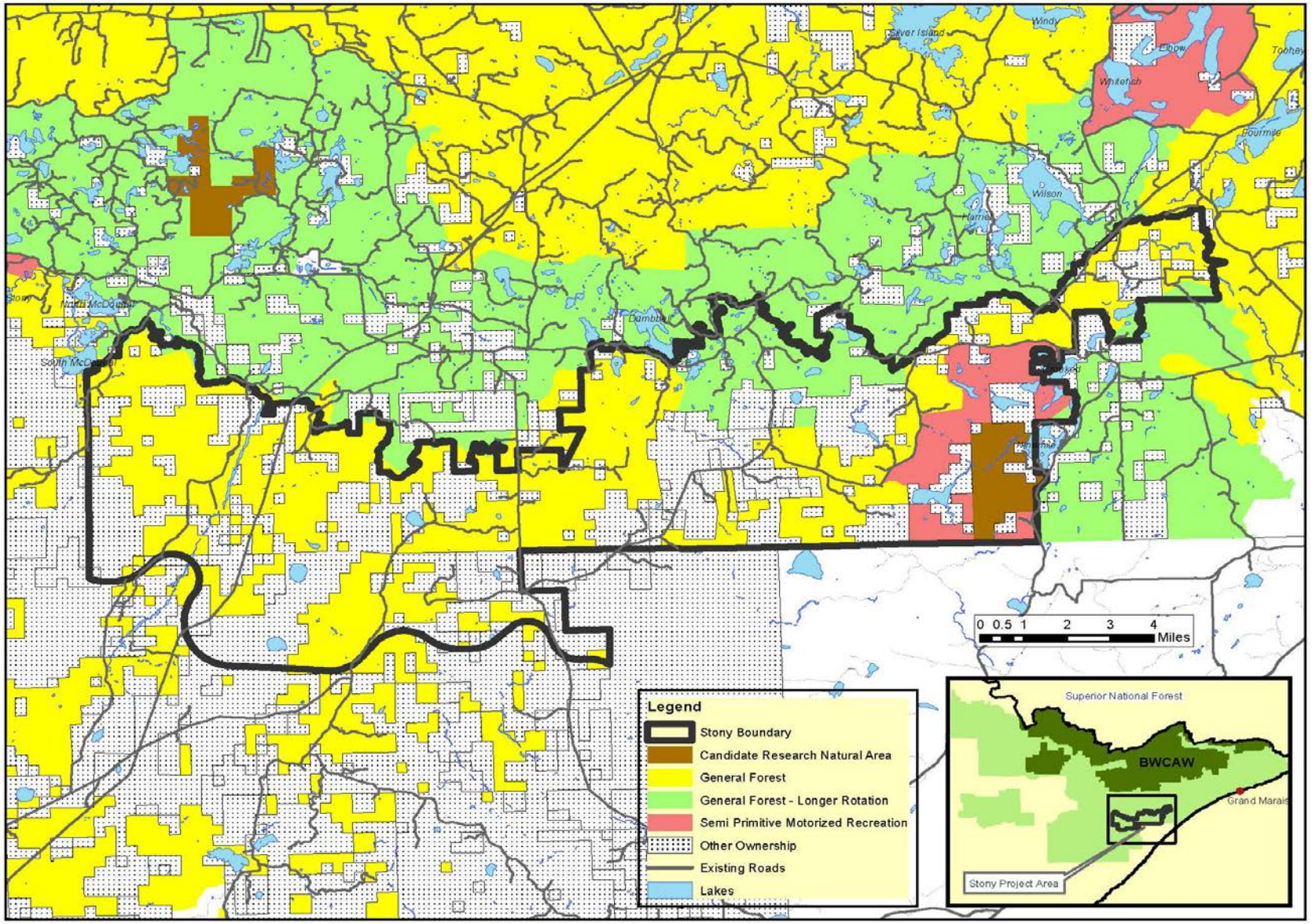
This Decision Notice and Finding of No Significant Impact describes the selected vegetation management activities in the Stony Project for Modified Alternative 2, my rationale for selecting Modified Alternative 2, how I considered input from the public, and how this project meets applicable laws, regulations, and policies.

The Stony Project Area is located in Cook and Lake County, Minnesota. The Vicinity Map (Figure 1.1) shows the general location of the Stony Project Area. Townships included in the project area, from west to east, are Township (T) 58 North (N) Range (R) 10 West (W), 9W, 8W, 7W, 6W; T59N, R10W, R9W, R8W, R7W, R6W, R5W; T60N, R7W, R6W, R5W. The Stony Project Area encompasses approximately 81,000 acres, of which, about 47,000 acres are National Forest System land. Selected activities would occur only on National Forest System lands.

Purpose and Need

The purpose of the Stony Project is to implement objectives in the Superior National Forest Land and Resource Management Plan (Forest Plan). The Forest Plan promotes management of the Forest for multiple benefits by setting goals and objectives in numerous resource areas, such as managing for wildlife and fisheries habitat, providing recreation opportunities, and promoting ecosystem health through vegetation management. The Forest Plan takes a strategic look at

Figure 1: Stony Project Area Vicinity Map.



landscape ecosystems and describes desired resource conditions that will provide resilient ecosystems and ensure ecosystems are capable of providing a sustainable flow of beneficial goods and services to the public.

Each project on the National Forest begins with a review of the Forest Plan and an assessment of the existing condition of the resources within the project area. In 2014 an interdisciplinary team of natural resource specialists compared the existing resource conditions of the Stony Project Area with Forest Plan desired conditions and objectives. Where the resource specialists' assessments found a difference between the existing and desired conditions, a purpose and need for action was identified. The purpose and need selected for this project is described in more detail in Chapter 1 of the Stony Environmental Assessment and includes the following:

A. Need to Promote Diverse, Productive and Healthy Wildlife Habitats and Ecosystems
B. Need to Reduce Hazardous Fuels
C. Need to Manage for the Minimum Road System
D. Need to Provide Sustainable Timber Products

Decision

My decision and findings are based on my expertise and knowledge of the area, the Stony Project Environmental Assessment (EA), the Stony Biological Assessment (BA), the Stony Biological Evaluations (BE), the Stony Project Record, and the 2004 Superior National Forest Land and Resource Management Plan (Forest Plan).

