

# Northwest Howell Response to Comments

## Letter # Com # Comment

## Response

1 1 "I understand from research done by Steve Carpenter (Professor at Center for Limnology, UW Madison) and Steve Ave'Lallemant (WDNR) that fish cribs are now seen as "feeding stations" for large predator fish, much like bird feeders, in so far as small fish congregate around cribs, rather than being distributed naturally throughout the habitat."

It is likely true that isolated cribs provide feeding stations for larger fish, as well as harvest sites for fishermen. However, this is true of any lake structure, man-made or natural. It will be true for natural wind fall or artificial tree drops sites as well. Structure attracts fish. In a lake like Quartz, there are both natural and artificial "feeding stations", and possibly harvest sites for the fishermen who know the locations of these sites. Any structure will concentrate fish, since this is often where the food is. By adding additional structure, we do create more feeding sites, but we also increase the carrying capacity of the lake. Not all the fish will be eaten by predatory fish nor will all the fish be harvested. Generally, as structure is added to a lake, fish, invertebrates and fishermen become more dispersed. All the sites may still be fished, but the lake can now support more residents, and probably tolerate more fishing pressure. Some fish biologists still favor the placement of structure in lakes, if it's done properly. Single cribs in lakes do concentrate fish, but placement of cribs in "reefs" of crib structures allows the fish population to spread out across a larger area, and provides all the other benefits of hiding, foraging, etc.

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1	2	60 fish cribs, or even 30 in a lake the size of Quartz would be far too many	60 is the total for both Quartz and Steven's Lakes. The cribs would not be the typical 4'X8'X8' ft. square structures. These would be basically some natural log structures about 1-3 feet tall, fashioned such as to make a complex small pile of woody structure. These cribs would be placed as near to shore as the DNR would permit, so as to mimic natural logs or wind-fall. Shallow water woody structure provides important colonization sites for insects and invertebrates, as well as nesting, hiding, feeding and foraging sites for fish and other aquatic organisms. Quartz and Steven's Lakes contain some (not much) of this type of structure, but other lakes contain much much more. In particular, some of the less disturbed, undeveloped lakes on the Thousand Island Chain of Lakes on the Michigan Wisconsin border provide a great example of lakes with very complex woody shorelines. A fisheries survey of Quartz Lake was conducted by WDNR under Forest Service contract during 1997. The final Lake Survey Summary - Quartz Lake, report dated 8 December 1998, pg. 6 recommended an increase in shallow water woody cover and specifically suggested both half logs and about 40 "tree drops". The most recent report on the fishery of Steven's Lake is from October 1996. This report made no recommendations on shoreline or lake structure improvements, but per personal correspondence with Bob Young, DNR Fish Manager for Forest and Florence Counties, WI, this in other lakes tend to have greatly reduced woody structure, and he is supportive of selected structural improvements .
1	3	Quartz Lake holds a number of musky. Just how a musky population in a small lake plays out with predation in a fishery should be considered in determining the best course of habitat enhancement.	There are a few musky in Quartz, these fish were probably unofficially stocked. The DNR did stock this lake many years ago, and those musky should have all died out, so it's more likely that a few fishermen have continued the stocking. Generally speaking, adding structure to the lake would provide more habitat for prey species and benefit the overall fishery.
2	1	"LSLA believes that alternative 4 presents the best option of the alternatives analyzed in the DEIS"	Comment noted
2	2	"Additional alternatives which harvest more of the hardwood sawtimber and remove more of the over mature trees should be developed and analyzed." "NEPA requires that the government vigorously explore and objectively evaluate all reasonable alternatives. 40CFR 1502.14."	See response to letter 3 comment 2

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2 3 Forest Service needs to consider in detail the economic and social benefits to the local and regional areas from the timber sale program. "With several hundred jobs created directly by the federal timber program on the CNF and millions of dollars in income generated from those jobs, the importance of the federal timber sale program is obvious." "In many of the rural communities in which the national forest is located, these jobs are an important component of the local economy."

The Forest Service recognizes that jobs and products generated from National Forest timber sales are important to local economies. This was identified as part of the purpose and need for this project (sections 1.3.2 and 1.3.5 3A). The amount of jobs created, income generated and payment to counties by alternative is discussed in Table 3.8.3.2-1. The DEIS states under section 3.8.3.5 "Through the duration of the sale contracts, the action alternatives would help (at varying levels by volume of action alternative) to maintain current employment levels, current sawlog and pulpwood supplies to area mills, and revenues to both Federal and local governments." The DEIS also states in section 3.8.2 "The harvest in FY 1998 (October 1, 1997 through September 30, 1998) of 147.9 MMBF from the Chequamegon-Nicolet National Forest supported approximately 2,093 timber-related jobs and \$127 million in employment-related incomes. " Alternative 2 specifically would provide \$23,208,495, 325 jobs, 23 MMBF of timber and payment to counties in the amount of \$404,486 (DEIS Table 3.8.3.2-1).

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2 4 "Local governments also benefit from the federal timber program." "The payments to counties are estimated in the DEIS, but the benefits to the other local units of government are ignored. DEIS p.100. These funds help local schools and communities meet their financial needs. The federal money also reduces some of the tax burden on local citizens. If harvest volumes decrease on the CNNF, these lost revenues to the small communities become a significant problem for local government."

The DEIS states under section 3.8.3, "The Forest Service is limiting the economic efficiency and impact analyses to those monetary values that are readily available and market-defined. This analysis is not intended to show every possible tradeoff, but, rather, to consistently and reasonably compare the costs, benefits, and efficiencies between the alternatives."

Table 3.8.3.2-1 shows the payments to counties anticipated to be generated by alternative. Section 3.8.1 provides some details of benefits to local communities generated from timber sale receipts "The 25% Funds are equal to 25% of the gross receipts of the Forest and are distributed by the Department of Agriculture. Both funds are used by local school districts and for the improvement of county and town roads.

PILT funds are not generated from timber harvest activities but rather acres of ownership. These funds are by the Department of the Agriculture to the state of Wisconsin that distributes them to the counties in which the Forest is located. Since PILT funds are distributed by the Department of Agriculture and none of the alternatives would affect that funding they are not considered in this analysis.

Forest County has approximately 344,030 acres (as of September, 1996) of NFS land within its boundaries. In FY 2000, \$454,695 was distributed through the 25% Fund and \$36,098 were distributed through PILT to Forest County. (25% Fund and Payment in Lieu of Taxes Information for Forest County, USDA Forest Service, February 2001).

2 5 Logging is a family tradition for many of the loggers in the area. Towns are dependent on logging with many support related businesses benefiting from timber sales on the federal forest. A stable supply of timber from these federal forests is critical to maintaining these loggers and their support businesses. In many of the local communities, logging is the dominant industry and major employer. Forest Products industries are the major employer in the region surrounding the CNNF. Loss of those industries would be devastating to the communities and families.

See response 2-4. This issue is beyond the scope of the project level analysis. Addressing a stable supply of timber from federal forests rests with analysis at the Forest Plan level and not the project level. See also response to letter 2 comment 7.

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| 2        | 6     | "The economic analysis in the DEIS favors selection of Alternative 4." The economic analysis shows that this alternative has a higher PNV, greater returns, makes the forest more productive, and has a larger positive impact to the community .  | Regulations (36 CFR 219.27b (3)) state that vegetative manipulation shall not be chosen primarily because they will give the greatest dollar return or the greatest output of timber, although these factors should be considered. Economic factors were analyzed in the DEIS in section 3.8 of the DEIS. In Section 3.8.3.2, the DEIS states that "Out of the action alternatives, Alternative 3 has the highest present net value and benefit cost ratio however produces less return to local incomes, generates less commodities to local industries and creates fewer jobs. Although Alternate 3 produces less wood products than Alternative 2 and 4, it has fewer costs associated with site prep, road construction and reconstruction and sale preparation." Alternative 2 ranked between Alternatives 3 and 4 as far as production and costs were concerned. See Table 3.8.3.2-1 |
| 2        | 7     | "It is critical that the National Forest maintain a timber program that harvests timber at consistent, stable levels over the years. Harvest levels should be equal to the allowable cut in the Forest Plan, which would provide for a long-term, continued harvest at sustainable levels. A stable flow of timber is critical to the businesses that harvest and utilize timber products. For example wide fluctuations in the volume of timber to be harvested in an area may make it difficult for small loggers to maintain their business from year to year. In short, the Forest Service cannot operate a timber sale program without loggers. An even flow of timber off the national forests can go a long way toward stabilizing many of these logging operations." | This activity would contribute to maintaining a timber harvest level that is stable. Allowable Sale Quantity (ASQ) does not equal annual harvest but rather defines the upper level of harvest that could be done while maintaining sustainability. This level of analysis was completed in the Socioeconomic Impact Analysis at the Forest Plan Level (pp487-490 and Sec. B-5 of the Forest Plan FEIS). Further analysis at this broad scale level was conducted and documented in " A report on the Socioeconomic Roundtable Convened by the CNNF" completed in 1995. This concern is beyond the scope of project level analysis.  |

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2	8	"National Forests are suffering from outbreaks of disease, increasing forest mortality and generally declining forest health. Fuel loads are increasing, resulting in dangerous conditions that can cause harm to both people and property near the National Forests. By the Forest Service's own admission, 65 million acres of America's 192 million acres National Forest System are at high risk of catastrophic wildlife, insect infestation and disease. Any analysis conducted by the Forest Service should recognize that responsibility by discussing in detail the present condition of the study area within the National Forest. More active management of the NF lands, including increasing timber harvesting can reduce these problems and return the forests to healthier conditions."	Forest health was not identified as an issue in scoping for this project so it was not analyzed in great detail. Insect and disease concerns were raised however throughout Section 3.1 especially in regards to the maturing condition of much of the aspen and jack pine forests. The discussion concerning selection harvests in hardwood forests mentions an objective to increase stand quality, health and vigor by removing insect and diseased trees. The greatest risk factor for potential insect and disease outbreaks and wind damage is the mature age of aspen and jack pine. The age class distribution of all species is shown in Table 3.1.2-5. Annual maps of insect defoliation are available. Insect and disease presence and damage is recorded during compartment examination (vegetative inventory). This information is available in vegetative data base. No catastrophic insect or disease problems have surfaced from this inventory. There are 115 acres of mature jack pine in the project that could under the right environmental conditions, pose a high fire risk. These areas are proposed for harvest with all three action alternatives.
2	9	In order to manage the Forest, the Forest Service needs to have road access. The road access is also needed to provide for multiple use of the Forest. LSLA members expect access for recreation and fire prevention, and they expect access to reach private lands. The FS must assure that it has sufficient access to manage the forest and deal with wildfire and other catastrophic events. LSLA is concerned about the proposal to decommission roads under Alternatives 2-4 (DEIS p.92-95).	See response to letter 3, comments 5 and 6 and letter 8, comment 2.
2	10	"The proposal set forth in alternative 4 is more appropriate and recognizes concerns expressed by the public about specific roads as important for recreational access or other access. DEIS p.95"	Comment noted

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| 2        | 11    | "The DEIS discloses certain site specific activities that will be applied to all proposed actions. Some of the restrictions include limiting operations to frozen soil in certain soil types. A large percentage of the harvest sites would require operations in frozen soil conditions. Before implementing such blanket restrictions, the Forest Service obtain current information from local loggers and determine whether they have upgraded their equipment to the point where they can operate on non-frozen ground without causing any significant soil impacts. In many areas of the Lake States Region, loggers are investing large sums of money into equipment which is designed to operate in more difficult soil conditions. If the loggers are willing to make that investment in equipment, land managers should be willing to see how that equipment can be utilized. IF the Forest Service has investigated this issue, it should be disclosed in the environmental documents." | See SectSee Section 2.6E page 20 states operating season may be changed by written agreement. So if the logger had the right equipment and soils are dry they can be allowed to work outside the operating season with permission. Since the flexibility is there, this is not necessarily a "blanket restriction" as suggested. These Design features are applied to minimize soil disturbance (i.e. compaction, rutting, erosion, etc) and are site specific as they address individual soil types that occur in the project area. In addition, unless we specify/restrict types of equipment to be used, (which would discriminate bidders) we cannot base operating restrictions for soils on assumptions of what equipment operators might have. If a particular operator has invested in low psi equipment, we can always do the written agreement, thus his investment is not lost. |
| 2        | 12    | "The DEIS references fragmentation in at least two places in the analysis. DEIS P. 43, 47. LSLA does not believe there is any credible scientific evidence of within forest fragmentation. Fragmentation has been scientifically documented as a concern in urban and highly agricultural areas. That concern does not transfer to fragmentation within a forest. Forests that are harvested and regenerated to a forested condition are quite different from fragmentation caused by forest land conversion."   | Fragmentation in managed forests is more subtle than that caused by the conversion of forested areas to other uses. What occurs is the simplification of landscape patch structure and isolation of ecosystem-type patches, including old growth stands. The edges caused by roads and timber management are distinct and are lacking the complexity and "softness" of a naturally created edge.   |

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2	13	"Forests within the Lake States Region have historically been frequently disturbed by large fires. These fires created a mosaic across the landscape of various forest types and age-classes that can be mimicked by timber management. These practices do not cause fragmentation of the forest. This forest is naturally fragmented by swamps, lakes and natural openings. Species have adapted to these conditions on the Lake States Forests throughout the years. Negative references to forest or habitat fragmentation due to silvicultural practices in forest settings should be removed from Forest Service analysis.	See response to Letter #2, Comment #12.
2	14	"The DEIS and biological evaluation implicitly recognize that habitat can be used as a surrogate to determine presence of most species. We agree that this approach to species viability analysis is correct and appropriate in this case, and that specific species viability studies are not needed. If there is no habitat in the study area to support the species, it is unlikely the species resides in the study area. Conducting a viability survey for such species only serves to unnecessarily expand the workload of already overworked Forest Service personnel. The Forest Service in the NW Howell DEIS correctly uses habitat in the analysis."	Comment noted
2	15	"LSLA believes that active management through timber harvest is the most economical and efficient way to maintain the healthy ecosystem which is the desired future condition for this area of the Chequamegon/Nicolet National Forest."	Comment noted
3	1	"LSRA does not support the selection of Alternative 2, which has been proposed by the Forest Service. Of the identified alternatives, we favor Alternative 4."	Comment noted

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3	2	"We would like the District Ranger to expand the analysis and identify additional areas for harvest."	It is assumed that the commentator is not suggesting an expansion of the project area, but is suggesting additional areas within the project area should have been included for harvesting. All stands analyzed within the project area, classified as suitable for timber harvest, were reviewed and only those that meet minimum stocking levels for thinning within the next 5 year period (hardwood, red pine, white spruce) or age of maturity for stands managed as even-age (aspen, jack pine) were included as part of this project. Stands lacking this stocking criterion were not identified for treatment. In addition, other areas due to existing guidelines such as Wild and Scenic River Corridor Buffers, were identified as stands to defer. Reasons for not harvesting some areas of mature aspen in this project area are listed in Section 3.1.
3	3	"In recent years, the health and condition of our federal forest lands has become an issue of great importance. National forests are suffering from outbreaks of disease, increasing forest mortality and generally declining forest health. The overmature forests in the Lake States Region have created ideal conditions for disease outbreaks, insect infestations and damage from windthrow. In the past, foresters salvaged dead and dying timber to control the spread of disease and insects and re-establish a new forest. Over the past few years, pressure from a variety of sources has prevented the Forest Service from maintaining healthy forests. The EA must contain a broader discussion of forest health issues, with a detailed discussion of the present condition of the project area and the potential for disease and insect outbreaks and wind damage."	See response to Letter 2 comment 8.
3	4	"The Forest Service must recognize its responsibility for actively managing the National Forest, including its legal obligation to provide timber for use by the public."	Timber production is part of the purpose and need for this project, see section 1.3.5 of the EIS

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3	5	"In order to manage the forest, the Forest Service needs to maintain road access. Permanent roads in the National Forest system are beneficial to all visitors to the fore and increase the value of these public lands. Road access is needed to provide for multiple use of the forest."	The roads analysis process evaluated each road in terms of it value for access and in terms of the adverse effects they may have on the surround resources. The majority of roads rated as having the lowest need for access values and the highest potential effects to resources, such as Threatened and Endangered species, were designated for decommissioning. Most of these roads are short segments or already have adequate access from another road. See also response to Letter 3 comment 6.
3	6	LSRA is concerned about the proposal to decommission roads under Alternatives 2-4, DEIS p. 92-95. "The DEIS recognizes that the loss of these roads could affect access for recreational use. DEIS p.93. Recreational use generates economic benefits to the local economy. The discussion of these economic impacts should be included in the economic analysis section of the EA. The proposal set forth in Alternative 4 is more appropriate and recognizes concerns expressed by the public about specific roads as important for recreational access. DEIS p.95."	Page 93 of the DEIS states that permanent closure of roads "could affect motorized access by recreationists since these road segments would no longer be available. However, to achieve the desired road density of this area (as stated in Forest Plan), roads that were just short segments, and were in areas where other access roads already exist were identified as roads to decommission. Section 3.6.3 states that "The action alternatives are consistent with recreation opportunity spectrum objectives, and would have only very minimal or no effects on recreation access, settings, or opportunities". Therefore, no economic impacts are expected due to changes in recreational opportunities. See also response to letter 3, comments 5 and 9 and letter 8 comment 2.
3	7	"The Forest Service must expand its analysis of the economic and social impacts of the project." "The law specifically states that the National Forests be managed and administered to provide for outdoor recreation and timber. 16USC 528. Indeed timber resources and recreational use, including motorized use, are an important economic asset to the area. They both serve an important function: to retain existing residents and businesses and to attract new investment to the area."	Impacts on recreational uses are analyzed under section 3.6 of the DEIS. Section 3.6.3.5 states that "The action alternatives are consistent with recreation opportunity spectrum objectives, and would have only very minimal or no effects on recreation access, settings, or opportunities." Commercial imber harvest to provide wood products and fiber in accordance with the Forest Plan is part of the purpose and need for the project (Section1.3.2). Economic impacts of the project are discussed in section 3.8. Specifically, the DEIS states that "Through the duration of the timber sale contracts, Alternatives 2, 3 and 4 would help to maintain current employment levels, current sawlog and pulpwood supplies to area mills, and revenues to both federal and local governments." Section 3.6.3.5 states that "Recreation activities such as hunting, fishing, berry picking, camping, canoeing, fishing, and snowmobiling are fully compatible with timber and wildlife management practices and the associated design measures." See response to letter 2, comment 3.

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3	8	“The Chequamegon/Nicolet National Forest has a significant impact on the economy of the local area. The Forest provides timber for the wood products industry and loggers. These industries employ a significant number of people in the area. There are hundreds of jobs created by the federal timber program in WI, creating millions of dollars in wages for local residents. IN many of the small local communities, the forest products industries and their support businesses are the major employment sector.”	comment noted
3	9	“The EA contains a good discussion about the economic impacts of the project on the forest products industry. DEIS p.98. However, the economic impact on the tourism and recreation industry are ignored. DEIS p.98”	Page 98 of the DEIS states that "The effects analysis in the recreation section (see 3.6.3 and 3.6.3.5) determined that the action alternatives are consistent with recreation opportunity spectrum objectives, and would have only very minimal or no effects on recreation access, settings, or opportunities. Therefore, economic impacts to recreation and tourism will not be analyzed under the economic analysis for this project. See also section 2.3.1". Since little change to recreation or tourism opportunities are expected, it is reasonable to assume that there will be little or no economic impact to these resources. See also response to Letter 3, comment 7.
3	10	“A review of the economic data favors the selection of alternative 4. The income generated by alternative 4 is more than 2 million dollars greater than the next closest alternative. DEIS p.100. Payments to the counties are significantly higher under alternative 4. DEIS p.100. And more importantly, 29 more jobs are generated by the activity proposed in alternative 4. DEIS p.100. Notably increasing the volume of timber harvested as proposed by LSRA would generate even greater economic benefits and returns.”	See response to Letter 2, comment 6

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3	11	“The social impact of the programs maintained by the Forest Service must also be considered in more detail. With the exception of a discussion of jobs, there is no discussion of the social impact issue. In many of the local communities, generations of families have based their livelihoods on the National Forest. Logging has been a way of life for generations of families living in and around the National Forest.” “Omitting a discussion of the social issues violates NEPA requirements.”	See response to letter 2 comments 4 and 7
3	12	“There are many residents in the communities and areas surrounding the National Forest whose culture and tradition is based on recreation and employment tied in some way to the National Forest. The National Forest not only provides jobs, but hunting, fishing and recreational opportunities. National forests support a wide range of jobs and opportunities which are an important component of the social environment in the communities. Loss of these jobs and the cultural opportunities would be devastating to the local communities. The National Forest timber program is critical in keeping this social environment intact.”	Sustainability of the National Forest timber program is a National level issue that is beyond the scope of this project. The issue of a sustainable timber program was addressed in the Forest Plan Projected volume outputs for the Chequamegon-Nicolet National Forest. The Northwest Howell project is working towards the desired future condition identified by the Forest Plan concerning timber products.
3	13	The EIS does not provide detailed information on the impact of the Project on local government. It would also be helpful to discuss the units of government that receive these funds and the resulting tax savings to local citizens. These funds help local schools and communities meet their financial needs. As harvest volumes decrease around the country, these lost revenues to small communities become a significant problem for local government.	See response to letter 2 comment 4
3	14	“Timber harvest is critically important to meeting the broad, multiple-use objectives that Congress set for the National Forests. The FS uses timber harvest to achieve a broad array of important goals. Timber sales incorporate multiple Forest Service objectives, including fuels management, insect control, habitat management and reconstruction or construction of roads for long-term access to the Forest.”	Comment noted

