File Code: 1570-1

Date: September 13, 2004

Mr. Mark Donham Heartwood Box 308, RR1 Brookport, IL 62910

RE: Appeal of the Decision Notice and Finding of No Significant Impact for the Thunderbird Project Environmental Assessment, Munising Ranger District, Hiawatha National Forest, Appeal 04-09-10-0030 A215

Dear Mr. Donham:

On July 29, 2004, you filed a notice of appeal pursuant to 36 CFR 215.11. District Ranger Teresa Chase signed her Decision Notice and Finding of No Significant Impact on June 10, 2004, for the Thunderbird Project. The legal notice for this decision was published on June 15, 2004. My decision is based upon the Appeal Record and the recommendation of the Appeal Reviewing Officer (ARO) Allan Bier, District Ranger, Laurentian Ranger District, Superior National Forest, regarding the disposition of your appeal. The Appeal Reviewing Officer's review focused on the decision documentation developed by the Responsible Official, Teresa Chase, and the issues raised in your appeal. The Appeal Reviewing Officer's recommendation is enclosed. This letter constitutes my decision on the appeal and on the specific relief requested.

### FOREST ACTION BEING APPEALED

The Thunderbird Project, encompassing approximately 11,347 acres of National Forest land, consists of various management activities including, but not limited to, thinning and harvesting of timber, prescribed burning, construction of temporary roads, and the reconstruction of existing roads within Management Areas 4.2 and 4.4.

### APPEAL REVIEWING OFFICER'S RECOMMENDATION

The Appeal Reviewing Officer found no evidence that the Responsible Official's decision violated law, regulation or policy. He found the decision responded to comments raised during the analysis process and comment period and adequately assessed the environmental effects of the selected action. In addition, he found the issues raised in your appeal were addressed, where appropriate, in the decision documentation. Based on his review, the Appeal Reviewing Officer recommended the decision be affirmed.

### **DECISION**

After review, I concur with the Appeal Reviewing Officer's analysis and findings regarding your specific appeal issues (e.g., failure to meet viability requirements of MIS, sensitive and T&E species; failure to adequately access cumulative effects to the goshawk and red-shouldered hawk; failure to adequately access forest fragmentation effects on interior birds; inadequate support for soil mitigation measures; and failure to revise the Forest Plan).





Mr. Mark Donham

To avoid repetition, I adopt his rationale as my own and refer you to the enclosed Appeal Reviewing Officer recommendation for further detail.

It is my decision to affirm District Ranger Teresa Chase's Decision Notice and Finding of No Significant Impact for the Thunderbird Project on the Hiawatha National Forest.

Pursuant to 36 CFR 215.18(c) this decision constitutes the final administrative determination of the Department of Agriculture

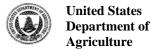
Sincerely,

/s/ Thomas A. Schmidt THOMAS A. SCHMIDT Appeal Deciding Officer Forest Supervisor

Enclosure

cc:

Responsible Official, Teresa Chase RO, Patricia Rowell



Forest Service Superior National Forest Laurentian Ranger District 318 Forestry Road Aurora, MN 55705 Phone: (218) 229-8800 Fax: (218) 229-8821

File Code: 1570-1 Date: September 9, 2004

**Route To:** 

Subject: Appeal of the Decision Notice and Finding of No Significant Impact for the

Thunderbird Project Environmental Assessment, Munising Ranger District,

Hiawatha National Forest, Appeal 04-09-10-0030 A215

To: Forest Supervisor, Hiawatha NF

This letter constitutes my recommendation for the subject appeal filed by Mark Donham, Heartwood, Doug Cornett, and Northwoods Wilderness Recovery for the Thunderbird Project on the Munising Ranger District of the Hiawatha National Forest (HNF). District Ranger Teresa Chase signed this Decision Notice on June 10, 2004. The legal notice of the decision was published on June 15, 2004.

My review was conducted pursuant to 36 CFR 215 – "Notice, Comment, and Appeal Procedures for National Forest System Projects and Activities." To ensure the analysis and decision are in compliance with applicable laws, regulations, policies and orders, I have reviewed and considered each of the points raised by the Appellants and the decision documentation submitted by the Hiawatha National Forest. My recommendation is based upon review of the Project Record including but not limited to the scoping letter, public comments, Decision Notice (DN) and the Environmental Assessment (EA).

On August 16, 2004, an offer to meet with District Ranger Teresa Chase to informally settle this appeal was declined by Mark Donham, representing Northwoods Wilderness Recovery and the other Appellants.

### **Appeal Issues**

The Appellants raised 6 main issues in this appeal of the Thunderbird Project Decision. Some of the major issues had numerous sub-issues. The appeal points are answered in the order received from the Appellants.

