

PUBLIC COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT – APPENDIX B

This appendix contains the public comments received by the Forest Service during the official 30-day comment period on the Draft Research-Rochford Environmental Assessment. The comment period began on March 24, 2004, and ended on April 23, 2004. Forest Service responses follow the comments.

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April 19, 2004

Research-Rochford Project
Dave Atkins
U.S. Forest Service
2014 N. Main
Spearfish, SD 57783

Rec'd
APR 23 2004

Hello,

Native Ecosystems Council (NEC) would like to provide the following comments on the draft environmental assessment (EA) that was released on 3/22/04 for public review and comment.

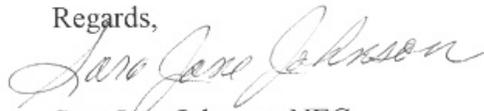
1. The Forest has not addressed the monitoring requirements as per the Chief's remand of the Revised Forest Plan (RFP); the type of monitoring that is currently being done has no relationship to the impacts of timber harvest on wildlife. If you aren't providing answers to logging impacts on wildlife, then what is the point of monitoring? | NEC 1
2. This analysis is a continuation of the past Forest failure to provide any quantitative measurement of logging impacts on wildlife, either direct, indirect or cumulative. You have no habitat criteria for any management indicator species (MIS) or sensitive species. If you don't define what they need, how can you measure the condition of the habitat for these species in the respective project area. All your analyses on wildlife are arbitrary assumptions that do not meet the requirements of the National Environmental Policy Act (NEPA). | NEC 2
3. As per #2 above, the Black Hills Forest continues to proceed with intensive timber management activities without developing and implementing conservation strategies for wildlife (MIS and sensitive species). This ensures that the viability of most wildlife species on the Forest is threatened by the ongoing timber management program, because minimal habitat needs of these species have not been identified for protection. | NEC 3
4. We were very happy to see that no logging is planned within the goshawk postfledging area of this project area. We are also pleased to |

- know that this nest has raised young in the last 2 years, according to the EA. What we are concerned about is the lack of analysis of the overall conditions of the project area for goshawks as per Reynolds et al. (1992), or the southwest goshawk guidelines. As per the expert interviews for the Phase I Amendment, landscape management was recommended by the goshawk experts. The Forest has not provided any data, monitoring or other expert testimony to indicate why the Phase I interviews recommendations are unnecessary and are not going to be implemented. It is clear that the viability of the goshawk is threatened by the lack of a landscape habitat management. You indicated that the status of this population is stable to possibly declining. If you are going to alter their habitat, and the best scientific recommendations are not being followed, and the status of the population is uncertain, how can you determine that this project, along with many other projects, will not have significant cumulative effects on this species? You need to do an EIS to address timber management impacts on this species across the Forest, and address site-specific failures to do landscape management for this species.
5. It is unclear why you have not completed a snag inventory for this project. You certainly have a good inventory of the timber resource. How can you manage snags without any inventory data? | NEC 4
6. If you don't know the level of snag habitat in this project area, how can you determine that no significant impacts exist to cavity-associated wildlife? | NEC 5
7. If you don't know what the current level of snags is in this project area, how can you include snag management objectives in your project planning? It is clear that you don't. | NEC 6
8. As per #7 above, if you don't have to have a certain level of snags per acre in a project area, as per the RFP, then what is the basis for estimating population viability of cavity-associated wildlife in the project area? | NEC 7
9. If you don't meet the projected snag densities as per the RFP, then what are the consequences to cavity-associated wildlife species, as per local persistence? | NEC 8
10. Please define how the decision to develop the proposed range of structural stages in this project area were designed with snag habitat in mind. What are the estimated snag numbers per given structural stage, and how is the distribution and acreage of each structural stage planned to meet snag management goals of the RFP? | NEC 9
- | NEC10