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3	15	“In order to continue timber harvests and many other forest management activities, there must be a sufficient number of trained loggers with state-of-the-art, expensive logging equipment who can perform the forest management activities required in the National Forests. Without loggers, the FS cannot perform its mandated obligations.”	Comment noted
3	16	“The alternatives in the DEIS should be expanded to include additional timber harvest activities. NEPA requires that the government vigorously explore and objectively evaluate all reasonable alternatives.” “Additional opportunities should be identified in overstocked hardwood stands and in stands that are overmature. Failure to actively manage these stands may result in an irretrievable loss of resources.”	See response to letter 3 comment 2
3	17	“LSRA believes the cumulative impact analysis conducted in the DEIS meets the requirements of NEPA. Some commentary suggest that the FS must conduct a broad cumulative impact analysis of every possible timber sale within and adjoining the project area. That position is unfounded.”	Comment noted
3	18	“It is the existing Forest Plan, not the revision process, that governs management prescriptions on the Chequamegon/Nicolet National Forest.” “The current Forest Plan controls project decisions until the Plan is actually amended.”	comment noted
3	19	“Nothing in NFMA suggests that a Forest Plan expires after fifteen years.” “Most important, there is nothing in the statute which even suggests that failure to revise the Forest Plan within fifteen years terminates the Forest Plan and allows the Forest Service to implement new forest management direction. The only way to implement new forest management direction is through a Forest Plan amendment process.”	Comment noted
4	1	Will bermed roads be re-closed after the timber sale?	Existing classified roads, that were physically closed prior to this activity, will be re-closed after timber sale activity. Section 3.7.3.2

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4	2	The culvert through the swamp (Sec 30, south of Ramsdell Lake) is smashed. Road is currently closed, but culvert is backing up water. He's concerned that people are getting over the berm and driving into the swamp.	This road has not been proposed under any alternative for reconstruction or decommissioning. The roads analysis shows that this road should be retained for future use. It will be field reviewed to develop a plan to replace the existing culvert or remove it until future entrees are needed
5	1	"I am writing to you in regards to Forest Road 2978 and why I feel it should be closed to vehicle traffic after the Howell Project Harvest. In 1992, my mother, Helen Resop, purchased land adjacent to Kilborn Lake area on the south side of Hwy 70. My family and I spend quite a lot of time in this area and have seen the abuse it takes." "In 2000, someone dumped old furniture in the meadow. I have also seen considerable damage to the forest from ATVs and with the low water levels on Kilborn Lake ATVs have been driving on the exposed lakebed." "Road 2978 also needs to be closed off by Hwy 70. People are driving up the embankment across the Hwy from our cabin to access the area. It needs to be closed at both ends!" "I feel very strongly that closing this road will help to protect a beautiful and unique area."	This area has been designated for motorized use in the Forest Plan. The Forest Service tries to provide a mix of motorized and non-motorized areas so that all users may find their place in the forest. However, "cross-country" ATV use is prohibited under the current Forest Plan and dumping is illegal and should be reported to the District Law Enforcement Officer. The section of FR 2978 along highway 70 has been designated for decommissioning under alternative 2 and 3.
5	2	"At one time there was a berm at 3016 and 2978 but after Hwy 70 reconstruction in 1995, 2978 was no longer accessible from 70. Someone actually leveled off the berm (I believe it was with a snowplow) to access the area. For this reason, I would like to see something other than a berm close the road. Our northern property boundary, which runs right along the north side of Hwy 70, has a large number of big rocks. I would be wiling to donate as many as needed to close the road."	The berm at 3016 and 2978 was removed to open up access to the Kilborn Lake area. The berm was removed because the entrance for 2978 became inaccessible when highway 70 was reconstructed. This area around Kilborn Lake was designated for motorized access making it necessary to provide access from the west via the 3016 entrance
5	3	"I know that closing Road 2798 will not totally eliminate all of the abuse but it should reduce it somewhat. The ATVs will still be a problem. The area is a short walk from Road 3016, Hwy 70 or Road 2172. People that are willing to get out of their vehicle and walk can still enjoy the area."	This area has been designated for motorized use. The Forest Service provides a mix of motorized and non-motorized areas so that all users may find their place in the forest. The ATV activity that is occurring is illegal. If you are aware of who is doing this illegal activity you should contact the District Law Enforcement Officer so corrective action can be taken.

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6	1	Up to 47 miles of roads were identified in the DEIS for decommissioning. Please consider the following comments regarding proposed road decommissioning: 1) All roads slated for decommissioning should be reviewed for the presence of existing culverts, whether functional or not. 2) To best protect cold water aquatic resources within the affected areas, all culverts located on roads to be decommissioned should be permanently removed. 3) The removal process should result in an opening through the road bed at natural stream grade, which will prevent ponding of water behind the road and allow free passage of aquatic organisms within the waterway.	Most of the roads that are being decommissioned do not have any culverts or other improvements. The majority were user developed roads and temporary roads that did not get closed. The roads will be looked at prior to decommissioning in the field and all drainages will be opened to allow free flow.
7	1	"I'm very concerned about the reduction of activities relative to timber harvest management in general but specifically to the big reduction of aspen clear cutting followed by natural regeneration of same for various age classes. Maintenance of wildlife-openings and the hunter walking trail system has been neglected. Habitat for deer, ruffed grouse, snowshoe hare and a host of other animals, birds, plants is rapidly disappearing at an alarming rate. The various berries that result from forest disturbance are also in decline."	With a few exceptions, potential suitable timber including aspen, meeting timber harvest guidelines has been included in the DEIS, with the greatest amount provided under Alternative 4. Wildlife openings are continuing to be maintained at a level approaching the Desired Future Condition identified in the 1986 Forest Plan (DEIS, pg. 29). The Project area contains two hunter walking trail systems (HWTs), Howell Lake and Mainline Lake. Although these areas are not mowed or brushed each year the systems are being maintained within the project area. The commenter is correct that some HWT's outside the project area have not been properly maintained. Table 3.3.3.1-1, pg. 56 DEIS, displays data relating timber harvest, especially clear-cut harvest to deer density. This table shows that generally, deer numbers have fluctuated greatly with no clear association to clear-cut harvest. The commenter does not state which specific species are "rapidly disappearing". To date, forest data collected on songbirds and plants have shown no evidence of rapid disappearance.
7	2	"The Forest Service tradition of high quality habitat and timber harvest management that occurred in the 1950's, 60's, 70's and 80's needs rejuvenation."	Comment noted
7	3	"I can support your decision to choose alternative 2 for implementation. However, if it can be modified to include more acreage for timber harvest and aspen clear-cuts, I and many other concerned citizens would be very pleased."	See response to letter 3 comment 2

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8	1	<p>“I have received the details on the proposed plans for the NWH Project. I have a vacation home in this area and am intimately familiar with this part of the forest. I have no problem with most of the plans you have for this area and understand the need for good forest management practices to be implemented.”</p>	<p>Comment noted</p>
8	2	<p>“I am upset about the closing of the roads in the Nicolet National Forests. I am vigorously opposed to any plans for changes in access to the forest. Every one of the “alternatives” call for the closing of more of the low standard dirt roads and logging roads. Many of the roads (about half of them) have already been closed off to the public with steel gates and some permanently with earth berms.” “Any road closing restricts access to thousands of acres of woods. These roads and trails are used by many people mostly residents and seasonal users for camping, berry picking, firewood gathering, fishing, hunting and exploring and site seeing.” “The important issues is ACCESS. Without it, the Forest has little purpose except as a museum for an elite.”</p>	<p>Alternative 3 proposes the most road decommissioning while still maintaining an open density of 3.54 miles per square mile. This equates to 69 percent of the roads in the project area to remain open. Within the project area there are very few areas that are over a quarter mile from an open road. The areas that are over a quarter mile from an open road would not increase under any of the alternatives. For alternative 3, 49% of the roads to be decommissioned are less than a quarter mile in length. The longest road to be decommissioned is 0.96 miles and is currently closed.</p>
8	3	<p>“I wonder if these closed roads are included in the road inventory you specify. If so, they should be removed since many of these closed roads are growing over and are no longer roads but footpaths.”</p>	<p>Forest Service Policy dictates that the classified roads (system roads) that are closed will remain on the road inventory and included in the density calculations. Many of these roads will be temporarily reopened in the future to provide access for management activities such as timber harvesting and then closed again after completion of the activity. The only roads that are removed from the inventory are the ones that are designated for decommissioning. These roads have been determined to be unneeded for any future management activity and will be allowed to revegetate. Also, see response to letter 8 comment 2.</p>

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8	4	<p>“The Forest Service seems to think there are too many roads. I believe they think there is a demand for more non-motorized acreage. The studies I have seen are flawed. They include the opinions of people who have never visited a national forest, let alone the Nicolet forest. People I have talked to seem to think you are referring to roads in national parks.” “As I observe the plan unfolding I can see that there are many interests to consider and many diverse groups to satisfy. I also see that some of these groups do not represent the majority of the public who visit and use the forests. I visit and use the Nicolet forest frequently and estimate that over the last 30 years I have cumulatively spent at least 2 of those years or 800 full days in the woods hunting, exploring, fishing, hiking, snowmobiling, canoeing and driving back roads.”</p> <p>“Almost all of the people I talk to (and this includes hundreds) want these roads open. If you talk to people who live near and use these forests regularly I am sure you know that there are very strong feelings about this.”</p>	<p>There are differing viewpoints on the amount of roads that should be opened and closed. Many of these views are from people who don’t visit the forest but are still very interested in how the forest is being managed. These views are important to consider along with the views of the many people that enjoy the use of the forest. Also see letter 8 comment 5.</p>
8	5	<p>“The Nicolet National forest is supposed to be multi-use. There are already hundreds of thousands of acres in designated wilderness areas and “non-motorized” areas in the Nicolet and Chequamegon forests that are used only by a few who are willing to hike back in. This is fine for them, but most people cannot walk in, especially the elderly, families with young children and those with disabilities. The National Forest is supposed to be for all to use, not just for an elite ground wanting some kind of “primitive” experience.”</p>	<p>The current forest plan gives direction as to what the road density for each management area should be. It also states in chapter IV-20 “close or obliterate existing low standard roads not needed.” The roads designated for decommissioning have been identified, through the roads analysis process, to have low use values while also being identified as having potential for damaging effects on the surrounding ecological functions.</p>

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8	6	“I also can see that the Forest Service is trying to implement forest management practices [road policies] that are geared more for other parts of the country where roads cause erosion and spoil natural areas. This is not the case in the northwoods.”	There are many different reasons that roads are closed and some may include erosion and unacceptable effects to natural areas. The roads designated for closure for this analysis have been determined to have a low use values with the potential to cause other resource damage. Some other reasons for closing roads may include the spreading of noxious weeds or disturbing a sensitive plant or animal. The Forest Service tries to have a mix of differing experiences, which includes leaving roads open that provide needed access and are within Recreational Opportunity Spectrum guidelines.
8	7	“I have talked to the previous FS administration and they just do not get it. The people who use the forest do not want the FS to build more roads or even maintain any roads. Users keep these roads open. We only want them to leave the roads alone and even open up those that have already been closed. Once these roads grow over they will be lost forever.”	See response to letter 8, comment 5
8	8	“One thing that strikes me about the debate among the various user groups that claim to have an interest in the forest. They mostly are very narrow in their view about how the forest should be managed and selfish in asking for restrictions on that use.”	Comment noted

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8	9	<p>“I would like to present a broader view that would ultimately satisfy a larger number of people. Since the Forest Service also spends a lot of their time in the woods I think the following points will ring true: although there is heavier use of some parts of the forest, the majority of it is void of people almost all the time; most people who may visit the area do not experience the northwoods except around the edges of the forest; the public needs to be exposed to more of the woods in order for them to truly appreciate, understand and cherish them; many woods roads and trails in the forest have been closed either permanently or with steel gates and earth berms; closing roads tends to concentrate traffic and people on the roads that are left; walking trails are difficult for the FS to maintain, vehicles tend to keep trails open and makes areas accessible without maintenance by the FS; as closed roads grow over, even trails will disappear over time; only a very few will venture into a forest without trails.”</p>	Comment noted
8	10	<p>“I am not advocating more roads. We do however, need to stop closing the forest, stop closing these woods roads and open up the roads already gated and bermed. Your motto says it well “caring for the land and serving people” but we need for all people to “care for the land” as you do. They never will if they do not experience it. By keeping the forest open, you will be “serving people”.</p>	See response to letter 3, comment 5.
9	1	Requested hard copy of DEIS	Copy sent as requested
10	1	Request for hardcopy of DEIS	Copy sent as requested

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| 11 | 1 | <p>Please consider the following: Limit vehicle access to the road marked 24 with the use of a berm or gates. 2) Reconstruct the road marked 1419 to provide access to the area to the north and west and access to the Brule River. The road designated 24 basically parallels Huff Creek and crosses many low land areas and drainages from the ridge to the north and west. This road was primarily used by the public to access the area to the north and east that was clearcut in 1976 and for access to the Brule River. Typically during the spring melt and summer and fall rains the road washes and becomes too rough to travel for all but the largest four-wheel drive vehicles. When this occurs, most people use the next road to the north that is marked 1419. Ms. Frank told me that a concern was the steep grade of 1419 where it intersects 24. The steep grade does not seem to be a problem for the frequenters using that road. The area along the Huff Creek was select-cut about 5 to 8 years ago at which time the road was repaired. Soon after though, the road washed and became to rutted for most to use. I believe that everyone involved would be better served if access to this area was limited to maintain the natural integrity of the forest along Huff Creek.</p> | <p>Road 24 better serves the entire area. The portion of 1419 that intersects 24, number 417, is very rutted and steep making it difficult to haul timber products over, especially in the wintertime. Access would still be needed to the south of this intersection, making it necessary to use 24 anyway.</p> |
| 12 | 1 | <p>The following federally listed threatened or endangered species or critical habitat occurs in Forest and Florence Counties: bald eagle breeding habitat; gray wolf habitat; Canada lynx potential habitat. Due to the nature and location of the proposed activities, we conclude that the above listed species or critical habitat will not be affected. This precludes the need for further action on this project as required by the 1973 ESA as amended.</p>  | <p>Comment noted</p>   |

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13	1	“The Ruffed Grouse Society is disappointed in the District’s tentative selection of Alternative 2 as it clearly does not meet the project’s purpose and need and makes no attempt to attain the Forest Plan DFC goals for aspen in MA 1. The purpose and need (pages 5 and 6) clearly shows that the aspen component is below DFC goals in this MA. In addition, this document also identifies the concern in MA’s 2.1 and 4.1 that without action 1115 acres of aspen greater than 50 years of age are at high risk to convert to other later successional species.” “Only Alternative 4 truly makes an attempt to meet the stated objective to “maintain amount of aspen and improve age class distribution of aspen and jack pine in all MA’s” (page 6).”	See response to letter 13 comments 2 and 7
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13 2 “The Society has repeatedly brought forward its concern that the Forest is disregarding current Forest Plan goals, especially in MA 1, in site specific projects (id. 11/6-7/01 Washington Office Review, 7/3/02 Forest Supervisor meeting, 8/8/02 Regional Forester meeting, as well as numerous comments on project proposals).” “Please document how the alternatives will move the specific landscape in question towards these explicit requirements with regards to aspen composition, or document how the proposed project will move MA 1’s taken as a whole (Forest wide) towards the clear direction outlined in the existing Forest Plan.” “This would be expected to show, as the Society has repeatedly stated, that ongoing site-specific decisions or non-action have greatly reduced the ability of the Forest to maintain Plan aspen levels now and into the future.” “The Society is also concerned that the selection of Alternative 2 fails to fully consider the effects of identifying 640 acres of mature aspen that “would not be cut under any alternative (p.30) for a variety of reasons.” These acres would directly add to the decline in aspen levels in the project area and in the MA’s that they are included in. This along with other management actions ongoing or having occurred on the Forest since the 1986 Forest Plan was finalized have greatly reduce the amount of aspen being managed. Reasons such as “lack of access” and “excessive slopes” may reduce commercial harvest opportunities but should be considered as non’commercial habitatat management activities.

All aspen forest that was old enough to be deemed mature and that was classified as suitable for timber management was considered for regeneration to aspen in this project.

Of the 640 acres of mature aspen mentioned that are not available for clearcutting 500 acres are unavailable because the Forest Plan precludes clearcutting in these areas (e.g. along Wild and Scenic River Corridors, along Class I and II trout streams, visually sensitive areas) DEIS p.30. The remaining 140 acres are not classified as suitable for timber management for various reasons. Only 44 acres were identified as having excessive slope or a lack of access. See response to letter 20, comment 3 regarding non-commercial treatment.

Existing percentages of aspen compared to DFC is displayed in the Tables 3.1.2-1 through 3.1.2-3 of the DEIS. In the short-term, the change in the percent of aspen would be imperceptible for any of the alternatives when viewed at the District or Forest level. Alternative 2 would maintain 398 acres in aspen by regenerating them (no change in percent of aspen, just in age-class). Alternative 4 would regenerate 846 acres of aspen. This includes 212 acres that would be converted from other species to aspen (less than 1% change in aspen acres). It is true that in the long-term without disturbance aspen will convert to other species. This would be expected to take some time, probably 20-50 years depending on the stand and specific conditions. Many of the aspen stands would still maintain an aspen component even beyond that time, typically converting to a mix of aspen/spruce/fir or aspen/hardwoods. Age-class distribution by alternative is displayed in Table 2.5-1 of the DEIS.

In Alternative 2, some areas of aspen were allowed or encouraged to convert to other forest types because they already have an advanced understory established of some other species (see Section 3.1.3.3). A total of only 53 acres of aspen in M.A. 1.1 were to convert to hardwood and white pine for various reasons, described in detail in Section 3.1.3.3.

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13	3	<p>“While no date is given, we believe that this (pre-settlement condition is what he means t.j.f.) refers to pre-European settlement (mid 1800’s)”. Historic information can provide helpful insight into what may have existed in the past, but it is inherently imprecise and does not adequately represent the range of change that has evolved over time in response to dynamic disturbance regimes. Reconstruction of presumed “historical” vegetative conditions are inappropriate for use as a foundation of current land management planning. Selecting other times in history (as pollen data has illustrated” would show this area dominated by aspen, by spruce/fir and even a period dominated by red or jack pine. Young forests are extremely important to regional biodiversity and have always been”.</p>	<p>It is not the intention of this project to restore the Northwest Howell area to historical conditions. The purpose of examining historical conditions is to identify ecosystem factors that formerly sustained species and communities that are now reduced in number, size, or extent, or which have been changed functionally. This gives some indication of the sustainability of ecosystems and identifies some compositional, structural, and functional components of ecosystems that may need management attention. Knowing historic conditions can help in developing management alternatives by indicating where adjustments can be made to improve forest diversity and health. Maintaining or restoring some structural or compositional components of the historic landscape within actively managed lands can help conserve important elements of biological diversity.</p>
13	4	<p>“That study demonstrated that forest fragmentation caused by timber harvesting, including clearcutting, had little effect on breeding birds. Rivera et al (1999) found that survival of juvenile wood thrushes was high when they reached “safe havens”, that included vegetation attributes that enhanced protection such as dense woody stems, understory vegetation and deciduous saplings”.</p>	<p>Comment Noted:</p>
13	5	<p>“The society disagrees with the judgment shown in MIS tables 3.3.3.1-2a and 3.3.3.1-2b on Page 60 in regards to the chestnut-sided warbler. Under both Alternatives 2 and 3, the long-term populations of chestnut-sided warblers would “be displaced” as young forest habitat especially aspen continues to decline. While we agree that the proposed acres of aspen regeneration in Alternative 2 would provide additional young forest habitat, it will not make up for the large amount of habitat being actively or passively allowed to convert to mid or late successional species. Alternative 3 would have an even greater negative effect on this species with no aspen management occurring”.</p>	<p>The tables displayed have been recalculated with more recent songbird density estimates. In response to the comment, effects on the chestnut-sided warbler are displayed with respect to proposed actions. It is true however that species that depend on regenerating forest habitat, such as the chestnut-sided warbler would naturally decline as the amount of habitat declines, or increase if more habitat is made available. For managers then, the question is what amount is the “right” amount. Under the alternatives proposed, Alternative 3 would not provide the best conditions but some habitat would still be provided along naturally occurring edge and in the more recently clearcut forest areas. Alternative 4 would be best, as indicated in Table 3.3.3.1-2c, and Alternative 2 better as compared to the other alternatives, which do allow the passive reduction habitat.</p>

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13	6	<p>“The recreational benefits of early successional wildlife species for consumptive and non-consumptive purposes do not appear to have been considered in this analysis. Obviously any significant decrease in ruffed grouse or woodcock populations would create quite an impact, socially as well as economically, in this region”.</p>	<p>Impacts to recreational opportunities are expected to be minor (DEIS, p.84). The short term and long term effect on ruffed grouse populations was discussed in Section 3.3.3.1. Alternative 2 would create 398 acres of young aspen (early successional habitat) which would provide ruffed grouse and woodcock habitat. In Section 3.3.3.1 it is stated that there would be little effect on this habitat in the short term because of the current amount of young aspen forest. See response to Letter 3 comments 7 and 9.</p>
13	7	<p>The Ruffed Grouse Society remains concerned about the continuing decline in aspen forest communities nationwide, regionally, and on the Forest. During the past 18 years, aspen forests in Wisconsin have declined by 265,000 acres. Since the mid-1960’s, the total area of aspen in Michigan, Minnesota and Wisconsin, which contains 80 percent of the aspen in the Eastern US, has decreased by 21 percent (Leatherberry and Spencer 1996). In Wisconsin, private individuals own nearly 9 million acres (57 percent). A majority of these private landowners (54 percent) have not harvested timber and thus have declining opportunities to perpetuate aspen habitats. The Wisconsin National Forests provide on the last opportunities to maintain early successional landscapes.</p>	<p>Maintaining aspen was one of the objectives for this project as well as a major issue. Decline of aspen in Wisconsin was considered in the DEIS (p.30). A total of 398 acres of aspen forest is proposed for clearcutting and regenerating back to aspen with Alternative 2 and 846 acres with Alternative 4 to maintain this type. Aspen on Forest level and regionally are beyond the scope of this analysis.</p>
14	1	<p>“Please halt all timber sales, especially the North Howell until the new forest plan has received full + final approval. The forests should be left alone until we know what the desired future condition will be”.</p>	<p>See response to letter 20 comments 4 and 6</p>
15	1	<p>“In the best interest of saving the Endangered Pine Martin and many other species, I am urging you to stop all timber sales in the CNNF, especially the North Howell, until the final approval of the New Forest Plan”.</p>	<p>See response to letter 20, comments 4 and 6</p>