### 1. Viability Requirements and Monitoring of MIS, Sensitive, and T&E Species (NOA, p. 3)

The Appellants claim, "The EA is totally devoid of any credible information regarding populations of MIS, regional sensitive species, and state and federally-listed species in the Thunderbird area or anywhere in the Hiawatha. This is clearly a violation of the NFMA [and] NEPA. (NOA, p. 5).





**Response**: Frank Verito responded at scoping for Doug Cornett and Mark Donham on this issue. Mr. Cornett raised this issue during the 30-day Notice and Comment period.

The Thunderbird Project EA identifies federally threatened or endangered, regionally sensitive, State listed, and Management Indicator Species that might occur in the project area based on habitat and/or site-specific surveys. (EA, existing conditions for vegetation, flora, and wildlife, pp. 28-57; Botanical Biological Evaluation, Appendix D; Wildlife Biological Evaluation, Appendix E). The Thunderbird Project EA, "Botanical Biological Evaluation", and "Wildlife Biological Evaluation" also contain examples of the types of site-specific surveys conducted in the project area, including rare plant surveys, winter track surveys, lynx surveys, woodland raptor surveys, raptor nest location monitoring, breeding bird census surveys, Kirtland's warbler surveys, and dragonfly surveys (EA, Botanical Biological Evaluation, Appendix D; Wildlife Biological Evaluation, Appendix E).

The Forest Service, in partnership with other agencies including the US Fish and Wildlife Service (USFWS) and the Michigan Department of Natural Resources (MDNR), collected credible inventory and monitoring data for species occurring or have suitable habitat in the project area. Examples of population data referenced include surveys for fisher, pine marten, wolf, bobcat, river otter, bear, loons, ruffed grouse, deer, warblers, goshawks, eagles, and rare plants (Project File, Volume 1, Book 5 and 6, Tab Q: Wildlife).

The analysis for the Thunderbird Project also relied on data from research projects, conservation assessments and the "Michigan Natural Features Inventory". Direct, indirect, and cumulative effects to threatened, endangered and sensitive species were determined for each alternative based on population data referenced above, and expected changes to habitat. These effects can be found in the vegetation, flora, and wildlife environmental consequences sections of the EA (EA pp. 31-93), the "Botanical Biological Evaluation", and "Wildlife Biological Evaluation" (EA, Appendix D, E).

For federally listed threatened and endangered species, the Hiawatha National Forest requested consultation with the USFWS, who concluded the selected Alternative (3) is not likely to adversely affect the Canada lynx, gray wolf and the Kirland's warbler. No effect was found for the piping plover, and bald eagle (DN, p. 6; Wildlife Biological Evaluation, Appendix E, Table 3, p. 7).

I find an ample amount of credible population information on MIS, regional sensitive species, and State and federally listed species for the Thunderbird project area, as well as other portions of the Hiawatha National Forest. The conclusions drawn in the analysis are based on this information and procedures used to reach these conclusions are in compliance with NEPA.

## 2. <u>Cumulative Effects of Northern Hardwoods and Pine Cutting is Threatening Viability of Goshawk and Other Species</u> (NOA, p. 5)

### The Appellants claim:

- "The EA does not describe the existing environment in any detail [as it relates to the goshawk], and in that regard is inadequate." (NOA, p. 5).
- "...[T]he EA does not adequately discuss the habitat needs at all for the Northern Goshawk, In fact, it makes erroneous conclusions that selective cutting and thinning will benefit the species or will not harm it when the overwhelming scientific evidence shows that selective cutting and thinning does harm the species." (NOA, p. 6).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham on these issues. Mr. Cornett raised these issues during the 30-day Notice and Comment period.

The EA (pp. 25, 59) and "Wildlife Biological Evaluation" (pp. 27-31) describe suitable goshawk habitat and habitat needs of the species. I find the existing environment for the goshawk has been documented in detail. Neither the EA nor the "Wildlife Biological Evaluation" include statements regarding selective cutting and thinning as a benefit to the species. The Appellants' claims are unsubstantiated.

### The Appellants also contend:

- "Considering the species is already regionally sensitive, this widespread adverse habitat modification cannot be said to be in compliance with 36 CFR 219.19." (NOA, p. 6).
- "Goshawk is not viable according to the NFMA regulations definition, in the UP, yet this project is targeting primary habitat. This is a violation of NFMA, and failure to mention or discuss this important factor is a violation of NEPA." (NOA, p. 7).

**Response**: Frank Verito responded at scoping for Doug Cornett and Mark Donham on these issues. Mr. Cornett raised these issues during the 30-day Notice and Comment period.