- | | |
|--|--------|
| <p>11. If the RFP does not actually require a given number of snags on the landscape, how were environmental impacts of the RFP evaluated in the EIS? If you don't know how many snags were going to be present, then how could you measure the impacts of an unknown snag density?</p> | NEC 11 |
| <p>12. If you are going to keep 5 trees per acre, and these trees will represent the general diameter distribution before cutting, then how are you going to determine the impact of this "distribution" in the EA? You did not define what the size of green replacement trees will be in each unit, and how this will affect cavity-associated wildlife in that particular harvest unit. These green replacement tree sizes will be different for each unit. How were all these differences addressed in your analysis? Also, what is the expected snag density in the next 10 years in each harvest unit based on the number and size of green trees to be left, and what does this indicate for RFP snag objectives for this project area in the next 10 years?</p> | NEC 12 |
| <p>13. A stated goal is to reduce insect and diseases. However, you did not evaluate how this objective will affect snag development, and insect food resources for wildlife. If insects and diseases are reduced, so will snags and food for wildlife. How do you know that you will not significantly reduce habitat values for wildlife with an objective to reduce insects and disease? If you are not going to provide adequate pest populations in this project area for wildlife, where else in this landscape will these wildlife needs be met? You did not evaluate the cumulative effects of this timber management goal.</p> | NEC 13 |
| <p>14. You have about 190 acres of white spruce habitat in this project area of 25,690 acres. You did no evaluation of this amount of spruce, which is below 1% of this landscape. The ongoing Forest monitoring on birds has indicated that spruce is highly important to a number of old growth species. You did not address how this current level of spruce will meet the needs of these species, as well as the needs of the pine marten. In fact, you concluded that this spruce habitat is not enough for the pine marten. Isn't this a significant effect? If it is not enough habitat for the marten and other species, what do you propose to do about this? It is likely that many additional acres of spruce habitat types exist in this project area. You failed to consider a spruce restoration alternative that will address the current habitat problems for wildlife associated with spruce.</p> | NEC 14 |
| <p>15. You also failed to evaluate quantitatively the logging impact on snag recruitment. There is now information available to indicate the overall impact of forest thinning on snags. You need to be incorporating this information into your evaluations, since it is clear that logging will result in drastically reduced snag densities.</p> | NEC 15 |

- | | |
|--|--------|
| 16. You have no analysis of old growth habitat in the EA. Simply listing the acres of old growth (197 acres in 25,690 acres of the project area, or 0.7%) is not an evaluation. This appears to be a drastic decline from historic levels of old growth, and would appear to be a significant cumulative effect of timber management. You need to evaluate how this decline, as well as the paucity of current old growth, is affecting associated populations of wildlife. | NEC16 |
| 17. You did not demonstrate what the impact is of the current failure of this project area to meet RFP direction for habitat effectiveness for big game. If you are not meeting RFP direction, why isn't this a significant impact? If the RFP direction is being used as an indicator of significant impacts, then exactly what is the purpose of this RFP direction? | NEC 17 |
| 18. You indicate that snag habitat may be created through killing of trees. What data or science is currently available to indicate this will provide suitable snags for wildlife, or is comparable to natural snag-creation processes that allow for the development of heart rot. | NEC 18 |
| 19. You have not done any flammulated owl surveys in the project area, even though this species is known to occur within 7 miles of this area, and it is listed as a sensitive species on the Black Hills Forest. How can you protect a sensitive species, as well as make conclusions regarding project impacts, if you are not doing surveys? This is a snag-associated as well as an old growth-associated species. Since both features are limited in this project area, doesn't this require some type of mitigation or restoration for this species? | NEC 19 |
| 20. Could you include a section on monitoring and mitigation that defines how ongoing Forest monitoring has been used to make changes in the timber management program to benefit wildlife? | NEC 20 |

Regards,



Sara Jane Johnson, NEC
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RESPONSE TO NATIVE ECOSYSTEMS COMMENTS

NEC 1. Forest-wide wildlife monitoring is addressed in the BHNF 2002 Monitoring and Five-Year-Evaluation Report (USDA 2004a). Additional monitoring is accomplished for each project as identified in individual project files. The monitoring for the Research-Rochford project is identified in Appendix A of the EA.