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16	1	<p>“As the New Forest Plan is about to be released for public comment and is already overdue, I request that all timber sales be halted until the final approval of the New Forest Plan and its desired future condition criteria.” “Of particular importance is halting the North Howell Sale which threatens pine martin habitat and goblin fern habitat”.</p> <p>“As for the Plan itself, three hundred and 90 thousand acres or more should be set aside for wilderness and wilderness restoration where no cutting should even be allowed”.</p>	See response to letter 20 comments 4 and 6
17	1	<p>“As a Wisconsin Citizen, I am asking you to stop all timber sales, especially the North Howell. These sales potentially undermine the soon to be released and approved forest plan. They also (the North Howell specifically), threaten goblin ferns and Pine Marten habitat”.</p>	See response to letter 20 comments 4 and 6
18	1	<p>“I agree that it would be best to at least delay the sale until the new forest plan is approved and the desired long-term status of this area of forest is clearly known.</p>	See response to letter 20, comments 4 and 6
18	2	<p>Large scale logging of the remaining more mature mesic forest in this large sale area could constitute the loss of a significant area of remaining habitat for Goblin Fern”. “It would be wise to carefully consider the long term fate of this area which includes what appears to be irreplaceable habitat. It is always necessary in these discussions to acknowledge the difference I the way the term “mature forest” is used by the forest industry as compared to how it is used by ecologists out side of the forest products industry”.</p>	<p>Pg 41 of the DEIS addresses the proposed Ecological Reference Areas (RNA, SMA and old growth areas) awaiting possible designation by the Forest Plan Revision. These areas were chosen because they represent some of the highest quality ecological reference areas on the district, and possession of old growth characteristics being one of the factors for inclusion. These areas are within the project area, however, these sites are not identified to have vegetation management activities applied to them at this time. Of the 44,172 acres of the Northwest Howell area, 13,899 are upland hardwoods suitable and available for timber management. Less than half of those upland hardwood acres are considered for treatment in this project, and (Alternative 2 = 5941, Alternative 3 = 4057, and Alternative 4 = 5887). Not all 13,899 acres of upland hardwoods are suitable habitat for Goblin Fern due to past disturbances and exotic earthworm infestations. Mitigation measures for Goblin Fern are described in Appendix F of the DEIS.</p>

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19	1	“My only regret with this project is that it ends on the eastern boundary of highway 139. I strongly recommend that if not through this project, then through another project, that some extensive cutting be proposed, reviewed, and followed through to the eastern edge of the Nicolet Forest in the west-central part of Florence County”.	comment noted
19	2	“I have reviewed the DEIS for the Howell Lake project with great interest because I am excited that someone within the Forest Service has recognized the need to cut some timber for all of the positive reason detailed within the summary document. The benefits of completing his project will benefit the local forest and also everything that interact with the forest within this area for many years to come”.	comment noted
20	1	“Generally, I am still concerned that the 43,600 acres is too large an area to be effectively evaluated through a single EIS”	comment noted
20	2	“This document does [no]sp provide an actual date whereby comments are due. While it does reference the Federal Register, the FR is not readily accessible to the public. NEPA requires that review documents must be clear and accessible to the broad range of the public to fulfill its legal requirements. This document starts by putting the lack of clarity of the comments-due date as road block in front of the public.	The exact publication date in the Federal Register is usually not known at the time when the DEIS is published. The DEIS is provided to the EPA who files a notice of availability (NOA) with the Federal Register. This is done in accordance with Forest Service Handbook 1909.15 Section 23.4 which states, the review period should be calculated from the day after the EPA’s notice of availability appears in the Federal Register. The cover letter for the DEIS states that the anticipated publish date of the NOA was mid-November. The DEIS was mailed to interested individuals on November 15, 2002, two weeks prior to the NOA. The NOA appeared in the Federal Register on November 29, 2002.

**Letter # Com # Comment**

**Response**

20 3 “If the objective is vegetative management, why has the project limited itself to only considering commercial harvests”? .....”This does NOT provide for consideration of all reasonable alternatives. . In addition the “No Action” alternative dismissed without any clear rational justification. “Some case law suggest that in order to fulfill the requirements of NEPA, and EIS needs to consider a truly broad range of alternatives.”(p56-58)

The decision that the majority of vegetative management on the Nicolet NF would occur through commercial timber harvest was made in the Forest Plan ROD page 26-8 -and does not need to be made again at the project level. Forest Plan p. 14 “timber harvesting will continue to be used as an effective way of influencing the desired future changes in the number of both game and non game species”, and p. 15 “timber harvesting is recognized as needed to accomplish multiple use objectives.”

Part of the purpose and need for this project is to provide timber products to local communities, Section 1.3.5.

The No action alternative has not been dismissed in the. No alternatives were dismissed in the DEIS, rationale for selection occurs in the ROD. Four alternatives were considered in detail in the DEIS. Also, four additional alternatives were considered but eliminated from detailed study (Section 2.7) including one no harvest, restoration-only alternative. Rationale for why these alternatives weren’t considered in detail is provided in the same section.

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20 4 In effect, this project makes a planning level decision to KEEP land in production without there actually being a new Forest Plan. “p8 The DEIS points to 40 CFR 1506.1 as a basis for continuing to take action under the old forest plan, but fails to note that the Forest Plan was clearly meant to expire in the Fall of 2001”. “p8 The DEIS notes that the Forest has “new and additional information” available that is being used in this analysis. However, the DEIS fails to make it clear just what information is being used or how it is being used. Further, until such information is incorporated into a new programmatic document (such as the new forest plan), there is no legal basis for the USFS to use such information to guide its activities”. The DEIS implies that the “No Action” alternative does not meet Forest Plan Goals, but it doesn’t even consider the possible benefits to waiting until the new forest plan is finalized before authorizing new management”. “The Nicolet Forest Plan and EIS have expired and should not be used as the basis for any new timber sales or other projects”.....”The plan needs to be updated due to extensive new information about the forest’s condition and significant new laws and regulations. Further, the USFS has been delinquent in its revision of the forest plan (which started over six years ago and has been on “hold” for a number of years. The USFS should be using all of its planning resource to complete that process before it puts irretrievable resources into new commercial timber harvests and other management activities”. “The suspension of the Howell project is necessary because the goals, objectives, standards, and guidelines contained in the 1986 Nicolet National Forest Plan are no longer 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”.

See response to Letter 20 comment 6.  
NFMA, 16 U.S.C. § 1605(f)(5), requires that forest plans “be revised from time to time when the Secretary finds conditions in a unit have significantly changed, but at least every 15 years . . . “. The current Chequamegon and Nicolet National Forest Plans were both approved on August 11, 1986.

Under Section 1605(f)(5), the agency is required to have revised each Plan by August 12, 2001. The Chequamegon-Nicolet National Forest is currently preparing a combined revision of both Forest Plans. A notice of intent to revise the plans was published in the Federal Register on 06/27/1996. Since that time, Public Involvement and analysis have proceeded such that alternative actions are being finalized. The anticipated availability date of the Forest Plan Revision DEIS for public comment is April 2003).

There is no express requirement in NFMA, or its regulations, to halt management activities if a Forest has initiated plan revision but cannot meet the statutory timeframe. There is no Agency direction to halt management activities if an approved forest plan exceeds the revision timeframe. No court has ordered the agency to cease management activities because revision was not completed before the statutory timeframe lapsed.

Moreover, Congress does not intend management to cease if the 15-year date for plan revision is not met, as indicated by specific language in the 2003 Interior Appropriations Act:

SEC. 327. REVISION OF FOREST PLANS. Prior to October 1, 2002, 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. It is evident that this intent has been longstanding, with related language in past appropriation acts:

- 1986 – PL 99-500, Sec 101(h)(title II), Oct 18, 1986, 100 Stat. 1783-242, 1783-268.
- 1986 – PL 99-591, Sec 101(h)(title II), Oct 30, 1986, 100 Stat 3341-242, 3341-268.
- 1987 – PL 100-202, Sec 101(g) (title III, sec 314), Dec 22, 1987, 101 Stat 1329-213, 1329-254.
- 1988 – PL 100-446, title III, Sec 314, Sep 27, 1988, 102 Stat 1825.
- 1989 – PL 101-121, title III, Sec 312, Oct 23, 1989, 103 Stat. 743.

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**Response**

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			<p>New information and monitoring data are being integrated into the revision of the Forest Plans. In addition to current Forest Plan standards and guidelines, this new information has been considered in developing the proposed and alternative actions, so as to provide for protection of forest resources. Public comments have not provided evidence that the standards and guidelines, and other information used to develop the Northwest Howell, proposed action would fail to protect forest resources. Therefore, this issue is dismissed as not relevant to the Northwest Howell proposed action, and analysis should continue under the guidance of the existing Forest Plan.</p>
20	5	<p>“Seek data first from existing sources such as State Heritage Databases or records of the U.S. Fish and Wildlife Service or State wildlife and fish agencies. Conduct field surveys as necessary to verify or supplement available information”.</p>	<p>comment noted, this was done for the NWH project</p>

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20 6 “The Howell DEIS suggests that it can proceed with such activities because the new forest plan is being worked on, and the suggested management activities in the Howell do not generally conflict with alternatives proposed in the new plan. Further, they do not clearly outline these alternatives or possible conflicts in the DEIS, but rather hide this analysis in the “project file” which is not readily available to the public given the limited period for comments and participation under NEPA. “p13 FOREST PLAN The DEIS states that “All forest type compositional changes that would occur due to vegetative management proposed under the NWH Project would be in alignment with all alternatives of the Forest Plan revision.” However, since the public is not yet privileged to the details of the new forest plan, they have no why (way?) of telling that this is true.

The compatibility with the Forest Plan Revision analysis is discussed under section 3.1.4 of the DEIS. An analysis of the compatibility of harvests proposed in this project with Forest Plan Revision alternatives was completed. Each Alternative under Northwest Howell was compared with all alternatives under the Forest Plan Revision. This analysis displays all harvests including number and type of cut that would create conditions that would be incompatible with the desired vegetative condition under Forest Plan Revision Alternatives. This complete analysis is included in the Project File (Compatibility with Forest Plan Revision).

This analysis was complex and included many maps and spreadsheets so it was not included as an appendix to the DEIS, but placed in the project file and is available upon request. A summary of the analysis will be included with the ROD. The alternative maps for the Forest Plan Revision have been available to the public since July 2002. Each Forest Service Office had copies of these maps for display and sharing with the public. These maps were the basis for this compatibility analysis.

In the context of the entire Forest Plan revision, the ID Team analysis (Project File, Forest Plan Revision Analysis) found goal trade-offs from Northwest Howell actions to be very small and the cumulative tradeoffs at the overall Forest Plan level to be negligible. The scope and scale of vegetation treatments and road access management is well within all of the goals, objectives, standards, and guidelines found in the range of all alternatives considered for Revision. Additionally, the Northwest Howell action alternatives were developed by considering the new information and conditions used in developing the Plan Revision alternatives. These small trade-offs will have no impact on limiting the range of options for decision-making and alternative choices to revising the Forest Plan.

**Letter # Com # Comment**

**Response**

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20	7	“p2. Why is multi-aged structure considered optimal, and even if it is , is it better to achieve that objective through extensive disturbance via management that can negatively impact wildlife and spread exotics, or better to wait and allow the forest to reach said composition on its own”.	Uneven-aged structure is the desired future condition as outlined in the Nicolet Forest Plan for the vast majority of hardwood forest acres in all management areas for the project area. It would take many years, perhaps 100 or more depending on the current condition of the stand in order to reach an uneven-aged structure. Repeated natural disturbances would have to occur to create openings in the forest canopy to allow for establishment of new age classes or trees would have to grow to large size then fall over to create such holes. This would take more time than desired to reach this desired condition.
20	8	“p4 in section” 6)Underplant trees” there is a notation “XX” that is completely obscured to the public”.	The XX was merely an indicator of information that was meant to be filled in, but missed by mistake. The sentence should read Within the river corridor, 20 acres of fencing would be installed in selected areas within to protect regeneration from deer browsing. This number was identified in other areas of the DEIS. See Table 2.5-5.
20	9	“p.6 Dave Poquette is not identified. Why should the public trust his figures”?	Dave Poquette is the Timber Management Assistant Ranger on the Eagle River-Florence (ERFL) District. He is responsible for the management and oversight of the timber program on the District. The information on page 6 provided by Mr. Poquette was the average annual sale volume for the ERFL District from 1996-2002.
20	10	“p6 last paragraph. The DEIS states, “The forest products industry plays a vital role to the economic well being of the local economy,” but also states that “No specific figures are available at the local level.” Given the lack of data, the Forest Service is making conclusions without real evidence.....This statement also fails to give any reference to the extensive value of recreation on National Forest lands.”	See responses to Letter 3 comment 7 and Letter 3 comment 9.A study conducted by Marcoullier and Mace, (cited in DEIS) showed that nearly \$52 million dollars was generated by timber removals in northeast Wisconsin (1996 dollars). Of that total, dollars generated off of Forest Service lands in northeaeat Wisconsin totaled over \$15 million dollars or approximately 25%. This output to the area would suggest the forest products industry does play a major role with the Forest Service contributing 25% second only to non-industrial private landowners. See also responses to letter 3 comments 7 and 9.

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20 11 “p.7 The forest has already exceeded its road density requirements and an extensive network exists that should allow for appropriate uses. No new roads should be built, nor should old roads that are no longer drivable be reconstructed. All costs of road construction and reconstruction should be made transparent in this plan. If they are not, the public cannot really understand the economic benefits (or lack thereof) in this proposal”.

This project would help reduce the amount of unneeded roads and move towards forest density requirements. There are several areas that are inaccessible to the Forest Service making it necessary to construct road segments for this project. Two of these roads are currently only accessible through private land. Due to the length of road, which would be required to reconstruct on private land, it is more desirable to construct roads into these areas, for this entrée and future entrees. There are also several landings that need to be built along town roads to allow for safe decking of wood products off of the town roads. The costs for all construction and reconstruction within this project were included in the economic analysis. The full analysis is located in the Project File.

20 12 “p8 It is appalling that only a “tentative summary for the effects to Federally Threatened and endangered Species has been completed. . . . Without a final determination by the USFWS, this DEIS is premature, based only on conjecture, and fails to follow the requirements of NEPA. Once there is a final determination by the USFWS, the documentation in it and its conclusions need to be clearly explained within the DEIS. The USFS fails even to give a sufficient outline of the “tentative summary” within this document”.

The NEPA process requires that a Biological Assessment be completed once the Deciding Official selects an alternative from the Environmental Impact Statement. The USDI Fish and Wildlife Service then reviews the analysis and provides a determination specifically based on the selected alternative. This process is explained in the tentative summary pg. 69 DEIS in the section entitled “Summary of findings”. Also stated here is that the tentative summary is based on similar actions in the past. This is not conjecture by any means. For every major District action requiring NEPA analysis, the USDI Fish and Wildlife Service has been contacted and a letter from the FWS is on file. Not a single letter has been received to date indicating a threat to Federally listed species for any project.

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20 13 “p11 The DEIS discusses using mitigation where TE species are known to exist, “or if they are found during project layout and implementation,” but it fails to discuss what actual monitoring measure will be used or if qualified biologists will be available to identify TE species during the project implementation. Further, there is no citation to any papers, reports, studies or any formal documentation of any evidence at all that the mitigation measures work as indicated”.

Mitigation measures and design features are discussed further in Appendix 1 of the Record of Decision for this project.

Monitoring measures have not been identified in the DEIS on a per site basis. Page 50 of the DEIS references a document entitled “Monitoring Methods and Wildlife Population Trend Data”. This document provides data on selected species that are monitored over various time periods. Species include: Songbirds that are monitored at 150 or more fixed points each year either on the north or south half of the Nicolet Forest; Eagle, osprey, and common loon nest/territory monitoring; Beaver colony density on about 50% of streams on the entire Nicolet; Ruffed grouse drumming transects along three permanent transects; Woodcock surveys along two permanent transects (results in provided to state and federal agencies and copies also maintained in district files); Amphibian auditory surveys conducted along two permanent routes, with results provided to WDNR and Milwaukee Public Museum. Other monitoring surveys conducted district-wide for 10 –15 years or more and maintained in district files include surveys for black tern, great blue heron, trumpeter swan, northern goshawk, red-shouldered hawk, wood duck, and black bear (permanent route bait station transect). Aquatic surveys include routine USFS and/or DNR comprehensive lake and stream electro fishing surveys, and largemouth and smallmouth bass spawning surveys. These surveys are in addition to DNR and USFS winter tracking surveys conducted for all mammals and late summer or fall howling surveys conducted for wolves specifically.

20 14 “p12-13 In discussing the economic concerns raised, the USFS fails to note that they were asked to consider the costs to the taxpayer for this project”.

A benefit-cost analysis is was considered in the DEIS in section 3.8. Present value costs along with a benefit cost ratio are included in Table 3.8.3.2-1.

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20	15	<p>“The DEIS appears to be saying, “we are proposing a commercial harvest, therefore any alternative that does not include commercial harvest does not fulfill our proposed purpose and need.” This type of logic artificially limits the range of alternatives and may be in violation of NEPA. The DEIS never makes a clear argument as to why there is a purpose and need for commercial harvest in this project area. “...while the Forest Plan does recommend a certain level of commercial harvest, (need to check the following) the court’s interpretation of Name’s management guidelines, commercial harvest should not be the reason-d’etre.”</p> <p>“While there may be some good reasons to do vegetative management within the project area., a true range of alternatives should be examined that addresses the goals for vegetative management under the governing forest plan (if there is one). To mix the goal of vegetative management with a goal for commercial harvest artificially restricts this huge project to a narrow range of alternatives.”</p>	see response to letter 20 comment 3
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20	16	<p>“If the project is implemented, certain areas are much more affected than other are by fragmentation. These changes should be examined for each management area to properly portray the effects the project will have.”</p> <p>“p45. The DEIS notes that at least one patch greater than 1000 acres may be broken up in each alternative. What kind of patches are these? How does splitting these large patches interplay with the road less area regulations that the courts have recently backed?”</p> <p>“p48. The DEIS note that land in private ownership is increasingly being parceled off into smaller and small lots. This emphasizes the need to keep National Forest land in large patches, as it is the only land in the area that can be maintained as such in the long term.”</p> <p>“p48 The DEIS states that the general effects of management activities on fish and wildlife are described in the 1986 Forest Plan. Has there been no monitoring or new information on said effects since the Plan was adopted?”</p> <p>“p48-51 The information and analysis for wildlife is incredibly brief and unsubstantiated. P49 suggests that this analysis was done via “specific experts, recent literature review, and numerous site specific field surveys,” however, this section fails to identify the experts, literature or where the review can be found.”</p> <p>“P49 DEIS admits that road construction may impact animal and plant habitat, reduce the quality but fails to offer any mitigation measures.”</p>	<p>The interior forest patch analysis looked at areas of contiguous canopy cover of mature forest habitat that were not fragmented by openings in the canopy caused by wetlands, young forests or open upland areas, private property and roads of a certain level of development (See DEIS pg 40, 3.2.1 Methodology).</p> <p>The large patch of over 1000 acres of interior forest that is broken up in each alternative is currently just over 1086 acres. Approximately 136 acres are proposed for harvesting near the edge of the patch which will decrease the large patch to 950 acres. There are no inventoried roadless areas within the NW Howell project area.</p> <p>Since the 1986 Forest Plan, some monitoring has been implemented. The Forest conducts a comprehensive breeding bird survey each year in all habitats, many other species are also surveyed such as, grouse, woodcock, loon, eagle, osprey, black tern, blue heron, swans, woodland raptors, wolf, bear, and frogs and toads. Winter track surveys are also conducted along fixed routes to monitor such species as fisher, marten, coyote, fox and other mammals. These monitoring methods were referenced on page 50, DEIS in a document entitled “Monitoring Methods and Wildlife Population Trend Data”. More documentation is referenced in the Biological Evaluation Reference Document (pg. 53. DEIS) and in the Biological Evaluation, referenced on pg. 48 DEIS. More documentation of species experts will be provided in the FEIS.</p> <p>The DEIS (p49) addresses the effects of road construction and improvements on the habitat of interior forest species through fragmentation of interior forest habitat. Alternative 3 was developed to respond to this issue having a lower effect on fragmentation from timber management and roads.</p>
20	17	<p>“P50 The DEIS mention’s pine martin, but doesn’t really discuss them. However, the DEIS notes that, “Habitat within the project area is mostly undeveloped which greatly enhances opportunities for many of the above mentioned species to exist here.” CEQ regulations require that NEPA procedures make environmental information available to the public before any decision is made.” Goes on to quote (40 CFR 1500.1(b)).</p>	<p>An evaluation of American marten is provided in the Biological Evaluation and Biological Evaluation Reference Document (pg. 53 DEIS), which was made available to the public upon request. As stated on pg. 53 DEIS, these documents are in the project file. Marten are discussed on pg. 5 of the BE document and on pg. 31 of the BERD. See also response to letter 24 comments 12 and 18.</p>

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20 18 “There is no mention of water monitoring, or of monitoring of TE species, or of indicator species. This lack of monitoring may be in violation of NEPA (mitigation requirements), NFMA and possibly the Forest Plan.” Goes on to quote 26 CFR 219.19 (a)(6) and (g)(1).

