

APPENDIX C

Disposition of Issues from Scoping

Scoping involved mailing to individuals on the mailing list, publication of notices and news releases, publication on the Monongahela National Forest Website and in the Monongahela National Forest Schedule of Proposed Actions, presentations for local groups such as the Chamber of Commerce and County Commission, phone calls and personal comments with members of the public, organizations, and groups.

Some of the comments may have been paraphrased. Following each comment is the Forest Service response. Copies of all the letters are included in the project file. The project files also contain requests for additional information which has been supplied by the Forest Service and is not contained in this summary, as well as comments which do not require a response.

Most of the comments express concerns about the type and magnitude of environmental effects of the project which would be explained in the effects section of the EA.

The page numbers, for the most part, list the beginning page in the EA document of the section that includes the relevant discussion.

Devin M. Scherübel, Heartwood
1027 E. Walnut, Columbia, MO 65201
May 18, 2001

1. Logging is an inappropriate use of public forests and is contrary to the public interest. Heartwood, therefore, opposes this sale.

Response: As an agency of the federal government, the USDA Forest Service responds to Federal law. Congress has identified that a role of the National Forest System is to produce and provide trees for the consumptive use of the citizens of the United States. For instance, the Organic Administration Act, June 4, 1897, states, "No national forest shall be established, except to improve and protect the forest within the boundaries, ..., and to furnish a continuous supply of timber (emphasis added) for the use and necessities of citizens of the United States." The Weeks Law, March 1, 1911, under which most of the Eastern National Forest System lands have been assigned states, "The Secretary of Agriculture is hereby authorized and directed to ... purchase such forested... lands within the watersheds of navigable streams ... necessary ... for the production of timber." The Multiple Use Sustained Yield Act, June 12, 1960, states, "It is the policy of the Congress that the National Forests are established and shall be administered for... timber...." Also, the National Forest Management Act, October 2, 1976, states, "... the Secretary of Agriculture, ... may sell, ... trees, portions of trees, or forest products located on National Forest System lands." These, and many other laws passed by Congress (such as the *National Environmental Policy Act of 1969* as amended, the *Endangered Species Act of 1973*,

the *National Historic Preservation Act of 1964* as amended, the *Clean Water Act of 1977* as amended, the *Wild and Scenic Rivers Act of 1968*, etc.) all influence management decisions of NFS lands.

The management of forests is often controversial, stemming from fundamental differences in how forest resources are viewed by different segments of society. The management of federally-owned forests is driven by legislative mandate to provide for multiple uses and values (National Forest Management Act of 1976, or NFMA).

Congress has determined that producing and selling trees for timber is an appropriate use of public (national forest system) land and is in the public interest. This issue is beyond the scope of this analysis and will not be considered further.

At the project level, scoping was conducted for the Desert Branch Project Area in May 2001 to obtain site-specific public opinion and to develop issues concerning the proposed projects (see EA, pp. 16-18, Chapter IV, and Appendices C and D). Issues and concerns raised during this public involvement process are summarized in the EA or in Appendices. Many of these issues were used to develop alternatives to the Proposed Action and to analyze environmental effects.

2. Additionally, the Purpose and Need needs to indicate the true purpose and need for the project (i.e., to approve logging so that money can be illegally skimmed from the KV fund to support the Forest Service bureaucracy.) The Forest Service is so far out of control that many times it claims it does not have to obey the law, because there were no comments indicating the law should be followed. Therefore, we wish to raise the issue that of all laws that apply to the project need to be followed.

Response: The purpose and need defined in the Desert Branch EA was developed from a comparison of the existing and desired future conditions of the Desert Branch Project Area and is consistent with regulations set forth by the Council on Environmental Quality (CEQ)(40 CFR 1500-1508) and with Forest Service regulations. Forest Service Handbook 1909.15, Chapter 11 indicates that, whether it is an Environmental Impact Statement (EIS) or an Environmental Assessment (EA), the lead agency shall determine the scope of the analysis (section 1508.25) and the significant issues to be analyzed in depth. The scope of the analysis depends on the nature of the proposed action and the purpose and need for action so it is important that they be specific and well defined. FSH 11.2 states, "The most important element of the scoping process is to correctly identify and describe the proposed action. Elements of the proposed action include the nature, characteristics, and scope of the proposed action, the purpose and need for the proposed action, and the decision to be made. The following concept from the CEQ regulations also apply..."*Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined...*"

Planned KV projects within the project area are within the list of approved KV

activities. Although the exact amount which will be placed in the KV fund from this sale has not yet been determined, an estimate can be obtained by adding the total costs of the following projects which are often budgeted through the KV program: site preparation, regeneration stocking surveys, construction of wildlife openings and waterholes, and planting of mast producing trees and shrubs. The logging corporation incurs additional expenses in the form of corporation employee salaries; local, state and federal taxes; subcontracting, etc. None of these amounts are included in this analysis.

In 2002, the five-year average for administrative overhead including office and staff for the Washington Office, Regional Office, and Supervisor's Office expenses is 26.9%. In 2001, the administrative overhead was as follows: Washington Office/Regional Office, 6.0 percent and Supervisor's Office 18.68 percent. Overhead for the Gauley Ranger is 7.4 percent of the direct project cost. Some direct project costs are used for salaries for activities such as contract preparation, inspection, or performing of the work.

PUBLIC OPINION

3. A scientific poll conducted for the Forest Service revealed that most Americans oppose logging, mining, and grazing on public forests. (Bruce Hammond, "Forest Service Values Poll Questions Results and Analysis." The question was, "Natural Resources in Public Forests and Grasslands Should be Made Available to Produce Consumer Goods." Forty-seven percent disagreed with 26% strongly disagreeing. Seventeen percent had no opinion and 36% agreed. Statistically this represents a significant disagreement with the statement.) In May 1996, ICR Survey Research Group conducted a nation-wide public opinion survey for Lake Research. The survey found most Americans support "ending commercial logging . . . on all federal publicly owned lands." Several states also have conducted public opinion surveys which have found most people in that state do not want their National Forest logged. The most recent nationwide public opinion survey [Republican Pollster American Viewpoint conducted a national survey of 1,000 registered voters for the Heritage Forests Campaign from December 28, 1999 through January 2, 2000. All interviews were conducted by telephone. The margin of error for this study is $\pm 3.2\%$.] asked, "In general, do you favor or oppose allowing logging, mining, and other industrial activities on National Forest lands?" Sixty percent (including 43% strongly) were opposed and only 31%, (including 10% strongly) were in favor. Another nationwide public opinion survey (National Survey conducted by Market Strategies, Inc. and Lake, Sosin, Snell, Perry and Associates, Inc. N=800 registered voters June 22-25, 1998. Market Strategies, Inc. has conducted polls for Newt Gingrich, Bob Dole, George Bush, and Gerald Ford.) asked: "There has been a national debate about whether the U.S. Forest Service should continue to sell timber from our national forests. Do you favor or oppose continuing to allow timber companies to log in our national forests? (IF Favor/Oppose ASK:) And do you STRONGLY (favor/oppose) this or just SOMEWHAT (favor/oppose) this?"

The results were: Strongly favor, 7%; Somewhat favor, 17%; Neither, 2%; Somewhat oppose, 19%; Strongly Oppose 50%; Don't Know, 5%, Refused, 0%. Note: Even voters in the west, by a 2-1 margin (62%/31%), oppose continuing to allow timber companies to log in National Forests. Opposition is 70% or more in other regions of the country.

In an interview, former Chief Thomas, referring to public opinion, stated: "For example, it was just about evenly split about whether we should harvest timber from national forests or not. That's an interesting fact for us to have at our disposal." The Forest Service should consider public opinion in its analysis as the National Forests belong to U.S. citizens, not the logging corporations. What do the words, "government of the people, by the people, and for the people" mean to the Forest Service? As former Chief Thomas stated on May 21, 1996, "These lands belong to the people and must Be managed by democracy. If we don't have the people with us, we fail." As The Declaration of Independence states, "Governments are instituted among men, deriving their just powers from the consent of the governed, that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it . . ."

Response: The projects we are analyzing at this time are site specific and the analysis addresses physical, biological, and social impacts in the Environmental Effects Chapter of the Environmental Assessment (EA). The purpose and need for the proposal is consistent with the Forest Plan. The purpose and need is established in the EA, pp. 6-9 and is based on the difference between the existing condition and the desired future condition. Also see the response to your comment #1.

4. Alternatives, which are not connected to logging, must be developed and considered to respond to the majority of Americans who do not want their National Forests cut down. In *Sierra Club v. U.S.D.A.*, 1997 WL 295308 (S. D. Ill. September 25, 1995) aff'd by order adopting opinion 116 F.3d 1482 (C.A. 7 (Ill) 1997), the Court ruled that while the Forest Service is allowed to log National Forests, the Forest Service is not required to cut down the public's forests. "The Forest Service was created by and for the people. Hence, we communicate with and listen to the public . . . The results on the ground reflect . . . full and fair consideration of public opinion." The Forest Service Ethics and Course to the Future October 1994. The Forest Service should "serve the people" as it claims to do. Claiming that what the majority of Americans want is "beyond the scope of the analysis" is ignoring the public and subverting democracy. We think James Furnish's departing comments put it well:

"What remains confusing and troubling to me is that the Forest Service seems to consider itself as our most important constituency. We are much more adept at being aware of and acting on the "best interests" of the Forest Service than we are of the best interests of the public. This introversion hasn't served us well for the last 20 years and it won't in the future. We will never truly "serve people" until we have the courage to tell our employees that we need to set our previous views aside."

Additionally, defining the purpose and need so narrowly to exclude alternatives that do not cut down the public's forests is illegal. Since there is legislation in Congress to end logging on public lands, an alternative must be developed to manage the area in the manner prescribed in HR 1396, the National Forest Protection and Restoration Act.

Response: See the response to your comment #1. The No Action Alternative would address HR 1396. Many protective and restorative measures are included within the alternatives which include timber harvest. See also Alternatives considered but dropped from full analysis on pp. 39-40.

5. The no-action alternative does not adequately respond to the wishes of the majority of Americans who do not want their natural heritage converted into stumpland. The no-action alternative has almost no chance of being selected due to all the time and money invested in developing the project. For example, in an May 9, 1997, appeal resolution meeting, Hoosier National Forest Supervisor Ken Day stated, "I don't want to go through all these documents and then declare, all this work, and then say 'Okay I'm gonna select a no-action alternative and not do anything afterwards.' Why do the analysis?"

In 1998, we did a nationwide FOIA request to find out how often the Forest Service selects the no-action alternative for a proposed timber sale. The results were:

- * Number of proposed timber sales in the last 5 years with No-Action Alternative selected: 8

- * Number of sales with No-Action Alternative selected since Michael Dombeck became Chief on January 6, 1997: 0

- * Last time No-Action Alternative Selected: December 13, 1996

- * Acres of timber proposed to be cut for which No-Action Alternative selected in last five years: 7,362

- * Acres logged in the last five years (from TSPIRS reports): 4,168,282

- * In the last five years, the Forest Service logged 567 times more acres than they selected the no action alternative for.

- * "[The] Forest Service prepares 4,000 to 5,000 environmental assessments annually, of which about one-half are for timber sales. In FY 1997, Forest Service awarded contracts for 232,110 timber sales." USDA/OIG-A/08801-10-At at 4.

If there is a range of alternatives that have projects other than logging, the Deciding Officer would have alternatives that respond to public will and provide projects for all the time and money invested in the analysis. If there is not an alternative with only

non-logging projects, the Forest Service will have ended its inquiry at the beginning as there will be a pre-determined result of logging in the project area.

Response: The use of commercial sales as a tool to accomplish vegetation manipulation work was addressed during Forest Plan development. Page 74 of the Forest Plan states--"Commercial timber sales shall be the means of accomplishing most vegetation manipulation work."

During what the Gauley District calls the "National Forest Management Act (NFMA) Planning" stage (prior to developing a Proposed Action), an interdisciplinary team of individuals (IDT), who have expertise in various natural resource fields, examined the existing condition of a project area to come up with a list of projects that could be implemented to meet the desired future condition of that area, as guided by the Forest Plan. During this stage, we identified methods that would most efficiently and effectively achieve the list of projects.

On this Forest, few no-action alternatives have been officially selected in a Decision Notice for a timber sale-related environmental assessment--this is because we tend to discard our proposal for a timber sale as soon as we determine that a sale may not be the most effective method of vegetative manipulation or that such a sale would result in unacceptable effects to natural resources. On the Forest, we have several examples where, early on in the NFMA planning stage, or mid-way through the environmental assessment planning process, we discarded our original proposals because of concerns that timber sales in the area would result in adverse effects to resources (e.g. aquatic habitat; endangered, threatened, and sensitive species; recreation values; etc.) or would not be the most cost effective means of obtaining management objectives. In addition many portions of proposed timber sales have been dropped, and much smaller sales than the proposed action are often chosen.

In 1994, the Greenbrier District released a Proposed Action for public comment which recommended conducting a commercial timber sale in the Hoe Lick opportunity Area. Mid-way through the analysis, the IDT determined that the proposal would have several adverse impacts: (1) road locations needed to access harvest units would affect the habitat of known populations of the Cheat Mountain salamander, a threatened species; (2) proposed activities could impact the habitat of the endangered West Virginia northern flying squirrel; (3) road access would be difficult to establish without adverse effects to the watershed; and (4) a commercial sale which would avoid these adverse effects would not be cost effective. Therefore, the Proposed Action was not carried forward, the environmental assessment was never completed, and an official Decision Notice was never issued.

In 1997, the Cheat Ranger District began an assessment of the existing condition of the Bear Heaven Opportunity Area to determine what projects needed to be implemented to move that area towards the desired future condition. During their initial review, and in early discussions with interested publics, they determined that a commercial timber sale would likely impact habitat of the Virginia northern flying

squirrel and Cheat Mountain salamander and affect populations of the endangered running buffalo clover. These concerns lead them to drop any consideration of a timber sale in that area at this time.

Other similar examples include the 1995 analysis of the Mozark Mountain Opportunity Area (Cheat Ranger District), the 1997 Guadineer NMFA review (Greenbrier Ranger District), and the 1998 Rabbit Run review (Gauley Ranger District) (project file in district records).

At a smaller scale, other methods--besides a commercial timber sale--may be feasible to use for wildlife habitat manipulation, watershed restoration (e.g. redesigning the existing transportation system, closing roads to public motorized-vehicle use, etc.), and recreation improvements. However, in the case of the Desert Branch area, we concluded that implementing a timber sale in the project area would not result in significant adverse effects to natural resources and would be the most cost effective means of meeting multiple management objectives and the specific purpose and needs of this area (EA, Purpose and Need, p.6 and Chapter III -Environmental Effects, p. 43).

NEED FOR TIMBER SALE

6. The analysis needs to address the need for the timber sale. Just because the Forest Plan allows timber sales, one cannot conclude there is a need for the sale. The Forest Service must disclose site-specific monitoring data which demonstrates that there is a need for the sale. The need analysis must also address why natural processes will not create enough early successional habitat. If the analysis claims a need for early successional habitat, the analysis must demonstrate that there is a need for the type of habitat that the Forest Service creates as opposed to the type of early successional habitat that is created naturally. We also request that the MIS species for early successional habitat be changed to the only creature that truly requires the type of habitat devastation) created in Forest Service timber sales: Forest Service bureaucrats.

Response: The differences between the existing conditions and the desired future condition, as expressed by the Forest Plan, determine the need to manage the area. As explained in the Purpose and Need and Proposed Action sections of Chapter I (pp. 6-15) there are several areas where the existing condition and the desired future condition vary, including overstocked stands and an unbalanced age class distribution. Overstocking results in lower tree vigor and less mast production. Also there is very little area in the 0 to 15 year age class to provide early seral habitat. Thinning trees and creating young stands can be accomplished by nature through such events as insects and diseases and weather conditions, but such events are random and may not provide the thinning or early seral habitat in large enough proportions. Timber harvesting is one way to achieve the desired conditions in a managed way. This method also allows for utilization of some of the wood and provides money to

the local economy and the U.S. Treasury. Commercial timber sales are to be the means to accomplish most vegetative manipulation work to meet the Forest Plan goal (p. 74).

