



South Fowl Lake Snowmobile Access Project

Appendix F
Update to the Biological Evaluation
for the
South Fowl Lake Snowmobile Access Trail
Environmental Assessment

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Draft EIS

F-1

Appendix F

South Fowl Trail Project Update

Introduction

The South Fowl Lake Access Trail project was analyzed in an Environmental Assessment (EA) and the Decision Notice (DN) was signed in February 21, 2006 (USDA Forest Service 2006a&b). The EA examined five possible trail corridors to access South Fowl Lake by snowmobile from the parking areas at the terminus of the Arrowhead Trail. A new trail is needed as an alternative to the user developed trail known as the Tilbury Trail. Although the Tilbury Trail was used for many years, it is illegal because it follows the Royal River, ~60 percent of which is in the Boundary Waters Canoe Area Wilderness (BWCAW). In the DN, Dennis Neitzke, District Ranger for the Gunflint Ranger District, chose an alternative trail route (Alternative 2) which is geographically near the illegal Tilbury Trail. It would be 2.2 miles and would require new construction over most of its distance.

The Biological Evaluation (BE), written to accompany the EA, combined the Biological Assessment (BA), usually written to assess the effects to federally listed species, and the Biological Evaluation, usually written to cover effects to the Regionally listed Sensitive Species. This combination was more frequently used in past years. At the time, the gray wolf, bald eagle, and Canada lynx were federally listed as Threatened. The assessment included the Region 9 Sensitive Species listed for the Superior National Forest, 38 of which were known or assumed to be in the project area. These included 12 animals, 21 vascular plants, and five lichens.

The BE stated that any of the five alternatives may affect but are not likely to adversely affect wolves and lynxes. Alternatives 1, 3, 4, and 5 would have no effect on eagles. Alternative 2, which was chosen by the ranger, may affect but is not likely to adversely affect eagles.

The trail prescribed by Alternative 2 has not been established. The decision was litigated. In September, 2007, the judge for the U.S. District Court for the District of Minnesota decided the Forest Service is to complete an Environmental Impact Statement (EIS) to evaluate the impact of sound, resulting from use of the trail, on the visitors to the Boundary Waters Canoe Area Wilderness. The EIS was begun in August, 2009.

The EIS represents a change only in degree to which the trail project is assessed. No changes were made in the project itself, the alternatives, proposed uses, trail locations, or expected volume of use discussed in the original environmental assessment.

This document describes the relevant, changed conditions in the project area that could have bearing on the listed species considered in the BE. These changes do not reach a level of



significance that would affect the original BE findings; therefore the Biological Evaluation does not need to be completely rewritten.

Threatened Species

Wolf

The status of wolves in the Lake States has been a very convoluted one in the last two years. The FWS originally announced the decision to delist the wolf in February, 2007 (USDI, Fish and Wildlife Service, 2007a). This decision was challenged in court and on September 29, 2008, the U.S. District Court for the District of Columbia vacated the February, 2007, decision (Friedman, 2008) because of plaintiff's questions concerning designating Distinct Population Segments while at the same time delisting that segment. The wolf was relisted in December, 2008, while the Fish and Wildlife Service began clarifying its argument that it could justify designating a population segment and delist concurrently (USDI, Fish and Wildlife Service, 2008b). In a January 14, 2009, news release the FWS announced again it would be delisting the wolf while correcting the problematic issues cited by the US District Court for the District of Columbia in September, 2008 (USDI, Fish and Wildlife Service, 2009a). On March 6, 2009, Secretary of the Interior Ken Salazar affirmed the decision by the FWS to remove gray wolves from the list of threatened and endangered species in the western Great Lakes, and the northern Rocky Mountain states of Idaho and Montana and parts of Washington, Oregon and Utah. Wolves would remain a protected species in Wyoming (USDI, Fish and Wildlife Service, 2009c). The notice of wolf delisting was published in the Federal Register Vol. 74, No. 62, April, 2009 (USDI, Fish and Wildlife Service, 2009d). It became official a month later in May 4, 2009. Then on June 26, 2009, the FWS announced a settlement agreement with plaintiffs in a lawsuit challenging the Service's rule to remove protections to the Western Great Lakes population. The Service must provide additional opportunity for public comment on the rule to assure compliance with the Administrative Procedures Act. The wolves on the Superior NF have been relisted while the Service gathers additional comments (USDI, Fish and Wildlife Service, 2009f).