After reviewing all of the alternatives, the environmental analysis, data from further field reconnaissance, and public input, I have decided to implement Alternative 2 with three modifications (hereafter referred to as Modified Alternative 2). First, to better meet fuel reduction and reforestation objectives units 145-048, 275-001, 275-004, 280-011, and 309-011 have been changed to clearcut with reserves with secondary reforestation activities instead of understory fuels reduction. Second, to maintain desirable lynx habitat unit 301-019 was dropped from treatment. Third, to be more economically feasible units 144-038, 145-023, 272-030, 272-041, 280-010, 280-015, 280-062, and 283-023 will no longer have slash disposal as a secondary treatment.

These changes are reflected in Appendix A: List of Proposed Stands, Treatments and Mitigation Measures. The scope of the changes is small and the effects of Modified Alternative 2 are within the effects analysis presented in the Stony Project Environmental Assessment. Table 1 summarizes the primary vegetation management actions and Table 2 shows the secondary treatments and reforestation methods under Modified Alternative 2. All acreages stated in this Draft Decision Notice are best estimates and small differences are expected in implementation treatment acreages.

Table 1: Summary of Proposed Action by Primary Treatments.

Treatment Description	Unit Acres
Treatments that create young forest	
Broadcast Burn	165
Burn Inclusion	43
Clearcut with Reserves Harvest	2,246
Clearcut Harvest	303
Seed-tree Harvest	15
Treatments that create multi-aged forest through uneven-aged harvest	
Partial Harvest	38
Treatments that improve stand conditions through intermediate harvest	
Commercial Thinning	604
Pre-commercial Thinning	350
Treatments that restore stands through a variety of non-harvest activities	
Mechanical Site Preparation	757
Riparian planting	451
Underplant	38
Understory Fuels Reduction	1,266
Understory Fuels Reduction/Riparian Planting	540
Total of all Treatment Types	**6,816**

Table 2: Summary of Secondary Treatments and Reforestation Methods.

Secondary Treatment and Reforestation Description	Unit Acres
Secondary Treatments	
Crush/Shear All Black Spruce After Harvest	303
Mechanical Site Preparation	445
Riparian Planting	275
Slash Disposal	652
Understory Fuels Reduction	79
Regeneration Activities	
Interplant and Natural Regeneration	706
Natural Regeneration	1,391
Plant	461
Seed	755
Seed and Riparian Planting	78
Underplant	423
Total of all Treatment Types	**5,568**

The following list of appendices describes where to find the site-specific treatment and mitigation measures. Please refer to these important details to get a complete understanding of the decision.

- **Appendix A** lists the specific stands, treatments and mitigation measures that would be implemented with this decision.

- **Appendix B** gives a general definition for each of the treatment types and regeneration methods.
- **Appendix C** lists the Design Features and Operational Standards and Guidelines that apply to all units. Design Features and Operational Standards and Guidelines are based on the Forest Plan and Minnesota Forest Resource Council guidelines and are an integral part of the actions and are designed to minimize adverse effects.
- **Appendix D** is the Draft Decision Map which displays the locations of the proposed selected treatments.
- **Appendix E** provides responses to comments received on the Environmental Assessment.

As part of my decision 811 acres will be treated for mechanical site preparation or slash disposal on low nutrient soils where Forest Plan guidelines call for retaining slash and woody debris (G-WS-8, FP p. 2-16). A list of these units is in the Stony Project Record. In these units I have determined that site preparation or fuel reduction is a higher priority than the nutrient status. The effects to the soils resource will be limited and not detrimental, and the effects to soil nutrients will be lessened when the units are regenerated to conifer species. Therefore, this part of the soil guideline will not be followed in some units. These trade-offs are discussed in more depth later in this Draft Decision Notice under Compliance with the National Forest Management Act. Chapter 3 of the Environmental Assessment describes the effects of removing slash on these sites.

Also, units that will be treated for dwarf mistletoe infestation will not follow Forest Plan guideline G-TM-5, related to retaining legacy patches in harvest, MFRC guideline related to retaining a minimum of 6 to 12 live leave trees per acre, and MFRC guideline related to retaining a minimum basal area in a riparian management zone. I have decided that exceptions to the leave trees guideline to address insect and disease treatments (such as dwarf mistletoe in black spruce) where leaving live trees will be counterproductive is necessary and is appropriate (MRFC Guidelines, p.78, 2005). For a discussion of the adverse and beneficial effects of not leaving legacy patches or live trees see section 3.9 of the EA.

Biomass removal may occur on harvest units with secondary treatments of slash disposal or site preparation, and on non-harvest units with primary treatments of understory fuel reduction or site preparation. Except as described above, biomass removal will not occur on units where soil mitigations call for retaining slash. Biomass removal will include tops and limbs (from harvest operations), brush, and non-merchantable stems; it will not include stumps or existing coarse woody debris. Biomass removal will follow Operational Standards and Guidelines (Appendix C).

As part of my draft decision Forest Roads 393J and 365B will be decommissioned, and 28 miles of temporary roads will be constructed to access units and decommissioned after use is complete. All temporary roads will be decommissioned following Operational Standards Guidelines G-TS-16 and G-TS-1 (Appendix C).

Reasons for the Decision

In this section I provide my reasons for selecting Modified Alternative 2 rather than Alternative 1 by discussing how Modified Alternative 2 addresses the purpose and need for the project.

Please refer to Chapters 2 and 3 of the EA as the information found there supports the following discussion and provides a comparison of the Alternatives.

In making my decision, I considered the competing interests and values of the diverse public as reflected in the comments I received throughout this project. Based on some of the comments I received, I recognize that this decision will probably not satisfy every individual or every group. Yet the decision making process for forest management is never straight forward and involves making tradeoffs. As a decision maker I have to balance beneficial and adverse effects with short-term and long-term outcomes. I do understand that there are a number of tradeoffs and I discuss these throughout this section.

Of the alternatives I considered in detail or briefly, Modified Alternative 2 has several characteristics that led me to select it for implementation. In my professional view, Modified Alternative 2 provides the best balance between resource use and resource protection, and best meets the project purpose and need while incorporating measures to address public concerns. I explain my rationale in more detail below with each of the elements of the purpose and need for the Stony Project.