The main portion of the project area is not considered suitable habitat for goshawk. The majority of management in this area is jack pine clearcut. Jack pine is not used for nesting by goshawk most likely due to the small size canopy of jack pine. Management actions in this portion of the project area will have little effect on Northern goshawk. (Wildlife Biological Evaluation, Appendix E p. 29)

The project area contains two main forest types, hardwood and conifer. Conifer stands other than jack pine that include deciduous and conifer species would be suitable for goshawk nesting. An existing goshawk nest is in a red pine stand that also has deciduous trees. This stand was originally proposed for harvest, but removed from the proposed action. In addition, stands 22, 27, and 50 in C-50 were previously in the proposed burn area, and are within the postfledgling area for the existing goshawk nest. These stands were removed from the proposed burn area and will be mechanically scarified outside of the nesting season. It's unlikely there will be any direct impacts to the goshawk from any proposed activity since harvest and burning will not occur in the area where the current goshawk nest occurs. (Wildlife Biological Evaluation, Appendix E, pp. 27-30).

If additional nest sites were found in the project area during implementation, the "Recommendations for Avoiding, Minimizing Effects or Conservation Measures" would apply to protect the goshawk.

Because there is limited habitat for the goshawk within the project area and harvest/burning have been removed as project activities within the stands where the goshawk nest and fledging areas occur, the project will not have long-lasting effects on the species. The proposed action is not likely to cause a trend to federal listing or loss of viability for the goshawk. The Appellants have not supplied sufficient evidence to show the proposed action will affect goshawk viability or ecological sustainability. I find the Responsible Official adequately evaluated the effects on the goshawk.

The Appellants further allege, "The cumulative impacts on the Goshawk of widespread, accelerated level of hardwoods and pine logging must be significant, Yet, the EA is devoid of any analysis of this and only mentions one of the past sales that have occurred over the last 15 years." (NOA, p. 7). "Such an analysis is clearly required during an EA, i.e., a significance determination, pursuant to 40 CFR 1508.27(b)(7)." (NOA, p. 7).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham on this issue. Mr. Cornett raised this issue in his comments during the 30-day Notice and Comment period.

The claims made by the Appellants concerning lack of cumulative effects analyses are not substantiated. The "Wildlife Biological Evaluation" (Appendix E; pp. 29-31) discusses direct, indirect, and cumulative effects on goshawks. There were no significant cumulative impacts noted for the goshawk (Wildlife Biological Evaluation, Appendix E). Table 3.1-1 of the EA and the "Wildlife Biological Evaluation" (EA, p. 27; Wildlife Biological Evaluation, pp. 12-13) address sales for the last 15 years (Includes discussion of 11 past timber sales by the Forest Service and additional timber harvesting on private lands).

In addition, the Appellants allege:

- "The EA fails to reference the work of Beier and Drennam" (NOA, p. 6). "This study indicates it is prey availability, not abundance that is the critical factor in feeding success of the species. This is not addressed at all in the EA." (NOA, p. 6).
- "In addition, the EA does not mention the serious predation problems which are currently the biggest threat to the species." [Reference made to study on 'Deer Edge Effects'] (NOA, p. 6).

**Response:** None of the Appellants addressed the Beier and Drennam article or the predation issue during scoping or 30-day comment period.

The Appellants' assertions are unfounded. The EA and "Wildlife Biological Evaluation" cite three scientific publications (Gibson, 2003; Cooper, 1999b; Bednarz and Dinsmore, 1982) on

prey availability and predation. Further, the EA (pp. 28, 29) recognize that the creation of openings favors the introduction of predator species. The article referenced by the Appellants is from the Southwestern United States and discusses prey availability and limiting factors in ponderosa pine and juniper, habitats not found in the Lake States.

Gibson (2003) is specific to the Hiawatha National Forest and to the West Unit where the project area is located ("Productivity, Predation and Habitat of Woodland Raptors on the West Unit Hiawatha National Forest in the Upper Peninsula of Michigan, USA"). The northern goshawk is addressed in Gibson's paper, which is the most recent site-specific scientific information available ("Response to Comments", Volume 1, Book 1, p. 11).

The goshawk is impacted directly by alteration of suitable nesting structure around the nest site and disturbance during the nesting season. It's impacted indirectly by influencing the distribution and abundance of prey species (Cooper, 1999b). Harvest and burning have been removed from the project activities within the stands where the goshawk nest and fledging areas occur. Changes to small prey populations would be temporary. Each prey species would be affected differently by the treatments. Treatments would differ depending on the forest type (Wildlife Biological Evaluation, Appendix E, p. 28).