The FWS continues to press for delisting because available data indicates that this Distinct Population Segment (DPS) no longer meets the definitions of Threatened or Endangered under the Endangered Species Act. The threats have been reduced or eliminated, as evidenced by a population that is stable or increasing in Minnesota, Wisconsin, and Michigan, and greatly exceeds the population level criteria established for recovery.

Because the project remains the same, I find no reason to change the determination of "May affect, not likely to adversely affect the gray wolf". Nor would it destroy or adversely modify gray wolf critical habitat. The risks to wolves due to shooting, trapping, collision, and chasing were noted and remain low, especially on the route proposed by Alternative 2. This project

would not change the current, low road density in the area. Prey (principally moose in the winter) would not be affected. There is a slight chance denning could be affected along the proposed route, but potential denning area remains extensive.

Canada lynx

Critical Habitat and Primary Constituent Elements

Proposed Critical Habitat

Critical Habitat for lynx had not been designated at the time the Fish and Wildlife Service and Forest Service (Chippewa and Superior National Forests) consulted and conferred to write the Forest Plan Programmatic BA and Biological Opinion (BO) for the Forest Plans (USDA, Forest Service, 2004). However, the goals, objectives, standards, and guidelines of the Forest Plan follow the Lynx Conservation Assessment and Strategy (Ruediger, B. et. al. 2000). They focus on habitat manipulation and protection, and provide the Primary Constituent Elements of Proposed Critical Habitat under control by Forest Service managers. The Forest Service manages wildlife habitat, not wildlife populations. Therefore, most of the risk factors to lynx that were analyzed in the Programmatic BA relate to habitat and the assessment covers Critical Habitat as much as or more than it covers the lynx itself.

The proposal for lynx Critical Habitat was issued on February 28, 2008 (USDI, Fish and Wildlife Service, 2008a). At that time, Mary Shedd, then Forest Biologist for the Superior National Forest, and Susan Oetker, then wildlife biologist with the Fish and Wildlife Service (FWS) at the Twin Cities Field Office and liaison between the Superior and Chippewa National Forests and FWS, conferred about how to address Lynx Critical Habitat in environmental assessment documents. They agreed on statements to acknowledge the fact that the guidance for lynx management in the Superior NF Management Plan (USDA, Forest Service, 2004) is directed toward managing the Primary Constituent Elements (PCE's) of lynx habitat. Mary, also, wrote and Susan reviewed and agreed to a crosswalk (Table F-1, below) further showing the link between Forest Plan guidance and the PCE's of lynx habitat. The Biological Assessments written after that point in time include the statements developed by Mary and Susan.

Critical Habitat

Lynx CH was designated on February 25, 2009 (USDI, Fish and Wildlife Service, 2009b). Generally, it includes Northeast Minnesota east of Highway 53 between Duluth and International Falls. Only mining areas near Virginia Minnesota were excluded. As such, it includes almost all of the Superior National Forest.

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Table F-1*: Primary Constituent Elements (PCE's) of Lynx Critical Habitat (CH) with Crosswalk to Analysis Indicators from the Forest Plan Programmatic Biological Assessment (USDA Forest Service, 2004), showing how impacts to CH are appropriately analyzed using BA indicators.