Promote Diverse, Productive, Healthy Wildlife Habitat and Ecosystems

Compared to Alternative 1, Modified Alternative 2 makes the most progress towards Landscape Ecosystem and Management Indicator Habitat Objectives. Modified Alternative 2 has an appropriate balance between creating young forest and maintaining mature forest patches, thereby sustaining a diverse mix of wildlife habitats. The interdisciplinary team was strategic in determining which mature patches to retain and which to turn into young forest for future mature patches. Modified Alternative 2 will create 2,748 acres of young forest, providing valuable habitat for various species, such as moose and deer (browse habitat) and migratory birds (nesting and feeding habitat).

Alternative 1, the No-Action Alternative, not only fails to contribute to the Landscape Ecosystem Objectives for age class, but resulting conditions would move further from Forest Plan objectives. For example, combining the 0 to 9 age class acres in upland landscape ecosystems, Alternative 1 results in zero acres in the young class, a drop from about 196 acres in the existing condition, moving further from young age class objectives.

Even though I understand that structural diversity may be higher under Alternative 1 due to the lack of even-aged management, Modified Alternative 2 will increase species diversity due to the inclusion of more acres for planting, thereby increasing tree species diversity. Modified Alternative 2 will regenerate a broad mix of species, including some that are decreasing across the landscape, such as white pine and tamarack. The diversity of tree species in stands will be increased through interplanting and underplanting (See Appendix B for definitions). A mix of white pine, red pine, yellow birch, cedar, white spruce, and red oak will be interplanted on 706 acres in Modified Alternative 2. A mix of cedar, tamarack, black spruce, white and red pine, yellow birch, and red oak will be underplanted on 423 acres in Modified Alternative 2. If I do not take any action in this project, stands of old aspen and paper birch will continue to decline and balsam fir will be the dominant species regenerating. The No-Action Alternative would continue the current condition where little white pine regenerates.

A diverse mix of upland and lowland habitat, which occurs in the Stony Project Area, is also important for moose. An important component of moose habitat is the availability of young

forest for foraging. Modified Alternative 2 will create young upland forest providing more available forage for moose. Modified Alternative 2 will create 1,380 more acres of foraging habitat than Alternative 1. Moose tend to favor early successional browse species, such as quaking aspen, paper birch, and certain shrubs, which will regenerate following harvest. Shrub and tree regeneration following management activities under Modified Alternative 2 will provide another 10 to 20 years of forage. Alternative 1 proposes no management activities; therefore, it will do less than Modified Alternative 2 to create forage for moose. Without management actions or natural disturbance events, foraging habitat is expected to decrease over the next decade.

Under Modified Alternative 2, fourteen lowland black spruce units heavily infected with eastern dwarf mistletoe will be treated. Young healthy black spruce will be regenerated through these treatments on 291 acres and will improve forest health by preventing further decline of black spruce in the infected stands and prevent the spread of mistletoe from these stands to neighboring stands. Modified Alternative 2 will treat these stands as "clearcut *without* reserves" and will not follow Forest Plan guideline G-TM-5, related to retaining legacy patches in harvest, MFRC guideline related to retaining a minimum of 6 to 12 live leave trees per acre, and MFRC guideline related to retaining a minimum basal area in a riparian management zone. Exceptions to the leave trees guidelines to address insect and disease treatments (such as dwarf mistletoe in lowland black spruce) are appropriate where leaving live trees will be counterproductive (MFRC Guidelines, p.78, 2005).

I have decided that not following these guidelines in these stands is appropriate and will reduce the likelihood that dwarf mistletoe will affect regeneration. I also realize that dwarf mistletoe will not be fully eradicated; however by not leaving any black spruce in the units, the spread of dwarf mistletoe will be decreased by removing its host, black spruce trees. If I do not take action in this project these stands will continue to decline, the infestation will spread to adjacent areas, and the lowland black spruce forest type will be lost in these stands and the riparian areas.

Additional objectives Modified Alternative 2 will meet:

- **Improve riparian function:** Alternative 2 will manage for conifers in the riparian area. About 236 treatment acres (991 unit acres) will be underplanted with northern white cedar, red pine, white pine, tamarack, and/or white spruce in the riparian area of the stand. Conifers will eventually grow into overstory trees creating shade for aquatic and wetland ecosystems, thermal cover for wildlife, nest sites for riparian associated species (such as eagles and osprey), and provide coarse wood and fine litter to the streams and lakes, creating structure and nutrients for the aquatic system.
- **Improve health and productivity in red pine and white spruce plantations:** Some plantations in the Stony Project Area are densely stocked and overcrowded, reducing tree health and productivity, as well as limiting stand structural and species diversity. In Modified Alternative 2, 975 acres of red pine and white spruce plantations will be thinned to enhance stand and tree health and productivity.
- **Improve productivity of stands with low tree stocking:** In some stands in the Stony Project Area the older trees are dying and a few trees are regenerating, causing the stand to become dominated by shrubs. There is 291 acres of forest with inadequate tree stocking that will be regenerated through mechanically preparing the site followed by planting under Modified Alternative 2.

Reduce Hazardous Fuels

The selected alternative (Modified Alternative 2) will reduce fuel hazards on about 4,091 acres through harvest, understory fuel reduction, and mechanical site preparation. Through these treatments defensible space, the area between a fire and values at risk where firefighters are able to take suppression actions, will be increased. The spatial arrangement and combination of fuel reduction treatments within Modified Alternative 2 will reduce hazardous fuels to a level in which fire behavior from a wildfire will be decreased. By decreasing fire behavior, firefighting tactics can be more effective, and will reduce risk to firefighters' safety. The combination of increasing defensible space and decreasing fire behavior will increase the likelihood that fire suppression activities can be conducted to minimize impacts to values at risk, like houses or cabins, and provide for public safety. Additionally, removing hazardous fuels near high travel corridors will improve the safety of travel for forest visitors and local residents during a wildfire.

If we did not treat fuels on National Forest System land, such as under Alternative 1, fuel load would increase in and around the Wildland Urban Interface throughout most forested land within the project area. This would be due to dead, dying, and/or wind thrown trees and successional trends toward spruce-fir forest types. This increased fuel loading could result in higher intensity wildfires; therefore, implementing Modified Alternative 2 will best reduce wildland fire risk, and maintain a high level of safety for life and property.