The need for early successional habitat is discussed on page 6, and in the Effects Section, especially the section beginning on page 56 of the EA. Also, the MIS species are listed in the Forest Plan (pp. 83 and L-1); changing these species would be outside the scope of this analysis.

Site specific data was used throughout the EA to demonstrate the site-specific need for action. The contribution of natural processes to early successional habitat are discussed in Alternative 5, No Action.

BIODIVERSITY & FOREST FRAGMENTATION

7. The issue of biodiversity and forest fragmentation needs to be considered. In an interview, former Chief Jack Ward Thomas summed up why these issues are so important: "First don't let habitat situations get so bad that species get listed. That's playing Russian roulette. Once a species gets listed as threatened or endangered, it quickly slips out of anybody's hands and into the hands of the regulatory agency. That means you get ahead of the situation. You ask "How are we going to address this circumstance in a rationale, reasonable fashion, in a coordinated manner so that it is not necessary to list the plant or animal?" . . . One would not want to repeat the exercises of the Pacific Northwest where nobody would face the issue and everybody continued to twist away from the inevitable. If you look at the history if that particular issue, solutions were Proposed and rejected, back and forth. The social and economic impacts kept increasing with each ratchet. The earlier you can address these issues, the more chance it will be addressed rationally with minimal impact. The longer you wait, the more options you lose, and the more dramatic the effect becomes in the end." (Seeing the Forests and the Trees: An Interview with Jack Ward Thomas. "Wisconsin Natural Resources," April 1995.)

Response: Region 9, in coordination with the U.S. Fish and Wildlife Service and state agencies, has developed a list of endangered, threatened, and sensitive (ETS) species for the Monongahela National Forest. The Monongahela National Forest is developing both terrestrial and aquatic ecological classifications which provide a framework for comprehensive species management across the Monongahela National Forest landscape, rather than relying on isolated, piecemeal efforts. In regard to ETS species, ecological classification field data are used to develop predictive models of species occurrence. Predicted occurrences in the field can then be field-verified if necessary. These subsequent field data are continually used to refine the models. This approach is fully operational for ETS plants, and in the early stages of development for birds and bats. During project analysis, potential habitat is evaluated for each of these species and the potential effects proposed actions may have on their habitat is assessed and documented. The Biological Evaluation is sent to the USDI Fish and Wildlife Service for their review and their concurrence on effects is obtained

before projects are implemented.

Forest fragmentation and its effects on wildlife species is discussed on pages 118-126 of the EA. For the Desert Branch project, the effects on endangered, threatened, and sensitive species were evaluated and described on pages 129-139 of the EA. No significant effects are expected.

Eliminating all timber harvest would not necessarily prevent the endangerment of species, since species requiring open and early seral habitat can also become sensitive, threatened, or endangered.

BIODIVERSITY & FOREST FRAGMENTATION

8. It is time to act to protect neotropical migrants and biodiversity in general. The longer the Forest Service waits, the worse the problem becomes.

Response: Effects on neotropical migrants and biodiversity are analyzed in the Wildlife and Fragmentation sections of the Environmental Effects Chapter of the EA (starting on pages 98 and p. 118 respectively).

Currently, 98 percent of the project area is covered by forested stands ranging from 61-105 years old (EA, p. 56). Many overstory trees are predominantly shade-intolerant to moderately-shade tolerant tree species, and most understory trees are shade-tolerant species (EA, pp. 45-46). If no action is taken, over time (as succession continues) stand overstories will begin to be dominated by more shade-tolerant species. This is likely to positively impact forest interior species whose favored habitat conditions already abound in the project area; but it is likely to have an adverse effect on featured species which require early successional habitat. Under the Proposed Action and Alternatives 2, 4, and 6, the variety of habitat conditions in the project area would be increased because earlier successional stands would be developed which would be structurally, compositionally and functionally different than the stands that currently exist. Depending on the alternative, zero to three percent of the project area would be regenerated to create early successional conditions. Up to 1.3 percent of the area would be converted to wildlife openings, depending on the alternative selected. (See Table 7 on pp. 41-42.) However, the remaining forested stands would continue to provide habitat characteristics of mid- to late-successional forests (forest stands typified by advanced regeneration of shade-tolerant species of red maple, sugar maple, and beech with an overstory of yellow poplar, some oaks, and hickory). These changes are not expected to significantly affect forest interior species since forested habitat is so common now; however, these changes are expected to improve habitat conditions for species that require early successional habitat.

9. Biodiversity and forest fragmentation must be addressed in regard to all species, not just birds. This includes, but is not limited to: mammals, invertebrates, plants, insects, micro-organisms, reptiles, and amphibians.

Response: Forest fragmentation is addressed in the Fragmentation section (p. 118) of the Environmental Effects Chapter.

Through use of ecological classifications, modeling, and current concepts of conservation biology, we are, over time, becoming more efficient in our analyses and getting a better understanding of the relative importance and value of areas on the forest. However, forest fragmentation effects have been centered around the effects to neotropical migratory birds because some of the best available data we have to work with comes from ongoing forest songbird research conducted on the Monongahela National Forest. Birds are a useful species group, since they use a variety of forest structure. In addition, birds are easy to study because the presence of a species can be confirmed by sight or song identification and data can be collected at minimal expense. Reproductive success can also be evaluated easier for songbirds than for other species by locating and monitoring nests. We have initiated studies generating data relevant to edge effects on plants and bats. As these data are analyzed and results become available, they can be used to assess fragmentation effects. Over time, effects on other species could be added. Until such time, the depth of analysis and conclusions documented in the EA are sufficient for the Responsible Official to make an informed decision about the impacts of actions taken in the project area.

The effects of proposed actions on wildlife were analyzed in the Environmental Effects Chapter of the EA (p. 43). The alternatives are consistent with the Forest Plan, which was recently amended on March 12, 2004, in consideration of changes in requirements for management of endangered, threatened, and sensitive species.

10. The degree to which this area provides a biological corridor and its value should be considered.

Response: No permanent changes from forest vegetation to agricultural land are proposed; therefore, the entire area would continue to provide a link with neighboring forested lands. Effects of alternatives on areas of mature habitat were considered in the EA (pp. 127-128).

The concerns about biological corridors were considered in several ways including: National Forest MP Areas where activities are limited, mature habitat designation, riparian area protection, and the fragmentation effects. The Forest Plan at a programmatic level looked extensively at providing large blocks of continuous land by designating management areas that emphasize natural processes. Approximately 25% of the Forest is managed with little or no-activity and includes Management Prescription Areas 5.0, 6.2, and 8.0.

On a smaller scale, stands are proposed as mature habitat within other MP's, such as the MP 6.1 area in which the Desert Branch Timber Analysis Area is located. Although mature habitat stands have not been designated in this analysis, a pool of stands is available for future designation to provide "old growth" characteristics of

different forest types. These areas will not have management activities this entry. Other areas are protected for riparian area management. These "islands" of mature trees connect with other forested stands to allow for movement/dispersal of plants and animals through the area. Proposed openings would result in a change from forest vegetation to grassy openings on several acres, but these areas would be relatively small and would not break any links between forested lands. See Mature Habitat section (p. 127) of the Environmental Effects Chapter.

To the extent necessary for determining effects, this issue is a component of forest fragmentation and mature habitat which are addressed in the Fragmentation and Old Growth/Mature Habitat Concerns sections (p. 118 and p. 127) of the Environmental Effects Chapter.

11. Sampling effects and minimum area requirements of all species should be addressed.

Response: There is no requirement to analyze all species within the project area. In accordance with Code of Federal Regulations (CFR) 219.19, management indicator and associated species (MIS) were selected for the Monongahela National Forest during the Forest planning process to serve as representatives for estimating the effects of forest management activities on populations of similar species (Forest Plan, p. 83). Effects on Wildlife are analyzed in the Wildlife and Fragmentation sections of the Environmental Effects Chapter of the EA (p. 98 and 118).

12. The impact of cowbird parasitism and predation to forest interior birds should be prominently considered. The analysis of the impacts to forest interior birds needs to address nesting success. Some studies have documented forest interior birds in recently logged areas. The presence of these species in these areas normally indicate that the species are being harmed. Forest interior birds normally do not successfully reproduce in recently logged areas. These areas, in essence, have become ecological traps. The need for large tracts of forests should be considered. (Robbins, Chandler S., Deanna K. Dawson, and Barbara A. Dowell, "Habitat Area Requirements of Breeding Forest Birds of the Middle Atlantic States." Wildlife Monographs No. 103, July 1989.

Solheim, S. L., W.S. Alverson, and D.W. Waller, "Maintaining Biotic Diversity in National Forests: The Necessity for Large Blocks of Mature Forests." Technical Bulletin Vol. 4 No. 8, School of Natural Resources, the University of Michigan.

Robinson, Scott K. and David S. Wilcove, "Forest Fragmentation in the Temperate Zone and its Effects on Migratory Songbirds." Bird Conservation International 4:2330-249.)

Response: See response to following comment.

13. A study published in Science contained these findings and recommendations for neotropical migrants:

"Nest predation and parasitism by cowbirds increased with forest fragmentation in nine midwestern landscapes that varied from 6 to 95 percent forest cover within a 10-kilometer radius of the study areas. Observed reproductive rates were low enough for some species in the most fragmented landscapes to suggest that their populations are sinks that depend for perpetuation on immigration from reproductive source populations in landscapes with more extensive cover.

"Our results suggest that a good regional conservation strategy for migrant songbirds in the midwest is to identify, maintain and restore the large tracts that are most likely to be population sources. Further loss or fragmentation of habitats could lead to a collapse of regional populations of some forest birds. Land managers should seek to minimize cowbird foraging opportunities within large, unfragmented sites. In more fragmented landscapes, the reduction of cowbird parasitism may require trapping and large scale restoration efforts, whereas reduction of local forest edges may reduce nest predation and increase mating success. . . . Increasing fragmentation of landscapes, however, could be contributing to the widespread population declines of several species." (Robinson, Scott K., Frank R. Thompson III, Therese M. Donovan, Donald R. Whitehead, & John Faaborg, "Regional Forest Fragmentation and The Nesting Success of Migratory Birds." *Science* Vol. 267 March 31, 1995 Pages 1987-1990.)

The analysis needs to consider these findings and recommendations. A follow-up study conducted in a heavily forested area concluded:

The conclusion is that some management practices (clearcuts, forest openings, and possibly regeneration openings) may cause a reduction in the reproductive success of birds nesting in adjacent forest. Rates of parasitism are significantly higher for many species in these contexts and daily nest mortality is also slightly higher. Cowbirds appear to be preferentially attracted to openings within the forest and then direct much of their nest-searching activity into forest adjacent to the openings.

It follows from this that the quality of a forest tract as a "source" will depend on the structure of the landscape within the forest tract. Tracts with many internal openings and edges will, in general, produce fewer young per nesting attempt than tracts with few disturbances. Accordingly, management for viable populations of NTMB should involve minimizing the amount of internal opening and edge.

Whitehead, Donald R. "The Effect of Landscape Pattern and Timber and Wildlife Management Practices on the Reproductive Success of Neotropical Migrant Landbirds in South-central Indiana." November 1995. The following additional studies also need to be addressed: Winslow, Donald E., Patrick J. Doran, Donald Whitehead, Grant M. Greenberg, Matthew A. Koukol, Elizabeth A. Geils, R. Bernadette Slusher, & Thomas B. Ford, "The Reproductive Success of Forest-Dependent Songbirds in South-Central Indiana: Effects of Forest Management

Practices” and Doran, Patrick J., Donald R. Whitehead, Donald E. Winslow, “Within-Landscape Patterns of Land Cover and the Nesting Success of Neotropical Migrant Birds in South Central Indiana.” The analysis needs to consider these findings.

The analysis needs to consider Desrochers, Andre, & Susan J. Hannon "Gap Crossing Decisions by Forest Songbirds during the Post-Fledging Period" Conservation Biology, Vol II, No. 5 October 1997, pp 1204.1210.

Response: Effects of fragmentation on forest interior birds are discussed in the Fragmentation section of the Environmental Effects Chapter. The effects proposed activities will have on interior forest habitat, and the amount of edge created, are described on page 125 of the EA. The level of fragmentation provided by the action alternatives is not expected to have adverse effects on bird abundance or viability, with core areas occupying 52 percent (Alternative 1) to 67 percent (Alternatives 3 and 5).

Emerging research in contiguous forest areas of the Eastern U.S. shows a different pattern of fragmentation effects (or lack of effect) on forest songbirds than those of the Midwest. Fragmentation research studies such as those cited from the Midwest are not applicable to conditions in this area since the Monongahela forested landscape differs from that of the Midwest in several dramatic ways: (1) it is largely intact (WV is approximately 79 percent forested), in contrast to the generally small, isolated forest tracts of the Midwest (southern Indiana, where referenced studies were conducted, is approximately 35 percent forested) [Kingsley, Neal P, Forest Inventory and Analysis. USDA Forest Service, North Central Experiment Station. Folwell, MN. Personal communication 1/6/97]; (2) Cowbirds do not appear to meaningfully affect forest songbird populations here; and (3) the Monongahela appears to function as an interior habitat source rather than as a sink.

When the only the counties containing Hoosier National Forest are considered, the percentage of forested land in the Indiana counties is approximately 49 percent. For West Virginia, those counties containing the Monongahela National Forest, the percentage of forested land is approximately 82 percent (FIA data).

Studies on the Monongahela include the following.

A.) Point counts at 660 stations across the Monongahela.

B.) Nest search plots (10) across an array of fragmentation in the mixed mesophytic forest type. Each plot is 40 ha in area. Data on 300 nests were collected in 1996, and on 200 nests in 1997. (This study is ongoing; 1998 data were collected but have not yet been analyzed).

C.) An assessment of cowbird effects--Cowbirds appear to have minimal effects in intact and moderately fragmented landscapes on the Monongahela. Only six percent of 660 point counts in 1996 showed cowbird occurrence, and only five of 300

nests were parasitized (two percent). In 1996 and 1997 combined, only three percent of 2,640 samplings showed cowbird occurrences (77 cowbird occurrences) (3/30/99 personal communication with Tom DeMeo, USFS). These findings are in accord with companion bird studies by Jeff Duguay and Cathy Weakland at WV University.

D.) An assessment of nest predation--As a rough generalization, about one-third of the nests sampled were predated. Although data analyses are ongoing, nest predation of interior species does not appear to be related to landscape core area or edge density. Further analyses are necessary before conclusions can be reached. Additionally, in 1998, Gary Williams of WV University began a three-year effort on the Monongahela to identify nest predator species through the use of infrared cameras.

Cowbirds and other nest predators are abundant near forest edges with farmland or suburban neighborhoods. Population declines and cowbird nest predation were noted in suburban or agricultural areas with remnant patches of woodland. Forest edge areas are generally common where National Forest land borders private lands. However some studies in northern New England and in the Midwest have shown that moderate clearcutting that maintains 65 to 80 percent of the forest cover within large expanses of forest may have relatively little impact of forest bird communities. A study compared 18 study sites on the Mark Twain National Forest in Missouri. In this study nine sites had been managed with clearcutting and nine had not had recent timber harvest. The clearcut areas were still 80 percent forested, but the forest was interrupted with openings. The density of forest migrants was similar in the harvested and unmanaged sites. A study in New Hampshire compared unmanaged areas (96 percent mature forest) to managed areas (65 percent mature forest). Results were similar to the Missouri study in showing that this type of clearcutting does not result in severe population declines. Clearcut edges are also transitory and diminish after a decade or two in the forest (Robert Askins. *Midwestern National Forest and Migratory Songbirds. Inner Voice. March/April, 1996*). Therefore, clearcutting that leaves at least 80 percent forest cover does not appear to show the same results as suburban or agricultural areas with small forest patches.