Primary Constituent Element (PCE)	Indicator	Rationale
Boreal forest landscapes supporting a mosaic of differing successional forest stages and containing:	From Effects Analysis Indicators Table	The Forest Plan Programmatic Biological Assessment (BA) provides rationale for indicators. This rationale is also relevant to address PCEs.
a) Presence of snowshoe hares and their preferred habitat conditions, including dense understories of young trees or shrubs tall enough to protrude above the snow;	<p>1a. Snowshoe hare habitat acres.</p> <p>1b. Percent of unsuitable habitat on NFS land</p> <p>4. Percent of lynx habitat in LADs with adequate canopy cover- upland forest > 4 years old and lowland forest > 9 years old</p> <p>10. Acres of snowshoe hare habitat in which within stand structure will be increased thru diversity and under-planting of conifer on SNF lands.</p> <p>11. Acres and % of lynx habitat currently unsuitable on all ownerships</p> <p>12. Cumulative change to unsuitable condition on NFS lands.</p>	<p>Programmatic BA: Section 4.5.4.1, pp. 106-110</p>
b) Winter snow conditions that are generally deep and fluffy for extended periods of time;	<p>5. Miles of ATV trails allowed</p> <p>6. Miles of snowmobile trails allowed</p> <p>7. Miles of temp and OML 1&2 roads</p> <p>8. Policy on cross-country use of ATVs and snowmobiles</p> <p>9. Policy on use of ATVs and snowmobiles on OML 1&2 roads</p> <p>13. Miles of roads to be decommissioned and new OML 1 roads to be closed on NFS lands</p> <p>14. Miles of road where RMVs are allowed on NFS lands.</p> <p>15. Road and compacted trail density on all ownership.</p>	<p>Programmatic BA: Section 4.5.1, pp. 116-117</p>
c) Sites for denning having abundant coarse, woody debris, such as downed trees and root wads; and	<p>1b. Percent of unsuitable habitat on NFS land</p> <p>3. Denning habitat in patches > 5 acres</p> <p>4. Percent of lynx habitat in LADs with adequate canopy cover- upland forest > 4 years old and lowland forest > 9 years old</p> <p>11. Acres and % of lynx habitat currently unsuitable on all ownerships</p> <p>12. Cumulative change to unsuitable condition on NFS lands.</p>	<p>Programmatic BA: Section 4.5.4.1, pp. 106-110</p>

Table F-1*: Primary Constituent Elements (PCE's) of Lynx Critical Habitat (CH) with crosswalk to Analysis Indicators from the Forest Plan Programmatic Biological Assessment (USDA Forest Service, 2004), showing how impacts to CH are appropriately analyzed using BA indicators.

Primary Constituent Element (PCE)	Indicator	Rationale
d) Matrix habitat (e.g., hardwood forest, dry forest, non-forest, or other habitat types that do not support snowshoe hares) that occurs between patches of boreal forest in close juxtaposition (at the scale of a lynx home range) such that lynx are likely to travel through such habitat while accessing patches of boreal forest within a home range. The important aspect of matrix habitat for lynx is that these habitats retain the ability to allow unimpeded movement of lynx through them as lynx travel between patches of boreal forest.	1b. Percent of unsuitable habitat on NFS land 2. Acres of red squirrel habitat 4. Percent of lynx habitat in LAUs with adequate canopy cover- upland forest > 4 years old and lowland forest > 9 years old 11. Acres and % of lynx habitat currently unsuitable on all ownerships 12. Cumulative change to unsuitable condition on NFS lands.	Programmatic BA: Section 4.5.5, pp. 111-117
*This table is taken from the draft of May 6, 2008, authored by Mary Shedd, and reviewed by Susan Oetker. That draft was in response to the proposal to designate Critical Habitat for lynx (February 28, 2008). The original text addressed Proposed Critical Habitat (pCH) which ultimately became the designated CH we have today.		

The South Fowl Lake Snowmobile Access Project did not separately address Primary Constituent Elements of Critical Habitat because it was assessed in 2005, three years before CH was designated. Below is a review of effects analysis for the project to address the PCE's.

Effects Analysis Review – Canada Lynx

All the above indicators, and therefore, all PCE's were considered in the South Fowl Lake Snowmobile Access Project. Most were determined not involved with the project. Since the focus is on establishing a legal trail as a replacement to an illegal trail, the condition of snow is one Primary Constituent Element linked with road/trail construction. Roads and trails, and their density are assessed as effects indicators in most BA's, in large part because they affect the continuum of deep, fluffy snow (see Table 1, above). Compacted snow trails are thought to

provide linear avenues for lynx competitors, especially coyote and bobcat in this landscape, to penetrate lynx habitat. These predators could reduce the number of snowshoe hare, the primary prey of lynx, and they are more aggressive than lynx and could drive them from any co-inhabited area. Roads and trails, also, bring the effects of humans in lynx habitat. Both aspects were covered in the South Fowl BE.