Provide Sustainable Timber Products

Modified Alternative 2 best meets this portion of the purpose and need, because it will provide wood products. Harvesting the units proposed in Modified Alternative 2 will provide approximately 28,000 ccf (a hundred cubic feet) of wood products, while Alternative 1 would not provide any wood products. Since Modified Alternative 2 provides more volume, it will also provide more total revenue and a higher 25 percent payment to the counties, and for this reason, I selected Modified Alternative 2.

Tribal Consultation

The District Ranger and interdisciplinary team consulted with tribal representatives from 1854 Treaty Authority, Grand Portage Band of Lake Superior Chippewa, Fond du Lac Band of Lake Superior Chippewa and Boise Forte Band of Chippewa at various stages throughout the development of the Stony Project. Contacts were made during data collection, while developing the purpose and need and proposed action, and during the comment periods for scoping and the Environmental Assessment.

The alternative I have selected, Modified Alternative 2, best addresses tribal interests in the project area. Under Modified Alternative 2 there will be an increase in the number of acres of young aspen, paper birch, and mixed deciduous and coniferous forests. Young forest acres provide valuable forage for species of interest to the tribes, such as moose, deer, and grouse for hunting and gathering purposes. Also, there will be an increase in the number of young forest acres near existing roads for access to hunting. In comparison to Alternative 1, Modified Alternative 2 will provide for greater opportunities to access land for hunting and gathering purposes.

Thermal cover for moose will increase under Modified Alternative 2 and there will be nearly a nine percent increase in young upland forage habitat. Alternative 1 proposes no management activities; therefore, it would do less than Modified Alternative 2 to create forage for moose. Underplanting and interplanting of conifers in Modified Alternative 2 will improve stand diversity as recommended in the moose management plan.

Alternative 1 would not be responsive to tribal interests of creating young aspen, paper birch, or mixed deciduous/coniferous forest, which provide foraging habitat for species of interest (See EA Section 3.3 for more discussion on vegetation changes in the ecosystem.). Tribal interests also include having nearby access to young forest for exercising treaty rights. By not creating any new young forest, Alternative 1 would not provide additional opportunities for hunting and gathering purposes.

Public Involvement

The interdisciplinary team has worked with members of the public, community organizations and agency personnel throughout the development of the purpose and need, proposed action, issues and alternatives and environmental analysis for the Stony Project.

In addition to collaboration with tribal representatives as described in the previous section, we collaborated with Minnesota Department of Natural Resources (MN DNR) specialists. Biologists and resource specialists shared data on wildlife habitat, rare species in the area, treatment of dwarf mistletoe infestations, the ecology of the area, and forest management actions each agency was considering. The Forest Service and MN DNR also collaborated on the management of the Manitou Shoepack Project area. The interdisciplinary team worked with members of the Manitou Collaborative and the State to coordinate across project and ownership boundaries within the project area.

Public involvement was initiated with the scoping comment period. Several methods were used to inform the public about the scoping comment period for the Stony Project. In June 2015 a scoping letter requesting comments was mailed to over 500 individuals, groups, and agencies who either own land within the project area or who have expressed an interest in these types of projects. The Scoping Report was also available online and was listed in the Superior Quarterly (a Schedule of Proposed Actions for the Superior National Forest) starting in July 2015.

We received 21 responses from individuals, groups, and agencies during the scoping comment period that raised issues, asked questions or provided comments. Additional responders simply asked to be on the project mailing list.

In January 2016 we provided notification of the release of the Environmental Assessment and the start of an additional comment period to 240 individuals, groups, and agencies through a mailed letter or email notification. We received four responses expressing concerns, asking questions or providing comments. The interdisciplinary team reviewed and analyzed comments submitted on the Environmental Assessment and provided a written response to each person or group who provided a comment. The comments received did not raise any new issues that the interdisciplinary team had not already addressed within the Stony Project Environmental Assessment. Responses to all comments received are in Appendix E of this Draft Decision Notice.

Other Alternatives Considered

Seven alternatives were considered for the Stony Project. Of the seven alternatives, two were analyzed in detail, three were analyzed briefly in the Stony Project Environmental Assessment, and two were suggested in comments on the Environmental Assessment and was considered when responding to those comments. I have determined this range of alternatives is adequate and follows Forest Service environmental analysis regulations at 36 CFR 220.7 for consideration of alternatives. None of the alternatives analyzed briefly meets the purpose and need for the project as well as the alternatives analyzed in detail. Therefore, I did not find rationale for analyzing any of these in further detail. See Chapter 2, Section 2.4 of the EA and Appendix E of this document for further discussion on reasons to not analyze these alternatives in further detail.

Alternative 3: Proposed Action from Scoping Report

In June 2015 a Scoping Report was distributed to the public informing them of the Stony Project. The Scoping Report included a "Proposed Action" which outlined the management activities the interdisciplinary team had determined at the time would best accomplish the Purpose and Need for Action as described in the report.

The February 2015 Proposed Action was not carried forward for detailed analysis primarily because the interdisciplinary team conducted further field reconnaissance and analysis and made modifications that would better meet project objectives (the purpose and need).

Alternative 4: Mechanical Fuel Reduction Treatments around Tanner Lake

Alternative 4 was developed to respond to comments concerning prescribed burning near Tanner Lake. Specifically, a commenter requested for an alternative to be analyzed that would treat the units around Tanner Lake with understory fuel reduction; or if burning was to occur, preserve a 150 foot buffer zone around the shoreline of Tanner Lake, as well as private property.

Alternative 4 is similar to Alternative 2, except that a few units would be dropped from treatment. These units would be dropped from Alternative 4 instead of being treated with understory fuel reduction as proposed by the commenter, because of the difficulty of doing mechanical operations in the area. Much of the 200 acre area is not suitable for mechanical work; the limited sections where it would be possible to conduct understory fuel reduction would not be cost effective, nor would they meet the objective of restoring red and white pine to the area. However, understory fuel reduction along the road would occur. All other actions and treatments proposed in Alternative 2 are included in Alternative 4.

Effects to the visual quality along Tanner Lake are the only difference in effects between the two alternatives. Under Alternative 4 there would not be any changes to the visual quality along Tanner Lake except for those that would occur with natural aging and succession of the forest. Under Alternative 2 there would be small changes to the forest along Tanner Lake. The effects of Alternative 4 would be the same as Alternative 2 except for the difference in effects to scenery around Tanner Lake. Given the overall similarity of effects between Alternatives 2 and 4, Alternative 4 was not analyzed in detail.