It would be expected that thinning impacts would be less. Although roads may act as conduits to bring nest predators into the forest, the proposed road would leave much of currently unroaded forest area unroaded. Even though roads provide foraging areas for cowbirds, their populations are dependent on activities on agricultural (or similar) lands (Thompson, 2004).

Thompson, Frank, Research Wildlife Biologist, Project Leader Research Work Unit-4154. USDA Forest Service, North Central Experiment Station. Columbia, MO. E-mail 02/19/2004

Parasitism of nests is related directly to the location of openings. The further openings are away from possible nest sites the less likely that nests of other birds would be parasitized. Large blocks of unfragmented habitat would remain after

harvest and thus limit cowbird parasitism. Regeneration harvest units and wildlife openings would be located in large blocks of forest habitat and away from open fields. The effect of cowbird parasitism is expected to be insignificant because of the high percentage of core area in the Project Area. Also, research on the Monongahela National Forest and the Fernow found very few cowbirds or evidence of parasitism in the area.

Also, the need for larger forested tracts was addressed in our Forest Plan in the designation for wilderness areas, Management Prescription 6.2 areas, and other locations where no timber harvest is done. The forest has 5 wilderness areas ranging from 5,997 to 35,864 acres (total 78,131 acres) and sixteen MP 6.2 areas from 3,037 acres to 19,644 acres (total 124,491 acres). In addition, MP 2.0 areas (totaling 22,501 acres) provide for uneven-aged management. Other guidelines, such as riparian protection, Wild and Scenic River Guidelines, Mature Habitat designation, and occupied T&E habitat buffer areas, provide additional sites of continuous forest canopy.

14. The issue of the impacts to herbaceous understory needs to be addressed. Research indicates herbaceous-understories never recover from logging. (Duffy, David and Albert J. Meier, "Do Appalachian Herbaceous Understories Ever Recover from Clearcutting?" *Conservation Biology* Vol. 6 No. 2 June 1992)

Response: The effect of clearcutting on herbaceous composition has been the subject of some controversy (Duffy and Meier 1992, Elliott and Loftis 1993). However, the importance of assessing the entire disturbance history, not just the forest management history, has been emphasized. More recently, Jenkins and Parker (1998) found little difference between managed and unmanaged stands but did find that stands formerly used for subsistence agriculture were notably different with respect to the herbaceous layer. An earlier study did not consider this point (Duffy and Meier 1992). Three watersheds on the Fernow with different management histories have been intensively evaluated and species composition could not be correlated with stand age or management history (Gilliam and Turrill 1993, Gilliam and others 1995). Ford and others (2000) also found little difference among understory herbaceous communities of different ages in the southern Appalachians. Indeed, Ford et al. (2000) directly refutes Duffy and Meier (1992). Jenkins and Parker (1999) speculate that disturbances associated with forest management are usually not severe enough to shift ground layer species composition. There is at least one notable exception to this generality. Running buffalo clover (RBC), a federally endangered plant, may be partially dependent on disturbances associated with partial overstory removals. The proposed research includes recovery objectives for RBC. Moreover, it should be noted that only a small percentage of the proposed activities include clearcutting, shelterwood, or two-aged cutting.

Effects on habitats where sensitive species, including some herbaceous understory plants are discussed in the TES section of this EA, starting on page 128, and in effects

on other vegetation, p. 61. No significant impacts on herbaceous understory plants are expected.

15. The analysis needs to consider the degree to which the alternatives would impede the movement and dispersal of closed-canopy forest wildlife species between stands and larger regions. The analysis should present and quantify the degree of fragmentation within the project area that has already taken place and those that will occur as a result of the various alternatives. These patterns need to be compared to the historical patterns that existed prior to human disturbance.

Analysis needs to be conducted and presented to show the range of potential impacts for the following variables:

- total amount and distribution of late-successional and mature forest habitat.
- total amount and distribution of important wildlife habitats now uncommon due to past human activity (e.g., riparian forests, native grasslands, etc.).
- total amount and percentage of forest habitat compromised by edge effects.
- size distribution of habitat patches by seral stage and forest type.
- forest patch perimeter to edge ratios.
- amount and distribution of roadless area within and adjacent to the planning area.
- degree of connectivity between both individual forest stands and larger habitat blocks.
- degree of structural contrast between habitat patches.
- population viability analysis for species or feeding guilds most prone to fragmentation effects (e.g., area sensitive mammals, forest-dwelling songbirds).

Response: Movement and dispersal of closed canopy wildlife species between local areas is discussed in the Fragmentation section of the EA, pp. 118, (primarily for birds) and in the Wildlife section, pp. 98, for salamanders (pp. 100, 106) and species in the turkey bear association (See MIS section starting on page 108.) The range of potential impacts to the above variables are displayed on p. 122. Although movement within certain local areas will be restricted for some species, it will not lead to significant effects. Comparisons to historical patterns that existed prior to human

disturbance are not provided although some references are made to prehistoric landscapes in the Heritage section.

The work with forest fragmentation analysis on the Monongahela National Forest over the past five years suggests that the correct metrics are being used to assess fragmentation effects. Core area and edge density, for example, have provided useful comparisons of the project alternatives. By relating core area and edge density to field bird data, we are gaining a sense of the thresholds where bird abundance and viability may be affected, and how this varies with species.

The range of natural variability is more appropriately addressed at the programmatic level and is a concept gaining some acceptance for programmatic forest planning. For project planning analyses, existing conditions are measured against desired future conditions as described in the Forest Plan. The intent of NFS land management in the Desert Branch Project Area is to consider site-specific ecological processes when using forest management practices to meet goals and objectives of the Forest Plan (EA, p. 9). The ecological setting of this area, the existing condition, desired future condition, and needs of this area are identified throughout the EA and especially starting on page 43 of the EA.

16. Existing conditions regarding these variables must be considered within the historical ranges of natural variability (i.e., what was likely there before large-scale human alteration of the landscape).

Response: Existing conditions are measured against desired future conditions as described in the Forest Plan. The range of natural variability is a concept gaining some acceptance for programmatic forest planning. It is more appropriately addressed at the programmatic level. For project planning and analysis, the Forest Plan desired future conditions are used. Discussion of the ecological landtypes and potential vegetation may be found starting on page 44 of the EA.

The issue is beyond the scope of the analysis and was not carried forward.

17. The analysis must define and measure biodiversity both in terms of the existing condition and the condition that would result if each of the alternatives is implemented. The analysis must consider the vulnerability, reduction from historical abundance, and the regional importance of all species in the project area. The analysis must use the pre-settlement condition of the project area as a benchmark for comparison with the existing condition and proposed changes to the project area. The analysis must consider the functional, structural, and compositional attributes of biodiversity. The analysis needs to evaluate the existing condition of biodiversity, and compare it with the natural range of variability.

Response: The items requested here can be categorized as components of biological diversity. We looked at the ecological classification system developed for the Monongahela National Forest to determine the possible effects of the various

alternatives. Regarding landscape context, this project extensively looked at the effects of the project on the landscape. Activities were prescribed based on the desired future condition of the area from a landscape perspective.

The depth of analysis is sufficient to allow the Responsible Official to determine what the effects would be under each alternative

18. The Project Area needs to be considered within a landscape context. The analysis needs to consider the importance of maintaining connectivity between both individual and larger habitat blocks. To adequately consider the impacts of the project on biodiversity at the landscape scale, the following analysis must be conducted for all of the alternatives:

- size distribution of habitat patches for all community types and forest seral stages.
- patch size diversity index.
- degree of connectivity maintained between habitat patches at various scales, particularly between those patches that are now uncommon in the landscape (e.g., late successional forests, roadless areas).
- vegetation mosaic patterns.
- cumulative effects at scale of watershed and regional ecosystem.
- comparison of landscape patterns created by development to those created by natural disturbance regimes for all the above variables.
- maintenance of uncommon or unique landscape elements (e.g., rare plant communities, natural ecotones, undistributed vegetation along environmental gradients, etc.).

Existing conditions regarding these variables need to be considered within the context of their historical ranges of natural variability (i.e., what was there before large-scale human alteration of the landscape?).

Response: The Project Area includes the National Forest land and a few acres of private lands within the OA boundary. The area was analyzed within the landscape scale and includes some parameters suggested by the commenter. Although the U.S. Forest Service does not determine activities on private lands, activities on private lands are considered in determining the effects of activities on National Forest lands. See page 44 of the EA. A watershed assessment and Forest wide roads analysis were also used to provide landscape scale context.

USDA Forest Service. November 19, 2002. Roads Analysis Report, Desert Branch OA, OA Scale Roads Analysis, Monongahela National Forest, Draft 2.0. Elkins, WV

19. The analysis needs to consider the cumulative and site specific effects of logging on biodiversity. The analysis must consider impacts on the following levels of diversity: 1) regional landscape, 2) community-ecosystem, 3) population-species, and 4) genetic. The analysis area must be large enough to consider biodiversity on all these levels.

Response: Populations and species of wildlife were considered in the analysis, primarily with regard to the habitat characteristics needed to maintain populations within the project area. Wildlife, and wildlife habitat was described in many contexts throughout the EA, including discussion in the context of each Management Indicator Species (MIS) (EA, pp. 108). Additional information on MIS was included within the EA for each TES species, and for non-TES species for which habitat exists within the area. The EA sections on specialized habitat types for certain sensitive species is descriptive of some of the habitat relevant to non-sensitive species as well. Also, see responses to your next four comments

20. The regional landscape analysis needs to: 1) Identify the distribution, richness, and portions of patch (habitat) types and multipatch landscape types; 2) Consider the collective patterns of species distributions (richness, endemism); 3) Consider heterogeneity, connectivity, spatial lineage, patchiness, porosity, contrast, grain size, fragmentation, juxtaposition, patch size frequency distribution, perimeter area ratios, and the pattern of habitat layer distribution; and 4) Consider the disturbance processes (areal extent, frequency, or return interval, rotation period, predictability, intensity, severity, and seasonality), nutrient cycling rates, energy flow rates, rates of erosion and geomorphic and hydrologic processes, and human land-use trends.

Response: Regional landscape patterns were considered at the Forest Plan level of analysis which is incorporated by reference. (Forest Plan, p. 5).

Project-level analyses looked at fragmentation and biodiversity from the standpoint of how this project would effect the environment. Effects on biodiversity are disclosed in the Environmental Effects Chapter of this EA (p. 43). Fragmentation, an element in biodiversity analysis, was also evaluated (p. 118).

The district's CDS data shows which broad vegetation types and ages occur within the project area; endangered, threatened, sensitive species distribution is generally shown in the West Virginia Natural Heritage Program Information data base. Data for Cheat Mountain salamanders, Virginia northern flying squirrel, Indiana bat and cave records were also reviewed. Site specific plant surveys were conducted in August 2001, looking for threatened, endangered and sensitive plant species. The listing of all plants surveyed in the project area are part of the likelihood of occurrence table found in the BE. Analysis and survey results are documented in the BE. The biological evaluation has been sent to the USDI Fish and Wildlife Service

for their review concurrence before any decision is made. Sensitive species are also listed and evaluated in the BE. Erosion is addressed in the Watershed and Soils Sections of the Environmental Effects Chapter (p. 69 and p. 87). The Forest Plan identified standards and guidelines for wildlife habitat, vegetative manipulation, special areas, and other resources with the intention of protecting, maintaining and restoring the entire array of diverse natural communities their successional stages which are and have been a part of the project area. Techniques used in vegetative manipulation are those which imitate natural processes (individual tree selection/natural mortality; even-aged harvest/windstorm of wildfire;, etc). By insuring that actions proposed in this project follow Forest Plan standards and guidelines, the communities which support genetic, community, and species diversity will be maintained.

Ecological classifications, delineations and interpretations, combined with site surveys of the area, were used to predict changes and effects on vegetation. The purpose of the proposed research is to evaluate changes and effects on vegetation. Detailed vegetation data are collected as part of the research process, and have been collected for the last 50 years.

21. The community-ecosystem analysis needs to: 1) Identify relative abundance, frequency, richness, evenness, and diversity of species and guilds; 2) Identify proportions of endemic, exotic, threatened, and endangered species; 3) Identify dominance-diversity curves, lifeform proportions, similarity coefficients, and C4:C3 plant species ratios. 4) Consider the substrate and soil variables, slope and aspect, vegetation biomass and physiognomy, foliage density and layering, horizontal patchiness, canopy openness and gap portions, abundance, density, density and distribution of key physical features (e.g., cliffs, sinkholes, and outcrops) and structural elements (snags and down logs), water and resources (mast) availability, and snow cover. 5) Consider the biomass and resource productivity, herbivory, parasitism, and predation rates, colonization and local extinction rates, patch dynamics (fine scale disturbance processes), nutrient cycling rates, and human intrusion rates.

Response: Many of these parameters are components of biodiversity. Effects on soil and biodiversity are addressed in the Soils section of the Environmental Effects Chapter (87, and entire Chapter III). There are no sinkholes, or karst topography in the Project Area. Biological diversity was addressed in the EA. These details were considered where appropriate to display potential effects, in sufficient detail to allow an informed decision.

22. The population-species analysis needs to: 1) Identify absolute or relative abundance, frequency, importance or cover value, biomass, and density. 2) Consider dispersion (micro-distribution), range (macro-distribution), population structure (sex and age ratio) habitat variables, and within-individual morphological variability. 3) Consider the demographic process (fertility, recruitment rate, survivorship, morality),

metapopulation dynamics, population genetics, population fluctuations, physiology, growth rate (of individuals), acclimation, and adaptation.

Response: A biological evaluation has been sent to the USDI Fish and Wildlife Service for their review to ensure that this project would have no significant effects on species diversity and will not affect any Federally endangered species. The Forest Plan provides guidance for wildlife habitat, vegetative manipulation, special areas, and other resources with the intention of protecting, maintaining, and restoring the entire array of diverse natural communities and their successional stages which are and have been a part of the project area. Techniques used in vegetative manipulation are those which mimic natural processes. By insuring that actions proposed in this project follow Forest Plan guidance, the communities which support genetic, community, and species diversity will be maintained.

Also, identification of ETS conditions and effects from the proposed action and alternatives can be found in the Wildlife and TES sections (p. 98 and p. 129 of the Environmental Effects Chapter.

23. The genetic analysis needs to: 1) Identify allelic diversity and presence of rare alleles, deleterious recessive, or karyotypic variants. 2) Consider the effective population size, heterozygosity, chromosomal or phenotypic polymorphism, generation overlap, and heritability. 3) Consider inbreeding depression, outbreeding rate, rate of genetic drift, gene flow, mutation rate, and selection intensity.

Response: We have little information on the genetic makeup of species within the project area. Genetic diversity is maintained through enhancing the diversity of natural communities which harbor native species. The proposed projects would improve the distribution and amount of habitats. Interim riparian guidelines provide for the protection, maintenance, and enhancement of riparian species/habitats. Research on genetic background of important tree species is just beginning.

The Forest Plan standards and guidelines require projects to protect unique communities/habitats and to maintain communities on appropriate sites. By meeting Forest Plan standards and guidelines for special habitats, wildlife habitats, and protection of other resources, we assume that all genetic material will be accommodated. By using techniques which mimic or approximate natural disturbance processes, we assume that species will have opportunities to maintain genetic information and also continue evolving genetic differences at a natural rate. We feel that meeting Forest Plan standards and guidelines would provide the variety of communities which would harbor all genetic material. This issue was not carried forward in the analysis.

24. For all state and Federal threatened and endangered (including candidate species), sensitive species, species of concern, and rare species the analysis needs to: 1) Describe the desired future condition (habitat quality, quantity, and configuration needed to support the desired population levels), 2) Disclose any known or suspected

limiting factors, 3) Define suitable habitat and the status of the habitat on the project area for the species, and 4) List management recommendations which would remove or mitigate any adverse effects.