The project only occurs in LAU 42, with an area of 32,306 acres, federal ownership is 59 percent, and where current indicators show: the percent unsuitable habitat on all lands is less than one, well under the 30 percent limit indicated in the Forest Plan; 51 percent of the federal forested land is in denning habitat >5 acres, significantly above the 10 percent minimum required; 72 percent of the federal land is hare habitat and all the hare habitat is available; 18 percent of the federal land is squirrel habitat; and there has been no vegetative management in the LAU, or zero percent, in the last decade compared with the 15 percent limit of change through vegetative management allowed on federal land in a decade. Since no management has occurred on state or federal land several years before or since the project EA was issued, the indicators have remained stable. Therefore, there is no reason to increase indicators now beyond the road/trail analysis indicators from the first BE. The trail and road density issues are updated below.

Road and Trail Density - The Forest Plan directs managers to attempt to maintain road/trail densities within Lynx Analysis Units (LAU's) below two mile per square mile. The 2005 BE described the road/trail densities with the following statements:

Currently it (LAU 42) has 29.2 miles of roads and snow compacting trails, including the illegal trail along the Royal River. Since that trail which is 2.4 miles would be closed in all alternatives, we should start with 26.8 miles ($29.2 - 2.4 = 26.8$) as the basis on which to compare changes in trail mileage... The current road and snow trail density is 0.68 miles per square mile including the illegal route along the Royal River.

The miles of road used in the 2005 BE were based on erroneous data. Currently, our analysis shows 50.66 miles in LAU 42. Since the 2004 Forest Plan Revision, the Superior National Forest has made a concerted effort to update its roads database and standardize the calculations used in analysis. So although the road mileage has varied over the years, the change is actually a reflection of an increase in accuracy and not necessarily a change in conditions on the ground.

Along with some discrepancies in the road mileage figures, we've also used incorrect land base acreage for the calculations. The computer runs have been programmed using only federal land as the basis to calculate the roads per square mile. Since we use all roads in the calculations, we should use all acres. The calculations should have been using total LAU area minus the lakes over 10 acres, as per the guidance in the LAU Analysis Area lynx-wolf roads parameters, an internal document (USDA Forest Service, 2004c). Discounting the lakes over 10 acres, there are 27,609 acres in LAU 42. Using this area and the 50.66 miles of roads and trails in the LAU, the

current road/trail mileage (which excludes the Tilbury trail since it was closed in 2005) is 1.17 miles per square mile.

The point to be made here is not the discrepancies in the density figures over the years, but that these changes do not indicate an increase in actual mileage during the last few years. No road or trail building activities have occurred on state or federal land in the area since the initial assessment in 2005. The density is well below the Forest Plan Guideline (G-WL-8, USDA Forest Service, 2004, p. 2-30) of maintaining road and trail density below two miles per square mile.

Table F-2 shows the length of new construction under each alternative and how much of that new construction would be in a new corridor. The preferred Alternative 2 would add the most new corridor mileage. Adding the 2.2 miles of this proposed trail would bring the road/trail density to 1.22 miles/sq. mi. in LAU 42. This is a 0.02 increase which would be insignificant and the density would remain below the 2 miles/sq. mi. guideline in the Forest Plan.

However, as mentioned in the 2005 BE, this increase follows a 2.4 mile reduction in trails from the closure of the Tilbury Trail. The Biological Opinion for the Forest Plan Revision states “When a new trail is to be developed, an equivalent amount of trail (user-developed or Forest Service designated) must be decommissioned (Biological Opinion pg. 35)”. Although delays because of litigation have created a gap in time between when the Tibury Trail was closed and a new trail may be built, the intent of this new trail is to replace the old illegal trail. (Without the Tilbury Trail closure, road and trail density would be 53.06 miles/sq mi.) Alternative 2 would result in a net 0.2 mile decrease in snow compacted trails (2.4 miles reduced and 2.2 miles added).