Citations to 26CFR 219.19 (a)(6) and (g)(1) refer to requirements for Forest Plans, not project levels EISs. CFR 219.13 Forest Planning-resource integration requirements. “The minimum requirements for integrating individual forest resource planning into the forest plan are established in 219.14 through 219.26 of this subpart.”

Sections 3.3.1 and 3.3.2.1 state that methods used to determine population levels and monitoring techniques are discussed for each species in the MIS Monitoring Methods document in the Project File. This document includes monitoring information for bald eagle and gray wolf, the two federally listed species known to occur or with potential to occur within the project area. This document is lengthy and was not included as an appendix, but is available upon request. Recent court decisions have held that CFR 219.9 regulations apply to Forest-wide planning and do not require the Forest Service to conduct site-specific monitoring of MIS in the project area.

Water quality was not raised as a major issue, so it was not analyzed in the DEIS in detail. Monitoring of water quality is discussed in the Water Resource Report in the Project File. Since “no detrimental erosion or sedimentation would be expected to occur from stand treatment, temporary road construction and non system road reconstruction on the project sites under any of the alternatives (section 3.5.2)”, the report was summarized in the body of the EIS. From the Water Resource Report, “.Water quality data including temperature, alkalinity, pH, and color has continued to be collected for most of the streams within the Chequamegon-Nicolet National Forest since the Aquatic Classification and Inventory first began. This water quality data has enabled also details monitoring related to the road/stream crossings, lake and stream monitoring, timber sale and BMP implementation monitoring.

20 19 “What does this say about the Nicolet monitoring program when there are so many sensitive species that are “Likely to Occur” but have not been verified. It would seem that they has not been sufficient research done to really understand the environment that will be impacted by these sales and certainly not enough to understand the possible effects on these species.”

The “likely to occur” species the commenter refers to are species listed as Regional Forester Sensitive Species for other Forests. They are not yet documented on this Forest but suitable habitat is present, therefore we need to consider them in the Biological Evaluation.

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20 20 “The analysis that is done suggest that past timber harvesting HAS resulted in stream and wetlands sedimentation, the introduction of exotics and non native diseases, the loss of plants and animals, a decline in habitat that provides food and cover. The DEIS doesn’t really show how these new sales will be different that past logging which created these significant impact.”  
“The cumulative effects section also notes that there are major actions on non-federal land “potentially affecting wildlife and other resources” but it does not discuss the effects that these projects are likely to have on forest structure, species numbers or species habitat.”(see 40 CFR § 1508.8 and .25(c) and .25(a)(2))

It is assumed that the reference to past logging impacts the commenter is referring to comes from references to historical logging, pre-dating the establishment of the National Forest. These historic practices completely cleared landscapes of any trees, dammed rivers to drive logs down them and resulted in huge slash fires. Current timber management practices do not resemble these types of practices. All CNNF projects adhere to all applicable Environmental laws as well as Forest Service policy, Forest Plan standards and guidelines and Best Management Practices. In addition, project specific design features and mitigation measures were developed for this project to minimize or eliminate adverse impacts to resources. Specifically, design features to minimize sedimentation and non-native species are included in section 2.6 of the DEIS and mitigation measures protecting threatened, endangered and sensitive plant and wildlife species are addressed in Appendix F. Much sediment entered streams during historic times, especially during log drives down the various rivers, although some has entered streams in recent times and may continue to do so until sites are repaired. The forest has made a great effort in working with various town jurisdictions to re-design both roads and culverts to keep sedimentation to a minimum (10% Project File). Historically, some, not all, exotic species also entered the Nicolet area prior to the time the Nicolet was designated a National Forest. To clarify some of the historic aspects of effects on wildlife, a document entitled “Vegetative Diversity as it Relates to Wildlife on the Nicolet National Forest (1983)” will be made available in the project file. This document was developed as a supplement to the 1986 Land and Resource Management Plan. Major actions occurring on non-federal lands (pg. 67 DEIS include timber harvest, land development, and road and stream improvement projects. Effects of private land activities are briefly discussed on pg. 68 and 69 under Future Actions. Development of private lands generally would not greatly alter forest structure on federal lands, with the possible exception of the creation access roads and road use into private in-holdings. However, roads into private lands are typically narrow, and do not greatly alter the tree canopy. Depending on the type of road surface, a road can create a barrier to the movement of some species as well as create an entry into forest habitat for others. In many cases, these roads are then gated thus vehicle use is restricted. Most major actions on private land – stream habitat has been mostly positive, with joint cooperation occurring between towns and USFS to improve stream crossings and reduce erosion. This results in an overall improvement in water quality. Although development of private lands such as for homes and cabins can lead

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**Response**

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			<p>to a reduction of some types of habitat and the possible displacement of species, most of these developed sites maintain as much of the surrounding forest as possible, with habitat still remaining suitable or even preferred for a number of other species. Mass conversion of forested areas to open or agricultural lands has not occurred, although some open lands have been converted to conifer plantation.</p>
20	21	<p>“P68 The DEIS says that under all the alternatives, wildlife and plant species are expected to remain at viable numbers, but the DEIS doesn’t state what the minimum numbers are that would sustain viability.”</p> <p>“P91 The numbers on this table do not seem to add up. If they do, than this table needs more explanation or needs to be redone so that it is clear to that average reader.”</p>	<p>Minimum viable numbers of species are not provided nor are they necessarily known. Using Management Indicator Species provides an indication of the condition of habitat and in some cases the direction of population trends. Other species that are known to be of concern are considered in the Biological Evaluation. Comment noted. Table will be clarified.</p>
20	22	<p>“P92 The DEIS says that reconstructed roads “would not affect any change on the correct road density for this project.” However, our field surveys suggested that some of the roads that would be “reconstructed are already at a point that they would be considered decommissioned. [Dave- you need to verify this. It was the case in the Cayuga sale, but I’ve not been on the Howell as you have.]</p>	<p>Maintenance Level 1 are closed roads, during the closure period windfall and small brush will begin to revegetate the road. Culverts may be removed to protect riparian areas during this closure period making it necessary to reconstruct these roads. These roads will be returned to their current closure status after management activities are completed. Maintenance Level 2 roads are maintained for high clearance vehicle and are generally user maintain between management entry periods also making it necessary to reconstruct these low standard roads to a smoother stable surface. These roads will be reshaped and appropriate drainage structures will be considered such as culverts and outlet ditches. Some may require realignment changes both vertically and horizontally making it necessary to remove tree in these areas along with areas that have narrowed in. The term decommission does not describe the condition of an existing road, it describe a management activity that will occur if a road is designated as unneeded, these roads do not fit in the category of being unneeded.</p>
20	23	<p>“Section 3.8 p98 The DEIS admits that, “no specific figures are available at the local level”. However, while the writers include the figure that the wood-based sectors account for 21% of the total economic output, they do not include available figures that show that the amount of that output coming off of National Forest is a small percent of the total wood-based sector.”</p>	<p>Section 3.8 describes the existing conditions concerning income to Forest County and employment situation. The DEIS states that 53% of Forest County is National Forest (344,030 acres) and produced over a half million dollars in PILT and 25% Fund while creating 14.14 jobs per million board feet for a county with only 10,039 residents. Quantitatively it would appear that the Forest Service does play a vital role to the county.</p>

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20 24 “The June 5, 2001 letter from the USFWS, which serves as the only documentation in the DEIS that informal consultation took place as specified under the ESA requirements, does not make it clear why the project will affect federally listed species, but instead it arbitrarily concludes that they will not be affected. Still the letter makes it clear that should “new information become available that indicates listed species or critical habitat may be affected, consultation should be initiated.” “In a recent Federal Court case, the judge decided that the USFWS failed to adequately consider the habitat requirements of the lynx in three regions, including the Great Lakes region. As the decision made it clear that the USFWS has not considered the habitat requirements of the lynx in the Great Lakes, the consultation process for the Cayuga project needs to be restarted and the results- specifically the any effects that the project might have on the lynx – must be made available to the public before this project continues.”

This comment refers to the Cayuga project specifically, and not the Northwest Howell Project. Regardless, an analysis of federally listed species is provided in the project record. See also response to letter 24 comment 13

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21	1	<p>The US Environmental Protection Agency Region 5 (US EPA) has reviewed the USFS DEIS for the Northwest Howell Project on the CNNF. Our review is pursuant to the NEPA, Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. The US EPA has rated the document LO-Lack of Objections. This rating indicates that our review did not identify any potential environmental impacts requiring substantive changes to the preferred alternative. Based on our review, we compliment the USFS on incorporating potential impact mitigations into the project as “design features”, which help to ensure their implementation with the rest of the project. Also, we appreciate the inclusion of the white-tailed deer discussion in Section 3 of the document. The discussion underlines serious concern over negative deer herd impacts on forest ecology, specifically regeneration of under represented native flora. We would support a multi-agency effort (including state, local, and federal agencies) to reopen discussions of optimal deer herd size in the context of restoration of species and forest ecosystems. US EPA also supports the USFS efforts at restoration of forest structure along the rivers in the project area, and we encourage the USFS to work cooperatively with other agencies to initiate and complete comprehensive river restoration efforts as opportunities become available.</p>	Comment noted
21	2	<p>We recommend that the text under “Unavoidable Adverse Effects be modified so that it addresses specific adverse effects that cannot be mitigated under the action alternatives.</p>	This text appeared in error and has been removed from the FEIS

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22 1 In general, we've found the document to be comprehensive and thorough. The concerns we expressed during the scoping phase have been addressed either directly or indirectly. The mitigation measures outlined in the project are consistent with the Department's management and current science. In reviewing the project's compatibility with the Forest Plan it was somewhat muddled by the considerations of the new direction in the Plan revision currently in progress.

Comment noted

22 2 The maintenance of intolerant types such as aspen moves away from DFC. However, when considering the analysis of need information for the Plan revision, the aspen management was more aligned with goals. The Department continues to be concerned with maintenance of the aspen and jack pine types due to their regional significance and noteworthy declines in recent years. They are important to both the economy of WI and the wealth of species associated with these forest types. By using techniques such as retaining isolated aspen clones or an occasional white pine in clearcuts, perhaps we can maintain our intolerant types while still providing some habitat niches for species not associated with early successional types. Canopy gaps in northern hardwood have also proven to increase species diversity by encouraging flushes of more mid tolerant species such as ash and red oak.

Importance of maintaining aspen and jack pine noted. Support for canopy gaps in northern hardwood noted. The use of canopy gaps in hardwood stands to encourage the regeneration of mid-tolerant species is discussed in Section 3.1.3.3. Design feature number 25 in Section 2.6 specifies that super canopy white pine as well as cedar and hemlock will not be harvested. It is a common practice to leave a conifer component in aspen clearcuts on the forest.

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22 3 Based on our review, we are in agreement that Alternative #2 is the best choice. There are tradeoffs, however we feel this alternative most effectively balances the Department's concerns. This alternative:

- 1)  will not significantly impact wildlife populations in the short term. In the longer term it will serve to benefit species associated with interior forests and lower populations of game and non-game species associated with early successional forests
- 2)  adequately mitigates negative impacts to protect plants and animals
- 3)  encourages important forest types such as hemlock, white pine and red oak
- 4)  provides reasonable transportation for management and recreation while maintaining the open road density less than the desired future condition (4 mi per sq mi) outlined in the Forest Plan
- 5)  allows for reasonable harvest of timber to benefit the local economy
- 6)  addresses the need to provide fisheries habitat

I applaud your efforts in researching and producing the information for this project.

Comment noted

23 1 I'm writing in response to the proposed new road 8C. I met with FS Rangers back in May of 2002 to discuss the new road. I understand the proposed work and have no objection to the forest project. I only ask that when the forest work is completed the new road be closed off. Currently, the town road crosses thru my property, and an old forest road runs along the SW side. There is another road that gives access to an adjoining 10 acres on the SE side. The proposed new road would run along the west side for the length of the property. I hope that after reviewing the locations of the surrounding roads that you consider my request.

This road is planned for closure after construction and completion of the management activity. Adjacent landowner notification would have occurred during the initial scoping period on May 10, 2001. Adjacent landowners were given maps of potential treatment areas within the project area. Notification of the project also appeared in the Vilas County News Review, The Forest Republican (Crandon, WI) and The Florence Mining Journal between the dates of May 13 to 16, 2001.

Could you please tell me the date that property owners were first notified of this project?

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**Response**

24 1 Members have documented serious resource degradation in the project area and across the forest and region but many of these issues have been ignored in the DEIS or given only cursory verbal treatment. Such treatment of these issues violates the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA) and the Endangered Species Act (ESA).

Correcting past resource degradation was not a focus of the purpose and need for this project. Other projects already completed and ongoing address this need (see below). The DEIS does address water quality impacts with respect to the proposed actions (DEIS, 3.5.3 and 3.5.3.3). A Water Resources Report was also completed for this project (Project File).

The Forest Service is always concerned about resource protection including water quality. A road/stream crossing inventory was conducted on the Chequamegon-Nicolet National Forest in 1997-2000. The purpose of the inventory was to obtain information to help with prioritizing watershed restoration projects at stream crossings. During the survey, each road/stream crossing was investigated to determine the general extent of erosion and sedimentation. A number of observations were made at each site including the road surface material, slope, length, drainage, culvert size and condition, evidence of road surface erosion, evidence of culvert failures or washouts, and condition of the embankments. Based on these observations each site was rated according to the apparent erosion and sedimentation that was occurring as either major, moderate, minor, and none. These ratings are one tool used to prioritize and schedule stream crossing replacement or restoration projects. Approximately 28 percent of the road/stream crossings within the Forest boundary were identified as having moderate or major sedimentation problems. These crossings have been identified by the Forest as high priority for repair.

The high priority stream crossings and stream improvement work needed within the project area were addressed in a separate document under the Elvoy/Brule Watershed Improvement EA which was approved on June 18, 2002. These projects and effects are discussed under the Total Cumulative Effects on Water Resources section in 3.5.3.3.

The Roads Analysis Process which was completed for the NWH Project (Project File) also identified Forest Roads within the NW Howell project area with known hydrology problems. Arterial and collector roads were analyzed under the Forest Roads Analysis, which occurred in a separate Forest-level analysis. Many of these projects will or currently are addressed under 10% Fund Projects.

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- 24 2 One of the central points of conservationist's comments on the NWHVMP is that the project is inappropriate because a new LRMP will be adopted soon and conservationists are working to ensure that the wealth of conservation science that has developed over the past fifteen years is integrated into the new LRMP.
- Since development of the 1986 LRMP, the Northwoods (including the entire CNNF) has undergone enormous change, most of which has been detrimental to ecosystem stability and ecological status. Over the past 17 years, the science of conservation has progressed to the point whereby failure to incorporate this new information into land management on the CNNF constitutes an egregious affront to sound scientific land management.
- Our organizations call on you to withdraw the Northwest Howell Timber sale on the basis that all new management activities involving timber harvest, road construction or other extractive actions at this time should be deferred until a new plan is adopted (except for cases where public safety or other emergency conditions exist) and a new cumulative effects analysis can be completed. Furthermore, new information on species viability has not been incorporated into the current plan, particularly information on species such as Canada lynx, pine marten, migratory warblers, goblin fern and others.

New information was considered as appropriate and available in the analysis of this document. Each resource section describes the processes and resources used for analysis. Specifically from the Wildlife Section 3.3.1, "The analysis discussed below considered the most up to date sources of information available, which included contact with various species experts, recent literature reviews, and numerous site specific field surveys conducted by USDA Forest Service (FS) professional and technical level biologists, ecologists, and botanists. Additional highly intensive field surveys for songbirds and woodland raptors were conducted under contact often using taped calls for sensitive/reclusive species. The results of the field surveys are maintained in the project file, and summarized in the BE. "

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24 3 The CNNF cannot simply state that they completed an “analysis of the compatibility of harvests proposed in the project with Forest Plan Revision Alternatives” and expect the public to accept the statement on face value. If such an analysis were done, then this information should be presented in the DEIS so the public can evaluate it. Instead, Forest Service makes it very difficult to access this information by keeping it in the project file. By assuming that the proposed alternatives will be consistent with the final adopted LRMP alternative is to pre-suppose the outcome of this public process. Pushing the NWHVMP through the pipeline before the new forest plan is adopted makes a decision in principle and application, that a new plan will not call for conservation measures incompatible with the effects of the NWHVMP on wildlife, wildlands, aquatic resources and other natural resource values. Compliance with the new Forest Plan cannot be determined based only on the suggested alternatives since a final forest plan may be a “combination of alternatives” (CNNF Supervisor Archie at Nov. 4th 2002 meeting with conservationists in Madison, WI).

See response to letter 20 comment 6

24 4 The purpose and need for the NHVMP reflects a bias towards timber production and ignores significant issues including need to recover populations of the state endangered pine marten, northern goshawk and red-shouldered hawk and contribute to the recovery of the federally endangered timber wolf and Canada lynx.

The purpose and need statement reflects an outdated perspective which ignores the need to restore and protect ecological health in the CNNF.

Section 1.1 specifically states that the project will focus on managing vegetative conditions using timber harvest as the primary method (Forest Plan ROD p.26-8). The purpose of the project is to move toward the management objectives identified in the Forest Plan for forest age, structure and species composition. By accomplishing these objectives, this would also provide diverse wildlife habitat, visual variety, a more effective transportation system and economic benefits. The Biological Evaluation addressed pine marten populations, northern goshawk and red-shouldered hawk. See also response to letter 24 comments 12, 18 and 20, 21. The Biological Assessment addressed wolves and lynx. See also response to letter 24 comment 13

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24	5	The Forest Service undermines its ability to work with the public when it insists on pushing through five large timber sales weeks before a new forest plan will be proposed. An important contribution to the erosion of trust of the public in the CNNF was the failure of the Forest Supervisor to answer adequately the question of why these sales had to be pushed through at such a late date. The CNNF has yet to come up with an answer to this question and none is forthcoming in the NWHVMP EIS.	In the context of the entire Forest Plan revision, the ID Team analysis (Project File, Forest Plan Revision Analysis) found goal trade-offs from Northwest Howell actions to be very small and the cumulative tradeoffs at the overall Forest Plan level to be negligible. The scope and scale of vegetation treatments and road access management is well within all of the goals, objectives, standards, and guidelines found in the range of all alternatives considered for Revision. Additionally, the Northwest Howell action alternatives were developed by considering the new information and conditions used in developing the Plan Revision alternatives. These small trade-offs will have no impact on limiting the range of options for decision-making and alternative choices to revising the Forest Plan. Since there will be no limiting of the Forest Plan Revision, it was not necessary to postpone these proposed actions.
24	6	The purpose and need fails to reflect the need to repair and recovery streams in the project area that are being damaged by road crossings and timber harvest. Deposited road materials visibly damage several streams in the area and these impacts have been ignored in the purpose and need statement. See Appendix B.	See response to letter 24, comment 1 and 15. The Chequamegon-Nicolet National Forest has conducted an Aquatic Ecological Classification and Inventory for the streams within the forest boundary. The ecological units, called valley types, are based on stream bank full width, alkalinity, maximum water temperature, and aquatic biota. The streams within the Northwest Howell project area are healthy resilient systems that meet Clean Water Act standards (Section 3.5.2.2).

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24 7 The emphasis on timber harvest and preparation of stands for future harvest violates the multiple use mandate of the forest service and ignores the overwhelming public opinion supporting wildland restoration and roadless area protection.

There is no inventoried roadless area within the NWH project area. There is no evidence that timber harvest precludes multiple uses. In fact, in section 3.6.3.5 “Recent recreation use within the project area has been in harmony with past management practices. Recreation activities such as hunting, fishing, berry picking, camping, canoeing, fishing, and snowmobiling are fully compatible with timber and wildlife management practices and the associated design measures. It has been suggested that timber harvesting in an area would preclude recreational uses in that area. There has been no evidence of this assumption on the Eagle River-Florence District. Recreational use at developed campgrounds has been very stable over the past decade while at the same time, timber sales have been occurring across the district (district use records and personal communication with Jeff Herrett, Recreation Assistant Ranger). In section 2.3.2, “A collaborative study was conducted with the Wisconsin DNR Bureau of Forestry and the University of Wisconsin-Madison/Extension (Marcoullier and Mace, 1999) to examine recreation and timber production in Wisconsin’s forests by looking at extent, importance, performance, and compatibility of these two uses. The study employed recreational use surveys, analysis of timber inventory data and regional economic modeling. The study found that timber production and recreational use of forests were relatively compatible. “ Furthermore, recreationists generally felt that balanced use (for both timber and recreation) was an important component of local economic conditions for communities in forested regions and that forest land uses should account for these localized effects on rural populations (Marcoullier and Mace, p. ii).”

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24 8 The CNNF's classification of major and minor issues is contradictory and ignores scientific and policy concerns at the state and federal level. Classification of wildlife, vegetation and non-native invasive species as minor issues that are "addressed through analysis, project design criteria or mitigation" is inappropriate. The NHVMP planning area lies in the heart of the critical habitat for the state endangered pine marten and also provides habitat for an unknown number of red-shouldered hawks, northern goshawks, neotropical migratory warblers, and other species needing special conservation management approaches. In addition, the federally threatened timber wolf and Canada lynx have also been found in the project area. With an overall road density of nearly 4 miles/sq. mile, the DEIS's admission that there are no permanent wolf packs in the Nicolet side of the forest is not surprising. FS makes no effort to restore this habitat to the point where permanent occupancy by wolves is possible. This has negative impacts on lynx viability.