Response: The Biological Evaluation on endangered, threatened, and sensitive species is summarized in the TES section of the Environmental Effects Chapter. Many of the above concerns are addressed in that section. All alternatives are consistent with protective measures described in the Threatened and Endangered Species Amendment Environmental Assessment on the Monongahela National Forest.

25. All old growth opportunities should be evaluated independently of potential timber stands. Opportunities must be based on both landscape and structural characteristics. Any stand that meets either or both characteristics should be designated old growth. Riparian areas deserve priority for inclusion in old growth designations for watershed protection and wildlife benefits

Response: Ideally, mature habitat would be designated or identified during the NFMA, not the NEPA analysis. However, it is not incorrect to evaluate mature habitat during project planning and NEPA. In fact the plan allows for this by allowing harvesting of old growth stands “before complete loss provided replacement stands maintain the desired proportion of the area.” (Forest Plan, page 55)

For this analysis, mature habitat and timber harvest are analyzed in the same document. However, the mature habitat was evaluated independently from the timber harvest. The identification of mature habitat is discussed in the Old Growth section of the Environmental Effects Chapter (p. 127).

26. An alternative to manage this area for forest interior species (by changing its management prescription if needed) must be considered. Projects that reduce the fragmentation of the area should be considered.

Response: Allocation of land to management prescriptions is based on, at the highest level, a Forest Plan level decision and beyond the scope of this analysis. This issue was not carried forward in the analysis. Fragmentation is analyzed in the Fragmentation section of the Environmental Effects Chapter (p. 118). Alternatives 3 and 5 would reduce fragmentation.

27. The analysis needs to address the predation impact of logging. The analysis needs to consider the impact of increased populations of nest predators such as blue jays, raccoons, and black snakes. The analysis needs to also consider the impact of logging roads (both providing feeding areas and a source of calcium for cowbirds) on forest interior species.

Response: The effects of forest fragmentation on forest-interior birds have been previously discussed (See comments 12 and 13) . The fragmentation analysis indicates that significant, effective forest interior habitat would remain following project implementation

Effects of the proposed action and alternatives upon the wildlife resource were discussed in the Environmental Effects chapter of the EA (p. 98-118).

Rudnicky and Hunter, 1993 ("Avian Nest Predation in Clearcuts, Forest and Edges in a Forest-Dominated Landscape") caution about extracting data from studies conducted in suburban or agriculture landscapes where predator abundance is high. They suggest an inverse relationship between the distance from forest edges and predation rates. *Journal Wildlife Management*. 57:358-364.

28. The analysis must cumulatively consider whether interior species can escape extinction if the project area is not protected. The issue of how forest interior species such as the woodthrush can maintain a Minimum Viable Population without protecting this area needs to be addressed. The results of the USFWS suggests that forest management practices that promote the conservation of insectivorous birds are imperative to maintain forest productivity. Such management practices would emphasize strategies that maximize bird species diversity and the viability of their populations."

Marquis, Robert J. and Christopher J. Whelan, "Insectivorous Birds Increase Growth of White Oak Through Consumption of Leaf-Chewing Insects" *Ecology*, 75(7), 1994, pp. 2007-2014.

Response: The phrase "protecting Project Area" may have different meanings for different people. Approximately 25% of the National Forest is managed to allow natural succession to occur without human intervention. These areas, including wilderness and MP 6.2 areas, provide large blocks of forest interior habitat.

Effects on interior species were considered in the Fragmentation section of the Environmental Effects Chapter (p. 118). The wood thrush and other interior birds return to timber harvest stands when trees are pole size, which takes about 20 to 30 years on the Monongahela. Although they have been displaced from the regenerated stands, viable populations exist in other stands not harvested. Given time, the harvested stands again provide habitat needed to maintain viable populations.

Potential effects on species designated as TES was evaluated and disclosed starting on p. 129 of the EA. No loss of viability is expected to occur for any of these species. Effects on MIS were also discussed in the EA, pp. 108.

Evidence from surveys indicated that most species with significant declines in this region are associated with disturbed or early successional habitat (Smith, 1992).

29. The issue of the impacts of roads needs to be addressed. The analysis needs to address the impacts of increased mortality due to road kills. The analysis needs to address the impacts from fragmentation and isolation of species with an aversion to roads.

Response: The road construction associated with the proposed action and alternatives was considered during the environmental analysis. Increased mortality due to road kills is not likely to change as a result of proposed activities since all newly constructed roads would be closed to public motorized use. The effects on wildlife, fragmentation, and water quality are disclosed in those sections in the Environmental Effects Chapter. These effects were determined to have no significant direct, indirect, or cumulative effects on wildlife populations or viability.

30. The issue of the effects the project will have on other stands in times with high wind needs to be addressed. The analysis needs to address if the openings will funnel the wind to other trees that will result in blowdown. By the same token, the analysis needs to address if the trees left standing can survive high winds.

Response: Thinning, while reducing the density of stands does not create large openings that would funnel wind and increase the risk of extensive wind damage. Although the openings that would be created by clearcuts and wildlife openings could increase the risk of wind damage in adjacent stands, observations on the Gauley Ranger District in 1998 did not suggest that thinned stands or those stands adjacent to clearcuts sustained higher amounts of wind damage when compared to other areas of the forest. The year 1998 had several high wind events on the Gauley Ranger District. Scattered blowdown and windthrow has been observed in several areas across the district, but the damage has been randomly scattered with no pattern of being more prevalent near clearcut or thinned areas. Isolated trees within openings, however, do seem to be more susceptible to wind damage. This issue is addressed here and is not carried forth in the analysis.

IMPACTS ON PLANTS & ANIMALS IN THE SALE AREA

31. The Forest Service misrepresents its project by using sanitized language, such as “harvest,” to describe the proposed action. The reality of a timber sale is that the Forest Service kills thousands of creatures and many of these creatures suffer long and agonizing deaths.

Response: Comment noted. Effects on wildlife are addressed in the Wildlife section (p. 98) of the Environmental Effects Chapter.

32. The analysis needs to disclose the true impact of the Forest Service converting our natural heritage into devastated stumpland.

Reponse: Thinned areas will retain a forest cover, although tree density will be lower. (See discussion of stocking (p. 52) in the Vegetation section of the Environmental Effects Chapter.) Clearcut areas will result in a removal of the forest cover, but regeneration of the new stands will occur and provide a forest cover as new stands develop. Other even-age methods of regeneration result in removal much of the forest cover, but these stands regenerate, as do clearcut stands. On the Monongahela National Forest, clearcut stands regenerate naturally. Within 25 to 30 years, the new stand is likely to be over half the height of the original one.

33. The Forest Service always claims that early successional species require the devastation of Forest Service timber sales. The Forest Service, however, neither provides any proof nor evidence of this claimed need or addresses the impacts to the species currently living in the area.

Response: The Forest Plan guides forest management in the Desert Branch area. The Forest Plan (page 166) states that "the intent is to ultimately provide each element of vegetation diversity within the home range of wild turkey." It also states that "the evenaged system of silviculture will be emphasized to create open understory conditions for turkey and the diversity of stands for bears..." (Forest Plan, page 174). Therefore, to meet the intent of the Forest Plan, some early successional vegetation should be provided within the area. Early successional habitat is also discussed in the Wildlife section (p. 98) of the Environmental Effects Chapter. Early successional habitat provides additional habitat diversity for wildlife species, including wild turkey and black bear. Several references are cited in this discussion.

34. The analysis needs to disclose the impacts to the plants and animals currently living in the project area. For example, scientists estimate the Forest Service kills 250 million songbirds a year, many of whose population is declining. Most killed are defenseless nestlings. The Forest Service kills many other species when it cuts the sale. The analysis needs to estimate the number of each different species that will be killed when the sale is cut. The population trend of each species that will be killed needs to be disclosed. For species with a downward population trend, the analysis needs to disclose how killing all these creates will impact the trend. Population trends must be calculated from site-specific inventory and monitoring data, not computer models.

Response: Extensive inventories and detailed lists of all plants and animal in the Project Area, along with a discussion of potential impacts on all of those, are not required to comply with the intent of the National Environment Policy Act (NEPA) and the National Forest Management Act (NFMA). The National Forest Management Act (NFMA) directs that National Forests be managed so as to maintain viable populations of species--managing for individuals within a population would be unattainable. NEPA requires us to use high quality information and accurate analysis to give appropriate consideration to site specific impacts [40 CFR 1500.1(b) and 40 CFR 1507.2(b)]. NFMA requires that we keep inventory data to the detail appropriate for the management decision and that our inventories allows us to

evaluate site specific conditions and deal with specific management concerns. The use of management indicator species is also called for [36 CFR 219.12(d), 36 CFR 219.26, 36 CFR 219.19]. These species are listed in the Forest Plan. The intent of CFR 219.19 in allowing for management indicator species (MIS) is to select MIS and monitor the effects of management practices on native and desired non-native vertebrate species within the planning area. How these species are doing indicates the health of the habitat the species requires. By monitoring these key species, the available habitat for any species with similar habitat requirements is monitored.

The impacts to vegetation and wildlife living in the area are addressed in the Environmental Effects Chapter (pp. 43) of the EA. The purpose of the EA is to address the site specific impacts of implementing this management direction. We are to disclose the pertinent direct, indirect, and cumulative effects in a reasonable manner. This does not mean we need to collect all encompassing data on all species.

35. The analysis also needs to disclose what kind of death these defenseless creatures will suffer. Will they be instantly killed when the trees are cut or when they are ran over by logging equipment? Or will they suffer a slow and agonizing death from starvation, exposure, or dehydration? The analysis also needs to estimate how long the creatures will suffer before they die.

Response: Effects on wildlife are addressed in the Wildlife section (p. 98) of the Environmental Effects Chapter. Mitigations to minimize harm to animals are listed in Chapter II (mitigations starting on page 19 and listed for each alternative in Chapter II).

36. The Forest Service needs to develop alternatives and mitigation measures to minimize the death and suffering the logging causes. For example, the alternative/mitigation measure of not cutting in the nesting season needs to be developed and considered.

Response: See response to previous comment. There is a mitigation of restricting bulldozing for wildlife openings to between July 15 and October 15 (p. 22, 27, 33, and 38).

37. The analysis also needs to disclose the indirect impacts to the species that are not directly killed by the trees being cut down or run over by logging equipment. The analysis needs to disclose how many additional plants and animals will die because of the major and sudden modification to their habitat. The analysis needs to disclose what kind of death these creatures will suffer. Will it be a quick and painless death? Or will the creatures suffer a long and agonizing death from starvation, dehydration, or exposure. The analysis needs to disclose how long these creatures will suffer before they die. The Forest Service needs to develop mitigation measures/alternatives to minimize the deaths and suffering. If the Forest Service claims that some of these

species will just go some place else, the Forest Service needs to provide proof of this. For example, the Forest Service would need to provide site-specific data showing other areas are not already occupied by other members of the species.

The analysis needs to address the humane and anti-cruelty laws. The analysis needs to disclose each law and indicate whether it would apply to a timber sale. (Please discuss both the Forest Service's and loggers compliance with the law.) Even if the Forest Service claims the laws do not apply to their logging, please disclose if all the animals in the sale area are being treated in the manner that would be considered humane under the laws.

In the Response to Comments, please explain why you believe killing and causing pain and suffering to forest creatures is justified so that you can get the cut out.

Response: Comment noted. Many new species will take advantage of the changed condition. Humane and anti-cruelty laws are not designed to apply to timber sales. This is outside the scope of this analysis.

MIGRATORY BIRD TREATY ACT

38. While the USFWS says it is not a criminal violation of the MBTA for the Forest Service to approve a timber sale, the USFWS says it is a crime for the loggers to kill birds. For example, the USFWS has stated: Federal Agencies are required to ensure that their decisions comply with the Migratory Bird Treaty Act (MBTA) (16 U.S. C. 703-712; Ch. 128; July 13, 1918; 40 Stat 755, as amended). The MBTA prohibits the take of migratory birds, nests, eggs and nestlings. The Federal list of migratory birds (50CRF10 April 15, 1985) includes nearly every native bird species found in the State of Idaho, including Northern flicker. The DEIS does not accurately represent MBTA requirements. The FEIS should reflect the analysis below.

The DEIS states: "Trees with unidentified but occupied nest may be felled during logging or thinning activities, destroying the nests. ... The proposed management activities comply with the MBTA." The MBTA prohibits the direct take of migratory birds, nestlings and eggs by persons. Actions undertaken by contractors of the Forest Service that include cutting occupied trees, resulting in the death of migratory birds, nestlings or eggs, are not in compliance with the MBTA. However, federal agencies are not considered "persons" under the MBTA, and federal employees are not liable for taking migratory birds while performing their official duties for federal actions within the authority of the federal agency. For instance, prescribed burn actions implemented by Forest personnel are in compliance with the MBTA, even if such actions result in the take of migratory birds, nestlings or eggs.

In this case, however, contractors felling trees with nestlings or eggs would result in take of migratory birds, and persons that cut such trees are liable under the MBTA. If actions were done in the winter, or other times when nests are not occupied by

nestlings or eggs, the action would be in compliance with the MBTA, because the MBTA addresses only direct take, but does not address habitat loss.

The Service recommends the FEIS include project design, timing and implementation requirements to protect migratory birds and their habitats, and correctly describe liability associated with the take of birds, nestlings and eggs. USFWS comments on the proposed Deadwood timber sale on the Boise NF.

Response: Our impacts to migratory birds are a result of habitat modification through timber harvesting. Habitat modification or destruction is not mentioned in the MBTA or its regulations. Other court precedence, and this was discussed in the commentor's letter, has held that modification of habitat is not considered taking under the Act. Although harmful effects on individual animals including birds may occur with any of the alternatives including no action, these effects were not determined to be significant in the Effects section of the EA.

Monitoring on the Monongahela National Forest has shown no evidence of negative impacts to song birds from timber harvesting activities (Wood, Duguay, and Nichols, 1999). In addition, we consulted with the US Fish and Wildlife Service and prepared a BA to address rare species. The 11th Circuit Court of Appeals has overruled the Georgia's court ruling that the MBTA applies to timber harvesting activities.

The 11th Circuit specifically found that the MBTA does not apply to the federal government as the federal government is not a "person" as defined under the Act. The 11th Circuit also found that "In 1897, Congress established the National Forest System 'to conserve the water flows, and to furnish a continuous supply of timber for the people.' In light of that purpose, it is difficult to imagine that Congress enacted the MBTA barely 20 years later intending to prohibit the Forest Service from taking or killing a single migratory bird or nest 'by any means or in any manner'

BASELINE DATA

39. Before carrying out the project, the Forest Service needs to obtain baseline data for all MIS species, forest interior birds, and reptiles and amphibians. This needs to be done with field surveys. See *Sierra Club v. Glickman*, 974 F.Supp. 905 (E.D.Tex. 1997). Survey methodologies must be disclosed.

Response: The purpose of the EA is to address the site specific impacts of implementing this management direction. The pertinent direct, indirect and cumulative effects were disclosed. Extensive inventories and detailed lists of all plants and animals in the project area, along with a discussion of potential impacts on all of those, are not needed to comply with the intent of the NEPA and NFMA. NEPA requires the use of high quality information and accurate scientific analysis to give appropriate consideration to site specific impacts [40 CFR 1500.1(b) and 40

CFR 1507.2(b)]. NFMA requires that inventory data be kept in the detail appropriate for the management decision and that inventories allow an evaluation of site specific conditions and deal with specific management concerns. As called for [36 CFR 219.12 (d), 36 CFR 219.26, 36 CFR 219.19], management indicator species (particularly black bear and wild turkey) were used in the Desert Branch analysis to evaluate effects to an array of species. The West Virginia Natural Heritage Program identifies unique natural communities as well as locations for listed or sensitive plants and animals. Field surveys have also been conducted for this project area to identify existing overstory and understory vegetation, ecological land type, soil type, slope percent, and other features of the landscape. Also, field surveys were conducted in the project area to identify the existence of ETS species, existing overstory and understory vegetation, ecological land type, soil type, slope percent, and other features of the landscape. The existing condition of, and effects to vegetation and wildlife were summarized in Chapter III (p. 43) of the EA.