Alternative 3 is the only other alternative with any notable, new, trail construction at 1.3 miles. Obviously, this addition would, likewise, be insignificant at the LAU scale. The increase possible with either of these alternatives is not significant and would not change a finding of “not likely to adversely affect”. See further density discussion under Travel Management below.

Table F-2. Change in Corridor

Activity	Alt. 1 No Action	Alt. 2 North Route	Alt. 3 South Route	Alt. 4 Proposed
New corridor opened	0	2.22 Mi.	1 Mi.	0.4 Mi.
New trail in existing travel corridor**	0	0	.32 Mi.	1.93 Mi.
Total new construction (clearing and/or dozing).	0	2.22 Mi.	1.32 Mi.	2.33 Mi.
Corridor closed	0	2.4 Mi	2.4 Mi	2.4 Mi
Net Change in Corridor	0	0.2 Mi closed	1.4 Mi closed	2.0 Mi Closed

** Arrowhead Trail, Stump River Road, South Fowl Lake Road, Un-named Trail for South Lake Road to South Lake.

Since the original BE was signed, decisions have been made on two road/trail projects, the Grand Portage Snowmobile Trail and the Travel Management Project. The cumulative effects of these projects are listed below.

Grand Portage Snowmobile Trail - The BE discusses the potential for a snowmobile trail linking the Grand Portage Reservation with the Gunflint Trail. That trail has just been established; the Ranger, Dennis Neitzke, signed the Decision Memo on March 6, 2010. The Fish and Wildlife Service concurred with our finding of "May affect; not likely to adversely affect" for that project. Except for 1.2 miles of overgrown road on state land being reopened, that trail follows existing roads. When the South Fowl Project BE was written the proposed routes included an option about three miles from the project area. The selected Grand Portage snowmobile trail is about four miles from the South Fowl Project area, and is outside of LAU 42. This trail does not need further assessment, nor does it change the current South Fowl Project finding of "not likely to adversely affect".

The Travel Management Project - The Travel Management Project assessed the number and location of unclassified roads, identified roads used for motor vehicles of all kinds, and identified which roads would remain open for Off-Highway Vehicles (OHV's) and which roads would be closed to these vehicles. The Forest Supervisor signed the decision notice (DN) and finding of no significant impact (FONSI) in December of 2008. That decision was appealed and the Appeal Deciding Officer remanded the decision until impacts to air quality in the Boundary Waters Canoe Area Wilderness (BWCAW) were disclosed. Forest specialists prepared a Supplement to the Environmental Assessment. It discloses effects to air quality in the Wilderness and effects to wildlife, and includes the potential effects from illegal road use. The Supplement was revised again after July, 2009, in order to address public comment. The Forest Supervisor signed the second DN/FONSI on November 19, 2009. The decision was appealed again on January 14, 2010. The Appeal Deciding Officer, the Regional Forester for Region 9, Kent Connaughton, issued a final ruling affirming the Forest Supervisor's DN/FONSI on February 26, 2010 (Connaughton, 2010). The decision is now under litigation.

As it currently exists, the Travel Management decision would decommission 1.2 miles of road in LAU 42. Decommissioning (subtracting) 1.2 miles of road, adding 2.2 miles of trail (Preferred Alternative 2), and the decommissioned 2.4 miles of the Tilbury Trail would result in a road and trail density of 1.20. ($2.2 - 1.2 - 2.4 = 1.4$ mile net decrease); and the new total is: $53.06 - 2.4 + 2.2 - 1.2 = 51.66$; so, the new density is 51.66 miles divided by 43.14 square miles = 1.20 miles per square mile.) Table F-3 displays the cumulative result of the project alternatives and the Travel Management Project. This calculation illustrates that these changes are small in scale compared to the LAU. If anything, the Travel Management decision could very slightly benefit any lynxes in LAU 42 because it decommissions some scattered road segments and concentrates road/trail mileage. The BA for the Travel Management Project has already assessed the effects to the lynx and it need not be repeated for the South Fowl Lake Snowmobile Access Project.