NEC 2. The habitat requirements for MIS and sensitive species are identified in Section 3.3.1 of the EA. Further discussion is available in the wildlife specialist's report and the Biological Assessment/Biological Evaluation (BE). Direct, indirect, and cumulative impacts on wildlife are also analyzed in these documents.

NEC 3. "Conservation strategies" are developed by the U.S. Fish and Wildlife Service for Federally listed threatened and endangered species. "Conservation strategies" are not necessarily developed for USFS Region 2 sensitive species and/or MIS species. Project level strategies to conserve these species are an inherent part of project specific mitigation and design criteria. Overall Forest-wide strategies for management of sensitive species and MIS species are available in the Revised Forest Plan and Phase I amendment.

NEC 4. The goshawk analysis in the EA is based on prior analysis accomplished for the Revised Forest Plan and Phase I Amendment. The Phase I Amendment BA/BE determined that following established standards and guidelines would maintain viability across the Forest. All proposed treatments in the Project Area comply with Phase I Amendment standards and guidelines established to protect viability of the goshawk. No significant cumulative effects were identified in the Phase I Amendment or the EA for this project.

NEC 5. A snag inventory was not necessary to complete the snag analysis for this project. Analysis of effects on snag habitat in Section 3.3.1 of the EA indicates that all alternatives would comply with Revised Forest Plan and Phase I Amendment direction.

NEC 6. See response to NEC 5 above. No significant effects were identified in the Phase I Amendment or the EA for this project. As stated in the EA, The Project Area was analyzed assuming that existing snag density does not meet Revised Forest Plan direction. Revised Forest Plan standard 2302 requires that in watersheds not meeting hard snag direction, all vegetation management projects will be designed to move hard snag densities toward this objective. Proposals move hard snag densities toward the objective by restricting snag cutting, by thinning stands to develop larger trees in the future, and by retaining an average of 5 trees per acre in overstory removal treatments to provide for large snag recruitment.

NEC 7. Snag management objectives identified in the EA are in compliance with Revised Forest Plan and Phase I Amendment direction.

NEC 8. As identified in NEC 6 above, the project was analyzed assuming snag density does not meet Revised Forest Plan direction. In accordance with Standard 2302 and 2306, the project is designed to move toward desired hard snag densities. The effects of this project on cavity associated wildlife is available under the individual species discussions in Section 3.3.1 of this EA. For instance, as identified under the Black-backed woodpecker, there is a discussion of current ongoing Forest monitoring for this

species and an analysis of the relationship of this monitoring to project specific conditions.

NEC 9. See response to NEC 8.

NEC 10. Analysis of the effects of this project did not require an estimate of snag numbers by structural stage. The project is in compliance with Revised Forest Plan standards that require snags and retention of green trees for snag replacements across each watershed. Also see response to NEC 8 above.

NEC 11. The determination of environmental impacts in the environmental impact statement associated with the Revised Forest Plan is beyond the scope of this project level analysis. See NEC 8 above.

NEC 12. See response to NEC 10 above. Five green trees of various sizes would be well distributed across each watershed. This would be in compliance with Revised Forest Plan direction.

NEC 13. Retention of dense forested stands within the project area, in addition to snag and green tree retention standards, is expected to maintain adequate habitat for species that rely on dead trees and would meet Revised Forest Plan direction. The effect of Revised Forest Plan goals and objectives is analyzed in the Revised Forest Plan Final Environmental Impact Statement, and beyond the scope of this project level analysis.

NEC 14. The amount of spruce in the project area is a pre-existing condition and not an effect of this project. The Phase I Amendment precludes vegetation management in spruce stands. All existing habitat would be maintained. Spruce restoration is not an identified purpose and need for the project.

NEC 15. The EA does not identify that logging would result in drastically reduced snag densities. Snags would be retained during logging activities unless they present a safety hazard. This project mitigation (Section 2.1.5 of this EA) would minimize the impact of the project vegetation management activities on snag distribution and density.