Information and effects on MIS are discussed on pages 108-118 of the EA.

40. An adequate monitoring plan also needs to be in place. The Forest Service needs to conduct plant and animal surveys in all seasons.

The analysis needs to disclose all the site-specific data that is being used for this project. For all the data, the analysis should reveal when it was gathered, who gathered it (including their qualifications) and the methodologies used. We have been on many Forest Service tours of proposed timber sales when the Forest Service could not find the site. Thus, we are concerned that the people who gathered the data for the project area may have been in the wrong place and not known it. The analysis needs to disclose the technology used to determine the location when the site-specific data was gathered and provide proof that the data is for the correct area.

Response: The Forest Plan has monitoring requirements for various resources. Monitoring is described for forest projects and resources in the Forest Plan, pages 247-260. Implementing proposed activities is not expected to result in significant adverse effects and additional site-specific monitoring is not required in this area. However, inspections of all phases of project implementation will take place. Also see planned monitoring activities for snags (p. 20) and the monitoring plan in Appendix B of the EA.

Current condition of vegetation and wildlife is describe in the Vegetation and Wildlife sections of the Environmental Effects Chapter (p. 43). Botany surveys are done in the summer when sensitive plants would be more noticeable. Animal surveys are done in the season most appropriate for assessing presence of the targeted species.

Professional knowledge and experience gained from implementing such activities either within this project area or in areas with similar landscape characteristics were used to assess effects. The field surveys and reports used in this assessment are part

of the project file, or District records, and disclose when information was gathered and who gathered it. Topographic maps, compasses, and aerial photographs were used to determine locations. Personnel have been trained to use these tools and have several years of experience using them. The qualifications and training records of the persons gathering the information are located in each individual's personnel records at the Forest Supervisor's Office.

41. The population trends of threatened, endangered, sensitive species, and MIS needs to be disclosed for the Ranger District, Forest and Region. The trends of threats to these species in each Ranger District, Forest and Region needs to be disclosed.

The analysis needs to disclose and consider all the monitoring data that has been conducted in the project area. If there has been no monitoring done in the project area, the Forest Service should not be proposing any projects until it obtains monitoring data for the area. If there is no monitoring data for the area, the analysis needs to explain why the NFMA and NEPA's monitoring requirements are not being followed. Computer model projections cannot replace field monitoring and surveys.

Response: The population trends of TES species for the Ranger District, Forest and Region are beyond the scope of this analysis, and were considered in development of the March 2004 Forest Plan Amendment. The effects that this proposed action and alternatives may have on threatened, endangered, and sensitive species and MIS in the Project Area were disclosed in the Environmental Effects Chapter of the EA. The BE also addressed the effects of the proposal on threatened, endangered, and sensitive species. The USDI, Fish and Wildlife Service, will be informally consulted.

PHYSICAL ENVIRONMENT

42. The issue of carbon holding capacity needs to be addressed. An older forest holds more carbon than a young forest. (Mark E., William K. Ferrell, Jerry F. Franklin, "Effects on Carbon Storage of Conversion of Old-Growth Forests to Young Forests." Science, Vol. 247, 9 February 1990, pp. 699-70.)

Response: Regulations by the Council of Environmental Quality state, "NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail." For project-level analysis, issues must be site-specific to the project. The context of the project analysis should focus on the locale rather than in the world as a whole (CEQ regs 1508.27 (a)). It is the responsibility of an individual to also provide sufficient information and argument so that the merit of an issue can be determined. A Deciding Officer is not required to research and construct scientific information to fill in the background or details of a commenter's concern.

On the global scale, carbon retention or release has been viewed as a factor affecting global warming. The assumption is that retention of carbon reduces or slows the rate of global warming. Deforestation can lead to an increase in carbon in the atmosphere. Logging is not generally considered deforestation. It causes a release of carbon to the atmosphere from mortality and decay of trees, from logging debris, and from the oxidation of the wood products. It also cause a net withdrawal of carbon from the atmosphere if logged forest are allowed to regrow. In the long term, the net flux of carbon from logging is probably close to zero ("Changes in the Storage of Terrestrial Carbon Since 1850," R.A. Houghton, *Soils and Global Change*, 1995, page 53 and 54). Currently, the Monongahela is growing more trees than are being harvested, therefore there is likely a net decrease of carbon from the atmosphere on the Forest. Effects on carbon sequestration are expected to be negligible (EA p. 68 and 156).

The concern will not be addressed further.

43. The issue of the impact of increased nitrates needs to be addressed. As forests are forced to absorb ever higher levels of nitrates from the atmosphere, their systems become saturated. When forest disturbances occur (fires, logging, etc.) these nitrate levels are released into streams and into the air as gaseous nitrates. High levels of nitrates in the soil can lead to cation loss, acidification, with obvious long-term forest health implications.

Response: A study on the Hubbard Brook watershed in the White Mountains of New Hampshire (Prichette, William L. and Richard F. Fisher. *Properties and Management of Forest Soils*, New York: John Wiley and Sons. 1987) showed an increase in nitrates and cations in stream water after the cutting of all vegetation and leaving material in place. The results of this study would apply mainly to clearcuts in northern hardwoods, where the cooler temperatures allow the buildup of thick litter layers.

However, the study included treatment of the area after cutting with a broad spectrum herbicide to suppress revegetation. Therefore, there were no plants to absorb available nitrates. In proposed timber harvests in the Desert Branch Project Area much of the material would be removed, and revegetation would occur after cutting. It is expected that the impact would be less in thinned areas since many of the trees would be left. Even in regeneration areas, revegetation would not be suppressed as it was in the study. Thus an unknown portion of available nitrates would be used.

Other studies in Coweeta, NC and Parsons, West Virginia showed no significant changes in nutrient concentrations following clearcutting when the area was allowed to naturally revegetate itself (Prichette and Fisher, 1987). Douglass and Swank (1972) did not show accelerated loss of ions to streams after clearcutting at Coweeta. However, a study published in 1997 did show elevated nitrogen mineralization and nitrification after clearcutting. The study also indicated that the nitrogen levels rapidly returned to baseline levels as the forest vegetation recovered. [Swank, Wayne T. and James M. Vose. *Long-term nitrogen dynamics of Coweeta forested*

watersheds in the southeastern United States of America. 1997. USDA Forest Service, Southern Research Station, Otto, NC.] Youngberg and Woollum (1970) found that increased sunlight to the forest floor increases growth of leguminous plants which are capable of fixing large amounts of nitrogen to a form which plants can easily take in. Kochenderfer (1992) reported measurements made soon after road construction and before revegetation began, and five years later in 1992 skid roads shrunk from 6.2 percent of the logged area in 1987 to 5.1 percent. As vegetative cover increases the soil temperature decreases. Pfister (1969) concluded in his study that the potential loss of timber producing land is minor and can be reduced to zero if road width is kept to the minimum actually needed. Since these areas are more similar to the project area than the Hubbard Brook area is, results from these studies should more closely indicate effects likely to occur in the Project Area.

Also, water quality is addressed in the Watershed section (p. 69) of the Environmental Effects Chapter. Effects on nitrates are addressed on page 97 of the EA.

44. The issue of the impacts to soil and water quality needs to be addressed. The effects of soil compaction and vegetation/nutrient removal must be considered.

Response: Compaction and nutrient removal are addressed in the Soils section (p. 87) of the Environmental Effects Chapter.

45. The analysis needs to address the impacts of decreased water quality due to increasing rates of soil erosion and mass wasting events. The effects of sedimentation, nutrient removal, and increased temperatures resulting from logging must be considered. The analysis needs to address the cumulative impacts on aquatic communities, including fisheries.

Response: Effects on water quality, streams, and fisheries are addressed in the Watershed section (p. 69) Fisheries section (p. 107) and MIS (p. 108) of the Environmental Effects Chapter. Some short-term soil temperature changes will occur, especially on new roads and clearcuts, but they are not expected to cause a decrease in long-term soil productivity of the soils in the Project Area.

46. Some of the factors which need to be considered in the analysis of the cumulative effects include: 1) coarse particulates organic matter, 2) fine particulate matter, 3) algal abundance, 4) temperature extremes, 5) turbidity, 6) diurnal cycle of dissolved oxygen, 7) nutrient input into the stream, 8) amount of suspended solids, 9) stability of substrate and banks, 10) uniformity of water depth, 11) habitat heterogeneity, 12) flow extremes, 13) diversity of microhabitat velocities, 14) primary and secondary production, 15) abundance of shredders versus scrapers, 16) abundance of omnivores versus piscivores.

Response: The effects on soil and water quality are addressed in Soils and Watershed sections (p. 87 and p. 69) of the Environmental Effects Chapter. Potential impacts to

rare species are addressed in the TES section of the Environmental Effects Chapter. The intent of environmental analyses is to address the site specific concerns with a particular proposed action. It is not intended for us to address Forest-wide or region-wide issues or every conceivable effect. Instead, we are to discuss the pertinent, direct, indirect, and cumulative effects of this proposal. The EA provides sufficient information for such a disclosure.

47. The analysis needs to identify all site-specific Best Management Practices for controlling non-point source pollution. The analysis needs to identify and consider any water quality monitoring done to demonstrate the adequacy of the Best Management Practices.

Response: Riparian mitigation measures applied in this project area, as well as Forest Plan standards and guidelines exceed the West Virginia Best Management Practices. Erosion prevention is incorporated into all earth disturbing activities and covered in the Forest Plan standards and guidelines, timber sale contracts, and special use permits. Monitoring conducted during timber sale administration verifies that implementing these measures correctly is adequate to control non-point source pollution.

48. The issue of all cumulative threats to water quality, including logging, illegal dumping, oil and gas leasing, wildlife openings upstream of the project area must be addressed. The analysis needs to identify all these threats. The analysis needs to identify and protect all riparian areas, wetlands, and floodplains.

Response: Effects on water quality and riparian areas are addressed in the Watershed section (p. 69) of the Environmental Effects Chapter. Past and current land uses, including wildlife and other openings in the vicinity, logging on national forest and private land, illegal dumping and trash, and minerals ownership were considered in the analysis and discussed in the September, 2002 Cherry River Watershed Assessment, which is part of the project file for this analysis. They are discussed in the affected environment sections for each resource affected. Reasonably foreseeable future actions are discussed in relation to cumulative effects, where a cumulative effect is expected.

49. The issue of the nutritional value of the plants growing in the resulting openings needs to be addressed. Research in the Pacific Northwest and Alaska indicates that the nutritional value of plants in open areas, such as a clear-cuts, is significantly less than in a forest. Preliminary results from research being conducted on the Daniel Boone National Forest in Kentucky show the same thing for all forms of logging.

Response: Neither research is specifically identified and cannot be addressed. However, it is doubtful that research conducted in the Pacific Northwest or Alaska would be applicable to the Allegheny Plateau. The ecosystems in these areas are completely different from that of the Alleghenies and were formed by different processes. Plant species are different and their reaction to harvest is also likely to be

different. To our knowledge, there is no documentation that nutritional value of plants growing in early successional openings of the Alleghenies is less than that of plants growing in the forest. The Kentucky results were cited as being preliminary according to the commenter.

However, the small area in openings would mitigate any loss in nutritional value in plants growing in them. Also since openings often support a large amount of herbs and forbs, the potential loss in nutritional value of plants in those openings would be mitigated by the quantity of plants available. In addition, openings provide conditions for certain soft mast producers, such as blackberries, which are used by many species. Effects on plants are analyzed in the Vegetation sections (p. 43) of the Environmental Effects Chapter and the sensitive species section (p. 132).

CAVES, SPRINGS, & GROUNDWATER

50. Timber sales increase water flow and sediment. Caves and springs many miles away can be adversely affected by logging 20 or more miles away and in different watersheds. For example, a timber sale could result in increased water entering a cave and in a major storm event, the increased water could result in a flood large enough to kill (i.e., drown) or harm creatures in the cave. Or it could kill someone exploring the cave. It could also adversely affect or kill creatures living in a cave or a spring by changing the temperature or increasing sediment. Thus, the analysis of effects must also consider groundwater and subsurface water flow.

Response: Timber sale activities in the Desert Branch opportunity area (OA 26.106) will not affect caves or cave ecosystems because hydrologic connections between the Desert Branch project area and caves and cave ecosystems are virtually impossible.

In the Monongahela National Forest area, karst (landscape formed primarily by the dissolution of limestone, and characterized by sinks, caves, and subsurface drainage) occurs where major limestone rock formations intersect, thus are exposed on the land surface. These areas are where the Greenbrier Group (Mississippian age), Helderberg Group (Devonian age) and several Silurian and Ordovician age limestone strata make up the surficial bedrock.

Precipitation is the main source of groundwater recharge within the Forest. A large percentage of the precipitation that recharges groundwater systems in this region discharges into nearby streams, with very little groundwater moving into deeper aquifers. Groundwater flow in karst generally occurs in enlarged solution fractures and solution conduits which makes karst aquifers susceptible to contamination from pollutants, including sediment.

Limestone rock units and karst do not occur within or have hydrologic connections to the Desert Branch project area. The surficial bedrock geology within the Desert Branch project area includes sandstone, siltstone, shale, coal and conglomerate of the

Pennsylvanian-age New River Formation of the Pottsville Group over most of the area. Mauch Chunk strata (Mississippian-age) occur along the North Fork of the Cherry at and just above river level in the area about 2 miles northeast of Richwood, West Virginia. The Greenbrier Group, which is closest rock group to contain limestones and developed karst, is buried approximately 1300-1800 feet beneath the Desert Branch project area. With very little groundwater movement into deep aquifers, a groundwater connection between the surficial bedrock in the Desert Branch project area and any Greenbrier Group rocks is highly unlikely, and any connection to Greenbrier Group karst areas is virtually impossible.

Devonian, Silurian and Ordovician limestones occur at depths of about 7000-8000 feet and deeper beneath the project area. This is well below depths at which freshwater would be expected to occur. This issue will not be analysed further.

ROADS

51. The analysis needs to determine if there are any roads in the project area that are not included in the Forest Transportation Plan inventory. If any roads are not in the inventory, they need to be permanently closed to the motorized travel by using permanent physical obstructions and by ripping, recontouring, and revegetating the road bed and prism. The Forest Service needs to determine if the number of open roads in the project area exceeds Forest Plan standards. If the standards are exceeded, the roads need to be permanently closed. If any road in the project area is already subject to a closure order, a site inspection needs to be conducted to determine if motorized use of the road is occurring. If such use is occurring, the Forest Service needs to block the traffic with physical barriers and ripping, recontouring, and revegetating the road. Law enforcement must be employed to ensure appropriate compliance.

Response: Roads within the area are addressed in the Transportation section (p. 150) of the Environmental Effects Chapter of the EA. A roads analysis has been completed for the proposed projects and is in the project file. The Forest wide Roads Analysis Plan was also considered, as was roads information contained in the Cherry River Watershed Assessment of Sept. 2002. Driveable non-system roads are not present in the project area. Old roads and skid roads exist, but appear to be closed and re-vegetated with herbs, grasses, seedlings and saplings.

52. The analysis needs to disclose the conditions and weight limits of all the roads and bridges that will be used to haul trees to the main roads. The analysis needs to disclose if any of these roads or bridges will need to be upgraded or repaired in order to carry out this project. The analysis also needs to disclose the amount of damage the logging trucks will do to existing roads and bridges, and the cumulative direct and indirect effects the transportation of logs will have on local residents and landowners.

Response: An engineering survey has been done on roads and bridges to be used for hauling. A roads analysis has been completed for the Forest and the projects. See

response to Swearingen comments # 2, 3, 6, and 7, (June 17, 2002) and the Transportation section of the EA.