The Appellants also allege, "Without the required in-the-field monitoring of the Goshawk, how can the agency estimate the effects on the sharp-Shinned and Cooper's Hawk?" (NOA, p. 7).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham, but did not specifically address this issue. Mr. Cornett addressed monitoring in general during the scoping period, but did not address the sharp-shinned and cooper's hawk specifically. Mr. Cornett responded about monitoring in general in his comments during the 30-day Notice and Comment period, but did not address the sharp-shinned and cooper's hawk.

The goshawk was properly assessed as indicated above, contrary to the Appellants' claims. The sharp-shinned hawk and Cooper's hawk use similar habitat, therefore, the effects are similar to the goshawk. The Forest Service is not required to analyze impacts to every species within a project area. Rather, they evaluate federally listed threatened and endangered species, Regional Forester Sensitive Species and Management Indicator Species.

Species in these three categories were reviewed in the EA and the "Wildlife Biological Evaluation" (EA, pp. 55-93; Wildlife Biological Evaluation, Appendix E) and no significant impacts were found. The Forest conducted field surveys for goshawks, sharp-shinned hawks, Cooper's hawk, and red-shouldered hawks (Wildlife Biological Evaluation, Appendix E, p. 10-11; Project Record, Tab Q).

The Thunderbird Project Team did an adequate analysis in the EA and "Wildlife Biological Evaluation" to evaluate effects on the mentioned hawk species. Sufficient raptor surveys and historical monitoring of raptor nests have been conducted. The Responsible Official had sufficient information to make an informed decision on this project.

The Appellants further allege, "[The Goshawk]... guidelines were not included in the final forest plan, and were never subject to public scrutiny. NFMA guidelines require that such forest plan amendments be subject to public comment and NEPA analysis." (NOA, p. 8).

**Response:** None of the Appellants addressed these guidelines specifically during scoping or 30-day comment period.

My review of the Project Record finds no reference to "standards and guidelines" for managing goshawk as mentioned by the Appellants. Suggested mitigation measures for goshawk management are found on pages 24 to 26 of the EA and "Recommendations for Avoiding, Minimizing Effects, or Conservation Measures" for goshawk are found on pages 44-45 of the "Wildlife Biological Evaluation" (EA, Appendix E). These mitigation measures are not explicit, programmatic direction.

### Lastly, the Appellants claim:

- "The analysis of the effects of the logging on wildlife is totally inadequate to cover the requirements of NEPA." (NOA, p. 6).
- "The pubic is being ill-informed about the effects of this action..., and the agency is not utilizing accurate, up-to-date information in its analysis...This clearly constitutes a violation of NEPA and NFMA." (NOA, p. 7).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham on these issues. Mr. Donham raised these issues during the 30-day Notice and Comment period.

The Appellants make a general assertion as to an inadequate wildlife effects analysis. However, my review indicates the EA and "Wildlife Biological Evaluation" (EA, pp. 55-93, Appendix E) provide sufficient analysis, contrary to the Appellants assertions. The project team used the most up-to-date information in drawing their conclusions ("Response to Comments", Volume 1, Book 1, p. 11). The Responsible Official was able to make an informed decision on this project.

In addition, the Forest conducted adequate public involvement. The project was first identified in the July 1999 issue of "Project Planning," the HNF's quarterly "Schedule of Proposed Actions". The project also was posted on the HNF Internet site in 2001. In May 2001, scoping was conducted, with approximately 518 letters being sent to landowners in the project vicinity, interested citizens, local governments, federal agencies, tribes, organizations, and industry, explaining the project and requesting comments on the proposed action. An open house was held in spring 2001 at the Munising Ranger District Office to further inform the public and to provide a forum for commenting. Team members interacted by phone, fax, and e-mail throughout the scoping period. Under each subsection of the "Affected Environment and Environmental Effects" section of the EA, the issues identified during scoping were addressed in direct, indirect, and cumulative effects discussions. Public comments were sought on the EA for a 30-day period beginning in May 2004.

### **3.** The Project Will Adversely Affect the Red-Shouldered Hawk and Threaten it's Viability (NOA, p. 8)

The Appellants claim, "Studies [e.g., Bednarz and Dinsmore and Bryant] indicating "...selective cutting in woodlots may result in the replacement of Red-shouldered Hawks by Red-tailed Hawks, ... are not discussed at all in the EA." (NOA, p. 8).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham about effects to red-shouldered hawks, but did not refer to Bednarz and Dinsmore or the Bryant article. Mr. Cornett discussed the red-shouldered hawk during the 30-day Notice and Comment period, but did not refer to this research.

My review of the Project Record finds that the Thunderbird Project Team used the Bednarz and Dinsmore article as part of their analysis (Appendix E, p. 35). The "Wildlife Biological Evaluation" has an effects analysis for the red-shouldered hawk discussing the potential impacts by red-tailed hawks (Appendix E, pp. 34), contrary to the Appellants claim.