One has to ask why, if populations of "browse sensitive" species are being damaged by deer browse in the project area and throughout the CNNF and FS states that these species are "extremely important for wildlife habitat", the vegetation issue is not a major issue in the project? Such a misguided focus ignores the growing body of scientific data demonstrating deer impacts on plants in northern forests.

Vegetation and Wildlife are more than major issues, they are resource sections with analysis devoted to a large portion of the DEIS (15 and 22 pages plus multiple appendices). See also response to Letter 24, comment 12, 20 and 21, letter 24 comment 13, 14. Regarding Status of the timber wolf in Performance Report 1 July through 30 June 2002:

At the time the DEIS was released wolves were known to occur in the Headwaters Area, but the FS was not calling these wolves a "pack" because neither USFS nor the DNR could confirm consistent use of the area or confirm pup activity. Winter tracking surveys and wolf howl surveys conducted during fall 2002 finally provided stronger evidence of wolf pack use of this area. Wolf status reports are reviewed for each project, and correspondence is ongoing between USFS and DNR wolf biologists and technicians

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24 9 The failure of the DEIS to account for ongoing plant diversity declines in northern Wisconsin and the CNNF is a major flaw of the document and a violation of NEPA.... Such a misguided focus ignores the growing body of scientific data demonstrating deer impacts on plants in northern forests. In fact, Professor Don Waller and Tom Rooney, PhD, of the University of Wisconsin- Madison have detected significant and troubling declines in plant diversity across Wisconsin and this information has been personally presented to CNNF Supervisor Anne Archie on November 4, 2002. The DEIS does not include ANY information on plant declines or vegetation changes other than generalizations that fail to meet the standards of NEPA and NFMA. It is also a violation of NFMA considering that many of the species that will have their primary habitat logged are rare or declining in Wisconsin and in some cases, across the region.

See response to Letter 24 comment 19. A reference to Waller and Rooney in regard to declines in plant species diversity is mentioned, but no specific citation is identified. The Forest Service assumes the reference to be “Biotic impoverishment and homogenization in unfragmented forest understory communities”. {T.P. Rooney, S.M. Wiegmann, D.A. Rogers, and D.M. Waller, University of Wisconsin – Madison. 20 pp.

The Rooney et. al. paper identified above was reviewed by both the district biologist and plant ecologist in response to Zaber’s comments. The FS is aware that some plant species appear to be declining (not regenerating effectively), and has indicated this in the DEIS. In general, the DEIS refers to these species as “browse sensitive species”, but also specifically identifies eastern hemlock, yellow birch, white cedar and others. The Rooney article attributes the decline in certain plant species to an abundance of deer and a decline in pollinator species. As is stated in the DEIS, management of the deer herd is under control of the State of Wisconsin. The FS has proposed a limited amount of fencing to exclude deer, thus clearly acknowledging the concern for deer impacts.

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24 10 One of the most serious shortfalls of the DEIS is its failure to address the potential impacts to TES species in a manner that allows for the levels of scrutiny of potential impacts called for in the Endangered Species Act (ESA) and in NEPA. In fact, there is no legitimate mechanisms for systematic analysis of impacts to TES are included in the DEIS, only a listing of potential species occurrences from existing datasets.... Impacts of any project must take a hard look at the potential effects on TES and not merely list the species potentially found in the area. Such a listing alone hardly constitutes use of the best available scientific information available.

The CNNF has failed to provide substantial and up-to-date documentation for assertions regarding wildlife impacts and other natural resource impacts... NEPA Section 1502.24 Methodology and Scientific Accuracy states that, "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix." □The CNNF has failed to provide substantial and up-to-date documentation for assertions regarding wildlife impacts and other natural resource impacts. For example, the basis for effects analysis for the barred owl, an MIS, is a study done in Washington state. The DEIS uses this study as the basis for determining habitat suitability for barred owl in the NWHVMP area. This is a misapplication of information that would fail to pass a basic wildlife biology class. There is no way it should be considered adequate for assessing impacts to this species. The same can be said for the remaining discussion of impacts to barred owl in the DEIS. Most egregious is the glib treatment given to the barred owl's needs on p. 64 where the DEIS states "In the short term, a few pairs of nesting barred owls could be impacted where timber harvest treatments occur in mature hardwood or mixed hardwood

Federally listed species are addressed in the BA. Although research conducted specifically on the forest for four species of owls has indicated barred owl to be very common, the citation was accidentally omitted on page 63, under the "Barred Owl" section. A more comprehensive documentation on the status of this species as well as some other MIS are provided in the FEIS. The missing citation should have referenced Paulios, A.T., 2003 for his master's thesis publication entitled "Selection and Distribution of Owls in the Nicolet National Forest".

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forests.” How many barred owl pairs will be impacted? How many barred owl pairs currently occupy the project area? What is the overall trend in barred owl numbers across the forest? How does reduction in barred owl habitats translate into effects on other species this MIS supposedly represents? These are critical issues to address with regards to this species but the DEIS never does so. Instead, the public is asked to swallow specious extrapolations that aren’t based on relevant data. This is a violation of NEPA and given the likelihood of damage to the best remaining barred owl habitat in the project area by the NWHVMP, it is likely a violation of NFMA.

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24 11 The Deis Lacks Site-Specific Information... Section 3.3.3.3 is based on inadequate generalizations of ecological conditions in the project area. (p. 67). A true cumulative effects analysis is based upon more than such statements such as “Disturbances caused by past practices could have resulted in cumulative effects on fish and wildlife resources and habitat”. This section also fails to address adequately future activities in the project area and its surroundings. Once again, jargon and verbiage substitutes for real site-specific analysis (e.g. “These activities over time (road construction, logging, etc.); the effects on wildlife populations, for the most part, appear to be minimal, that is, with the exception of the deer herd, wildlife populations seem to follow their normal cyclical patterns.”). What are these normal cyclical patterns and why should the public accept this dismissive statement given the lack of hard data and information contained in the DEIS. At the same time, the DEIS’ discussion of future development begs the question, What is the CNNF doing about development pressure? According to the DEIS, nothing (p. 68). This failure to respond to situations that pose threats to NF land and resources is unacceptable; despite the CNNF’s attempt to define away it’s responsibilities (p. 68).

Future activities are addressed on page 68, DEIS as best as can be determined. Past activities in the project area have included timber harvest, road construction and maintenance, and maintenance of selected wildlife openings. The effects on wildlife and wildlife habitat were stated as minimal because timber treatments have occurred in the past across the forest and WDNR, and Forest Service monitoring data has not demonstrated a loss of species. The Monitoring Methods and Wildlife Population Trend Data document (referenced on page 48, DEIS), displays this data for many species including bobcat, beaver, deer, grouse, eagle, loon, various songbirds, and also frogs and toads. The DEIS document only states that some species undergo periodic population fluctuations, that have nothing to do with any management activities. The most common species, as can be documented in any field guide, include snowshoe hare and ruffed grouse, but other species undergo good years and bad years as well and include owls, voles, and certain songbirds. The intent of this statement is to ensure that the reader not confuse normal population declines related to the down end of a “cycle” with a permanent population decline.

The commenter also suggests that the CNNF “do something about development pressure”. The CNNF has no control over management activities occurring on private lands. With regard to management of Federal Lands, the CNNF is managed for multiple uses, per the Multiple Use-Sustained Yield Act of 1960. This act states the “National Forests are established and administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes (16 USC 528). Further, Secretary of Agriculture is authorized to cooperate with State and local governmental agencies in the management of National Forests (16 USC 530). As such, access and thus road construction may be granted across federal lands to reach possibly “land-locked” private parcels.

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24 12 The CNNF has not analyzed adequately the impacts to the state-endangered American marten. The BE fails to include or reference the most up-to-date information regarding pine marten sightings and signs, as well as ongoing pine marten monitoring. Pine marten are found in the heart of some of the most extensive cutting units in the NW Howell sale. According to Wydeven, et. al. (2002) :

“Marten abundance seemed to be down from recent years, and most martens continue to exist in the refuge areas provided in northwest and northeast Wisconsin.”

The DEIS nor the BE mention the fact that only 19 American marten were detected along 224.3 miles of survey in this time period. That is 50% of the number found the year before (2000 – 2001) with slightly less intensive monitoring (~15 miles less). Of note is the fact that 20 marten were detected along 79.1 miles of survey routes in the Nicolet in 2000/2001 while only 14 were detected across 123 miles of survey transect routes in 2001/2002. The BE and DEIS also fail to mention that the NWHVMP lies in the center of the marten recovery zone, and that marten are found within the zone much more often than outside. Continuing to push marten to marginal habitat by reducing CWD, increasing fragmentation and winter activities (e.g. winter logging as mitigation for plant impacts) and improving conditions for coyote will have negative impacts on marten viability in the project area. Forest Service has failed to work to improve habitat conditions and population viability for marten in Wisconsin.

Proposed logging will reduce the amount of existing snags and standing woody debris in the cutting units. Selective logging will also significantly reduce the amount of future snags of suitable size developing in the cutting units.

Many of the proposed cutting units target the last undisturbed stands (since initial logging at the turn of the

The DEIS considered the most recent American marten survey data available, which included the above referenced report by Wydeven. Wydeven was also contacted by phone as a species expert, as was Wright. Gilbert (1995) was also reviewed. The final EIS, BE and response to comments considered these reports and comments from the species experts. Marten habitat is protected by the following measures. 1). Snag and den tree habitat is protected in all treated units by following reserve tree guidelines (Nicolet Supplements 15 and 18). The commenter is correct that numbers are down based on winter tack surveys (Wisconsin Wildlife Surveys, August 2001 and Status of American Marten in Wisconsin Report, 1 July 2001 Through 30 June 2002), but incorrect in stating that marten have not colonized areas around the reintroduction site. District records indicate small populations in Forest Co. northwest of the reintroduction site, as well as other areas. Also, timber harvest treatments have and continue to occur within the marten core area as well as outside this area, yet marten persist. Additionally, the Eagle River-Florence Ranger District contains three federally designated wilderness areas totaling 32,492 acres in which no harvesting has occurred since either 1978 or 1984, depending on the wilderness area, yet marten numbers are still low forest-wide. Two of these wilderness areas are outside of the reintroduction zone. Finally, timber harvest treatments have declined since the late 1980's, early 1990's. Timber harvest ranged from about 40 MBF during the period of 1988- 1992 then declined to the present volume of about 12 MBF, marten numbers have declined as well. Based on these observations, it would appear that if timber treatments were the sole cause of marten decline, then a reduction in harvest should have shown a similar positive response in the marten population and this does not appear to be the case. It is presumptuous to assume only one variable, namely timber harvest, is entirely responsible for such a decline, when there are a number of other key variables to consider, such as incidental trapping mortality, weather severity, interspecies competition (fisher?), prey abundance, disease, natural (marten) population cycles, etc., The commenter uses the term “70% stocked”, but it is unclear what is meant with respect to forest management. Our response assumes that 70% stocking is meant to mean 70 square feet of basal area (stand average). Also, a 70% stocked stand of one forest type may not look the same in all respects as a 70% stocked stand of another type. As with forest type, crown closure will also vary by % stocking, tree species, and tree diameter. For example, a stand comprised of 5” DBH hardwood with a stocking level of only 58-60% would have a 100% crown closure and contain

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century); these are also the best remaining marten habitat. This is taking place within the core range of the marten, a species that has yet to move outside the initial reintroduction area (CITE). The Forest Service has an obligation to protect and restore wildlife populations across the planning unit. Logging the best marten habitat in the core of its severely restricted range does not protect marten populations and certainly does not help to restore the species to a semblance of its original numbers, numbers that would put it out of danger of extinction in Wisconsin.

The CNNF has failed to include an analysis of home range size requirements and viable marten populations. In a study of marten and fisher home range sizes, Wright (1999) found marten home range size in a portion of the Nicolet NF to average 4.2 km<sup>2</sup> while fisher home ranges were 11.5 km<sup>2</sup>. The author also found martens using mixed hardwood stands and avoiding clearcuts and other young seral stages. Wright found that dead woody material is important to fisher and marten winter site selection at broader scales than previously reported. However, the DEIS specifically ignores regional scale issues and many landscape scale issues (DEIS 3.2 p. 40). Gilbert (1995) found marten and fisher home range sizes in an area adjacent to the NWHVMP to be 5.27 km<sup>2</sup> and 15.3 km<sup>2</sup>, respectively. He also found that marten used two stocking classes, pole-sized timber >70 stocked followed by saw timber >70% stocked (Gilbert). These conditions are eliminated in the logging treatments proposed for marten habitat. The DEIS and BE fails to reflect the importance of standing and down woody debris for marten and other species and fails to recognize the loss of critical stand characteristics following logging in marten habitat. The cumulative effects analysis for the NWHVMP is flawed with respect to pine marten and other species requiring intact, thermally stable, rich soil northern hardwood stands.

Instead, the DEIS and BE ignore marten home range requirements and fail to provide a minimally acceptable

about 400 trees/acre (Tubbs, 1977). The commenter indicates that 70% pole and saw timber will be eliminated in marten habitat. Generally, this is not true for most if not all treatments in the northern hardwood forest type. Generally, selectively harvested stands thinned to 80- 84% stocking, which exceeds the goal identified by the commenter as suitable marten habitat. With the exception of an occasional first entry stands or salvaged harvested stands. Thinning to below 70% stocking would of course occur in clearcut stands, but could also occur in stands damaged by windthrow/blowdown or disease. Analysis of marten habitat included various references identified on pg. 53 DEIS (project file, Biological Evaluation (BE) and Biological Evaluation Reference Document (BARD)). One information source which is in the project file but omitted in BE is the WDNR Pine Marten Recovery Plan. A citation will be added for this material in the final EIS. Specifically, page 26 of the WDNR marten recovery plan (1986) indicates that timber harvesting is compatible if allowances are made for old growth forest and canopy cover. It also states that both selection and shelterwood harvest methods are also compatible with preservation of marten habitat.

In response to concern over the American marten, additional documentation of potential effects will be provided in the revised BE.

cumulative effects analysis for marten impacts. For example, the BE includes nothing on marten population numbers, monitoring results, or habitat characteristics in proposed cutting units. While acknowledging the importance of coarse woody debris in the DEIS (p. 40), the BE and the DEIS fail to provide any data whatsoever on the levels of coarse woody debris in proposed cutting units and the amount of coarse woody debris (particularly CWD suitable for den sites) that remains across previously treated stands. Still, the BE does state that each successive treatment that occurs in marten habitat “probably reduces numbers of potential den sites”(Draft BE p. 6). Have they or haven’t they? Throughout the CNNF, previously harvested stands nearly always have lower levels of the most important CWD, large standing and fallen trees, including root tip up mounds than undisturbed stands (Tyrrell and Crow, 1994). Marten need secure rest sites and denning sites and use stands with greater amounts of CWD then would be expected on a random basis (Gilbert et. al 1997)

A determination of no effect for the NW Howell sale also ignores the severely overcut nature of the sale area. Much of the project area has been logged over the past twenty years in some form; remote conditions have been lost and this activity has fragmented forests, damaged waterways, degraded native biodiversity, harmed wildlife habitat and cut off migratory corridors. Thus, to conclude that logging will displace individuals is to ignore that fact that much of the rest of the area has been logged and habitat suitability in those areas is already damaged. Logging these stands and stand complexes will push marten towards extinction in the planning area; the Forest Service has an obligation to refrain from logging in pine marten habitat until a full forest-wide cumulative impact assessment can be completed for marten viability. This assessment must consider all data on martin population dynamics and must consider population dynamics and genetic interchange between isolated populations. None of this was done in the NW Howell BE or DEIS and the

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original forest plan guidelines fail to reflect the majority of conservation science developed since the original plan was adopted

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24 13 The NWHVMP fails to work towards recovery of the timber wolf and Canada lynx. The North American range of the lynx currently extends from Alaska, through Canada, and into the northern part of the contiguous United States (65 Fed. Reg. 16052) In the contiguous United States, the distribution of the lynx is associated with the mixed coniferous/deciduous forest of the eastern U.S.. Forest Service's contention that lynx are rare in the region is not a valid reason to ignore the species' needs according to the Endangered Species Act. By failing to address rare species including lynx and other species in the proposed cutting units (if they were not thought to be present when reviewing stand data, etc.). By this reasoning, the CNNF ignores the rarest and most vulnerable species at risk of extirpation from the project area or extinction.

The CNNF must comply fully with all portions of the recent court decision (Defenders of Wildlife et. al v. Gale Norton et. al. 2002; 00-2996 (GK)). To do so, the CNNF must withdraw the NWHVMP project from further consideration, prepare a new EIS for a new Forest Plan that actively takes into account lynx conservation (the current one does not do so) and take affirmative actions to restore and protect lynx habitat and habitat security. The NWHVMP does the contrary and is a violation of the recent court decision.

In fact, the treatments proposed in the project will damage lynx habitat by increasing fragmentation, decreasing interior habitat, improving road networks, and logging in areas some of the most remote areas on the forest. Lynx have been known to use the NWHVMP area and are confirmed to breed in the Superior NF, even during periods of lower than normal snowfall. The extremely cursory treatment of lynx and wolf conservation in the DEIS fails to meet the minimal standards of NEPA, NFMA and the ESA. Despite unsupported contentions in the DEIS that lynx do not exist in the project area because of low snow cover conditions ignores the fact that the NWHVMP receives an average of

Analysis of project affects specific to lynx and wolves as well as their respective habitats is disclosed in the Biological Assessment and meets compliance with the requirements of the ESA. There is no evidence of a breeding population of lynx on the forest, but transient individuals have been documented. An analysis of snowfall and potential effects on lynx habitat with respect to suitability, are discussed in a document (project file) Lynx Habitat Suitable Assessment for the Chequamegon-Nicolet National Forest, (Weiland, 2002). Generally, it is not the annual amount so much as the average depth of snow, consistency, and the duration of deep snow over the course of the winter that has an impact on lynx habitat. A project level analysis of the proposed actions indicates a "No Affect" determination by the USFWS.

The commenter suggests that the absence of wolf packs on the Nicolet may be a threat to lynx viability since wolves have a controlling affect on coyotes. The Chequamegon side of the forest has had, and continues to have a number of wolf packs, yet there is no documentation of increased lynx colonization/observations.

Regarding historic use by lynx in the Great Lakes area: Reference to L.F. Ruggiero, K.B. Aubry, S.W. Buskirk, G.M. Loehler, C.J. Krebs, K.S. McKelvey and J.R. Squires. This document was reviewed, in the lynx effects analysis.

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154.4 cm of snow each year (Gilbert 1995). That's over five feet of snow per year; a quantity that should be sufficient to provide lynx with some advantage if artificial compaction of snow from vehicles was greatly reduced in the Nicolet and the project area.

In a glaring shortcoming, the DEIS provides only a few short paragraphs on Canada lynx, a species now listed as Federally Threatened. The DEIS contains no data or analysis on effects to lynx. This type of short shrift is at the heart of Forest Service's failure to restore and protect this species on the CNNF and surrounding area. Elevated levels of human access into forests are a significant threat to Canada lynx because they increase the likelihood of lynx encountering people, which may result in displacement of lynx from their habitats and/or possible injuries or deaths by intentional or unintentional shooting, trapping, and vehicle accidents. Human access into Canada lynx habitat in many areas has increased over the last several decades because of increasing human populations and increased construction of roads and trails and the growing popularity of snowmobiles and off-road vehicles (USFWS Proposed Rule, Canadian Lynx, Federal Register: July 8, 1998, Volume 63, Number 130, Part II, Page 36993-37013).

Increasing human access into Canada lynx habitat has increased the vulnerability of Canada lynx to both legal and illegal harvest in areas that, historically, were relatively isolated from humans. Human access is a particularly important factor during periods when Canada lynx populations are low and concentrated in localized refuges. Canada lynx may be displaced or eliminated when competitors (e.g., bobcat, coyote) expand into its range. The Canada lynx is at a competitive disadvantage against these other species because it is a specialized predator, whereas bobcat and coyotes are generalists that are able to feed on a wide variety of prey. Competition between Canada lynx and other species may be facilitated through alteration of forests

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by timber harvest or other human activities. Modified habitat may be more suitable to Canada lynx competitors or may facilitate the establishment of a competitor after local extirpation of the lynx. In the Northeast United States, extensive clearing of forests for timber and agriculture improved conditions for white-tailed deer (*Odocoileus virginianus*) populations, which subsequently may have influenced a northward expansion of bobcats into the region. Additionally, mild weather in some regions for the past decade has improved conditions and habitat for bobcat and coyotes, particularly by minimizing snow depth. Snowmobile trails and roads that are maintained for winter recreation and forest management activities enable coyotes and bobcats to access lynx winter habitat. Snowmobile use in the Great Lakes and Rocky Mountain/Cascades regions has resulted in an increase in both human presence and the prevalence of packed snow corridors in lynx habitat. The increased snowmobile use and the increased area in which snowmobiles are used likely diminishes habitat quality for lynx, and also decreases the lynx's competitive advantage in deep snow. This results in an increased threat posed by competitors, as a result of the increase in hard-packed snow trails (USFWS Proposed Rule, Canadian Lynx, Federal Register: July 8, 1998, Volume 63, Number 130, Part II, Page 36993-37013).

Mitigation measures proposed in the DEIS and increased use of roads within the project area after logging activities stop is likely to harm lynx and damage lynx habitat. The Forest Service has an obligation to restore and protect both lynx and wolf and have totally failed to do so in the NWHVMP DEIS.