INVERTEBRATES & MICRO ORGANISMS

53. The issue of impacts to the microorganisms such as fungi and bacteria in the soil needs to be addressed. Logging will kill off many of these. An inventory of these organisms needs to be done so the impacts could be determined. The impacts of compaction, vegetation removal and erosion must be considered.

Response: Effects of harvest on soil are addressed in the Soils section (p. 87) of the Environmental Effects Chapter. In any ecosystem, environmental change causes changes in the activity levels or organisms and relative species abundance. This is true of soil ecosystems as it is in other ecosystem segments. To the extent that harvest activities mimic natural occurrences, the changes in soil microorganisms mirror naturally occurring changes in soil microorganisms. Even the most dramatic logging-related soil effects on roads and landings do not represent an irretrievable commitment of resources.

Pritchett (1987) states, "Thinning or removal of the forest stand by harvesting normally results in higher soil temperatures and moisture and increased decomposition and mineralization of the organic layers. Presumably the increase in decomposition rate results from increased microbial activity in general, with bacterial activity assuming a more important role in the latter stages of decomposition." Even though soil temperatures may increase after harvesting, ordinary soil temperatures seldom kill bacteria.

DEAD & DECAYING WOOD

54. Forest Service research indicates dead and decaying wood accounts for about 25% of a forest's biodiversity. (Maser, Chris, James M. Trappe "The Seen and Unseen World of the Fallen Tree." General Technical Report PNW-164.) The impacts of removing trees on this component of the forest ecosystem needs to be considered. The Forest Service generally contends that trees are somehow wasted when they die. If the trees die, they need to be allowed to fulfill their function and be recycled back into the ecosystem. The no-action alternative needs to consider these values. According to the Forest Service:

"Wildlife and fish need dead, hollow or fallen trees for food and family homes. Nationwide over 149 species of birds, 73 species of mammals, 93 species of amphibians and reptiles and nearly all fish use (dead trees) for food, nesting, or shelter. Only 31 bird species can make their own nest cavities in trees. Another 54 species of birds and other animals also use these holes. Loose bark on dead trees provides roosting colony sites for bats. Up to 167 pygmy nut-hatches have been known to roost simultaneously in a tree hole. Many species of turtles bask on fallen

trees in or near water. Rhythmic drumming on dead trees is a ritual woodpeckers use to attract a mate. Ants living in dead wood eat thousands of forest insect pests which can harm living trees. Bass and trout hide under trees that have fallen into the water. The forest neighborhood continually changes and yet the way animals, plants, and people depend on each other remains the same, Even as a tree dies, it continues to give life to animal families and eventually to new trees and other plants, and the cycle begins again." US GPO 1990-0-792-461

Reponse: The Forest Service recognizes the importance of this down woody debris as part of forest diversity. At the Forest level, the retention of dead and down logs and other ground material was provided for through various *Forest Plan* guidelines: (1) retention of five percent of the National Forest lands as mature habitat; and (2) maintenance of three to five snags and cull trees per acre (Forest Plan, p. 136). At the project level, several tons per acre (averaging five to thirty tons/acre depending on the type of cut) of tops, branches, and slash material will be left on the forest floor after logging is completed. Monitoring will be done for snags in harvest areas, and snags will be created if necessary, is a mitigation on page 20 of the EA. Also, riparian mitigation measures identified in Chapter II (pp. 21 and 26-27) will help ensure down woody debris is maintained in the area.

A mitigation to leave cull trees and snags in harvesting units unless they pose a safety hazard has been included in all action alternatives (see EA, p. 20). A mitigation to leave all topwood and slash scattered throughout the clearcuts has been included in all alternatives with clearcuts (see EA, pp. 22, 27, 33, 38).

55. The analysis needs to disclose how many standing and fallen dead trees would there be in a healthy natural forest of this size and the current status of this habitat component. The analysis needs to disclose the effects of the proposal on this important habitat.

Response: Dead trees, or snags were included in plot data for the project area, and was considered, along with observations from specialists field visits to the area. The quantity of fallen dead trees was observed during specialist's field visits to the area, and was considered and described in the EA to the extent considered necessary. Logging operations generate some slash, which will provide some woody debris. Also see response to your comment #54. This issue is discussed in the Effects section as a component of forest health (EA, p. 53). Mitigations regarding snags, or standing dead trees are also included in Chapter II.

FISH & WILDLIFE

56. Reptile and amphibian populations have been dropping dramatically throughout the world. The effects to these species needs to be evaluated. Baseline data needs to be gathered for the entire project area. A monitoring plan needs to be developed. Research indicates logging devastates salamander populations. (Petranka, James W.,

Matthew E. Eldridge, and Katherine E. Haley, "Effects of Timber Harvesting on Southern Appalachian Salamanders." *Conservation Biology*; Laura A. Herbeck, Larsen, David R. "Plethodontid salamander response to silvicultural practices in Missouri Ozark forests" *Conservation Biology* June 1999; Man Tech Environmental Research Services Corp., Corvallis, OR, "An Ecosystem Approach to Salmonid Conservation" www.pond.net/~kris/Mantec.htm; Recovery of Wild Salmonids in Western Oregon Forests: Oregon Forest Practices Act Rules and the Measures in the Oregon Plan for Salmon and Watersheds Technical Report 19991 Independent Multidisciplinary Science Team (Can be downloaded at www.forestscience.org/.) This research needs to be considered.

Response: There is no requirement to analyze every known species of plant or animal in the planning area. (See response to your comment #57.) Riparian areas can be amphibian habitat, and riparian mitigations are included in Chapter II. Protection of rock outcrop areas, creation and protection of waterholes, protection of seeps, and mitigation to leave all topwood and slash scattered in clearcuts (p. 22, 27, 33, and 38) will also minimize effects on those amphibian populations. (See discussion on rock outcrops in the Sensitive species section (p. 136) in the Environmental Effects Chapter).

The effects the proposed action and alternatives may have upon wildlife populations, including amphibians, are addressed in the Wildlife section (p. 98) and in the TES section (p. 129) of the Environmental Effects Chapter of the EA. See response to your comment #54.

57. The analysis needs to address the status of native fisheries & mussels and stream habitat quality compared with historic conditions in the project per adopting opinion 116 F.3d 1482 (C.A. 7 (Ill) 1997).

Response: There is no requirement to analyze every known species of plant or animal in the planning area (p. 69).

Also, existing conditions of the fisheries and water resources and effects on the resources are addressed in the Watershed section (pp. 69, 107) of the Environmental Effects Chapter. DNR and other data sources did not indicate that any mussel species were of concern in the North Fork of the Cherry River.

58. The Court ruled that the Forest Service was required to analyze the impacts of the ATV/ORVs violating the law by going off the trails. Similarly, the Forest Service needs to analyze the effects of timber theft.

Response: Illegal ATV use in the area was considered (EA, p. 151). There are no legal ATV trails in the area. Sale administration reduces the risk and opportunity for theft. Performance standards for timber sale administrators include adequate inspection of timber sale areas, which includes checking for unauthorized cutting and ensuring contract compliance. On the Monongahela National Forest, sale

administrators and harvest inspectors visit the logging sites frequently during operations to check for unauthorized cutting along with the other duties of the job. Although timber theft is not expected to be a problem, numerous timber sale clauses exist to pursue violators, and if necessary, mitigate effects to resources. The Monongahela National Forest has an established protocol where Timber Sale Administrators refer all instances of unauthorized cutting to Law Enforcement Officers. The timber sale contract also allows for the removal of trees that were not included in the sale. Examples include removal of trees for landings, temporary roads, skid trails, and damaged trees. These trees are approved for removal before cutting and the purchaser is billed at the bid rate.

59. "The Forest Service lost a lawsuit on a similar issue: ATV use on the Shawnee National Forest. In the Forest Plan EIS, the Forest Service claimed that there would not likely be any significant impacts from ATV/ORV use on the Shawnee National Forest. The basis for this claim was that there would be designated trails for ORV/ATV use. The Forest Service, however, failed to address the problems with keeping the ATV/ORVs on the trails. There was evidence of law enforcement problems on the Shawnee and other nearby areas. The record indicated that it was unlikely that the ATV/ORV riders would obey the law and stay on the trails. In *Sierra Club v. U.S.D.A.*, 1997 WL 295308 (So. Dist. Ill. September 25, 1995) aff'd by order adopting opinion 116 F. 3d 1482 (C.A. 7 (Ill),. 1997), the Court vacated the Forest Plan, EIS, and ROD. Subsequently, the Court issued a permanent injunction enjoining all ATV/ORV use on the Shawnee National Forest. In *Sierra Club v. U.S.D.A.*, 1997 WL 295308 (So. Dist. Ill. March 20, 1996) aff'd by order adopting opinion 116 F. 3d 1482 (C.A. 7 (Ill),. 1997). The Court ruled that the Forest Service was required to analyze the impacts of the ATV/ORVs violating the law by going off the trails. Similarly, the Forest Service needs to analyze the effects of timber theft."

Response: See response to previous comment.

NEED FOR THE SALE

60. The issue of the need to cut timber from the sale area to meet society's needs for timber must be addressed. The alternative of private lands providing the timber needs to be considered. The issue of the impacts of local landowners having to compete with below-cost government timber needs to be considered. In a hearing for *Kentucky Heartwood v. United States Forest Service*, Civil # 97-378 (E. D. KY, April 15, 1998), the timber industry put on witnesses who testified that the price of timber on private land had increased due to the reduction in logging on the Daniel Boone National Forest. The indirect effect of the unfair government competition triggering poor private forest management needs to be analyzed.

The state's private forests can easily provide all of our timber needs. On a state and regional basis, the National Forest contributes an insignificant portion of the timber production.

Response: The purpose and need section (p. 6) of the EA describes the need for this proposed action. Society's need for timber is only one of several reasons commercial timber sales are proposed for this area. The Organic Act of 1897 established the National Forests to (in part) "furnish a continuous supply of timber for the use and necessities of citizens of the United States". This purpose was again supported in the Multiple Use - Sustained Yield Act of 1960 and in the National Forest Management Act of 1976. No scientific evidence is provided to substantiate that there is an indirect effect of poor private logging practices because of unfair government competition. Timber sales on the Monongahela National Forest are typically above cost and offered at fair market values. Although the Forest Service portion of timber production is small on a national or statewide basis, it is often significant on a local or regional basis. This issue is outside the scope of the the analysis, having been decided in the forest planning process.

61. The best use of the area needs to be considered. The primary use of hardwoods from the Forest is pallets. The pallets are used only once and usually end up in a landfill. Pallets can be made from recycled plastic. There is a company in Missouri that makes pallets that can be reused 15-20 times. The analysis needs to compare the relative value of this area as a tree farm to make pallets that clog our landfills to wildlife habitat and recreation land. Such an analysis is needed to address the issue of what is the best use of this area.

Response: Different individuals will have different interpretations of what the "best use" of any area is. The Forest Plan allocated land to various management prescriptions in order to provide a mix of resources and opportunities across the forest. This Project Area is within Management Prescription 6.1, which includes production of forest products as part of the purpose of the prescription (page 164). The primary use of hardwoods from this part of the forest is for veneer, high quality lumber, or pulpwood. Obviously some Monongahela National Forest timber is utilized for pallets - good business sense and proper utilization of the resource require it. No matter how high the quality of timber is, there will always be some wood which does not meet either the size or quality standards for uses other than pallets. The approximate stumpage value of pallet-suitable timber is in the range of \$20 per hundred cubic feet. In FY 2001, the average value of all sawtimber - including low value species, small stem sizes, and defective pieces - bid and contracted on the Monongahela was approximately \$178 per thousand board feet. The consideration of what products are produced from harvested timber is beyond the scope of the site specific project, as is the indirect effect of filling up landfills with pallets.

Depending upon the product being shipped, pallets may be one-use or multi-use packaging. Like other things, economics and efficiency probably determine the extent of re-use. Pallet deposits (similar to soda bottle deposits) are often applied to promote re-use.

This issue was not carried forward in the analysis.

62. The Forest Service needs to consider and implement its “National Strategy for Waste Prevention and Recycling”. The analysis needs to consider how this timber sale will promote waste of wood and fiber. The Forest Service cannot bury its head in the sand and say this is beyond the scope of the analysis. The Forest Service has a legal responsibility to provide leadership to Waste reduction efforts. Ignoring the impacts of providing cheap, particularly below-cost, trees on reduction efforts is not providing leadership.

The indirect effects of filling up landfills with pallets, wood products, and paper (which are acknowledged in the National Strategy for Waste Prevention and Recycling) must be considered. An alternative of using reusable pallets or pallets made from recycled plastic needs to be considered. This alternative would respond to the issue of whether there is a need to cut this area and what the best use of the area is. An alternative of increasing the use of recycled paper also must be considered for the same reasons. The NFMA states: "recycled timber product materials are as much a part of our renewable forest resources as are the trees from which they originally came, and in order to extend our timber and timber fiber resources and reduce pressures for timber production from Federal lands, the Forest Service should expand its research in the use of recycled and waste timber product materials, develop techniques for the substitution of these secondary materials for primary materials, and promote and encourage the use of recycled timber product materials." (16 USC § 1600)

The Forest Service should follow its mandate to provide a leadership role in waste reduction by printing all documents on both sides and using either alternative fiber or 100% post-consumer recycled paper.

Response: This issue is not within the scope of project-level analysis. The recycling of paper and other resources is a national issue and involves both government and private actions. The agency advocates and practices recycling of paper, glass, plastic, and the use of recycled products. The Desert Branch EA and other documents that the Gauley District distributes are routinely printed on both sides.

63. The issue of exports needs to be considered. Trees cut down east of the Mississippi can be exported to foreign countries. An alternative of banning exports needs to be considered.

Response: There is no direction from NFMA to consider the banning of timber exports, especially in project-level decisions on the Monongahela National Forest. This is a national issue that can only be addressed by Congress.

RECREATION

64. According to the Explanatory Notes for the 1997 Forest Service Budget: 1) In FY 1994 the Forest Service hosted over 835 million visits on National Forests,

compared to 300 million by the National Park Service and 40 Million by Disney; 2) Recreational use of the forests is at an all time high, and RPA projections indicate that use will increase over 50 percent by 2040; 3) Over 2 million jobs are associated with the economic activity generated by recreation which is estimated to almost \$100 billion annually; and 4) Recreation fees to the Treasury were \$46 million last year. The timber program, by comparison, created 76 thousand jobs worth \$2.7 billion (National Summary Timber Sale Program Annual Report Fiscal Year 1994.) and cost the treasury \$278 million in 1994. (Forest Service Distribution of Timber Sale Receipts Fiscal Years 1992-94, General Accounting Office Report #GAO/RCED-95-237FS, September 1995.).

A survey in the September 1996 issue of Conde Nast Traveler magazine readers says that the environment has become a major issue for many travelers. More than half of the respondents (218 readers responded) said that the environment has become a factor in their travel plans over the last ten years. Ninety-one percent expressed concerns over environmental conditions at their destinations, and 25% said they had been forced to change travel plans because of environmental problems. Almost 42% said they would have changed plans had they known in advance about problems they encountered. The analysis needs to consider this survey.

The issue of impacts on recreation needs to be considered. The Forest Service should consider how the project, including the cumulative impact of other logging operations, will impact the increased recreational use of the forest in the future. The project will impact recreation well into the future. The cut area will not be attractive for recreation such as hiking, camping, bird watching, fishing, and solitude. The analysis needs to consider and disclose these adverse effects. The analysis needs to compare the ability of private lands to provide recreation and timber versus the National Forest's ability to provide such services. The Forest service needs to disclose the jobs and income from recreation whenever it mentions the jobs and income created by logging.

The Forest Service should consider how the project, including the cumulative impact of other logging operations, will to pay the Deciding Officer's and other Forest Service employee's salaries and other administrative overhead. The no-action alternative needs to disclose its impact on Forest Service employment levels.