The Appellants also contend, "What are the cumulative effects on the Red-shouldered Hawk?" (NOA, p. 9). "Clearly the EA is grossly inadequate to withstand this overwhelming scientific evidence of an adverse impact, and does not comply with the procedural requirements of NEPA or the substantive requirements of NFMA." (NOA, p. 9). "The sloppy, conclusory assertions that there would be no significant impact on Red-shouldered Hawk is not supported by any evidence..." (NOA, p. 9).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham on cumulative effects in general. Mr. Cornett raised this issue during the 30-day Notice and Comment period

I find the Appellants have not supplied sufficient evidence to show the proposed action will affect red-shouldered hawk viability. The cumulative effects analysis for the red-shouldered hawk is found in the "Wildlife Biological Evaluation" (EA, Appendix E, pp. 33 to 35). The Responsible Official had adequate information for her decision.

In 2001 a red-shouldered hawk was noted in the project area. In 2001 a red-shouldered hawk nest was located within ½ mile of the project boundary south of C-51. This nest has been active the past three years. While the project area is within the post-fledgling area of this nest, there are no activities proposed for the portion of C-51 within the post-fledgling area.

Within ½ mile of the project area there is one historic red-shouldered hawk nest. There are no activities proposed within ½ mile of this nest. There also are no activities planned within the post-fledgling area of the red-shouldered hawk nest within ½ mile of the project area boundary.

Conservation measures listed in the section titled, "Recommendations for Avoiding, Minimizing Effects or Conservation Measures" should protect habitat for this species if a nest were found in the project area.

The determination was made for red-shouldered hawk that the proposed management activities may impact individual birds, but would not likely cause a trend toward federal listing or a loss of viability.

### Lastly, the Appellants claim:

- "...[T]he agency, without providing any baseline data as to the populations of the species in the region, the project area, or even in the forest as a whole, brushes off the possibility of any impacts. This does not constitute a hard look under NEPA and does not meet the requirements of NFMA." (NOA, p.9).
- "Failure to collect and maintain baseline data also constitutes a violation of the Forest Plan and the ROD for the Forest Plan, thus a violation of NFMA in that regard." (NOA, .p 9).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham on these issues. Devin Scherubel for Heartwood expressed general concerns about having baseline data for MIS species, forest interior birds, reptiles and amphibians. Mr. Cornett raised these issues during the 30-day Notice and Comment period.

I find no validity to the Appellants' claims. Nowhere in the Forest Plan or ROD do I find requirements for the collection and maintenance of baseline data for a Regional Forester's Sensitive Species (i.e., red-shouldered hawk). I find no violation of NFMA. The Forest did complete surveys for the red-shouldered hawk (Wildlife Biological Evaluation, Appendix E, pp. 10-11). Raptor nest data is also included in the Project Record (Volume 1, Tab Q, Wildlife).

# **4.** The Effects of Forest Fragmentation on Forest Interior Birds is Inadequately Addressed (NOA, p. 9)

The Appellants claim, "In spite of the fact that the proposed action will significantly increase forest fragmentation in the area, which will affect adjacent areas including Shingleton Bog and the congressionally-designated Big Island Lake Wilderness, the Hiawatha brushes off impacts of this project on these species." (NOA, .p 9). "Clearly this does not comply with NEPA requirements to take a hard look based upon the most up-to-date accurate, scientific information." (NOA, p. 10).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham about this issue, but did not mention Shingleton Bog. Devin Scherubel for Heartwood expressed general concerns over fragmentation. Mr. Cornett did not raise this issue during the 30-day Notice and Comment period.

We can find no discussion in the EA that indicates significant impacts to the Shingleton Bog or the Big Island Lake Wilderness as alluded to by the Appellants. The Big Island Lake Wilderness is not within or adjacent to the project area. The Thunderbird Project Team responded to this issue during the 30-day Notice and Comment period by stating that the Big Island Lake

Wilderness is located many miles to the south and east of the project area ("Response to Comments", Volume 1, Book 1, p. 8).

### The Appellants also contend:

- "...[T]he EA is devoid of any site specific information about where these birds have territories and what the impacts will be if those territories are displaced and made unsuitable. (NOA, p. 10).
- "Where the agency makes conclusory statements about them being able to use other territories, there is no reference supporting these assertions...." (NOA, p. 10).
- "...[T]he cumulative effects analysis in regard to forest fragmentation is completely inadequate and inaccurate (NOA, p. 10). "The EA fails to identify what contiguous forest blocks remain after the logging, how logging has isolated areas of forest, and what the populations of birds in those areas were before and after logging." (NOA, p. 12).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham on forest fragmentation in general, but did not specifically address its effects on birds. Devin Scherubel for Heartwood expressed general concerns over fragmentation for birds and other species. Mr. Cornett raised this issue during the 30-day Notice and Comment period.