Alternative 5: Prescribed Burning, Road Decommissioning and Dr. Cohen's Methods for Reducing Fire Risk to Structures

Alternative 5 was developed to respond to comments concerning the impacts of logging and road construction on the environment, and the effectiveness of Dr. Cohen's methods to reduce fire risk to structures. Specifically, Mr. Artley requested an alternative be analyzed that would only include prescribed burning, road decommissioning, analysis of Cabin Creek Candidate Research Natural Area, and utilization of Dr. Cohen methods.

This alternative would include 38 acres of underplanting, 165 acres of broadcast burn, 451 acres of riparian planting, and 1 mile of road decommissioning. This alternative would also include educating the public through public meetings and written material about the types of fine fuels Dr. Cohen recommends be removed, along with the continuation of Firewise activities.

Alternative 5 would improve riparian function by underplanting in the riparian area and would manage for the minimum road system by decommissioning unneeded roads. However, Alternative 5 would not create young forest, increase within-stand diversity, improve moose habitat, improve health in lowland black spruce stands, improve health and productivity in red pine and white spruce plantations, improve productivity of stands with low tree stocking, reduce hazardous fuels, or provide sustainable timber products. Since Alternative 5 does not meet most of the components of the purpose and need for the Stony Project it was eliminated from further study.

Alternative 6: Supplemented No-Action Alternative

Alternative 6 was developed to respond to comments concerning the use of clearcuts to treat dwarf mistletoe. The commenter suggested an alternative be analyzed where prescribed fire is used instead of clearcutting.

This alternative would be similar to Modified Alternative 2 except that it would use prescribed fire to treat black spruce stands infested with dwarf mistletoe, instead of treating the stands as clearcut without reserves.

Burning instead of mechanical treatment is an alternate treatment in some areas; however, conditions on the Tofte Ranger District do not allow burning to be a viable alternative on all sites. Units with dwarf mistletoe infestations are wet sites that have organic, sphagnum soils and to conduct prescribed burning, these "wet sites" would need to have dry conditions. This means that adjacent upland sites would be very dry; to the point that limiting fire spread could be difficult. Since this alternative is not operationally feasible it was not considered in detail.

Alternative 7: No Road Construction or Clearcuts

Alternative 7 was developed to respond to comments concerning the impacts of road construction and clearcutting. A commenter requested an alternative be analyzed that did not include any temporary or system road construction or clearcuts.

This alternative would include 165 acres of broadcast burn, 43 acres of burn inclusion, 263 acres of thinning, 350 acres of pre-commercial thinning, 384 acres of mechanical site preparation, 38 acres of underplanting, 451 acres of riparian planting, 1,350 acres of understory fuels reduction, and 540 acres of understory fuels reduction and riparian planting. Firewise activities would also continue to occur.

The interdisciplinary team assessed whether the alternative would meet the purpose and need of the Stony Project. This alternative would improve riparian function and improve productivity of stands with low tree stocking. This alternative would not create young forest, improve moose habitat, or improve health in lowland black spruce stands. In addition, it would minimally or partially increase within-stand diversity, improve health and productivity in red pine and white spruce plantations, reduce hazardous fuels, and provide sustainable timber products. Since the alternative does not meet or minimally meets many of the components of the purpose and need for the Stony Project it was eliminated from further study.

Findings Required By Other Laws and Regulations

The alternative selected, Modified Alterative 2, complies with all applicable laws and regulations. How the alternative complies with some of the more pertinent laws and regulations is described below.

Compliance with the National Forest Management Act

The Forest Service is currently operating under the 2012 Planning Rule. As required by section 219.15(d) of the 2012 Planning Rule, this project is consistent with the direction found in the 2004 Forest Plan.

The best available science was used in making the proposed decision. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views, and where appropriate, acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk. In addition, the Stony Project complies with the 2004 Superior National Forest Plan as required by the National Forest Management Act.

The Stony Project Area overlaps four Forest Plan Management Areas (MA): General Forest Area, General Forest-Longer Rotation Area, Candidate Research Natural Area, and Semi-Primitive Motorized Recreation Area (EA p.1-2). However, Modified Alternative 2 includes treatments in only the General Forest, General Forest-Longer Rotation and Candidate Research Natural Area Management Areas. The Forest Plan includes desired conditions, objectives, standards, and guidelines for each Management Area and this Management Area direction was considered during the development of the purpose and need and proposed action for the Stony project. For more information on management areas located in the Stony Project Area, please refer to the EA on pages 1-1 through 1-3.

All relevant standards and guidelines have been incorporated in Operational Standards and Guidelines listed in Appendix C; and site specific mitigation measures are listed in Appendix A. Standards and guidelines will be met with this project except in two situations. In the first situation, units that are being treated for dwarf mistletoe infestation will not follow Forest Plan guideline G-TM-5 related to retaining legacy patches in harvest, MFRC guideline related to retaining a minimum of 6 to 12 live leave trees per acre and MFRC guideline related to retaining a minimum basal area in a riparian management zone. Exceptions to the leave trees guideline to address insect and disease treatments (such as dwarf mistletoe in black spruce) where leaving live trees will be counterproductive are appropriate (MRFC Guidelines, p.78, 2005). For a discussion of the adverse and beneficial effects of not leaving legacy patches or live trees see section 3.9 of the EA.

In the second situation, in specific units where fuel hazard is a high concern or site preparation for restoration of conifer is critical (listed in the Stony Project Record), slash will not be retained on the site as recommended in guideline G-WS-8. Deviations from guidelines may occur (FP p. 1-8) and for this project, a deviation is needed to accomplish the fuel reduction or reforestation work, and treatment of an insect infestation. Factors such as leaving a portion of biomass on site, will minimize effects to the soil resource and there will not be irreversible damage to soil, slope or other watershed conditions. For further discussion on effects to soils and mitigation measures applied to minimize effects, see Section 3.6 of the EA.

Road management in Modified Alternative 2 is consistent with the desired condition, objectives, standards and guidelines for transportation systems in the Forest Plan. These actions will result in the minimum amount of roads needed to accomplish forest management objectives.