Table F-3 Cumulative Road and Trail Density per Alternative
(miles/sq. mile of road and snow compacting trail).

	Alt. 1 (without Tilbury Trail Closure)	Alt. 2 (with Tilbury Trail Closure)	Alt. 3 (with Tilbury Trail Closure)	Alt. 4 (with Tilbury Trail Closure)
Density in miles/sq. mile	1.20	1.20	1.17	1.16

Determination of Effects to CH

Table 2: Summary of Effects to Critical Habitat by Alternative

Alternative	Determination	Summary of Rationale
All Alternatives, 1, 2, 3, 4, and 5	Not likely to destroy or adversely modify critical habitat.	The vegetational aspects of the Primary Constituent Elements (PCE - those physical and biological features that make up critical habitat and are essential to the conservation of the species) potentially used by lynx for hunting, denning, and travel would remain functional and provide all habitats necessary to conserve the lynx within the South Fowl Access Trail landscape. The PCE of snow conditions could be altered by Alternatives 2 and 3 at a very minor scale. They would both have new sections of snowmobile trail which would compress snow. The amount of new trail (2.2 and 1.2 miles respectively) would not change the total road/trail density for the LAU surrounding the project area. The Tilbury Trail was closed with an understanding that an alternative trail would be established for access to South Fowl Lake. The road/trail density would not increase with any of the alternatives; and, it would remain below the 2 mi./sq. mi. upper limit suggested in the Forest Plan. The anticipated use of these trails would not notably change the project-wide snow conditions which have existed for decades. They would each reduce total snow trail miles when compared to the existing, total mileage, including the illegal trail to be replaced. The snow conditions would not change from current conditions under Alternatives 1, 4, and 5. None of the Alternatives would affect the distribution of lynx in LAU 42.

Sensitive Species

Bald Eagle - The bald eagle was removed from the federal list of Threatened Species in July, 2007 (USDI, Fish and Wildlife Service, 2007b). It is now considered a sensitive species on the Superior National Forest. The BE for the South Fowl Lake Access Trail project discussed an eagle territory which includes South Fowl Lake. An historic nest once occurred near the proposed/selected trail route not far from where it would join South Fowl Lake. That nest blew down in 2004 and has not been rebuilt near that spot. There are two other nests, probably within the same territory, that occur on North Fowl Lake directly adjacent to South Fowl. Our nest surveys have been erratic in recent years, but anecdotal evidence suggests an eagle pair has used these nests since the South Fowl nest disappeared. None of the proposed trails would come within a mile of these nests, and there is no concern about effects to eagles.

Sensitive Plants - Botanists and ecologists view the project area as unique and relatively fertile. Goshawks and peregrine falcons are possible here, and some of the rarest plants in Minnesota occur here. The most unusual species are plants which benefit from the sedentary and diabase rock associated with calcareous, slightly basic, nutrient rich soil (Schwartz and Thiel, 1976). The steep, moist, north-facing cliffs, and contrasting shallow, dryer soils, and deep moist soils provides the base for a unique plant communities (Minnesota DNR, 2003). Six vascular plants here are considered unique because they are disjunct or are at the extreme edge of their range.

The proposed mitigation measures are crucial to protecting these plants.

At the time the original BE was written, one plant Canada yew (*Taxus canadensis*), which is listed on the Superior Forest Sensitive Species List, and a state listed plant, blunt-fruited sweet cicely (*Osmorhiza depauperata*) were found near the proposed route for Alternative 2. Perhaps more importantly, three other plants are known to occur on the slopes and cliffs directly adjacent to this proposed route. These are disjunct species occurring well away from other known locations, and are on both state and Superior NF lists. They are: maidenhair spleenwort (*Asplenium trichomanes*), large-leaved sandwort (*Moehringia* or *Arenaria macrophylla*), and encrusted saxifrage (*Saxifraga paniculata neagaea*). The BE stated the concerns and found that if mitigation to control trail construction and snow-free season use of the trail is effective these plants would likely remain undisturbed.