Regarding the Appellants' contention that the analysis lacks any site-specific information about forest interior birds' territories or populations, the Forest Service is not obligated to complete site-specific surveys for each project. However, the Responsible Official did use survey information gathered as part of Forest and breeding bird survey regional monitoring to estimate populations and trends for forest interior bird species. An analysis of 11 years of breeding bird studies in the "2000 Hiawatha Monitoring and Evaluation Report" indicates an increase in neotropical and area sensitive bird species since 1996.

As a measure of effects on forest interior birds, the Hiawatha National Forest uses the Black-throated Green Warbler as an indicator. This Management Indicator Species is one of the most commonly observed birds on the Forest. The "U.S. Geological Survey Breeding Bird Survey" trend analysis shows a significant population increase for the species in Michigan between 1966 and 2002 (Project File, Volume 1, Book 5 and 6, Tab Q).

A discussion on forest fragmentation is found in the EA on pages 68 to 71. Fragmentation is defined as opening of the forest canopy through timber harvest or road construction. The cumulative effects discussion for wildlife is found in the "Wildlife Biological Evaluation" on pages 11 to 13. This includes past, present, and reasonably foreseeable future activities that have a potential to contribute to forest fragmentation.

The Forest Service is not required to analyze impacts to every species within a project area. Rather, they evaluate federally listed threatened and endangered species, Regional Forester Sensitive Species and Management Indicator Species. Direct, indirect, and cumulative effects of

fragmentation on Regional Forester sensitive bird species is found in the "Wildlife Biological Evaluation", Appendix E on pages 27 to 39.

The Appellants have not supplied sufficient evidence to show that the analysis of fragmentation effects on forest interior birds is inadequate. I find the analysis of effects to be accurate and appropriate for the actions proposed in the Thunderbird Project.

Lastly, the Appellants claim, "Assertions in the EA ... [are] not supported by credible scientific information, and therefore does not comply with NEPA or NFMA." (NOA, p. 10).

**Response:** Frank Verito responded at scoping for Doug Cornett and Mark Donham on this issue. Devin Scherubel for Heartwood expressed the need to consider additional research findings. Mr. Cornett raised this issue during the 30-day Notice and Comment period.

The Appellants do not specify the inadequacies of the analysis. I find, however, the EA (EA, pp. 68-71) and "Wildlife Biological Evaluation" (Appendix E, pp 11-13 and 27-29) provide sufficient discussion on the effects of forest fragmentation on birds. The Responsible Official had sufficient information to make an informed decision on this project. I find no violation in law, regulation or policy. Data and research used for effects analysis was the best information available and can be found in Appendix J and Appendix E (References and Literature Cited).

### 5. The [Soil] Mitigation Measures Have Inadequate Support in the Record (NOA, p. 10)

Frank Verito responded at scoping, for Doug Cornett and Mark Donham concerning soil erosion and stream sedimentation. He did not address the issue of inadequate support in the Record. Likewise, Devin Scherubel for Heartwood expressed general concerns over soil erosion. Doug Cornet raised this general topic during the 30-day comment period to the Thunderbird EA.

### **Sub-Issue 5.1:** Documentation regarding mitigation measures is inadequate

The Appellants assert:

- "The documentation in the EA as to how the agency is going to comply with these sections [Sections a, e, f, of 36 CFR 219.27 regarding mitigation measures] is totally inadequate." (NOA, p. 41).
- "There doesn't seem to be anything specific about mitigation in the DN. Yet, there is no reference to extraordinary measures, or any studies, reports, or past monitoring that indicates that these mitigation measures function to completely eliminate all potential for significant impact." (NOA, p. 42).
- "These vague [mitigation] measures, which aren't even identified in detail, do not meet the standards required under NEPA and the Administrative Procedures Act (APA). There is no information in the EA as to where these activities will occur. Skid trails, log landings, and temporary roads ... soil types ... slope ... contours... consulting with soil

experts from the Natural Resource Conservation Service ... mulching...operating season ... what the restrictions are, or where specifically they will be applied." (NOA, p. 43).

- "Clearly, sedimentation and erosion is a serious and significant threat and there is inadequate discussion of this issue in the EA." (NOA, p. 43).
- "There is no data cited about how much of the ground would be covered vs. bare after the logging and heavy equipment use of the area.... ...[H]ow many of the skid trails will be across fragile soils..." (NOA, p. 44).
- There is no requirement in the protective measures to keep a certain percent of the ground covered by litter on skid trails..." (NOA, p. 44).