Response: In all alternatives, there will be opportunities for dispersed recreation and no developed recreation sites would be affected. Effects on recreation are addressed in the Recreation and Visual Quality section (pp. 141-146) of the Environmental Effects Chapter. Temporary closure of the area, including the Fork Mountain Trail section within the OA, would be necessary during helicopter logging. In addition, use of the Desert Branch Road by hikers would not be permitted during periods of helicopter logging, and would be discouraged by log truck traffic during times of hauling. Other than these factors, no adverse effects to recreational use or visual quality are expected. Also see pages 156-157 in the economics discussion.

Also, the Forest Plan includes planning for projected increased recreation use (pp. 63-73). Timber sales are designed to minimize conflict with recreation resource values.

The proposed activities would be beneficial to hunting, one of the most important recreational opportunities (in terms of dollars spent) in the state of West Virginia, through manipulation of vegetation to provide food and habitat for game species.

ECONOMIC IMPACTS

65. The Forest Service needs to address all the economic trade-offs and all the environmental externalities from the timber sale. The Forest Service needs to conduct an analysis that addresses the points of the Forest Service publication: "Assessing Economic Tradeoffs in Forest Management" PNW-GTR-403, August 1997. The Sky Did NOT Fall-The Pacific Northwest's Response to Logging Reductions by Ernie Niemi, Ed Whitelaw, and Andrew Johnston which can be downloaded at www.pacrivers.org/Publications/skyfalling.html needs to be considered.

Response: Pages 156-160 of the EA display the economic analysis for the Desert Branch area. As directed by the National Environmental Policy Act, this section focuses on the incremental economic differences between the alternatives. The EA displayed the projected costs and revenues of a timber sale in sufficient detail for the Deciding Officer to make an informed decision.

EVEN-AGED MANAGEMENT

66. The Forest Service needs to fully develop and consider uneven-aged management alternatives. The 6th Circuit has ruled:

The National Forest Management Act mandates that the Service ensure that even-aged management practices be used in the national forests only when "consistent with the protection of soil, watershed, fish wildlife, recreation, and aesthetic resources, and the regeneration of timber resources." 16 U.S.C. § 1604(g)(F)(v). The National Forest Management Act thus contemplates that even-aged management techniques will be used only in exceptional circumstances. Yet, the defendants would utilize even-aged management logging as if it were the statutory rule, rather than the exception. *Sierra Club v. Thomas*, 105 F.3d 248 (6th Cir. January 21, 1997).

Response: Even-aged management is consistent with the Forest Plan direction to provide a variety of habitat elements for wildlife and to provide for the regeneration of species intolerant to intermediately tolerant of shade. Alternative 3 includes a large area of uneven-aged management (p. 27-28 of the EA). See discussion of even-aged management in the Vegetation and Wildlife sections of the Environmental Effects Chapter. Effects of the proposed actions on soils, water quality, fisheries,

recreation, and visual quality are addressed in those sections of the Environmental Effects Chapter. Also see response to your next comment.

67. The Forest Service needs to consider true uneven-aged management (selection management). The Forest Service must not attempt to use “patch clear-cutting” in place of “group selection.” Group selection does not use area regulation, it uses diameter distribution regulation. The Forest Service also needs to consider the research done in Illinois on Group Selection. [Robinson, Scott “Effects of Selective Logging on Forest Birds In the Trail of Tears State Forest, Southern Illinois.”] The research Identified group selection openings as “ecological traps.” Many species were attracted to the openings, which appeared to be suitable habitat. These species, however, did not successfully reproduce due to predation and cowbird parasitism. The study concluded, “If land is to be logged, single tree selection at low volumes removed (<20%) and long (15-20 years) cutting intervals is the method that will have the least adverse impact on forest bird communities.”

Response: Even-aged management is a proven tool for regenerating and maintaining shade intolerant species. These species are part of forest diversity and include many of the most producing species. It would address site-specific conditions of the Desert Branch area and meet regeneration goals. Such management is consistent with Forest Plan direction to provide a variety of habitat elements for wildlife and to provide for the regeneration of species intolerant to intermediately-tolerant of shade (EA, p. 47). The Gauley Ranger District includes approximately 19,640 acres in MP 2.0, which emphasizes management of shade tolerant hardwoods through uneven-aged management. Alternative 3 does proposed uneven-aged management over much of the EA. Also, discussion in the Vegetation section acknowledges that parts of the OA may be managed under uneven-aged management in the future, even in the other alternatives (pp. 56-57 of the EA).

WILDLIFE OPENINGS

68. Wildlife openings adversely affect many species, particularly forest interior birds. Even the Council on Environmental Quality has acknowledged the devastating effects these openings have. The CEQ's publication, “Incorporating Biodiversity Considerations Into Environmental Impact Analysis Under the National Environmental Policy Act” states:

“The creation of forest openings and edge habitat favoring game species is now recognized as causing severe impacts to forest interior dwelling species.” CEQ at 18.

There are plenty of areas for openland species. Contiguous forest interior habitat, on the other hand, is very limited. Therefore the Forest Service should concentrate on providing habitat for species requiring large tracts of forest.

Response: Effects on interior habitat area addressed in the Fragmentation section (p. 118) of the Environmental Effects Chapter.

69. The analysis should consider the findings in Shawnee National Forest by Dr. Scott Robinson of the Illinois Natural History Survey. Dr. Robinson has these recommendations for Wildlife Openings:

“Food plots should either be allowed to regrow to forest or managed in such a way to avoid favoring cowbirds and nest predators. Millet should not be planted because it is a favorite food of cowbirds. Discing in spring should be avoided because it creates cowbird feeding areas. The permanent edges created around wildlife openings area also associated with the very highest predation rates (Suarez et. al., in prep) which means they may be ecological traps for edge preferring wildlife. Leaving a shrubby border around food plots may reduce predation somewhat, but evidence in overgrown wildlife openings elsewhere in Shawnee suggests that predation rates remain high. Food plots and wildlife openings may therefore not be benefitting any wildlife except for the omnivores that are also major predators.” Robinson, Scott “Effects of Selective Logging on Forest Birds in the Trail of Tears State Forest, Southern Illinois.”

Response: Effects of wildlife openings are addressed in the Wildlife section (p. 98) of the Environmental Effects. Also, findings in Illinois may not necessarily apply to West Virginia since conditions differ between the two areas. (The counties containing the Shawnee National Forest are approximately 34 percent forested, whereas the counties containing the Monongahela National Forest are about 82 percent forested.) Statewide, West Virginia is approximately 78 percent forested.

70. The issue of visual quality needs to be addressed. Wildlife openings are sensitive areas for visual quality. Wildlife openings are obviously artificial and unnatural and appear so. When hiking in a forest, artificial looking openings detract from the forest experience. Wildlife openings are also usually much hotter and more humid than the forest. This adversely effects hikers and other forest users.

Response: Effects on visual quality are addressed in the Recreation and Visual Quality section (p. 141) in the Environmental Effects Chapter of the EA. Openings may appear unnatural during and shortly after their development, but will gradually blend in with the surrounding area. The visual quality effects of the proposed openings are expected to be acceptable. Since wildlife openings are small in size and summer temperatures on the Monongahela National Forest are usually mild, hiking near or in a wildlife opening is not likely to adversely affect hikers.

INDIANA BAT

71. The Federally Endangered Indiana bat needs to be considered. The analysis needs to consider all available research. The ESA requires the Forest Service to use "the best scientific and commercial data available" to fulfill its Section 7 obligations. The analysis needs to consider the summer habitat required by female Indiana bats for maternity roosts (e.g., roost trees, protection from disturbance, and foraging habitat).

The analysis also needs to consider the summer roosting and foraging needs of male Indiana bats. The analysis on roosts needs to consider existing and potential roosts in upland and riparian areas and the issues of bats using the trees while the sale is being cut (which would result in their death by killing them when their roost is cut or being killed by an adjacent tree falling on them), loyalty to the roost trees, stress of finding new roosts, and the impacts of removing trees next to roosts or potential roosts (i.e., making the tree more susceptible to windthrow and changing the thermal dynamics). The analysis also needs to consider the email message from Dr. John Whitaker that we sent to the Forest on September 6, 1999. The Analysis also needs to consider the impact the logging will have on opening the area which allows other species of bats and birds to compete with the Indiana bat for the insects. Likewise, the analysis needs to consider the issue of additional predators that the Indiana bat will be exposed to as a result of opening the canopy. The analysis also needs to consider if there are any hibernacula in the area. If so, the analysis needs to consider the impacts of the sale on the bats' summer, fall, spring, and winter habitat. The Forest Service also needs to consider the rulings in *House v. United States Forest Service*, 974 F. Supp. 1022 (E.D.Ky. 1997) and *Bensman v. United States Forest Service*, 984 F. Supp. 1242 (W.D.Mo. (1997)). These rulings specifically rejected all the Forest Service's standard claims about why the logging will not have any adverse effects on the Indiana bat and ruled that the timber sales in question will "take" the Indiana bat.

*As a minimum these studies need to be addressed:

Callhan III, Edward, "Indiana bat Summer Habitat Requirements" Masters Thesis, University of Missouri, May 1993. (Callhan, 1993.)

Gardner, J.E., Garner, J.D., and Hoffmann, J.E. 1991 "Summer roost selection and roosting behavior of *Myotis sodalis* (Indiana bat) in Illinois." Unpublished Report, Illinois Natural History Survey, Champaign, Illinois. (Gardner 1991)

Kiser, James D. and Charles L. Elliot "Foraging Habitat, Food Habits, and Roost Tree Characteristics of the Indiana Bat (*Myotis sodalis*) During Autumn in Jackson County, Kentucky."

Clawson, Richard L., "Report on the Status of Priority 1 Indiana bat Hibernacula, 1995."

Clawson, Richard L., "Indiana Bat Summer Habitat Patterns in Missouri" (Clawson 1996)

Kurta, Allen, and Kimberly Williams "Roosting Habitat, Microclimate, and Behavior of the Endangered Indiana Bat (*Myotis sodalis*) in Southern Michigan." Eastern Michigan University, October 1, 1992.

Rommé, Russell C., Karen Tyrel & Virgil Brack, Jr., "Literature Summary and Habitat Suitability Index Model, Components of Summer Habitat for the Indiana Bat, *Myotis sodalist*," March 20, 1995

Gardner, James E., Joyce Hofmann, and James D. Garner, "Summer Distribution of the Federally Endangered Indiana Bat (*Myotis sodalis*) in Illinois" Transactions of the Illinois State Academy of Science (1996), Volume 89, 3 and 4, pp. 187-196.

Response: Effects on the Indiana bat are addressed in the TES section of the Environmental Effects Chapter of the EA and in the BE. (p. 131) Projects are consistent with the Forest Plan with regard to Indiana Bat. The project file contains additional information on the Indiana bat.

OAK/ HICKORY

72. The issue of the loss of the oak/hickory component needs to be addressed. Research shows the best way to maintain the oak/hickory component is to refrain from logging. [Mills Jr., W.L., B.C. Fischer and T.W. Reisinger, "Upland Hardwood Silviculture: A review of the Literature." Purdue University Station Bulletin No. 527.] Many areas with certain slope and aspect will never have a substantial oak/hickory component.

Response: The decline of oak is common throughout the eastern hardwood forest in both managed stands and unmanaged forest reserves. In southwestern Pennsylvania, a remnant old-growth forest once dominated by white oak was found to be undergoing a successional change to American beech, red maple, and yellow-poplar (Abrams and Downs 1990).

Effects on oak are addressed in the Vegetation section of the Environmental Effects Chapter, particularly in the Forest Type and Mast portions of that section (p. 44 and 65).

These same comments were received via E-mail from multiple commenters.

**Commenters: Missouri Heartwood
PO Box 7653
Columbia, MO 65205
June 2, 2001**

**Dr. Mha Atma S. Khalsa
1536 Crest Dr.
Los Angeles, CA 90035
June 4, 2001**

Dolores Pino
7200 Wilson Terrace
Morton Grove, IL 60053-1142
June 11, 2001

1. Logging is an inappropriate use of public forests and is contrary to the public interest.

Response: See response to Scherübel comment #1.

2. I am opposed to this timber sale.

Response: Comment noted.

3. Please consider in place of the proposed logging projects which retain the naturally evolving forest.

Response: See response to Scherübel comments #1 and #4.

4. I support the maintenance and enhancement of low-impact campgrounds and non-motorized recreational opportunities.

Response: Impacts on recreation are analyzed in the Recreation section of the Environmental Effects Chapter of the EA (p. 141).

James Overbaugh
Richwood, WV
May 11, 2001

1. He believes selective cutting is appropriate. He commented that trees left too long will die and be wasted.

Response: Comment noted. Effects on forest stocking are discussed in the Vegetation section of the Environmental Effects Chapter of the EA (p. 52).

2. He does not like clearcutting. He said that clearcutting takes too long for hardwoods to regrow. He commented that clearcuts first grow up in greenbriers and brush and fast growing trees such as yellow poplar and black locust. He commented that it takes 150 years to get good oaks after a clearcut.

Response: Comment noted. Effects of clearcutting and other even-aged harvest methods are analyzed in the Vegetation section of the Environmental Effects Chapter of the EA (p. 47-48).

3. He stated that he believes that the two things that most destroy forests are fire and clearcutting.

Response: See response to your comment #2. Fire is discussed on page 46 of the EA, and in other locations in Chapter III.

4. He did not have problem with roads as long as they are carefully located. He commented that they can be reseeded and eventually destroyed by regrowth of trees.

Response: Road location is determined by an engineering survey with care to minimize effects to other resource values. Roads are addressed in the Transportation section of the Environmental Effects Chapter of the EA (p. 150).

5. He commented that he has no objection to the proposal---if a tree is left too long, it will die and be wasted. He said that he did not see anything in the proposal that would hurt anything and does not see anything wrong with the plan.

Response: See response to your comment #1. Also, see response to Scherübel comment #54 concerning woody debris.

6. He believes in property ownership rights; even though he disagrees with the way some forest industries manage their land, he sees that as a right of property ownership.

Response: Comment noted.

He is pleased with what the Forest Service has done with its land. He has lived in Richwood for about 50 years.

Response: Comment noted

Joe Miller
Richwood, WV
June 10, 2001

Joe Miller, a local resident, commented that he would like to see road 946 mowed to keep the grass down in its middle. He frequently uses this road for walking, and keeping the grass mowed would make the road easier to use for walking, particularly when it is wet.

Response: Effects on recreation and roads are analyzed in the Recreation and Transportation sections of the Environmental Effects Chapter of the EA (p. 141 and p. 151). Road maintenance is not done frequently enough to keep tall grass from growing, because of budgets and staffing which are outside the scope of this analysis.

Burton Ervin
Cowen, WV 26206
May 9, 2001

Commenter is for thinning. He thinks it is a wise thing to do and that the local area could use the timber. Agrees that if we don't thin, that some of the older trees will be "choked" out.

Response: Comments noted.

Brian Altman
Gilboa, WV 26671
May 16, 2001

1. Commenter feels that there should be no logging whatsoever in the National Forest.

Response: Comment noted. See response to Scherübel comment #1.

2. Commenter states that area of county he lives in has been heavily logged or strip mined.

Response: Comments noted.

3. Commenter feels that mountains logged are no longer a forest, but are patches of woods and brush.

Response: Comments noted. Effects on vegetation are analyzed in the Vegetation section of the Environmental Effects Chapter of the EA (p. 45). Patches of woods and brush provide a diversity of wildlife habitat that is part of the desired future condition from the Forest Plan. Age class distribution is discussed in the EA (p.).

4. Commenter states that one can not escape the sounds of bulldozers, chainsaws, dump trucks, etc. in the mountains. Commenter indicates that the National Forest should be a place where one can find solace.

Response: Comment noted. Effects on recreation are analyzed in the Recreation section of the Environmental Effects Chapter of the EA (p. 141).