Suitability for Timber Production

Harvest of this timber will contribute toward an annual and sustainable timber program as expected in the Forest Plan (FP p. 2-37, O-SE-2). All commercial timber removal will occur on forest land that is classified as suitable for timber production. This conclusion is based upon on-the-ground examination of the stands proposed for harvest by resource specialists, review of the maps and facts provided in the Stony Project EA, and information provided in the project record. Based on my experience and the knowledge and expertise of the interdisciplinary team, I find there is reasonable assurance that harvested lands will be adequately restocked within five years of harvest. None of these lands have been withdrawn from timber production by an Act of Congress, the Secretary of Agriculture, or the Chief of the Forest Service.

Optimality and Appropriateness of Harvest Methods

The National Forest Management Act states, “When timber is to be harvested using an even-aged management system, a determination that the system is appropriate to meet the objectives and requirements of the Forest Plan must be made, and where clearcutting is to be used, it must be determined to be the optimum method.” In stands that will have a primary treatment of clear cut with or without reserves consideration was given to the objectives for the stand, silvicultural requirements of the vegetation species on the site, existing stand conditions, issues raised during the analysis, prior experiences in the area, and the Forest Plan direction. By these considerations, clearcut with or without reserves is an optimum harvest method for regenerating units that have these treatments proposed, and these harvest methods are sufficient to ensure regeneration in these units. A list of units with their respective selected silvicultural methods to accomplish the purpose and need for this proposal is listed in Appendix A.

Where clearcut with or without reserves has been prescribed in the Stony Project clearcutting is appropriate for the forest types where this treatment is proposed. The Forest Plan (FP pp. 2-20 to 2-21) states: “G-TM-2 – Clearcutting may be used to regenerate the following forest types: jack pine, red pine, spruce-fir, oak, aspen, aspen/spruce/fir, paper birch, and lowland conifers.” This is further documented in Table G-TM-7 “Type of Timber Management Practices by Forest Type Group.” The use of clearcutting is the optimum method for regenerating aspen, aspen/spruce/fir and paper birch as prescribed in the Stony Project because they are pioneer forest tree species and shade intolerant tree species. Use of the clearcut method optimizes management objectives in the project while ensuring successful regeneration. Stocking and regeneration surveys show we have been successful in regenerating clearcut units. Regeneration harvest units meet the

Forest Plan standard for culmination of mean annual increment and minimum rotation ages (S-TM-5, FP p.2-20). For further information, please refer to the 2004 Forest Plan Environmental Impact Statement (FEIS). The Stony Project EA also provides a thorough analysis of effects from even-aged management. The analysis is documented in Chapter 3 of the Environmental Assessment.

Vegetation Manipulation

All manipulation of vegetation complies with the seven requirements of the National Forest Management Act (NFMA) Regulations. This conclusion is based upon the following:

1. The actions in Modified Alternative 2 fit the goals stated in the Forest Plan for landscape ecosystem objectives and management area objectives.
2. The lands being treated can be adequately restocked within five years after final harvest as discussed under Suitability for Timber Production in the previous section.
3. These activities were not chosen primarily because they give the greatest dollar output or the greatest output of timber. Modified Alternative 2 was selected because it best meets the goals and objectives in the Forest Plan for multiple resources.
4. These activities were chosen after considering potential effects on residual trees and adjacent stands. The effects are disclosed throughout the Stony Project EA and are within the effects analyzed in the Forest Plan Final Environmental Impact Statement. In all cases the effects are acceptable when considering the purpose and need of the Stony Project and the goals, objectives, and desired conditions in the Forest Plan.
5. The selected activities will avoid permanent impairment of site productivity and will ensure conservation of water resources (Sections 3.6 and 3.8 of the Stony Project EA). The prescriptions and mitigations will adequately protect these natural resources.
6. The selected activities will provide the desired effects on water quality, wildlife and fish habitat, regeneration of desired tree species, recreational uses, aesthetic values, and other resource needs. The effects of the actions are fully disclosed in the environmental assessment. The vegetation management prescriptions and in particular, the Operational Standards, Guidelines and mitigations will adequately protect the other resources.
7. The selected activities are practical in terms of transportation and harvesting requirements, preparation costs, logging and administration, and reforestation and release needs. This determination is based on the fact that the selected activities are similar to those which have been practiced on the Superior National Forest and the Tofte Ranger District in areas similar to the Stony Project Area.

Wilderness Act

The Stony Project does not propose any activities near the Boundary Waters Canoe Area Wilderness and will not affect the Wilderness; therefore, it is my professional determination that Modified Alternative 2 complies with the Wilderness Act and the 1978 BWCA Act.

Clean Water Act

Analysis in Sections 3.6 Soil Productivity and Wetlands and 3.8 Water Quality of the Environmental Assessment indicates that there will not be significant effects to water resources. Operational Standards and Guidelines listed in Appendix C of the Draft Decision Notice will adequately protect water resources. The proposed decision complies with the State Water Quality Standards and the Clean Water Act.

Threatened and Endangered Species Act

The proposed decision complies with the Threatened and Endangered Species Act. The determinations made are that the Stony Project "may affect but is not likely to adversely affect" Canada lynx and gray wolf, and that the project "may affect, but will not adversely modify critical habitat" designated for Canada Lynx and gray wolf. The determination of effects made is that the Stony Project "may affect, and is likely to adversely affect" northern long-eared bat The Forest Service has conferred with the U.S. Fish and Wildlife Service who concurred with this determination on March 31, 2016. See the Finding of No Significant Impact factor 9 in this Draft Decision Notice for more discussion on this.

Clean Air Act

In Minnesota the Clean Air Act is addressed through the State Smoke Management Plan. Prescribed burning will be carried out in compliance with the State's Smoke Management Plan, the Superior National Forest Fire Management Plan and the Forest Plan. These plans outline how prescribed burning will be carried out so that the resulting smoke minimally affects air quality.

Based on the burning done over large burn units and in heavy blowdown fuels during the fall of 2002 in the Boundary Waters Canoe Area Wilderness, the Forest has developed a good record for managing smoke impacts during large scale prescribed burns. The National Ambient Air Quality Standards have not been exceeded to date during large-scale prescribed burning on the Forest. Therefore, it is expected the smaller prescribed burn areas in the proposed selected alternative will not exceed air quality standards, and it is determined that the proposed selected alternative will be in compliance with the Clean Air Act.