**Response:** The Appellants' claims are not correct. The EA sets forth the applicable and necessary soil-related mitigation measures in the "Mitigations and Monitoring" section (§2.5), the "Soils Environmental Effects" section (§3.5.3), the "Water Quality and Riparian Areas" section (§3.6.3) and the "Thunderbird Project Roads Analysis" (Appendix F). These measures developed by the Forest Service and the Michigan Department of Natural Resources; protect soils and water bodies in the project area. Further monitoring will evaluate the effectiveness of implementing these soil and water mitigation measures (EA §2.5).

Documentation of site-specific soil information, specific actions and effectiveness is included in the EA, appendices and Project Record. As stated in the EA, project design included applicable guidelines from the Forest Plan, FS Manuals/Handbooks, and from the Michigan Department of Natural Resources Best Management Practices (BMPs).

Site-specific information regarding soil types, erodibility, skid trails, log landings, temporary roads, mitigations, operating seasons and slope restrictions is contained in the Project Record (Volume 1, Book 4, Tab P, Documents P-1, P-2, P-3, P-9, and P-17). The "Thunderbird Transportation System Improvements Report" (Appendix F of the EA) was also used to identify transportation-related needs including opportunities for restoration. Additional soil information is contained in the project Interdisciplinary Team meeting notes (Volume 1, Book 2, Tab C). The EA and Project Record (Volume 1, Book 4, Tab P, Documents P-8, P-10, P-12, P-13, P-14, P-15, P-16, P-18 through P-27) are replete with references to scientific soils studies and reports.

While local staff for the Natural Resource Conservation Service received notification and project information, they provided no comments.

With regard to sedimentation, the "Water Quality and Riparian Areas" section of the EA (§ 3.6.2) states that "...[N]o streams occur on the project area. No critical fish habitat occurs on the project area.... There are no floodplains within the Thunderbird Project Area." The EA (§ 3.5.3.4) also states, "Due to the limited surface area on the project area, the depth of soils and the high infiltration rates, no short-term or long-term cumulative effects to water quality are expected as a result of implementation of any of the alternatives.

<u>Sub-Issue 5.2</u>: The EA lacks site-specific information about soil types and potential effects of proposed action, including effects of compaction, rutting/groundwater interaction, roadwork, and potential nutrient loss and effects to mychorrhizae.

### The Appellants claim:

- "The EA has some general information about soils within the project area but has no site-specific information about the specific soil types on a particular location..." (NOA, p. 42).
- "While the EA does acknowledge some impacts from compaction it ultimately downplays impacts.... Again, there are no citations to any studies or papers or any data to support any of this." (NOA, p. 45).
- "The EA does not mention how the compaction effects might last." (NOA, p. 49).
- "If the water table is high and there is rutting, tree roots will stand in water. What are the impacts of this? This is an impact not discussed in the EA. Also, there isn't any kind of procedure set forth in any of the documentation for testing the groundwater level." (NOA, p. 48).
- "Another factor that is not covered sufficiently in the EA is the impact of the roadwork on soils... The EA brushes off the cumulative impacts on soils." (NOA, p. 49).
- "Another impact on soils of timber harvesting is removing nutrients. The EA minimizes these impacts..." (NOA, p. 50).
- "...Mychorrhizal associations and the impacts from logging...[are] not addressed in the EA, yet is clearly a cumulative effect." (NOA, p. 51).

Response: I find the Appellants' contentions unfounded. The soil effects analysis, including a discussion of soil compaction, is presented in the EA (§3.5). This section of the EA contains site-specific information, extensively supported by the Project Record (Volume 1, Book 4, Tab P), regarding soils and potential effects sufficient for an informed decision on this project. Compaction is addressed in both the "Soils Environmental Effects" (§3.5.4) and the "Water Quality and Riparian Area Environmental Effects" (§3.6.3) analyses. The "Thunderbird Project Roads Analysis" (Appendix F) discusses the soils impacts of roadwork. The EA also addresses nutrient removal in the "Soils Environmental Effects" section (§3.5.3), supported by the Project Record (e.g., Volume 1, Book 4, Documents P-14). It is not the intent or purpose of project analysis to establish scientific baseline information or analyze every component of the ecosystem as the Appellants would like (i.e., mychorrhizal associations or water table studies).

The EA characterizes soils and discusses soil productivity and erosion potential in the "Soils Environmental Effects" section (§3.5). This discussion is supported by exhaustive stand-

level data contained in the Project Record (Volume 1, Book 4, Tab P, Documents P-1, P-2, P-3).