NEC 16. As discussed in Section 3.3.1 of the EA, the project contains 197 acres of late succession habitat. This is a pre-existing condition and not an effect of this project. No vegetative management is proposed in any of the late succession stands. All existing late succession stands would be maintained and this project would have no effect on late succession or old growth habitat. The cumulative impact discussion for snags recognizes the effect of previous management on snags.

NEC 17. Habitat effectiveness for big game is discussed in Section 3.3.1 of the EA for Rocky Mountain Elk and White-tailed Deer. As these discussions indicate, both action alternatives meet Revised Forest Plan direction for big game habitat effectiveness and are an improvement over existing conditions.

NEC 18. It is possible to create snags by killing live trees. But, as indicated under NEC 13 above, retention of dense forested stands within the project area, in addition to snag and green tree retention standards, is expected to maintain adequate habitat for species that rely on dead trees. This is also in compliance with Revised Forest Plan direction for snag habitat.

NEC 19. The EA analysis uses inventory data from project area reconnaissance, District wildlife observation databases, Rocky Mountain Bird Observatory transects, and information from the South Dakota Department of Game, Fish and Parks. As the EA states, it is reasonable to expect that there may be suitable habitat for the flammulated owl in the project area, but no flammulated owls have been noted in the project area. Since the project would not affect existing late succession habitat and includes mitigation to create snags and protect existing snags, no additional mitigation was deemed necessary.

NEC 20. Ongoing Forest monitoring is addressed in the Black Hills National Forest 2002 Monitoring and Five-Year Evaluation Report. This report focuses on whether or not the Forest is meeting or moving toward established objectives set forth in the 1997 Land and Resource Management Plan.



LAWRENCE COUNTY COMMISSIONERS

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April 22, 2004

Research-Rochford Project
C/o Dave Atkins, US Forest Service
2014 N Main
Spearfish SD 57783

Dear Mr. Atkins:

Enclosed are comments on the **Research-Rochford** Project EA that were approved and adopted by the Lawrence County Commissioners. The members of the Lawrence County Timber Committee members have done many hours of research to develop these comments and we ask that you please consider these suggestions to the fullest extent provided by law.

We continue to have an interest in the management of the Black Hills National Forest since it affects all residents and provides employment and economic benefits to our county. Over 52% of the land base in our county is in the Black Hills National Forest.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry W. Weisenberg".

Terry W. Weisenberg
CHAIRMAN

Cc: Brad Axton, Acting BHNF Forest Supervisor
Pam Brown, BHNF District Ranger



EQUAL OPPORTUNITY EMPLOYER

SUMMARY OF THE TIMBER COMMITTEE

Comments on the Research-Rochford EA Project

Introduction: The Timber Committee of the Lawrence County Environmental Review Ordinance consisting of Bill Coburn (Chairperson), Druse Kellogg, Dean Rasmuson, Jerry Jensen, and Brad Gordon respectfully submits the following findings and comments to the Lawrence County Commissioners.

Custom, Culture and Economic Stability: The harvest of timber and the production of wood products, have been and currently, is an important part of the custom and culture of Lawrence County. Historical documents give evidence that when this county was settled during the late 1800's many people were gainfully employed in the harvesting of trees for the many types of wood products these early settlers needed. It is estimated that by 1897 over 1.5 billion board feet had been harvested from the Black Hills for use by these earlier settlers. The harvest of this timber also created wealth for the people by providing much needed jobs and economic activity. The 1940 census shows that 1022 people were directly employed by the forest products industry. Unfortunately the census does not indicate whether this included loggers. The 1990 census indicates that almost 500 people were employed in Lawrence County by this industry providing over \$14 million in wages and benefits.

These wages are some of the highest paid by any industrial sector operating in the county. The economic impacts that Lawrence County receives from sale of timber in the Black Hills National Forest is significant. In fiscal year 1998 the county received over \$940,000 from the 25% fund. The county also recognizes that the main purposes for managing the national forests as mandated in the "**Organic Act**" was "**to preserve and protect the forests**", "**to furnish a continuous supply of timber for the use and necessities of the citizens of the United States**", and "**to secure favorable conditions of water flows**". The first timber to be offered for sale under this Act in the United States was sold to Homestake Mining Company in Lawrence County in 1898.