A recent court decision in Washington, D.C. has determined that the decision by the Fish and Wildlife Service to not include the Great Lakes in the range of the lynx was in error. Clearly, the best available science demonstrates the historic use of the Northwoods by Lynx .

The following are general concerns related to lynx recovery and management.

- Current management and conservation policies for lynx and their habitat are not adequate to address the threats to lynx survival.
- Loss and fragmentation of lynx habitat due to forestry practices, roads, and other human activities and developments is the major factor in the decline of lynx that needs to be addressed.
- Past and ongoing forestry practices present a unique threat to lynx
- Current silvicultural techniques are often detrimental to lynx
- Logging is not an effective substitution for fire and other natural disturbances, because fire and other disturbances will continue to occur, and differences with roading, coarse woody debris, forest structure, and the larger forest mosaic.
- Logging and the subsequent increased access into lynx habitat via the associated forest roads may be contributing to fragmentation and enhancing competition from other "generalist" predators
- Lynx conservation today requires a larger spatial scale than has been considered under past and current management, where federal protection and even international protection is required.

The NWHVMP DEIS fails to address these issues in any meaningful way. Furthermore, the absence of permanent wolf packs from the Nicolet side of the CNNF (DEIS p. 69) may be contributing to the threats to lynx viability in the planning area since coyotes are not controlled effectively when wolf are absent. The failure of the DEIS to discuss the high road densities in the project area and throughout the Nicolet and their effect on wolf habitat suitability contributes to the inadequacies of the DEIS and the BE for the NWHVMP.

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24 14 The NWHVMP DEIS fails to act proactively to restore habitat suitability for wolf in the project area and throughout the forest. The DEIS and the BE totally ignore the issue of road density as it relates to wolf populations. Road densities are essential factors in determining wolf habitat suitability but the DEIS makes no mention of it in regards to the needs of wolf. Why not? Such an oversight is a violation of the ESA.

Road densities are discussed with respect to wolf in the Biological Assessment. Alternatives 2-4 addresses the issue of reducing road densities (DEIS, Table 3.7.3-1, pg. 91). The BE does not discuss Federally listed species and was not intended to do so. These species are addressed in the BA. The ESA has not been violated since the NEPA process has been followed.

Regarding Status of the timber wolf in Performance Report 1 July through 30 June 2002:

At the time the DEIS was released wolves were known to occur in the Headwaters Area, but the FS was not calling these wolves a “pack” because neither USFS nor the DNR could confirm consistent use of the area or confirm pup activity. Winter tracking surveys and wolf howl surveys conducted during fall 2002 finally provided stronger evidence of wolf pack use of this area. Wolf status reports are reviewed for each project, and correspondence is ongoing between USFS and DNR wolf biologists and technicians

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24 15 The BE and DEIS fails to address adequately existing water quality problems within the project area.

The NWH DEIS fails to adequately address the existing water quality problems within the project area. Where streams are discussed, verbiage substitutes for real analysis and substantive discussion of waterway recovery. Specifically, the following streams or some portion thereof are located within the project area:

Stream Name  Use Designation  Use Problem  Use Problem Impacts

Allen Creek  Cold Class II, ORW  BDAM  Temp. Sed. Flow

Alvin Creek  Cold Class II  BDAM  Temp. Sed.

Brule Creek  Cold Class I  BDAM  Temp Sed. Hab.

Charlie Otto Creek  Cold

Chuks Creek  Cold  BDAM, FOR  Hab, MiG, NPS

Elvoy Creek  Cold Class I; ORW

Gaspardo Creek  Cold Class II  BDAM  Temp, Sed

Huff Creek  Cold Class II  BDAM, FOR  Hab, Mig, NPS

W. Allen Creek  Cold Class II  BDAM  Temp, Sed

Wilson Creek  Cold Class I; ERW

Lilypad Creek  Cold Class I/III, ERW  BDAM  Temp, Flow

Meadowbrook Creek  Cold Class II  BDAM  Flow, Hab

N. Branch Pine River  Cold Class II

BDAM – Beaver Dam; For - Forestry

Forest Service must evaluate the effects of proposed activities on the ecological status of these streams.

Several of these streams already have water quality problems associated with Beaver activity, forestry, and road impacts. We support inclusion of a table of streams and lakes within the project area but we stress that listings of waterways alone cannot suffice for real analysis of cumulative effects on flow

See response to letter 24, comment 1. Known erosion problems associated with roads were considered in the Roads Analysis process. Most road/stream crossing problems are addressed through the 10% Fund Program as separate projects. The listing of resource concerns above was not received by the Forest Service until the Draft EIS was out for public review. The commenter did not identify where this information came from. It has been passed on to the hydrologists and engineers. Those problems can be evaluated in the near future as potential restoration projects under the Forest’s watershed, fisheries and 10% programs. Road related problems that can be fixed through routine maintenance will be done by the C&M crew. Those that can’t be addressed through maintenance will be considered for inclusion under 10% Fund Projects. Design features and mitigation measures for invasive species are addressed in Section 2.6.

The Forest initiated a comprehensive evaluation of most road-stream crossings on the forest during the late 1990’s to address water quality issues. Each year a selected number of these crossings are repaired (10% Project), as funds permit. Repairs include culvert replacement, redesigning of roads and if necessary, road relocation. The Forest maintains a comprehensive data file of these stream crossings.

The commenter provided photos of four road-stream crossings indicating problems with sediment. A review of our road-stream crossing inventory provided the following information for the four stream crossings:

Allen Creek at FR 2172 was reconstructed in 1999 to reduce road surface erosion, embankment erosion and culvert failure. Ditches were re-established, gravel placed and cross-drain culverts installed on the road on both sides of the stream to reduce road surface erosion and sedimentation. This work has substantially reduced road surface erosion and sediment delivery to the stream but some erosion may still be occurring because of the moderately steep slopes on the approaches to the stream.

Lilypad Creek at FR 2169 had a severity rating of minor but there was evidence of some road surface and embankment erosion. The low point of the road is at the stream and the approaches have a three percent grade. These indicate the potential for some erosion and sediment delivery to the stream, particularly if the road is not crowned. This site will be evaluated and

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regimes, wildlife, and water quality. Since most of these streams have water quality impacts currently (Table 1), and since the CNNF did not refer to these pre-existing conditions or mechanisms to correct these problems in the DEIS, the document at best fails to comply with NEPA. The DEIS does not include any mechanisms to address pre-existing degradative conditions in waterways within the project area.

Forest Service has not conducted any stream surveys to identify populations of Endangered, Threatened or Sensitive species and ignores the impacts of logging road use on stream crossings and stream status. Forest Service also misapplies basic ecological concepts when it assumes that virtually all forest stands can be logged within a watershed over a period of a few decades and no cumulative effects will occur. Given the fact that

The DEIS also:

1.  Ignores sedimentation effects at road crossings on streams in the project area (see Appendix 1 for 2002 photo documentation);
2.  Ignores the fact that erosion and eroded materials, when deposited on soil rather than into streams (as asserted by the DEIS, p. 81), create perfect conditions for colonization of exotic and invasive species (see Appendix 2 Picture 3).

prioritized for treatment.

Wilson Creek at FR 2172 was rated as having no problems. The road approaches are flat and the low point of the road is 50 feet from the stream which indicate low potential for erosion and sediment delivery to the stream. The culvert does appear to be shorter than desirable and without much armor but the slopes are well vegetated. This site will be re-evaluated but will probably remain a low or moderate priority for treatment.

Huff Creek at FR 2454 will be re-constructed this summer as part of the Ten Percent Program. The existing culvert is undersized which has resulted in upstream ponding and caused the channel to aggrade with sand and muck. The new culvert will be much larger and set lower to help restore the upstream channel. In addition, the road surface will be graveled and crowned to reduce road surface erosion. The low point is located to the south and will be maintained at that location.

Efforts have been underway for more than 10 years to resolve impacts to streams from past and current forestry practices, beaver, and roads. Appendix A (pg. 26) of the Monitoring Methods Document referenced on page 48 DEIS provides a list of streams in the project area that are maintained in a “free flowing” condition. The forest has an annual program to reduce beaver impacts on selected streams and road crossings. Beaver are a part of the forest ecosystem, thus, their impacts are a natural part of processes that occur on the forest and there will be no attempt to eliminate them from every coldwater stream. Management of forest streams with respect to beaver strives for a balance to minimize impacts on some of the best quality streams fully recognizing that loss of water quality will occur from time to time. Monitoring of beaver populations is conducted each year, monitoring methods are described on pg. 4 of the Monitoring Methods Document, and an annual site specific map of colonies are maintained in the district files. Review of this map documents that the streams maintained as free flowing, are in fact free flowing (Beaver Flight Map, 2002).

In addition to stream monitoring for potential problem areas, lake and stream surveys are also conducted each year to assess the aquatic community. Monitoring is conducted at new locations each year but the WDNR also monitors long established sampling stations on a variety of streams.

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Recognizing the need to monitor potential impacts to stream temperatures, the Forest has for the past 8-10 years installed thermographs that record daily and seasonal temperatures at some 50 to 100 sampling points. Finally, almost every stream on the Forest has been sampled for baseline water quality data including temperature classification, and chemical composition. This data is maintained and available for review in the District Lake and Stream file records.

Finally, water quality impacts specifically from timber harvest activities are being monitored by periodically as developed by criteria of Wisconsin's Best Management Practices. Findings of this report were referenced in the DEIS Section 3.5.3.2.

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24 16 The DEIS is incomplete since it fails to include maps showing harvest areas logged over the past 20-yrs (p. 37 DEIS).

Without this essential piece of spatial information, the public cannot determine the exact extent of logging and other disturbances within the proposed project area. No cumulative effects analysis can be accomplished without this information integrated into a form that facilitates spatial analysis. This is particularly critical given that the CNNF consistently uses the excuse that organisms will move to undisturbed areas during logging and road construction activities. Why? Because according to the DEIS (p. 2). Over 23,300 acres within the project area have been entered for logging within the past 24 years. That is 50% of the total federal ownership within the NWHVMP planning area and 41% of the total land base in the project planning area. A proper cumulative effects analysis would not only display past cutting units with the project area, along with proposed units and future planned units. In addition, a cumulative effects analysis would examine the ability of organisms that will be “displaced” by logging to reach undisturbed forested stands of suitable quality. If all logging proposed in Alternative 2 is undertaken, over 30,000 of the 43,300 federally owned acres in the project area would be disturbed and degraded. Add to that the actions on private land in the project area and there is very little undisturbed habitat that could be colonized by displaced individuals.

This situation also calls into question analyses of warbler effects since that analysis ignores the intraspecific and interspecific competition that would result if “displaced” individuals attempt to colonize conspecific’s territories. How does the CNNF rectify these serious contradictions? The NWHVMP DEIS fails to reach the minimal standards for a cumulative effects analysis for logging and road construction in the project area. Based upon review of aerial photographs from 1992, inclusion of this map would likely

See response to letter 24 comment 26. The map the commenter refers to depicting past harvest is located in the Project File. It is available upon request. Approximately 36% of the FS acres within NWH Project Area and 45% of the acres on the ERF district are not available for timber harvest and would have very limited disturbance. These areas include wilderness, Brule River Corridor, Pine and Popple River Corridor (limited harvesting allowed), proposed LAD Complexes, roadless area and areas not suitable to timber harvest because of slope, location, access, etc. A complete listing of these acres is available in the veg section of the project file.

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24	17	<p>show significant logging disturbance across much of the project area.</p> <p>A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA. The NWHVMP DEIS refers to verbal communication and informal assessments to determine the effectiveness for wildlife impact mitigation measures, but no data supporting these assertions are provided. Repeated remarks dismissing real environmental issues out of hand are found throughout the document and hardly constitute the “hard-look” required by NEPA.</p> <p>The CEQ regulations require that, “NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” (40 CFR 1500.1(b)).</p>	<p>Effectiveness of mitigation measures and design features is discussed in several locations in the DEIS, including sections 2.6, 3.4.2.2, 3.4.2.4,3.4.2.5, 3.5.3.2, 3.5.3.3. Effectiveness of mitigation measures and design features for TES are discussed specifically in the BE and BA. See also response to letter 20 comment 13.</p>
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24 18 The public also has no way of knowing whether all mitigation measures will be successfully applied in the future, and are given no indication as to the effectiveness of the measures in the past.

For example, Forest Service asserts that snag and CWD guidelines are sufficient to protect habitat for pine marten and insure their viability across the forest. However, the marten has not been able to move outside the original re-introduction zones since re-introduction took place. Failure to provide sufficient CWD for marten in cutting units across the forest and within the NWHVMP area may be a significant cause of marten's failure to re-colonize additional areas around re-introduction sites, particularly in forest county. The CNNF's failure to truly protect and restore the marten since reintroduction is testimony to the failure of the current LRMP and undercuts specious arguments that mitigation measures in the DEIS actually work. Therefore, it is impossible to make an informed decision regarding potential adverse impacts to these valued resources. This is a violation of NEPA.

In addition, some mitigation measures for one species may damage habitat suitability for others. For example, winter logging is likely to damage habitat for lynx by compacting snows, creating competitor access to habitat, etc. The DEIS fails to address this issue.

Marten habitat is protected by the following measures. 1). Snag and den tree habitat is protected in all treated units by following reserve tree guidelines (Nicolet Supplements 15 and 18). District timber reviews are conducted yearly to monitor all aspects of implementing timber harvest including treatments affecting wildlife habitat, especially mitigation measures (reviews are on file).

The commenter is correct that numbers are down based on winter tack surveys (Wisconsin Wildlife Surveys, August 2001 and Status of American Marten in Wisconsin Report, 1 July 2001 Through 30 June 2002), but incorrect in stating that marten have not colonized areas around the reintroduction site. District records indicate small populations in Forest Co. northwest of the reintroduction site, as well as other areas. Also, timber harvest treatments have and continue to occur within the marten core area as well as outside this area, yet marten persist.

Additionally, the Eagle River-Florence Ranger District contains three federally designated wilderness areas totaling 32,492 acres in which no harvesting has occurred since either 1978 or 1984, depending on the wilderness area, yet marten numbers are still low forest-wide. Two of these wilderness areas are outside of the reintroduction zone.

Finally, timber harvest treatments have declined since the late 1980's, early 1990's to present and marten numbers have declined as well. Based on these observations, it would appear that if timber treatments were the sole cause of marten decline, then a reduction in harvest should have shown a similar positive response in the marten population and this does not appear to be the case. It is presumptuous to assume only one variable, namely timber harvest, among several other key variables, such as incidental trapping mortality, weather severity, interspecies competition (fisher?), prey abundance, disease, etc., is entirely responsible for such a decline. Lynx are addressed the Biological Assessment.

Commenter cites Tyrell and Crow (1994) as documentation of less CWD in previously harvested stands vs. undisturbed stands. The Tyrell and Crow (1994) article was not reviewed. The DEIS had already stated that treated stands could have fewer snags and den trees than untreated stands. However, the response to comments adds more discussion regarding the amount of

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CWD. Specifically, even though harvest treatments could reduce potential den and snag trees, natural tree mortality from diseases, wind-throw, and lightning strikes create new habitat every year. (See response to comments, and BE for more details on marten analysis of effects.) Gilbert et. al. (1997) was also not specifically reviewed for this document because personal discussions with Wright and a review of Wright (1999) provided the same habitat observations.

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24 19 Mitigation measures designed to protect very rare plant species in cutting units such as goblin fern and foam flower are unproven and risky.

There are very few undisturbed forest stands where rich soils with thick organic matter occur under a canopy of mature northern hardwoods provide the right conditions for these species. Changing the microclimate of the stands where these species occur or are suitable for these species will seriously damage populations of these rare plants to the point where viability across large portions of the CNNF will be lost. These rare plant communities are very susceptible to even slight changes in microclimate and other local conditions. Proposed logging in northern hardwood stands will alter the conditions required by these plants.

Mitigation measures proposed in the DEIS and BE do not include mitigation for moisture reduction or solar penetration or temperature fluctuations or out-competition by other herbaceous species following canopy opening. What evidence does the CNNF have to support their contention that these logging and road-building operations will not further threaten the viability of these species with pre-existing viability concerns? The DEIS also does not address declines in native plant species that may occur from deer browsing in these high quality stands (e.g. northern hardwood) slated for selective logging and reductions in basal areas to 80" or below. The proposed harvest of many stands within the NWHVMP will jeopardize the viability of these species across the planning area. This is a violation of NFMA and NEPA.

Mitigation measures for goblin fern are from the Conservation Approach for Goblin fern, *Botrychium mormo* W. H. Wagner (USDA Forest Service, Eastern Region 2001). At present, there are no data to show whether or not timber management may cause long-term negative consequences to rare plant populations. In the face of this uncertainty, we have used information developed through the Species Viability Evaluation process to developed design features. (The Species Viability Evaluation process was developed to compile species expert information for the Forest Plan Revision Process for the National Forests in Minnesota and Wisconsin).

Design features # 22, and #26 (DEIS p.22, and Appendix F) were created to avoid potential impacts from timber management. Design feature #22 restricts timber activity to winter logging to reduce ground disturbance. Design feature #26 will be incorporated into sale layout to maintain a closed canopy of up to 250 ft. radius (no-cut buffer) surrounding known rare plant population sites to limit moisture reduction and solar penetration of the microclimate.

The DEIS does address the affect of deer on a number of plant species on p.35, p.49, and p.55-57, and some fencing for understory regeneration is planned (p.22). Decline in native plant diversity was not identified as an issue of concern during the scoping phase of this project. This is an issue that has only recently been identified and it is not yet clear if and how timber management, deer herbivory, exotic earthworm infestations and other factors contribute to these declines. At this time we have no information to suggest the Proposed Action would cause related impacts to decline in native plant understory flora diversity. The commenter failed to provide any supporting evidence information about specific native plant declines related to the Proposed Action.

Deer induced ground flora diversity declines is a problem occurring at regional landscape scales and is more appropriately addressed at the Forest Plan and regional level. "While timber harvesting would produce biomass available for deer browse, there is not a direct correlation to herd size (see Table 3.3.3.1-1. Other conditions including winter severity, DNR population goals and hunting pressure are major factors in deer herd size. The DNR maintains the deer herd size at a density of 20 deer/mi<sup>2</sup> in the deer management units which encompass the project area. This goal herd size is well above the 10-13 deer/mi<sup>2</sup> upper limit

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24 20 The DEIS also includes contradictory statements that call into question determination of effect made in the DEIS.

For example, on p. 88, the DEIS states: “Timber harvesting is expected to begin as early as 2003 and may last several years depending on the area.” However, in the BE’s treatment of the pine marten, effects to the pine marten are cursorily dismissed with the following unsubstantiated claim:

“Regardless of which action alternative were (sic) selected, the harvest treatments would be short term thus from a noise disturbance perspective, the effect on marten would likely have a minimal effect (sic) because marten could relocate to less disturbed habitat.”

Which is it? Long term disturbance or short? It matters and from the conflict between the DEIS and the BE, it appears that the Forest Service really doesn’t know what the impacts to marten will be. At the same time, the BE uses a questionable (at best) assertion that creation of prey gardens (“...marten could benefit from some harvest treatments...since these activities would improve habitat for prey species utilized by marten.” BE p. 6). Does the CNNF have information substantiating a lack of prey organisms for marten? If not, then the assertion that increasing prey will somehow help marten ignores real constraints on marten population growth (e.g. den and nest sites, etc.).

ecologists suggest for deer densities to allow for regeneration of browse sensitive species. Therefore, unless the DNR deer herd size goals are adjusted, the deer population will likely continue to remain at a high enough level to limit natural regeneration of browse sensitive species regardless of the amount of browse produced by this project (DEIS, p.56).”

Species of ground flora that are listed as Regional Forester Sensitive Species are considered in the BE.

Timber sale contracts typically expire, that is, work is completed within a three-year period and the contract is closed. With respect to affects on wildlife habitat, this is considered short term. Even though the contract is open for about three years, timber harvest within a specific harvest unit, or payment unit, may last only weeks or months. The timber sale contract may cover 8-12 payment units, of which (usually) only two units may be open or active at any one time, therefore disturbance is of short duration especially within the payment unit.

Nowhere in the marten analysis does the Forest Service state there is a lack of prey species for American marten in the project area. Some timber treatments can result in more robust vegetative growth on the forest floor, which can result in a greater abundance of prey (mice, voles and snowshoe hare). Conversely, the commenter has stated that the Forest is not making efforts to recover state endangered animals (pg. 2 comments from Zaber, letter to E.B.Fitzpatrick , Jan. 14, 2003). Improving habitat conditions for marten by providing for more abundant prey is a method of improving marten habitat, as is maintaining areas of low road density thus reducing human disturbance, providing wilderness areas, and ensuring that snags and den trees are retained in harvest units. According to the WDNR Pine Marten Recovery Plan, the size of a marten territory (home range) is determined by prey abundance within that territory. An area of reduced prey will require a marten to establish and defend a larger size territory. The commenter has not provided information that marten den and nest sites are lacking on the Forest or in the project area, nor has he provided data correlating lack of den and nest habitat as the limiting factor in marten expansion.

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24 21 Discussion of impacts to goshawk and red-shouldered hawk are also lacking in site specific information regarding the success of mitigation measures provided in the DEIS and BE.

The CNNF presents no evidence that goshawk and red-shouldered hawks, two species with already low population numbers, are being protected by current mitigation and will be protected over time. For example, there is no evidence presented to support the assertion that no adverse effects are anticipated on this species so long as nest sites are discovered prior to project implementation. What if nest sites are not discovered in time? Also, goshawk do not live by nest site alone; they need large areas to forage and red-shouldered hawks are likely to be even more sensitive to logging in their habitat ranges than goshawk. Furthermore, the DEIS shows basal areas in selectively logged stands to be brought down below 90. Nearly all goshawk nests in the Hiawatha NF are located within stands that have much high basal areas (>120 or so). What is the basal area of existing stands containing or known to have contained goshawk and/or red-shouldered hawk nests (that were viable over time)? The BE and the DEIS should provide this type of essential information to the public prior to making unfounded assertions of “no effect” on populations despite the deaths of individuals of the species.