Mitigations and BMPs for this project represent the best scientific techniques currently available, and have been successful in past projects at reducing or eliminating potential adverse effects of management activities. Several relevant studies regarding potential effects were consulted and are documented in the Project Record. Relevant research, shown with Project Record citations, include:

- ✓ "Forest Harvesting and Water: the Lake States Experience", by Verry (Volume 1, Book 4, Tab P, Document P-8);
- ✓ "Harvesting Economics and Site Damage from Low-impact Harvesting of Partial Cut in a Northern Hardwood Timber Stand", by Sturos, Thompson, Christopherson and Sturos (Volume 1, Book 4, Tab P, Document P-13);
- ✓ "Sustaining Site Productivity in North American Forests: Problems and Prospects", by Powers (Volume 1, Book 4, Tab P, Document P-14);
- ✓ "Gentle Logging System Evaluation (Quantitative Measurements Report)", by Miller, Heyd, Rummer, and Jerome (Volume 1, Book 4, Tab P, Document P-16);
- ✓ "Harvest Impacts on the Soil Resource and Long-term Productivity", by Cleland (Volume 1, Book 4, Tab P, Document P-21);
- ✓ "Low-site Class Black Spruce and Jack Pine Nutrient Removals After Full-tree and Tree-length Logging", by Weetman and Algar (Volume 1, Book 4, Tab P, Document P-8).

# **6.** To Undertake the Thunderbird Project When the Hiawatha Plan is Expiring and FEIS Outdated is Not in Compliance with Applicable Laws and is Arbitrary and Capricious (NOA, p. 14)

Frank Verito responded at scoping for Doug Cornett and Mark Donham concerning the need to revise the Forest Plan. Doug Cornet addressed this general topic during the 30-day comment period to the Thunderbird EA.

Appellants claim, "The Thunderbird project must be suspended until the Hiawatha National Forest publishes a new Final Environmental Impact Statement supporting a revised LRMP. Continued implementation of the 1986 Hiawatha National Forest LRMP not only violates the RPA and the NFMA, but violates the National Environmental Policy Act...." (NOA, p. 56).

**Response:** I find no violations in law, regulation or policy as the Appellants assert. A Land and Resource Management Plan (LRMP, or "Forest Plan") does not simply expire. There are no expressed requirements in NFMA or its regulations to halt management activities if a Forest cannot meet the 15-year target in the statute. Also, the President of the United States on November 10, 2003 signed the Department of the Interior and Related Agencies FY 04 Appropriations Act, H.R. 2691, P.L. 108-108. Section 320 states:

"Prior to October 1, 2004 the Secretary of Agriculture shall not be considered to be in violation of subparagraph 6(f)(5)(A) of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1604(f)(5)(A) solely because more than 15 years have passed without revision of the plan for a unit of the National Forest System. Nothing in this section exempts the Secretary from any other requirement of the Forest and Rangeland Renewable Resources Planning Act (16 U.S.C. 1604 et seq.) or any other law."

Appellants further contend, "The suspension of the Thunderbird project is necessary because the goals, objectives, standards, and guidelines contained in the 1986 Hiawatha National Forest LRMP are no longer relevant or defensible in light of significantly changed resource demands by the public, significantly changed environmental and economic conditions, and significant changes in Forest Service management direction." "Despite these changes, the Hiawatha National Forest has not corrected, amended, revised, or supplemented the LRMP's FEIS and, 15 years later, continues to tier project level decisions to this irrelevant FEIS." (NOA, pp. 55, 57).

Response: The Hiawatha National Forest has completed yearly monitoring and evaluation reports and assessed changing conditions. The Forest is currently assessing this information along with new input from concerned citizens in preparation for its Plan revision (scheduled for completion in 2005). Likewise, the Hiawatha National Forest has maintained its existing Forest Plan through adoption of 23 separate amendments, many which incorporate new direction to reflect changing resource demands (e.g., Visual Quality Objectives; Wilderness; Research Natural Areas; Wild and Scenic Rivers; Threatened, Endangered and Sensitive Species; Semi-Primitive Areas; Roads; Below Cost Sales; First Decade Harvest; Second through Fifth Decade Harvest; Aspen Management; Even Age Versus Uneven Age Management of Northern Hardwoods; and Old Growth from the Original Forest Plan). The Appellants present no specific evidence that the existing plan direction used in the development of this project was inadequate, except for generic statements. Verification in the Project Record supports the fact the Forest Plan has not remained stagnant.

### **RECOMMENDATION:**

After reviewing the Project Record for the Thunderbird Project, and considering each issue raised by the Appellants, I recommend District Ranger Teresa Chase's Decision Notice of June 10, 2004 be affirmed.

/s/ Allan Bier ALLAN BIER Appeal Reviewing Officer District Ranger

cc: Responsible Official, Teresa Chase, RO, Patricia Rowell