Migratory Bird Treaty Act

The proposed decision complies with the Migratory Bird Treaty Act and the 2008 Memorandum of Understanding on migratory birds between the Forest Service and the U.S. Fish and Wildlife Service. The Stony Project Environmental Assessment and Biological Evaluation disclose effects to birds, focusing on species of management concern, and on habitat used by birds. Effects of the project activities on forest wildlife species (including birds) is evaluated by looking at effects to Management Indicator Habitats (MIH). These type and age groupings represent the broad spectrum of habitat used by the forest bird community. The MIH analyses and the project effects are discussed in the Stony Biological Evaluation. There will be no significant effect to birds or other wildlife under Modified Alternative 2.

Shipstead Newton Nolan Act

The proposed decision complies with the Shipstead Newton Nolan Act. No harvest of timber will occur within 400 feet of any lake or stream covered under the Act.

Finding of No Significant Impact

I have reviewed both the context and intensity of the selected alternative and its environmental consequences, which are disclosed in the environmental assessment and project record. Based on past experience with similar projects and practices, I conclude that the proposed selection of Modified Alternative 2 does not constitute a major federal action, individually or cumulatively, and will not significantly affect the quality of the human environment.

The level of analysis conducted for the Stony Project Environmental Assessment (EA) is adequate and documents no significant effects. Therefore, an environmental impact statement is not needed. This determination is based on the following factors:

Context

This discussion of the project's context provides meaning to the intensity of effects described below to support the rationale for finding of no significant impact related to each factor.

40 CFR 1508.27 states "The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting. In the case of a site-specific action, significance will usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant."

The Stony Project Environmental Assessment is tiered to the 2004 Forest Plan Environmental Impact Statement (FEIS) which analyzed effects of these types of actions at the Forest and regional scale. Where appropriate, the Stony Environmental Assessment has referenced analysis and conclusions from the Forest Plan FEIS.

The Stony Project is a site-specific action that does not have international, national, regional, or statewide importance. The physical and biological effects of the selected actions were analyzed at appropriate scales, such as within the project area, adjacent to the project area, or across a larger landscape. The analysis area differs for each resource and rationale for each analysis area is provided in Chapter 3 of the Stony Environmental Assessment.

As discussed in more detail below for the factors of significance, the context of this decision is limited to the location of the Stony Project Area. Even in a local context, this decision will not pose significant short or long-term effects. The proposal's relatively small scale limits its effects of the natural resource values and uses. Mitigations included in this project minimize and avoid adverse impacts to the extent that such impacts for some resources are not measurable, even at the local level.

Intensity (severity of impact)

I have reviewed both the context and intensity of the selected alternative and its environmental consequences, which are disclosed in the Environmental Assessment and project record. Based on my experience with similar projects and practices, I conclude that the selection of Modified Alternative 2 does not constitute a major federal action, individually or cumulatively, and will not significantly affect the quality of the human environment.

40 CFR 1508.27b lists ten factors to consider in evaluating intensity. I have considered them as follows:

1. Impacts may be both beneficial and adverse. A significant effect may exist even if on balance, effects are believed to be beneficial.

Both adverse and beneficial impacts of harvesting, fuel reduction, reforestation, road construction and other related actions were analyzed and disclosed in the Stony Project EA Chapter 3, the Biological Assessment and Biological Evaluations. Some of these adverse and beneficial impacts were described earlier in the Draft Decision Notice. In determining whether this project will have significant effects, the beneficial effects were not used to compensate for, or offset adverse effects. Careful consideration has been given to both beneficial and adverse impacts and neither will be significant.

2. The degree of effect on public health or safety.

The safety of forest users (visitors and residents) will be protected under Modified Alternative 2 by Operational Standards and Guidelines, Design Features, and mitigation measures. For example, prescribed burning mitigation measures for safety have been identified, such as posting prescribed fire warning signs at appropriate recreational areas including roadways, and contacting nearby residents and businesses. In addition, I expect that the prescribed burns in the selected alternative will not exceed air quality standards. The National Ambient Air Quality Standards have not been exceeded to date during large-scale prescribed burning on the Forest and the Stony Project will use similar smoke management techniques to minimize effects to public health.

Modified Alternative 2 will improve public safety by reducing hazardous fuels in strategic portions of the project area. By treating in Wildland Urban Interface Areas and along roads used for ingress and egress, defensible space (the area between a fire and values at risk where firefighters are able to take suppression actions) will be increased. Additionally, removing hazardous fuels near high travel corridors will improve the safety of travel for forest visitors and local residents during a wildfire. All fuels reduction treatments within Modified Alternative 2 will reduce hazardous fuels to a level in which fire behavior from a wildfire will be decreased. The combination of increasing defensible space and decreasing fire behavior will increase the likelihood that fire suppression activities can be conducted to minimize impacts to values at risk and provide for public safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

I have considered the unique characteristics of the area and determined there will be no significant effects to these resources. There are no park lands or prime farmlands within, or adjacent to, the project area. The project area does not include any Unique Biological Areas or eligible Wild and Scenic River Management Areas as designated in the Forest Plan. The project area does include one Candidate Research Natural Area (CRNA) and my decision will have no significant effect on the CRNA. For more information on the CRNA in the Stony Project see pages 2-4 and 3-37 of the Environmental Assessment. Also, there are no Roadless Area Conservation Rule Areas or Forest Plan inventoried roadless areas within the Stony Project Area.

I have found potential effects to historic or cultural resources from Modified Alternative 2 to be insignificant, see Section 3.9 of the Environmental Assessment. The project will also not have significant impacts to wetlands (section 3.8 of the EA). Forest Plan Operational Standards and Guidelines and MFRC mitigation measures will be in place during management activities.

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

The degree of controversy, with regard to effects on the quality of the human environment, is limited and considered not significant based on comments received during the scoping and the EA comment periods (EA Appendix A, DDN Appendix E). Differing opinions do not indicate that something is highly controversial. A range of comments were received on how National Forest System lands should be managed and what values are most important. The differences in comments reflect a range of opinions, and do not of and by themselves constitute controversy. The effects of the management actions referred to references shown in EA Chapter 4 along with monitoring and experience managing the forest. Although it is anticipated that this decision will not be considered favorable by all, it has been determined that the effects, as displayed in the Stony Project Environmental Assessment and supporting documentation in the project record file, are not likely to be highly controversial.