General Comments: In light of the importance of the timber industry and the selling of National Forest timber to the custom, culture and economic stability of Lawrence County, the Timber Committee expresses the following comments and concerns in response to the Black Hills National Forest's Research-Rochford Draft Environmental Assessment. Our committee recognizes the tremendous challenge that the USFS is faced with in preparing a suitable document and plan. Our intent is to assist the Black Hills National Forest in preparing a project that will have the most positive benefits on the citizens of Lawrence County

I. Area Description and Size

The Research-Rochford Draft Environmental Assessment is located in the southern portion of Lawrence County and the north end of Pennington County, along and between Highway 385 and the Rochford Road.

It covers 25,690 acres of National Forest and 2928 acres of interspersed private lands. 22,295 acres of this project fall within the 5.1 Management Area that emphasizes Resource Production.

Purpose and Need for Project

The stated purpose of this project is to implement the Revised Forest Plan by reducing susceptibility to insects and disease, reducing hazardous fuels, producing timber, sustaining future timber yield, enhancing vegetative diversity, reducing road densities, and enhancing big game habitat. **After review of the three alternatives we find that none of them will substantially meet the intent of the stated purpose and need for the project area.** Reducing road densities appear to be the only objective that is being achieved.

LCC 1

This project was initiated as part of the Research-Rochford Peak EA in 1998 and signed by the Supervisor in 1999. The project was later withdrawn after the Chief's decision on administrative appeals, species viability and diversity. The Research-Rochford was reinitiated in May 2003 under the Phase 1 amendment guidelines. This is the second try at getting this project completed.

Vegetation Harvest Proposals

The commercial harvest proposals that are being proposed appear to be well thought out and will meet the vegetative needs on the ground. While most of the silvicultural prescriptions that have been recommended for this project area are well thought out, the amount of treatments is insufficient to meet the projects purpose and need. Only 2826 acres or 11% of the project area is being treated.

How Does the Proposals Meet the Purpose and Need of the Project?

Reducing Susceptibility to Insects and Disease

Currently there are 13,299 acres or 64% of the pine stands that have medium to high risk for mountain pine beetle. The proposed alternative only reduces the risk by 6.3 percentage point leaving 58% of the project at high to medium risk. As has been evidenced throughout the BHNF, mountain pine beetles are at epidemic levels. Leaving 58% of this project at this high level does not meet the **Purpose and Need** of the project. By leaving this many acres untreated the Forest Service is only escalating an already unhealthy forest health situation.

LCC 2

Reducing Hazardous Fuels

The proposed alternative would treat a total of 1218 acres of hazardous fuels including 285 acres around Wildland Urban Interface areas (WUI's) and 17 acres around Rochford. We agree with the proposed treatments to the extent that they are appropriately implemented. The Forest Service has several areas planned for prescribe burning to reduce fuels. There is a high probability that most of these acres will be whole tree harvested which will have a significant impact in how much residual fuel is left in the forests. The USFS needs to keep this in mind as

LCC 3

they evaluate whether a site needs to be burned after it has been harvested. We understand that the Forest Service has some overall prescribe fire goals for the BHNH, but we would encourage them to not burn unless it is really needed. We are concerned about one large prescribe burn in Unit 082005. Reviewing the RIS data indicates that one of the sites, Stand 12, is a 4C stand with 150 square feet of basal area per acre and 14,511 board feet per acre. This stand is much too heavily stocked to be prescribed burned without significant overstory mortality. This stand should be harvested before it is burned. In addition, the other stands that are included in this prescribe burn are not planned for any harvesting and will not have any new activity fuels. The last time they were harvested was most likely in the late 80's so the slash that exists is old and punky and does not present much of a fuel hazard. Based on this information we see that there appears to be no fuel reduction reason for doing this burn. Is the burn being done just to meet arbitrary prescribe burning goals?