Red-shouldered hawks use large, closed canopy forests as their primary habitat. This has been repeatedly documented. For example, in “Red Shouldered Hawk Nests,” by Dijak et al, published in *The Wilson’s Bulletin* in 1990, the authors found that the mean canopy closure of successful nesting sites was 90%, and the mean canopy height was 22.3 meters. The woods were relatively dense, and the basal area 25.4 square meters/ha. In a recent study in Georgia on Red Shouldered Hawks, entitled “Nest-Site Selection of Red-Shouldered and Red-Tailed Hawks in a Managed Forest,” by Moorman and Chapman, also published in the *Wilson’s*

The status of both red-shouldered hawk and northern goshawk are described in the BE and BERD as referenced on page 53 of the DEIS. These documents are located in the project file. Site specific location information is not provided to the general public in order to protect nesting birds from disturbance. Summaries of yearly nest occupancy rates, nest success, and fledgling production is provided in the BERD.

Forest policy requires a no cut – no disturbance zone for a minimum 20 acres around all nest trees. Basal areas are not reduced at all (in the 20 acre unit). Active nest sites have been located during project implementation in the past. The nest activity has been reported by the sale administrator and also voluntarily by loggers cutting in the sale areas, and treatments were immediately halted. These units were then dropped from the sale and the harvest contract modified. In some cases the nesting birds completed their nesting, but relocated or abandoned the site the following year, and in other cases, the birds remained (personal observation District Biologist). Also, in some cases birds abandoned the area only to return some years later, and in at least one case successfully nested in the previously treated sale area, that is, they left the untreated area, and relocated in to the treated area (personal observation, District Biologist).

References regarding Red-shouldered hawk nest site criteria: Specific references listed by commenter include Dijak (1990), Moorman and Chapman (1996), Dednarz and Dinsmore (1982), and A.A. Bryant (1986). This literature was not reviewed specific to this DEIS because the forest utilizes site specific research conducted on the NNF by Thomas Erdman for goshawk habitat analysis, and John Jacobs for red-shouldered hawk habitat analysis. These researchers provide yearly survey results and have suggested management guidelines for past projects that are specific to the forest types of northern Wisconsin. Both the southerly climate and forest habitat characteristics in Georgia are considerably different and probably not appropriate for comparison with the less species diverse north woods.

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Bulletin in 1996, (Attachment 7) they also found that red-shouldered hawks nested in sites with 87% canopy cover. Another important finding in this study is that red-shouldered hawks nests “were located in larger stands (mean of 194.15 ha),” a finding of area sensitivity they supported with similar findings from other studies.

Alteration of the dense, mature forest habitat clearly has an adverse effect upon the species. As Bednarz and Dinsmore stated, in “Hawk Nest-Sites and Habitat”, published in 1982, in the Wilson’s Bulletin, (Attachment # 8) “Selective cutting in sense woodlots could possibly open habitats currently used by red-shouldered hawks to competition with red-tailed hawks,” and “As harvest of the Midwestern forests continues, the Red-shouldered hawk undoubtedly will lose some of its optimum habitat, allowing competition and replacement by the larger red-tailed hawk.” Dijak et al recommended that “Management to enhance lowland hardwood forests for red-shouldered hawk nesting habitat should provide for large-diameter trees with many large diameter perches in areas with a high percentage of canopy closure and high densities of small-diameter trees.”

There are also studies from the northern forest, which support these findings. For example, Bryant, A. A., 1986, in a paper entitled “Influence of selective logging on Red-shouldered hawks, *Buteo lineatus*, in the Waterloo region, Ontario, 1953-1978,” published in the Canadian Field-Naturalist, 100(4) 520-525, Bryant finds that “Incursions by red-tailed hawks were strongly associated with reductions in mean tree density and tree-crown diameter. This suggests that selective cutting in woodlots may result in the replacement of red-shouldered hawks by red-tailed hawks. Failure to maintain uncut buffer zones around traditional red-shouldered hawk nest sites may result in the local extirpation of this species.” He goes on to find that “Red-tailed hawk incursions were associated with tree densities and crown diameters, suggesting that these incursions were a response

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		to selective logging in woodlots...I believe that selective logging permits territory appropriation by the larger, more aggressive but less maneuverable red-tails, and that cutting for timber or firewood may be ultimately responsible for the decline of Red-shouldered hawks in the Waterloo region." Yet, this information is not discussed at all in the BE or the DEIS. How does the agency explain this glaring omission?	
24	22	<p>The DEIS fails to account assess impacts to MIS that reflect habitat needs of amphibians or any aquatic organism.</p> <p>MIS that would reflect the impacts to insects, including rare and sensitive Lepidopterans and Odonates.</p>	<p>The 1986 Nicolet Forest Plan did not specifically identify an MIS amphibian, but the DEIS does address potential effects of impacts on aquatic habitat in DEIS 3.3.3.2, pages 65 and 66, and potential effects on wood turtle are addressed on page 12 of the BE. Under section 3.5.3 "Direct and Indirect Effects on Water Resources", modifications are described to protect lake, stream and riparian habitat (pg. 79 DEIS). Design features (pg. 21 DEIS) address further protection measures for conserving wetland -amphibian habitat. Although not MIS, rare and sensitive insects were considered in the project analysis. Five Regional Forester's Sensitive Species of Lepidopterans and four of Ordonates were considered in the Biological Evaluation (Appendices H and I). Of the species considered, only the West Virginia White is known to occur in the project area, while the zebra clubtail was twice reported outside the project area. Potential project affects on these species are addressed on pages 11 and 12 of the Biological Evaluation.</p>
24	23	<p>The NWHVMP DEIS fails to address the problem of excessive deer numbers and fails to reflect the potential for high deer populations to influence spread of disease including but not limited to chronic wasting disease.</p> <p>In fact, the DEIS admits that each of the treatment alternatives would increase habitat suitability for whitetail deer. However, the DEIS fails to provide evidence that increasing habitat suitability does not help maintain artificially high population levels.</p>	<p>The concern over deer population is addressed in Sections 3.2.3.1 pg. 44, DEIS, and Section 3.3.3 pgs. 55-57. Impacts related to Chronic Wasting Disease are beyond the scope of this EIS.</p>

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24 24 Logging proposed within the Pine River Wild and Scenic River corridor are incompatible with the use and purpose of this river designation.

Specifically, moving northern hardwood stands within the corridor towards uneven age class distribution has nothing to do with enhancing and protecting the values of the river corridor. The DEIS makes no mention of a management plan for the Pine river. Does the Pine have a formally adopted management plan that went through the NEPA process? If not, then any logging within the corridor is a violation of sound management and applicable laws.

24 25 Effects to Bobcat (DEIS p. 61). Where does the CNNF get their information that supports the statement that “Alternative 3 maintains fewer open roads on the landscape, thus maintaining more remote habitat conditions, but does not provide for an abundant prey base for the future.” What information does the CNNF base their assertion that lower logging will not provide for future prey base for bobcat? This is completely specious and is based on conjecture. NEPA requires some degree of scientific support for statements such as this.

See response to letter 26 comment 3. The Pine River is not a federally designated WSR so National Wild and Scenic Rivers Act does not apply.

Tables 3.7.3.1-1 through 3.7.3.4-1 show total open road density figures for Alternatives 1-4 as 3.95, 3.85 3.54, and 3.86 miles per sq. mile respectively. The statement “Alternative 3 maintains fewer open roads on the landscape, thus maintaining more remote habitat conditions, but does not provide for an abundant prey base for the future” simply compares potential conditions among the four alternatives with regard to the tradeoffs of abundant prey versus remote habitat. The statement when taken in the context of comparing alternatives states only possible benefits or detriments across alternatives based on the assumption that bobcats prefer less disturbed areas but also require a stable prey base.

Since bobcat prey on mice, voles and (especially) snowshoe hare, as well as white-tailed deer, and that by maintaining early successional habitat favorable for these “prey” species, forage conditions for the bobcat would be improved as compared to the other alternatives. .

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24 26 Effects on Warblers. We support CNNF efforts to assess impacts to migratory warblers. However, the methods used to determine impacts are highly questionable and lacking in scientific support. Specifically, estimating habitat suitability for individual warblers, then determining the amount of that habitat in the project area and then dividing area by assumed territory size is an unsound way to estimate populations and/or impacts. Assuming that territories of these species are spaced regularly across the suitable habitat ignores patchiness and diversity within stands. Estimates of potential impacts are thus very compromised and are likely to be misleading at best. The CNNF has an obligation to monitor and assess population trends for these species across the forest and then use these data for effects determinations. The NWHVMP DEIS fails to make mention of the population trends of these MIS or of other Neotropical migratory species. Where are the data from the ongoing breeding bird surveys? Where are the data from breeding bird atlases? Where are the results of studies conducted across the region and across the forest? Substituting inappropriate models for wildlife impacts for real data on populations and population dynamics is unacceptable and violates NEPA. Failure to provide for recovery of migratory warblers that are declining in population violates NFMA. Furthermore, since these and other species are expected to move out of disturbed areas, assuming that all territories are occupied means any displaced animal will be lost. This is particularly true given the overcut nature of the Nicolet NF and the NWHVMP area in particular. At the same time, the DEIS does not provide the locations of suitable habitat that could be colonized during disturbance. Where are the remaining high quality habitat blocks that could absorb the organisms that will be displaced by logging? The DEIS does not include this information.

The commenter states that the process used to estimate songbird populations is inappropriate, that songbird population trend data is not provided, and that data from breeding bird survey was not utilized. In response to the concern over potentially inappropriate use of analysis methods for estimating songbird populations in the Northwest Howell EIS, estimates were recalculated using the most recent Nicolet Breeding Birds survey data available. Trend data which was provided by reference (DEIS, pg. 50) to the Monitoring Methods and Wildlife Population Trend Data, will also be revised to include an additional three years of data. Documentation of the analysis methods will also be provided per a correspondence with Dr. Robert Howe, in an unpublished summary "Estimating Bird Species Densities in the Nicolet National Forest". The commenter has expressed a concern for birds displaced by timber harvest. The analysis process considers this concern, which is why specific design features have been proposed to minimize disturbance to songbirds during the nesting season (DEIS, pg. 22, design feature #23). The commenter appears to only be concerned with species that require mature forest conditions, since no concern was expressed for birds displaced due to natural stand aging, these would include species such as ruffed grouse and chestnut-sided warbler which prefer regenerating forest (or have an association with such structure). The CNN Forest is obligated to maintain habitats for interior and edge-type species, thus displacement for one species can provide opportunities for others. Regarding the concern for long term, undisturbed quality habitat, only a portion of the forest is treated at any particular time, generally at intervals of 10-20 years for hardwoods. Also, songbirds do not totally vacate a treated unit even when logging occurs during the nesting season, although individual birds may be affected. Undisturbed habitat, especially what is becoming late successional habitat is available in the approximate 32,500 acres of federally designated wilderness lands on the Eagle River-Florence District. This habitat can provide areas for some displaced birds. The commenter also has expressed a concern that there may be no room in such areas, since they may already be at capacity. It is not possible to say with certainty if this is occurring or not, but clearly, some attrition is ongoing, and not every bird that migrates off the Forest returns the following spring. Forest maturation is an ongoing process and presumably, each year conditions on the CNNF as well as on private and industrial forests lands across Northern Wisconsin and the Great Lakes States in general new habitat is either created or lost depending on the particular species of concern.

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24	27	Section 3.7.2 of the DEIS is confusing. Reference to tables presented in text on p. 91 is inaccurate. In addition, why haven't "all findings/recommendations from the roads analysis" being proposed for this project? Also, what is meant by "There are also 123.5 miles of roads within the project boundary that currently don't have any recommendation on them. Their values have not been determined so they have been placed (sic) in storage." Are these included in the overall road density calculations? If not, why not? Text reference to table 3.7.3-1 is inaccurate (DEIS p. 91). This table does not break down road system alternatives by Management Area (MA) as indicated in text.	<p>1) The table is numbered incorrectly it should be 3.7.3.1-1.</p> <p>2) The reason all of the recommendations from the roads analysis aren't being proposed for this project is because many of the areas don't have any management activities during this period of time but will possibly be entered in the future. Many of the recommendations call for maintenance or reconstruction and would not make sense to do until further management activities were proposed. The additional roads that were identified for decommissioning after completion of the roads analysis have been designated under alternative 3.</p> <p>3) The 123.5 miles of roads that were placed in storage are roads that recommendation weren't made on because not enough information is known on them. Many of these roads may be determined not to be needed in the future and may be designated for decommissioning. Others may be needed for future management activities, these may require maintenance or reconstruction and without the proper field verification a road may be designated as a classified road that could produce adverse effects when another road makes more sense to use. If it becomes apparent that any of the 123.5 miles of road develop adverse effects they will be reviewed and recommendations will be made.</p> <p>4) The 123.5 miles of road placed in storage have been used in the density calculations.</p>
24	28	The CNNF website for the NWHVMP DEIS is inaccurate. The URL contains links for the East and West sections of the NWHVMP area but link to the wrong page (e.g. East cutting units link goes to the Western half of the project area). <a href="http://www.fs.fed.us/r9/cnnf/natres/eis/erfl/nwhowell/index.html">http://www.fs.fed.us/r9/cnnf/natres/eis/erfl/nwhowell/index.html</a>	Comment noted

**Letter # Com # Comment****Response**

24 29 The DEIS fails to address the issue of exotic invasive species in the project area and the effects the project will have on their spread and persistence. The DEIS gives only cursory treatment to this increasing problem. A problem that resulted in an Executive Order and a Wisconsin state committee. The failure to analyze the extent and dynamics of exotic invasive species in the project area violates NFMA since their invasion may impact rare species with viability concerns and NEPA . The Forest Service has an affirmative responsibility to protect the CNNF from invasive and exotic species; this has not been done in the DEIS. In fact, the proposed treatments will exacerbate existing problems and results in conditions that are conducive to the spread of these species. The CNNF must fully analyze and address this issue.

Timber management often includes varying degrees of ground disturbance and opening of the canopy that could provide suitable habitat for noxious weeds. However, subsequent growth of trees and closure of the canopy would return managed stands to a state generally unfavorable for habitation by the noxious weeds currently found in the project area.

Known infestations of non-native invasive (NNIS) plant species were identified in the Roads Analysis Process for Northwest Howell, which is available in the Project File. Almost all locations of NNIS occur along roads, not in the interior of stands. The DEIS addresses exotic invasive species and the effects the project will have on their spread on pg 46-47. Design features were created to limit the spread of these species, to monitor for any future appearance, and to control any invasive plant species should they appear.

The Executive Order 13112 (May 1999) on invasive species set direction for Federal Agencies, including: “subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably”. The DEIS shows that the Chequamegon-Nicolet is following this direction, within budgetary limits.

24 30 Gate breaching at Allen Creek Impoundment 8/02 (Appendix 2, picture). The NWH DEIS fails to account for illegal road use in all seasons. This breach is particularly troubling given the location’s use by black tern. The failure to address existing resource problems in the NWH DEIS violates NFMA.....

The Forest Service is aware of this problem, and has ticketed at least one individual in the past for driving around the gate. Gate breaching was relayed to FS Law Enforcement Officer Mark Borcovan. Surveillance may be conducted to attempt to apprehend violators. The primary purpose of placing the gate at this location, however, was not to protect black terns, but to prevent possible vehicle damage to the dike. Generally, based on observations at other black tern nesting colonies both on the district and off district, terns appear tolerant of people, so long as nests are not disturbed. Terns have only been known to use this site on rare occasions, and use of the area by terns is probably determined more so by water levels and vegetative structure.

**Letter # Com # Comment****Response**

24 31 (Commenter's letter Addenda) The NWH DEIS fails to address biological diversity at all relevant scales. For example, no mention of connectivity to other habitats outside the project area is made in the DEIS. This is a violation of NEPA and the extent it prevents recovery of wildlife and other species with viability concerns, is a violation of NFMA. The CNNF must address the role of the project area within larger landscape in order to complete a minimally acceptable cumulative effects analysis. This has not been done in the DEIS. ( A map is provided showing an arrow between the Ottawa NF and the Nicolet NF with a heading of Lynx/Wolf/Marten Movement Corridor CNNF/Ottawa NFs.)

Section 3.2. Biological Diversity is addressed at all the relevant levels and a description of the scale components is discussed as well. Section 3.2.2.1 Landscape Pattern in particular describes the landscape along and across the Michigan border including private lands. Tables 3.2.3-1 through 3.2.3-3 and DEIS Map 22 display data depicting a landscape that is already connected, that is, this area is generally forested, including much of the non federal lands (82% forested). Finally, DEIS Maps 10-12 display the Brule River Corridor (a no-harvest area), which partially abuts the Ottawa National Forest and the Pine River Corridor, which has only limited harvest treatments proposed.

Section 3.2.3.3 Cumulative Effects on Biological Diversity of All Alternatives does not specifically discuss corridors or movement of wildlife within these corridors, but clearly describes conditions both on and off the forest, including both federal and non federal lands, that again depicts a mostly forested landscape. The only non forested area discussed occurs across the Michigan border and consists of a larger area of agricultural lands. The commenter does not identify specific “barriers” to wildlife movement nor does the commenter identify any areas in which connectivity of the forested landscape is interrupted.

24 32 The commenter provided a list of stands titled “List of stands where timber harvest will damage resources and/or violate applicable environmental laws. At minimum, these stands should be deferred from harvest” (Appendix 3 in commenter’s letter

The commenter provides a list of stands but fails to cite why specifically these stands would “damage resources and/or violate applicable environmental laws”. This appears to be a listing of all the stands proposed for treatment in the NWH Project.

**Letter # Com # Comment****Response**

25 1 This vegetation management project should not move forward until there is a new Forest Plan in place to take consideration of new and updated scientific information on forest ecology.

The NFMA requires each national forest to revise its land and resource management plan at least every 15 years. The LRMP for the CNNF has expired and therefore is outdated. The suspension of the project is necessary because the goals, objectives, standards and guidelines contained in the 1986 LRMP are no longer relevant or defensible in light of significantly changed resource demands by the public, significantly changed environmental and economic changes and significant changes in Forest Service management direction. These include

Significant new information about :

The status, distribution and effects of management activities on TES and MIS.

The beneficial role of natural disturbance and detrimental effect of suppressing fires, insect outbreaks or floods and salvaging timber from areas affected by these disturbances.

Significant changes in the social and economic setting in which the CNNF operates including far less demand for commodities produced by the forest and far greater demands for preservation of old growth forests, wildlife habitat, clean water, recreation sites, and other goods and services produced by natural forest ecosystems.

Vast changes in the composition and structure of forests managed by non-Forest Service landowners that have caused detrimental cumulative impacts to terrestrial and aquatic ecosystems managed by the CNNF

New information about the inadequacy of the 1986 LRMP's goals, objectives, standards, guidelines and land allocations in protecting environmental, economic social and cultural resources

New information on the historical range of natural variability of tree species and age classes.

See response to letter 20 comments 4 and 6

**Letter # Com # Comment****Response**

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25	2	It is certain that the use of commercial timber harvest as the primary method of management is Not the best prescription to achieve diverse wildlife habitat, visual quality, a more effective transportation system or economic benefits.	Comment noted
25	3	Economically, the NWH project appears that it will likely lose \$ 1.9 million	We're not sure where the commenter gets this figure? Table 3.8.3.2-1 shows a cost benefit ratio for Alternatives 2-4 ranging from 1.06 to 1.09. A cost-benefit ratio of greater than 1 indicates that the benefits outweigh the costs. This table also shows Present Net Values ranging from \$16,145,040 to \$25,226,625.
25	4	The emphasis on cutting will also not achieve stands resistant to insect and disease infestations since the monocultures created by even-age management may increase the risks of disease in the forest.	Harvesting infected trees will increase the health of the remaining stand, which will be more resistant to infection because the weakened trees have been removed. Aspen, jack pine and red pine stands are those proposed for even-aged management. The red pine stands already exist and would be thinned. Each time these stands are thinned more light reaches the ground and different species become established thereby increasing the species diversity of those stands (see Section 3.1.3.3). Aspen stands proposed for harvest will either clearcut and regenerated back to aspen which could be considered a monoculture but at a younger more vigorous stage or they would receive a removal harvest that then convert to another type. There is a small amount jack pine forest proposed for harvest which currently is in a monoculture state that would be regenerated to younger more vigorous trees. The actions in the aspen and jack pine should reduce the likelihood of insect and disease problems in these stands with the exception of jack pine budworm which builds up in young stands. See also response to letter 2 comment 8.
25	5	Stocking level is an industry coined term and is not an indicator of a healthy forest ecosystem. Biological diversity in both age class and species makeup should be the indicators used	Stocking level was not used as an issue indicator. Stocking level was used as a factor affecting tree growth and vigor (see section 1.3.5 and 3.1.3.3). The Forest Plan emphasizes stocking level to maintain optimal growth rates. Biodiversity was discussed in section 3.2 where compositional diversity (number of species) and structural diversity were discussed. Forest health itself, was not identified as an issue. Age class diversity was deemed desirable for the aspen communities across the project area. Species and age class diversity was discussed in section 3.1.3.3 for northern hardwood forest using canopy gaps to increase this diversity.