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

The proposed activities, including timber harvest, reforestation, fuel reduction and road construction, are similar to those that have occurred in the past in this area and similar areas across the Superior National Forest. The effects of the Stony Project are expected to be similar to the effects of these past actions. Based on knowledge of the effects of similar past actions and the effects analysis disclosed in the Stony Project Environmental Assessment, I have determined that the effects will not be highly uncertain or involve unique or unknown risks.

All actions included in this project are consistent with the Forest Plan, and environmental effects are within the range disclosed in the Forest Plan FEIS. These types of actions and effects are monitored and the conclusions, evaluations, or recommendations of these reports have been considered in the Stony Project. Based on my knowledge of the effects of similar past actions and the effects analysis disclosed in the Stony Project Environmental Assessment, I do not believe there will be any highly uncertain effects or effects that involve unique or unknown risks.

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.

Implementing the proposed activities within this project area will not commit the Forest Service to actions on other lands either within or outside of the project area, and this action will not establish a precedent for future actions with significant effects. All connected future actions have been included in this project and the effects are disclosed in Chapter 3 of the Environmental Assessment. The reasonably foreseeable future projects disclosed under the cumulative effects analysis are those that are in the development phase and are not connected to the actions included in the Stony Project. Environmental analyses will be completed on these projects and site specific decisions will be made on whether or not to implement other projects. The selected

action is not likely to establish a precedent for future actions with significant effects, because timber harvest projects of this magnitude and complexity are commonly implemented.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

A cumulative effects analysis for each resource was conducted and documented in Chapter 3 of the Stony Project Environmental Assessment. For each resource the cumulative effects analysis boundary was determined by the resource specialist using professional knowledge of the resource affected and how effects accumulate. Past, on-going, and reasonably foreseeable future actions that were relevant to the effect being analyzed and within the analysis boundary, were considered. The Cumulative Actions and Climate Change document in the project record describes potential cumulative actions and was used by resource specialists as a basis for their cumulative effects analysis. There are no known significant cumulative effects between this project and other projects that have occurred in the past, or are currently being implemented, or are planned for the future.

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 historic resources.

Modified Alternative 2 will not result in impacts to any properties listed on or considered eligible for listing in the National Register of Historic Places (Stony Project EA, Section 3.9), nor will they cause any loss or destruction of any scientific, cultural, or historic places. Heritage Resource staff have completed a project specific inventory and although there are treatment units that contain or are adjacent to known heritage resources, impacts will be eliminated through application of Operational Standards and Guidelines, and mitigation measures. Heritage resource sites will be excluded from the treatment units, with boundaries marked (where appropriate) in the field prior to implementation.

Should previously unknown heritage resources be identified during project implementation, project activities will cease and the Forest Archaeologists will be contacted. Appropriate measures will be developed to ensure site protection in consultation with the Minnesota State Historic Preservation Officer and Tribal Historic Preservation Officers representing the Bands in the 1854 ceded territory. All sites will be avoided and protected following the standards set forth under the guidelines of the Memorandum of Agreement between the USDA Forest Service and the Minnesota State Historic Preservation Officer. My draft decision complies with the National Historic Preservation Act.

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 (ESA).

The effects to threatened and endangered species are briefly summarized in the Stony Project EA in Section 3.4. The Stony Project Biological Assessment contains the complete effects analysis and considered the existing condition information, including populations and trends and information on project area surveys, habitat needs and limiting factors; habitat trends, direct and

indirect effects, cumulative effects, the determination, and mitigations. The determination made based on the Biological Assessment, is that the Stony Project "may affect but is not likely to adversely affect" Canada lynx and gray wolf or their critical habitat. In accordance with requirements, the Forest Service consulted with the U.S. Fish and Wildlife Service who concurred with this determination on March 31, 2016.

As of October 2013 the northern long-eared bat has been proposed for federal listing under the Endangered Species Act; no critical habitat has been proposed at this time. The Forest Service proactively consulted with the U.S. Fish and Wildlife Service on our effects determination, as well as partnering with the Minnesota Department of Natural Resources (DNR) to collect data about those species that may be susceptible to white-nosed syndrome. Since 2009 the Forest Service has conducted acoustic monitoring routes across the forest to obtain baseline information about bat populations. Also, over the past two years we have collected data about bat demographics and habitat use to assess the health of bats and better understand maternity roost sites. These efforts will provide valuable data to make good management decisions prior to seeing the effects from white-nosed syndrome on bat populations, and we will continue to partner with the DNR to collect additional demographic and habitat information.

The determination of effects made based on the best available science known at this time, which is described in the Biological Assessment, is that the Stony Project "may affect and is likely to adversely affect" northern long-eared bat. The Forest Service has conferred with the U.S. Fish and Wildlife Service who concurred with this determination on March 31, 2016. The Stony Project follows the Conservation Recommendations outlined in the programmatic Biological Opinion for the northern long-eared bat (USDI FWS 2015b), as well as the Conservation Measures of the Final 4(d) Rule (USDI 2016).

Based on the Stony Project EA, the Biological Assessment, and the Biological Evaluations, there will be no significant direct, indirect, or cumulative effects to any Federally Threatened or Endangered Species or their habitats from Modified Alternative 2.

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

These actions will not violate any federal, State, local law, or requirement for the protection of the environment. The Stony Project will protect the environment to the extent practical and will enhance ecological conditions through vegetation management activities to meet Forest Plan desired conditions and objectives.

Implementation

This decision was subject to the objection process, pursuant to 36 CFR part 218, subparts A and B. These regulations provide for public review as part of the pre-decisional, administrative review process for environmental assessments. These recently published regulations are available at: https://www.federalregister.gov/articles/2013/03/27/2013-06857/project-level-predecisional- administrative-review-process.

A legal notice of the opportunity to object was published on April 29, 2016 in the Duluth News Tribune newspaper and sent to those who provided comments during the project's development. No objections were received, therefore this decision can be signed.

This decision may be implemented any time after the date of the signature. For additional information concerning this decision, please contact Becky Bartol at the Tofte Ranger Station, 7355 W. Hwy 61, Tofte, MN 55615 or (218) 387-3207.

Deciding Official

Matthew Judd
Acting Tofte District Ranger

7/18/2016
Date