5. Commenter asks if the government is going to force people to sell trees in their yards to loggers.

Response: The proposed action outlined in Chapter 1 of the EA pertains to National Forest lands only.

Richard L. Merrill
Ligonier, PA 15658
May 31, 2001

1. Commenter stated that proposed action looks very good to him.

Response: Comments noted.

2. Comment suggested having loggers remove timber along the contour lines.

Response: Comment is unclear as to whether commenter is suggesting that timber be removed along contour lines to facilitate layout of skid trail locations along contours or to have patches of removed timber along the contours. Effects of skid trails are discussed in the Soils and Watershed sections of the Environmental Effects Chapter of the EA (p.89, p. 68). Areas with helicopter logging would not have skid trails.

3. Commenter suggested having the clearcuts in a 20 to 30 acre checkerboard pattern.

Response: Clearcuts and other even-aged regeneration areas are spaced according the Forest Plan direction. They are laid out and shaped to avoid straight line edges and to blend in more naturally with the landscape (Forest Plan pp. 76-77).

4. Commenter stated that he does not approve of roads for ATV's.

Response: Comment noted. The Forest, including the roads, is not open to ATV use.

5. Commenter recommended using oaks, black haw, quaking aspen, and hawthorne if we reseed the clearcuts.

Response: Comment noted. Natural regeneration is expected to provide full stocking for new stands, as discussed in the EA (p.47-48)

6. Commenter would like to see loggers use sedimentation ponds and bales of hay for runoff areas.

Response: Mitigation measures to protect soil and water resources are included in the Soil and Watershed sections of the Environmental Effects Chapter of the EA, p. 87, p. 69), and in Chapter 2 for each alternative.

7. Commenter would like to see Forest Road 946 open for hiking and fishing.

Response: Forest Plan Standards and Guidelines for MP 6.1 allow pedestrian use for most roads. Forest Road 946 is closed to public vehicular travel, but is open for

hiking. See the Recreation section of the Environmental Effects Chapter of the EA (p. 141).

Allan C. Glasscock
Wildlife Biologist
National Forest Coordinator
West Virginia Division of Natural Resources
Elkins, WV 26241-3235
July 16, 1999

1. Wildlife manager noted prevalent bear and turkey sign, especially along seeded roadsides and noted that the area is excellent remote wildlife habitat. Deer are present, but do not appear abundant.

Response: Comment noted.

2. Expand the size of the log landing in stand 70/302 to at least one acre and develop a wildlife opening of 1 to 2 acres in stand 70/301.

Response: Wildlife openings of 3 acres in stand 70/301 and 1 acre in stand 70/302 are included in the Proposed Action and Alternatives 2, 4, and 6 (Chapters 1 and 2 of the EA, pp. 11 and 26, 33, and 38).

3. There is potential to construct a 5-acre savannah in a portion of stands 69/7, 9, or 15 and/or in stands 70/3 or 7 to increase early successional habitat in the area.

Response: The suggested savannahs are included in the Proposed Action and in Alternatives 2 and 6. Alternative 4 includes savannahs in stands 70/3 and 69/15-16.

4. Water availability in the area appears adequate. The upper portions of Desert Branch may benefit from aspen plantings to encourage beaver to maintain the existing beaver ponds.

Response: The Proposed Action and Alternatives 2, 3, 4, and 6 include the planting of aspen near Desert Branch.

5. The WVDNR recommends silvicultural practices to reduce the yellow poplar component and favor the release and regeneration of mast producers such as red oak and black cherry. Also, the WVDNR recommends that the Forest Service recognize the large amount of cut over private timber company land immediately to the south of the project area.

Response: Mast producers such as red oak and black cherry would be favored as leave trees in thinnings. Some of the regeneration locations were chosen to enhance

the regeneration of oak or cherry. See EA, pp. 48-49. Timber harvests on adjacent private lands were considered in the analysis (EA, p. 61).

6. The WVDNR recommends not permanently connecting FR 730 to FR 946. Permanent through roads would encourage gate breaching and other illegal road use. The WVDNR does not recommend connecting roads in MP 6.1 areas.

Response: There is no proposal to connect the roads in any of the alternatives analyzed in detail. An alternative to connect the roads was considered but was dropped from detailed analysis, EA. P. 39.

7. The WVDNR recommends that the Forest Service does not develop or promote recreational use on interior seeded roads and on adjacent wildlife opening developments as it would decrease the value of the area as remote wildlife habitat.

Response: The Fork Mountain Trail will continue to attract recreational use. Effects of the alternatives on recreational use are discussed in the Recreation and Visual Quality section (p. 141) of the Environmental Effects Chapter of the EA.

Comments of June 6, 2001

Previous comments of July 16, 1999 should be considered as still valid and current with Proposed Action.

1. The WVDNR supports the Gauley Ranger District in initiating the Proposed Action for the Desert Branch project in that it will provide important wildlife habitat, encourage continued production of hard mast, and address continuing tree mortality due to overcrowding.

Response: Comment noted.

2. The WVDNR recommends using tube shelters on red oak seedlings if monitoring indicates that desirable regeneration is not responding or is being overtopped by competing tree species.

Response: Comment noted. Regular stocking surveys will be done after regeneration harvesting to determine if desirable stocking is sufficient and if further action is needed. Planting and tubing of oaks is not included as a mitigation because existing advance regeneration of a variety of species including oaks is present.

3. The WVDNR supports the development of wildlife openings, savannahs, waterholes and recommends that they be maintained. The WVDNR states that to not plan to maintain these developments by regular maintenance is a waste of time, manpower, and money.

Response: Comment noted. Maintenance of wildlife openings is mentioned in various places in Chapter III (p. 43). Maintenance funding is outside the scope of the analysis.

4. The WVDNR recommends following MP 6.1 standards and guidelines as they relate to retaining snags, culls, and active den trees.

Response: The MP 6.1 standards and guidelines will be incorporated into project design. See EA, pp. 6, and mitigations in Chapter II for all alternatives.

5. The North Fork of the Cherry River has an excellent native brook trout-wild brown trout fishery as a result of the upstream application of limestone fines. The potential impacts of siltation on the high quality fishery and on the use of this river as a water supply for Richwood from this project should be addressed.

Response: Effects on the watershed and water quality are addressed in the Watershed section of the Environmental Effects Chapter of the EA, p. 68.

6. The WVDNR found no records of rare, threatened and endangered species within the boundaries of the proposed actions. The hellbender (*Cryptobranchus alleganiensis*) and long-stalked holly (*Ilex callina*) are found adjacent to these areas and in and along the North Fork of the Cherry River.

Response: Comment noted. Surveys for both plant and animal TES species have been done. Effects on TES species are addressed in the Endangered and Threatened Species, and Sensitive species sections of the EA, p. 129 and 133.

Jim Bensman
Heartwood
Wood River, IL 62095-1615
June 11, 2001

1. Logging should not be allowed.

Response: See response to Scherübel comment #1.

2. An alternative to manage the forest by protecting it needs to be developed.

Response: See response to Scherübel comments #4, #26, and #28.

3. The proposal is contrary to the MP 6.1 objective of remote wildlife habitat in that it proposed to “cut it down (i.e., create disturbance)”.

Response: The proposal is consistent with the Forest Plan direction for MP 6.1. See p. 6 of the EA, and Chapter III (43).

Barry Clutter
W.M. Cramer Lumber Company Marlinton, Inc.
Marlinton, WV 24954
June 8, 2001

1. Commenter indicates that a MP 6.1 area that emphasizes remote habitat is inconsistent with the location for an area “just east of Richwood”.

Response: Allocation of land to management prescriptions is based on, at the highest level, a Forest Plan level decision and beyond the scope of this analysis. Although this area is just east of Richwood, it does have characteristics of remote habitat. See Glasscock comment #1.

2. Commenter feels that Forest Service agenda to log by helicopter is unnecessary, not cost effective, and harmful to the economic survival of small businesses that rely on National Forest sawtimber.

Response: Small businesses have bid on helicopter sales on the Forest and in some cases have been the successful high bidder. See p. 156 and 158 in the Economics section of the Environmental Effects Chapter of the EA, and Alternative 2 (pp. 22-23), which includes on helicopter logging. The Forest Plan includes general direction to encourage improved logging systems (Forest Plan, p. 76).

3. Commenter indicates that cost studies are needed to ascertain the economic viability and impact of harvesting methods on the OA and the ultimate impact on local loggers and local small businesses.

Response: An economic analysis, including the cost of helicopter logging, is included in the EA, p. 162, in the Economics section of the Environmental Effects Chapter.

4. Commenter is familiar with the Project Area and is concerned that the area will become unavailable for future timber resources.

Response: Comment noted. This issue is dealt with at the Forest Plan level. The area is currently in the 6.1 management prescription, which allows timber management.

Bryan Bird
Forest Conservation Council
Boca Raton, FL 33427-6268
April 27, 2001

1. We are concerned with the adverse economic effects of commercial logging and the damage and loss of ecosystem service values associated with standing or otherwise intact forest ecosystems.

Response: Economics are addressed in the Economics section of the Environmental Effects Chapter of the EA (p. 156). Ecosystem service values are described throughout Chapter III, but not quantified in dollar terms. Thinning areas retain forest cover and are still able to provide the values mentioned in the comment. Clearcut or other even-aged regeneration areas temporarily have their value for some of these resources reduced, but they regain these values as they regenerate and may provide some resources or opportunities not found in sawtimber stands.

2. The opportunity costs of the logging program, which include the value of uses forgone on areas logged plus the benefits associated with alternative uses of timber funds have not been evaluated on a project basis or for the logging program as a whole.

Response: See response to your comment #1.

3. We request that a no-harvest, restoration only alternative be developed and given fair and adequate treatment.

Response: See response to Scherübel comments #1 and #4, and p. 39 of the EA.

4. The project will jeopardize the viability of species that thrive in forest ecosystems through activities associated with timber harvest and road building.

Response: See response to Scherübel comments #8 and #28.

5. The project will intervene in natural disturbance processes that are vital ecosystem sustainability.

Response: See response to Scherübel comment #20.

6. The project will degrade water quality and watershed condition.

Response: Effects on water quality and watershed condition are analyzed in the Watershed section of the Environmental Effect Chapter of the EA (p. 68).

7. The project will damage social and economic uses and values associated with natural forests.

Response: Effects on social and economic uses and values are analyzed in the Recreation and Economic sections of the Environmental Effect Chapter of the EA (p. 145).

8. Commenter is concerned about the damage and loss of ecosystem service values associated with standing or otherwise intact forest ecosystems.

Response: See response to your comment #1.

9. Commenter expresses concern about “below-cost” sales. Also commenter asks if costs and benefits, beyond those to federal government, meet government mandate of net public benefit.

Response: The EA displayed the projected costs and revenues of a timber sale in sufficient detail for the Deciding Officer to make an informed decision. Since the economic differences in the alternatives were incremental, the analysis included only variable costs. None of the Desert Branch action alternatives would result in a below-cost timber sale (EA, p. 158). However Alternatives 2, 3, and 4 would be expected to yield a negative net revenue when costs of associated projects such as wildlife openings, savannahs, trail improvements, and viewing platforms are considered.

10. Analysis needs to include an in depth treatment of cumulative effects especially in regards to soils, water quality, fragmentation, old growth, TES, MIS, and neotropical migrant birds. All activities including past, present, and reasonably foreseeable future activities on each and every land ownership must be incorporated.

Response: Cumulative effects are analyzed in the various resource sections of the Environmental Effects Chapter of the EA.

Additional comments on June 6, 2001

11. Commenter expresses concern about adverse economic effects of the national forest logging program and the failure to quantify such effects at the project level or for the program as a whole.

See responses to your comments #1 and #9.

12. Commenter states that the logging program increases cost of water purification and filtration,

Response: Effects on water quality are analyzed in the Watershed section of the Environmental Effects Chapter of the EA (p. 68). Sediment delivery to the North Fork of Cherry from proposed activities is expected to be minor, short term and not significant.

decreases value of private timberlands,

Response: See response to Scherübel comment # 60. This issue is outside the scope of analysis since the Forest Plan permits timber harvest.

unfairly competes against alternative fiber and building material businesses,

Response: National Forest timber is part of the mix of fiber or building material. See EA, p. 163. Also see response to Scherübel comment # 60.

increases wildfire risk,

Response: Wildfire is very uncommon on the Gauley Ranger District, and was discussed in several places for its role in the past, and for potential cumulative effects on long term mast species (p. 68). No alternative for use of prescribed fire was considered, because the ecosystem is not considered to be fire dependant (p. 39), nor is it fire prone.

increases repair and maintenance costs for highways and public roads, and

Response: Some work will be done on public roads used in this sale. See Transportation section of the Environmental Effects Chapter of the EA (p. 155, p. 157).

decreases the number of jobs in recreation, tourism, fisheries, and alternative forest products.

Response: See response to your comment #1.

13. Commenter wants to see a non-commercial, restoration only alternative and that all costs and benefits, both monetary and non-monetary be disclosed.

Response: See discussion in Economics section of the Environmental Effects Chapter of the EA (pp. 160-161). Also see response to Scherübel comment # 4.

14. Commenter wants to see economic analysis include value on “ecosystem services” such as recreation, flood control, pest control, and carbon sequestering.

Response: See discussion in Economics section of the Environmental Effects Chapter of the EA (pp. 160-161).

15. The rate of carbon lost to the of accumulation is much greater during harvest, and there is a net transfer of carbon from biomass to atmospheric CO.

Response: See response to Scherübel comment # 42.

16. The Monongahela FEIS was completed for a 1986 Record of Decision for the LRMP. The LRMP ROD becomes vacant as of July 2001. The Desert Branch EA cannot rely on an outdated FEIS for conclusions made about the timber market in 2001. The NFMA requires that the plan be revised at least every 15 years.

Response: 1/22/04 The Department of the Interior and Related Agencies FY04 Appropriations Act, H.R.2691, P.L.108-108 was signed by the President on November 10, 2003. Sec. 320 (see below) appears on page 66 of H.R. 2691

SEC. 320.

Prior to October 1, 2004, the Secretary of Agriculture shall not be considered to be in violation of subparagraph 6(f)(5)(A) of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1604(f)(5)(A)) solely because more than 15 years have passed without revision of the plan for a unit of the National Forest System. Nothing in this section exempts the Secretary from any other requirement of the Forest and Rangeland Renewable Resources Planning Act (16 U.S.C. 1600 et seq.) or any other law: *Provided*, That if the Secretary is not acting expeditiously and in good faith, within the funding available, to revise a plan for a unit of the National Forest System, this section shall be void with respect to such plan and a court of proper jurisdiction may order completion of the plan on an accelerated basis. The Monongahela National Forest is currently working on plan revision.

17. Resource demands by the public have changed significantly.

Response: See response to Scherübel comment #3.

18. Environmental and economic conditions have significantly changed.

Response: The economic analysis is in the Economics section of the Environmental Effects Chapter of the EA (p. 160).

19. Forest Service management direction has significantly changed.

Response: See response to Scherübel comment #1.

20. Because the Forest Service has no data for most species adversely affected by proposed management activities, and what data there is suggests that such species are declining and otherwise at risk, the Forest Service runs afoul of viability and diversity requirements.

Response: See response to Scherübel comment #39.

21. Attention needs to be given to factors such as increased OHV use, increased risk of fire, grazing, etc. in the cumulative effects analysis.

Response: See Transportation section of the Environmental Effects Chapter of the EA (p. 155). Also see fourth response under your comment #12. There is no grazing in this area.

Jack Newhouse

Cowen, WV
May, 2001

Forest Service personnel are trained and qualified. Go for it.

Response: Comment noted.

Ralph Brown
Richwood, WV
September 22, 2001

Commenter would like for visual quality of area from highway and vantage points be maintained.

Response: See Recreation and Visual Quality section, EA (p. 145). Visual quality is an issue carried forward in the analysis, Issue 2 (EA, p. 17).