**Letter # Com # Comment****Response**

25	6	<p>Hardwood stands in the second growth condition due to cutting in the early 1900s are best left to natural processes to achieve the uneven-aged condition desired. These forests have had close to 100 years to achieve biological diversity without human caused impacts. This is an excellent opportunity to allow continued hands-off management and achieve the desired condition. It is doubtful that in 100 years natural processes have not played out that meet and achieve the uneven-aged being asked for. Are there photos that show otherwise? When taking into consideration the impacts of mechanical treatment and erosion, dragging of trees to forbs and ground vegetation and impacts of disturbances to wildlife it is best to allow the approximately 75% of the hardwoods in the project area to remain in natural processes.</p>	<p>There are very few, if any, areas of hardwood that are proposed for harvesting in this project that have not been thinned before. It is doubtful that any have not had some kind of harvest activity in the last 100 years. Nearly 6,000 acres of hardwood have selection harvests proposed in Alternative 2. Approximately 4,000 of these acres have had a harvest since 1978, which is as far back as records are available. The process of developing uneven-aged management has already started through management on most of these stands. There is a total of approximately 17,000 acres of hardwood in this project area. This means that 11,000 acres or 65% of the hardwood forest will not have any harvest proposed with this project.</p> <p>Letting the stands proposed for harvest go to natural processes from this point forward would take a very long time to naturally develop uneven-aged structure for those areas that are still even-aged. This option would greatly favor sugar maple over other mid-tolerant species unless natural disturbance events created holes in the canopy to let sunlight in. Those stands with some uneven-aged structure now would continue as uneven-aged but possibly with less tree species diversity without holes in the canopy and at stocking levels higher than those recommended in the Forest Plan. Most of the hardwood stands in this project would be harvested in the winter (as a Design feature), which would protect soil and ground vegetation from disturbance.</p>
25	7	<p>American Lands supports returning our fragmented and disturbed forests to more natural and functioning ecosystems. Fragmentation is not due to trees species diversity. If forests are contiguous through diverse they still provide needed habitat for interior forest species. It is the cutting up of the landscape with roads, skid trails and clearcutting that reduce the quality of the forest for habitat values and increases the edge effect that is so detrimental to many species.</p>	<p>Fragmentation is defined and discussed under section 3.2 of the DEIS.</p>
25	8	<p>Please provide analysis on how alternatives proposed under this project take into consideration each of the alternatives in the new LRMP process. How will this project affect the feasibility of implementing the new alternatives?</p>	<p>See response to letter 20 comment 6</p>

**Letter # Com # Comment****Response**

25 9 It is believed that natural processes are preferred for jack pine stands and regeneration. There should be no cutting of jack pine; a jack pine stand will remain jack pine through natural processes and the additional help of prescribed burning.

As discussed in the DEIS under section 3.1.3.2, without treatment, jack pine plantations would continue to age and the risk of physical damage from wind and heavy snow and ice and for insect and disease attack would increase with time.

Dieback and mortality would eventually eliminate the jack pine and natural succession would replace the jack pine with other species such as balsam fir, white spruce, red maple and oak. This replacement may take some time however and more open shrub conditions may persist for a time. The amount of time spent in this condition will depend on the soil type, the presence of any advanced regeneration and any nearby seed source. The fire hazard would continue to increase during this period of mortality. Prescribed burning is proposed for 47 acres to promote natural regeneration of jack pine under alternatives 2 through 4 (DEIS, Table 2.5-5).

25 10 American Lands supports the No action alternative at this time. If the no action alternative was chosen, it would not mean the forest rangers could not enter the sale area for ten years. No action simply means not implementing this proposal. Forest management would still be proper under a no action alternative. Forest monitoring, fuels reduction, and other management activities could still be accomplished if no action was chosen on this proposal. A no action alternative would enhance interior habitat, provide for biological diversity i.e. older age class protection, reduced fragmentation due to no road building, reduced wetland and water quality impacts from no roadbuilding and the resultant sedimentation. It would provide reduced soil impacts, protection of visual quality

Comment noted

**Letter # Com # Comment****Response**

25 11 American lands is opposed to ANY new road building, our National Forests in general are over-roaded and there is a huge maintenance backlog indicating we cannot keep pace with ecological impact and safety issues on the roads already existing. American lands opposes all road building across wetlands. Invading exotic species such as purple loosestrife, garlic mustard, spotted knapweed, and other forest pests are conspicuous and often occur in high densities where road building has occurred. Most of these invading species thrive in open, disturbed habitats and frequently disperse along roadsides or attached to vehicles. Roads also increase edge habitat. We support the decommissioning of the 46.61 miles of roads. While the District many state that roads will be re-closed reality dictates the roads and their impacts are anything but temporary. According to language in NFMA, 16 USC 1608(b) and the Forest Service Manual (FSM) 7703.1, the agency is required to "Reestablish vegetative cover on any unnecessary roadway or other area disturbed by road construction on National Forest System Lands within 10 years after the termination of the activity that required its use and construction." Even if the timber contractor can extract the timber in nine weeks (although most timber contracts extend for five years; if this is not applicable to this situation then please let us know) and the Forest Service has 2-3 years to plant new trees, then the so-called temporary road could be in existence for up to 14 years. 14 years gives people a lot of time to use a road.

The sections of the Forest Service Manual that are quoted above refer to Temporary Roads. All roads constructed under this project will be added to the permanent National Forest Transportation system also known as classified roads. The maintenance for these roads is generally user maintained and designed for low speeds, 5-10 mph. Design features for NNIS will be implemented as well as Best Management Practices followed (DEIS, Section 2.6). Revegetating exposed soils is addressed under design feature Soils, C (DEIS Section 2.6).

**Letter # Com # Comment****Response**

25 12 We also believe that system and permanent special use roads should be considered in the DEIS when determining detrimental soil conditions. These roads have considerable and irretrievable effects that should be considered for overall cumulative impacts to the soils of the area. ...According to NFMA, the FS must monitor the effects of management practices to ensure maintained productivity. Land productivity is defined as a soil's capacity to support plant growth as determined by some index of biomass accumulation. A significant change in productivity is defined as the minimum level of reduced growth that is detectable by using current technology. Another concern with the clearcutting is the reduction of the sustainability of the soil by loss of carbon in the soil and the addition of CO<sub>2</sub> to the atmosphere....

Soils was a concern raised by the ID Team in terms of potential erosion, compaction and productivity. However, soils was not identified as an issue during initial scoping for this project and when implementing design features would eliminate or minimize potential adverse impacts to soil, thus was not analyzed in great detail and was considered a minor issue. Impacts from clearcutting, roads, trails and other administrative facilities on soil productivity was addressed as part of a specialist report found in the project file. Carbon loss is also addressed in the specialist report.

25 13 Another assumption – that the effects of compaction are soon alleviated by normal soil processes such as freezing and thawing – has not occurred on a loamy sand site in northern MN where the soils normally freeze each winter. Effects of logging practices on soil disturbance and loss of soil quality are just the beginning to be studied and indications are that compaction of soils and loss of biomass due to harvesting have far more significant affects than previously considered.

The above statement, "that the effects of compaction are soon alleviated by normal soil processes such as freezing and thawing", was not made in the DEIS and is inconsistent with the analysis. In section 3.4.2.4, Compaction and Rutting, the DEIS states there is moderate to severe risk of compaction on certain ELTs (Iron River ELT) and design features must be implemented in order to eliminate or minimize potential impacts. Design features for soils are specific when stating that logging operations be conducted during periods when the "ground is frozen" rather than "winter operation". This addresses the insulating effect that snow can have on the soil during the winter months. This study does not apply to our site-specific DEIS. This study would only apply to us if we did the same thing on silt capped soils. We have sale administration, contract clauses, mitigation measures etc to prevent this.

According to an additional study compaction resulted in soil disturbance ranging from 51% of the managed area to 17 % depending on equipment used. Large equipment 51%, chainsaw felling and small skidder 17%, cut-to-length equipment 33%. Winter harvesting did not alleviate disturbance by any significant amounts (45% heavy equipment, 8-17% other methods). (Soil disturbance and aspen regeneration on clay soils. Three case histories. By Douglas M. Stone and John D. Elioff.

**Letter # Com # Comment****Response**

25 14 American Lands believes that the project should be suspended until assessments of logging impacts on other sites in the area can be performed. Has the CNNF ever studied regeneration success on previously logged sites at the 1-5th year? The CNNF must provide site-specific data on soils, past soil loss, soil integrity, and its ability to regenerate trees within five years. What studies exist indicating successful regeneration, natural or manual on logging disturbed sites in this region? This area has been heavily logged for the past 120 years; at some point, the soil will be played out. Have we reached that point?

All areas of the National Forest that are regenerated either naturally or through planting are surveyed to determine reforestation success and stocking 1 and 3 years after the harvest treatment. All reforested areas are required to be restocked after 5 years by the National Forest Management Act. Stocking level data for all stands reforested in the last 20 years or more is available in the Forests vegetative data base. All stands that have been reforested need to reach an acceptable level of stocking to be certified. These certification codes are also in the data base. Table 3.1.3.3-3 displays the survival of various species planted on the forest over the last 4 reporting years (1995-98).

Every stand with a proposed harvest treatment is listed with its' corresponding soil type or ELT (Ecological Land Type) in Appendix C. Soil data specific to polygons that characterize these ELTs is available. Site specific mapping has occurred to identify these polygons. A soil scientist has visited representative sites. Resource specialists from timber management, botanists, soil mapping, vegetative inventory, silviculture, etc. have visited all of these sites in the field and would recognize and indicate impaired soils, erosion or rutting, none of which have been reported. Design features to protect soil have been applied site by site. Section 3.4.2.5 states that there has been no known adverse residual impacts to soils. Also in that section regarding soil integrity, it also states that site specific field monitoring by resource specialists (on similar ELTs inside and outside the project area) has shown no short or long term impairment to the soil resource. Also – current conditions indicate and nutrient availability are representative of the natural range of soil conditions inherent to the Chequamegon – Nicolet National Forest. No stand in this project has been harvest more than three times, maybe four at the most, over the last 120 years. The “heaviest” logging in the area occurred in the early 1900’s then many areas burned. Most stands have only been thinned one to three times since then. It is stated in Section 3.4.2.3 that the proposed activities in Alternatives 2-4 would have no long-term direct or indirect adverse effects to soil productivity. Harvest activities do not remove all of the biomass (only the bole of the tree) and nutrients are being returned to the site.

Letter #	Com #	Comment	Response
25	15	American lands supports the re-introduction of prescribed fire into the forest ecosystem to mimic natural processes, we oppose traditional commercial logging as a treatment for wildland, home and community fire risk.	Comment noted
25	16	Clean water, native vegetation, and living standing forests are three goals on which most citizens can agree. We need to see our forests being managed to alleviate this past mismanagement. A restorative approach is necessary whereby the answer to all management is not "cut the trees". The DEIS is disingenuous in many areas when it falls back on commercial removal of trees when other methods of vegetation management would be preferable and require less impact to reach DFC and maintain a healthy ecosystem for all species.	See response to letter 20 comment 3. A restoration only alternative was considered but eliminated from detailed study (DEIS, Section 2.7)
26	1	The DEIS does not contain a summary section and only provides a very cursory abstract. We recommend that the Final EIS include a summary section in accordance with the guidance set forth in 40 CFR 1502.12	A summary is now included with the FEIS.

**Letter # Com # Comment****Response**

26 2 The Brule, Peshtigo, Pine (including the north branch) and Popple (including the north and south branches) Rivers are in or adjacent to the project area. These rivers are listed on the Nationwide Rivers Inventory (NRI) prepared by the National Park Service. The NRI is a register of rivers that may be eligible for inclusion in the National Wild and Scenic River System. These rivers were included on the NRI based on the degree to which they are free-flowing, the degree to which the rivers and their corridors are undeveloped, and the outstanding natural and cultural characteristics of the rivers and their immediate environments.

Section 5(d) of the National Wild and Scenic Rivers Act requires that “In all planning for the use and development of water and related land resources, consideration shall be given by all federal agencies involved to potential national wild, scenic and recreational river areas.” In partial fulfillment of the section 5(d) requirements, the NPS has complied and maintains the NRI. The intent of the NRI is to provide information to assist in making balanced decisions regarding the use of the nation’s river resources.

The Popple and Peshtigo Rivers are not within or adjacent to the project area. There are no projects proposed within the one-quarter mile wide corridor of the Brule River. See response to 26, 3

**Letter # Com # Comment**

**Response**

26 3 A Presidential directive and subsequent instructions issued by the CEQ required that each Federal agency as part of its normal planning and environmental review processes, take care to avoid or mitigate adverse effects on rivers identified in the NRI. Further, all agencies are required to consult with the NPS prior to taking actions that could effectively foreclose wild, scenic, or recreational status for rivers on the inventory.

The Outstanding Resource Values (ORVs) for the rivers are: Brule River is recognized for its outstanding fishery and recreation values. The Pine and the North Branch of the Pine are listed on the NRI because of the scenic and recreational values.

The location of Nationwide Rivers Inventory (NRI) river segments within the project area should be clearly identified and mapped in the Final EIS. Potential impacts to the ORVs cited above should be evaluated and assessed in relation to both the eligibility and classification criteria of the Act. Actions that diminish the free-flowing characteristics or ORVs of a river segment could prevent the segment from qualifying for inclusion into the system.

No activities are proposed within ½ mile of the Brule River Corridor. None of the proposed activities in the project would foreclose the scenic or recreational status of the North Branch of the Pine River (DEIS, p. 84). There are no actions proposed within either of these river segments that would diminish the free-flowing characteristics of these rivers. Scenic and recreational values would not be adversely affected by this project (DEIS p.84).

The North Branch of the Pine River is a State of Wisconsin Wild and Scenic River. The CNNF has a Memorandum of Understanding (MOU) with the State of Wisconsin regarding protection of State designated WSRs that fall within the Forest Boundary. The MOU agrees to protect the ORVs for these rivers. The requirements of the MOU have been incorporated into standards and guidelines for Management Area 9.2 in the Nicolet Forest Plan. These standards and guidelines have been incorporated into this project (DEIS Section 2.6) and therefore, these ORVs will be protected. No harvesting will occur within 150 feet of the rivers edge and no road construction or reconstruction would occur within the river corridor.

The Nicolet National Forest Plan allows for occasional timber harvest within the North Branch of the Pine River zone for the purpose of improving wildlife habitat, improving aesthetic resources or to encourage the establishment of long-lived, large diameter tree species (Forest Plan p. 152-155). For this project, “under all action alternatives, the proposed planting and harvesting within the North Branch of the Pine River Corridor should restore long-lived species along the forested edge of the river. Over time these trees would provide seed to help establish trees closer to the rivers edge where it is currently open or alder is growing. The future long-term effects would be the development of uneven-aged structural diversity, increased species diversity, large tree development, and increased growth rates within the hardwood stands (DEIS, p.84).”

The Brule River and the North Branch of the Pine River are both labeled on the Proposed Harvest Areas maps and are identified with a shading pattern identified in the map legend as River Corridor. They are also identified on the Management Area map as MA 9.2.

**Letter # Com # Comment**

**Response**

26 4 Bose Lake Hardwoods, located within the National Forest approximately 13 miles east of Eagle River Wisconsin, is a mature northern hardwood-hemlock stand containing the best virgin stand of hemlock in Wisconsin. Recognized as a nationally significant landmark, Bose Lake Hardwoods was listed on the National Registry of Natural Landmarks in 1980.

The National Natural Landmarks (NNL) Program was established by the Secretary of the Interior to identify and encourage the preservation of the full range of geologic and ecological features that are determined to represent nationally significant examples of the Nation's natural heritage. The Final EIS should consider potential impacts to this NNL.

The Bose Lake Hardwoods RNA is outside the NW Howell project area, and will not be directly affected by management activities of the NW Howell project area. Divide road (FR 2176), which separates the Bose Lake area and the NWHowell project area, creates such a hard edge that any effects from timber management across the road will be so subtle as to be swamped by the road/edge effects.

**Letter # Com # Comment****Response**

26 5 Page 101 Section 3.9.1 includes a discussion of historic and pre-historic resources that are found within the area, however, it fails to indicate if any of these resources are listed, or eligible for listing on the National Register of Historic Places (NRHP). Please indicate if such properties are present, and if so, how many. The Final EIS should demonstrate that State Historic Preservation Office concurs with the findings and any proposed measures to minimize harm to the properties listed on or eligible for the NRHP.

All heritage resources will be avoided to protect them from disturbance. Further, District personnel will monitor those heritage resources located in proximity to project areas, to ensure that they are neither directly nor indirectly affected by project-related activities.

If previously unrecorded heritage resources are discovered during project activities, all surface disturbing activity within the vicinity of the discovery will halt. A professional archaeologist will examine the discovered resource, and consult with the Wisconsin State Historic Preservation Officer (SHPO) to determine treatment alternatives. If a previously unrecorded heritage resource is damaged by project activity, the District Ranger will secure funding to conduct a formal evaluation, i.e., evaluation to determine potential significance. Likewise, if a previously recorded heritage resource is accidentally disturbed.

From the Heritage Program Technical Report in the Project File, "Currently, there are 130 known heritage resource sites located within the NW/Howell boundary. Of the 130 known sites, 104 have not been evaluated as and as such are potentially eligible to the National Register of Historic Places (NRHP) 15 are Pre-European contact sites, 86 are Post European Contact, and 3 are multi-component (both Pre and Post Contact). Four sites have been evaluated as eligible to the National Register of Historic Places (NRHP) 1 pre-european, 3 post). Twenty-two of the sites occur on private land are just outside the OA area (they would be protected and avoided if they were in the APE-Area of Potential Effect)." All survey reports have been submitted to Wisconsin State Historic Preservation Officer (SHPO) for review and comment; SHPO comments are kept on file with each report.

**Letter # Com # Comment****Response**

27 1 I find bizarre and troubling the draft's treatment of ecological diversity. Restoring and maintaining the historical range of biological diversity is a pursuit worthy of the Forest Service. This plan focuses on four aspects of biological diversity: landscape pattern, patch size, coarse woody debris, and invasive plant species. The assumption is that these alone are reasonable, reliable and useful predictors of total plant and animal diversity and composition. Contrary to these assumptions, the scientific evidence is that native plant diversity is declining regionally at a variety of scales. The best this plan can offer is that one alternative may differentially affect edge (or disturbance) vs. interior species. This does not suffice as an informed discussion of plant diversity issues affected by timber harvest.

Four elements of biological diversity were identified as issues of concern (landscape pattern, patch size, coarse woody debris, and invasive plant species) and were analyzed in the DEIS (Sec.3.2). No assumptions were made that these elements alone are predictors of total plant and animal diversity and composition. The possible decline of ground flora diversity appears to be a problem occurring at regional landscape scales and is more appropriately addressed at the Forest Plan level. This is an issue that has only recently been identified and it is not yet clear how timber management, deer herbivory, exotic earthworm infestations and other factors contribute to these declines. The DEIS does address the affect of deer on a number of plant species on p.35, p.49, and p.55-57, and some fencing for understory regeneration is planned (p. 22). See also response to letter 24 comment 19. Approximately 6,200 acres within the NWH Project Area are proposed for Ecological Reference Areas under the Forest Plan Revision process. None of these acres are proposed for treatment under the NWH project. These areas would provide an opportunity to maintain and monitor the historical range of biodiversity as well as contribute to old growth values on the landscape (DEIS, p.41).

**Letter # Com # Comment****Response**

27 2 I have very strong doubts that the proposed mitigation measures are sufficient to assure continued status of rare plant populations. The document declares that planned actions would affect individuals but would likely not cause a trend of loss. For example, I don't believe the FS has presented evidence to suggest that tree harvesting 250 ft. from goblin ferns and other interior plant species will not result in irreversible decline. Rare plant species have peculiar needs for success at various stages of their life histories: much is unknown. The proposed mitigation plan shows how incomplete our knowledge is regarding the particular needs of these populations. The FS seems not to know what the long-term consequences will be of planned harvests: increased light, increased temps, longer effective-growing season, increased wind speed, changes in animal populations and behavior, etc. Yet, the FS simply assumes no trend of loss. With inadequate information on both how forest-interior conditions will change and knowledge of the needs of these populations, the proposed harvests represent an unwarranted threat to these populations.

See response to Letter 24, comment 19 and Letter 27, comment 1  
At present, there are no data to show whether or not timber management may cause long-term negative consequences to rare plant populations. In the face of this uncertainty, we have used information from several sources to developed design features. Most sensitive plant species were considered by the Species Viability Evaluation process in which species expert information was compiled for the Forest Plan Revision process of the National Forests in Minnesota and Wisconsin. Mitigation measures for Botrychium mormo goblin fern are from the Conservation Approach for Goblin fern, Botrychium mormo W. H. Wagner (USDA Forest Service, Eastern Region 2001). Design features # 22, and #26 (DEIS p.22, and Appendix F) were created to avoid the potential effects of timber management. Design feature #22 restricts timber activity to winter logging to reduce ground disturbance and the effects of trampling and disturbing understory ground flora. Design feature #26 will facilitate the layout of the stand design to maintain a closed canopy of up to 250 ft. radius over know rare plant population sites to limit moisture reduction and solar penetration of the microclimate.

Of the 44,172 acres of the Northwest Howell area, 13,899 are upland hardwoods available for timber management. Only 6,191 of those upland hardwood acres are considered for treatment in this project, and not all are proposed for treatment by alternative (Alternative 2 = 5941, Alternative 3 = 4057, and Alternative 4 = 5887). Not all 13,899 acres of the upland hardwoods available for timber management are suitable habitat for Goblin Fern due to past disturbances and exotic earthworm infestations. About 2000 acres of upland hardwoods are part of the potential Ecological Reference Area allocation for the Forest Plan Revision and are not considered for timber management in this proposal. These ERAs are usually high quality examples of the vegetation communities they represent and should provide habitat reserves for sensitive plant species.