Last summer Minnesota County Biological Survey botanists conducted more surveys in the area and they shared their findings with the Forest Service. All of the locations for the above plants were checked by the searchers and they discovered several more important plants at this cliff site. They found four more state listed species: a very small fern (*Botrichium michiganense*) which is also listed for the Superior NF, a sedge (*Carex supina*), purple reedgrass (*Calamagrostis purpurascens*), and a fern (*Woodsia scopulina*). They found two other species: a loco weed (*Oxytropis viscida*) which had not been collected in the state for decades, and *Prosartes trachycarpa* which is a new discovery for the state. These are not currently listed by

either Minnesota or the Superior NF for obvious reasons, and will likely become listed. The botanists found two other plants which, as of this time, have not been keyed to species, but which could be one of those listed. They are: a *Huperzia* spp., one of these, *Huperzia appalachiana*, is currently state and Forest listed; and *Arabis* spp., one of these, *Arabis hoboellii* var. *retrofracta*, is currently state listed. One other species, soapberry (*Sheperdia canadensis*), is apparently rare but not listed. Two other carex species were found for which no status has been determined – *Carex ovales* and *Carex tonsa*.

The finding of the BE was that the proposed alternatives may impact individuals but are not likely to cause a trend toward federal listing or loss of viability. This would apply to all the above plants *only* if the mitigations are effective. These are: to close the trail during snow-free seasons; limit access to the cliff area to only the current Border Route Trail, a hiking trail along the crest of the promontory which forms the cliffs; and bar rock climbing on the cliffs if needed. (Rock climbing has never been observed or known to occur in the cliff area, and the cliff area is not a climbing destination; Gunflint District Recreational Staff, personal communication).

During the 2009 survey the County Biological Survey reported a peregrine falcon at the South Fowl cliff site and black-throated blue warblers in the forests near the project site (Report not released). Both are listed as Sensitive on the Superior NF. The black-throated blue warblers had been reported by Forest Service personnel before the Environmental Assessment was written. The peregrine is now reinhabiting its historic range having been reintroduced into the Midwest in the 1980's. The area's cliffs appear to be good habitat for peregrine falcons. The peregrine was delisted from the federal Threatened and Endangered Species List in August, 1999, and is now considered a Sensitive Species on the Superior NF.

Both species were assessed for the South Fowl Access Trail project in a matrix covering all the Superior NF listed species. None of the alternatives for the project would lead to a trend toward federal listing or loss of viability for the black-throated blue warbler. Although the same finding applies to the peregrine, the potential negative effects of rock climbers was noted in the BE matrix in association with Alternative 2, the selected route. Disturbing nesting peregrines, especially early in the breeding and incubating period, can cause nest abandonment. This points out, again, the need to assure the trail is closed to motorized use during snow-free seasons.

References

Connaughton, Kent. 2010. Letter to Appellant Lawyer, Ms Melina Williams, from Regional Forester. Deciding to affirm the Forest-Wide Travel Management Project. Milwaukee, Wisconsin. February 26, 2010.



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Friedman, P. L. 2008. Judgement on Civil Action No. 07-0677 PLF. The Humane Society of the United States, et.al. v. Dirk Kempthorne, Secretary, USDI. et.al. U.S. District Court for the District of Columbia. 26 pp.

Minnesota Department of Natural Resources. 2003. Field Guide to the Native Plant Communities of Minnesota: the Laurentian Mixed Forest Province. Ecological Land Classification Program, Minnesota County Biological Survey, and Natural Heritage and Nongame Research Program. MNDNR St. Paul, Minnesota. 352 pp.

Ruediger, B. et. al. 2000. Canada lynx conservation assessment and strategy. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI Park Service. Missoula, Montana.

Schwartz, George M. and George Thiel. 1976. Minnesota Rocks and Waters. University of Minnesota Press. Minneapolis, Minnesota. 366pp

USDA Forest Service. 2004. Superior Land and Resource Management Plan, Superior National Forest. Duluth Minnesota

2004a. Forest Plan Revision EIS. Superior National Forest, Duluth, MN.

2004b. Forest Plan Revision Biological Assessment. Superior National Forest, Duluth, MN.

2004c. Guidance to calculate road density. Internal document for lynx-wolf road density analysis. Superior National Forest, Duluth, MN.

2006a. South Fowl Lake Snowmobile Access. EA. Gunflint Ranger District, Grand Marais, MN.

2006b. Decision Notice and FONSI for South Fowl Lake Snowmobile Access. EA. Gunflint Ranger District. Grand Marais, MN.

2008. Forest-wide Travel Management Project. EA. Superior National Forest, Duluth, MN.

2010. Decision Memo for CE covering Gunflint to Grand Portage Connector Trail. Dennis Neitzke. March 6, 2010.

USDI Fish and Wildlife Service. 1983. Northern States Bald Eagle Recovery Plan. 122 pp.

1992. Recovery Plan for the Eastern Timber Wolf. Twin Cities Field Office. St. Paul, Minnesota. 73 pp.

2004. Biological Opinion in response to the Biological Assessment for the Chippewa and Superior National Forest Land and Resource Management Plan. Twin Cities Field Office. Bloomington, MN. 49pp.

2006. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx (*Lynx canadensis*); Final Rule. Pages 66008 - 66061 in Federal Register Volume 71, Number 217, Thursday November 9, 2006. Washington, D.C. Available online at: <http://frwebgate2.access.gpo.gov/>

2007a. Endangered and Threatened Wildlife and Plants; Final Rule Designation the Western Great Lakes Populations of Gray Wolves as a Distinct Population Segment; Removing the Western Great Lakes Distinct Population Segment of the Gray Wolf From the List of Endangered and Threatened Wildlife; Final Rule. Pages 6052 - 6103 in Federal Register Volume 72, Number 26, Thursday February 8, 2007. Washington, D.C. Available online at: <http://frwebgate2.access.gpo.gov/>

2007b. Endangered and Threatened Wildlife and Plants; Removing the Bald Eagle in the Lower 48 States Form the List of Endangered and Threatened Wildlife; Final Rule;...Pages 37346 - 37372 in Federal Register Volume 72, Number 130, Monday, July, 9, 2007. Washington, D.C. Available online at: <http://frwebgate2.access.gpo.gov/>

2008a. Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx (*Lynx canadensis*); Proposed Rule. Pages 10860 - 10896 in Federal Register Volume 73, Number 40, Thursday February 28, 2008. Washington, D.C. Available online at: <http://frwebgate2.access.gpo.gov/>

2008b. Endangered and Threatened Wildlife and Plants; Reinstatement of Protections for the Gray Wolf in the Western Great Lakes and Northern Rocky Mountains in Compliance With Court Orders. Final Rule. Pages 75356 - 75371 in Federal Register Volume 73, Number 239, Thursday December 11, 2008. Washington, D.C. Available online at: <http://frwebgate2.access.gpo.gov/>

2009a. Service Removes Western Great Lakes, Portion of the Northern Rocky Mountain Gray Wolf Populations from Endangered Species List. News Release. January 14, 2009. 3pp.

2009b. Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx (*Lynx canadensis*); Final Rule. Pages 8616 - 8702 in Federal Register Volume 74, Number 36, Wednesday February 25, 2009. Washington, D.C. Available online at: <http://frwebgate2.access.gpo.gov/>

2009c. Secretary Salazar Affirms Decision to Delist Gray Wolves in Western Great Lakes, Portion of Northern Rockies. News Release. March 6, 2009.

2009d. Endangered and Threatened Wildlife and Plants; Final Rule To Identify the Western Great Lakes Populations of Gray Wolves as a Distinct Population Segment; Final Rule to Identify the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment; and To Revise the List of Endangered and Threatened Wildlife; Final Rules. Pages 15070 - 15123 in Federal Register, Volume 74, Number 62,