LCC 3

One of the major problems regarding reducing the risk of large wildfires is that the Forest Service has not proposed any large landscape type planning to reduce the continuity of the crowns from south to north. Most of the largest and destructive wildfires that have occurred in the Black Hills have generally burned from south to north. This project area continues to retain a heavy stocking of trees over large areas. Large crown fires are the most destructive force that imperils our forest. It would be extremely helpful to have the forest crown broken up by hardwoods and lightly stocked stands of pine. The heavy crown cover on the north side of the road from Rochford to Merritt poses a serious risk to the forests to the north. It would have been very beneficial for the Forest Service to create a fuel break along this slope. In several areas, large scattered old growth occur that have a heavy mid and/or understory. A thinning from below, highlighting these large, old trees would have significantly reduced the danger of crown fire and also improved the growing conditions and survivability of these old trees. In addition, opening up these south-facing slopes so the snow would melt would be beneficial to the deer that use this area in the winter.

LCC 4

Producing Timber

The action alternative proposes to harvest 8 million board feet of timber. The 1999 Decision proposed harvesting 10.6 million board feet. One of the alternatives, Alternative 3, which could have been chosen by the Forest Service in 1999, had a predicted harvest of 15.6 million board feet. So, in a period of 5 years the harvest potential went from 15.6 million board feet to 8 million board feet, a 48% loss.

LCC 5

There were many sites that we visited that are carrying very high stocking levels that could have been harvested to produce timber. In addition, it appears that many of the suitable tractor and cable logging sites have not been considered for harvesting. We ask why is the Forest Service not trying to manage these suitable sites through time as the Forest Plan requires?

One of the cutting units appears to have poor access to it. The CT/POL unit that is located just west of Minnesota Gulch in Section 8 is going to be extremely tough to harvest due to the proposed road location. There is an old road that existed in the late 1890's that provides access into Minnesota Gulch from the north which would give access to the north and east side of this harvest unit. This road was used probably as late as 20 to 30 years ago and does have a roadbed, an old wood Forest Service sign and also an old culvert that has been pulled out of the creek.

LCC 6

Sustaining Future Timber Yield

The current RIS database shows that there is 13,461 acres of ponderosa pine timber on suitable lands containing 84 million board feet and another 15 million board feet on 3239 acres of unsuitable ground. These volumes exclude the 3 timber sales that occurred within this project area since 1991 and the ongoing Minnex Timber Sale.

The proposed alternative recommends to only harvest 9.5% of the standing timber. From almost any forestry perspective, this is too small. From a sustainable point, in order to keep the individual trees growing and healthy the forest needs to be regularly thinned every 15 years or so. The growth on this project is somewhere around 2.5%. Using an average volume of 5000 board feet per acre on about 20,000 acres of suitable ground means that every year the suitable acres are growing somewhere around 2.5 million board feet. So in 3.2 years, the growth will exceed the proposed harvest. Then considering that the Forest Service may not harvest any of this project area for another 10 years it renders the current harvest as being woefully inadequate.

There are also a significant number of sites that have been pre-commercially thinned more than 20 years ago that again need to be pre-commercially thinned. The trees are mostly POL size and have been stagnated for some time. If they were pre-commercially thinned their diameter growth would be significant.

Throughout most of the project area, a tremendous amount of regeneration has become established during the 1990's when germination success was very high. This abundant regeneration poses quite a challenge to the Forest Service on what they should do. As we understand it, the current approach is to thin the regeneration to 12 X 12 to 14 x 14 foot spacing only one time before the stand becomes commercial size. The Forest Service asserts that they may only get one chance at thinning this regeneration. We hope this is not the case. We highly recommend applying two pre-commercial thinnings when you are dealing with over 5000 stems per acre. The first thinning should be done when the trees are about 15 feet tall and the lower side branches are starting to thin or even die due to effects of competition and apical dominance. The spacing should be around 4 x 4 foot reducing the number of stems per acre to around 2500. The second thinning should take place when the average diameter is between 4 and 5 inches to around 9 x 9 spacing. When these trees reach between 8 and 9

LCC 7

inches dbh, they would be carrying about 200 square feet of basal area. At this point in time a commercial thin/pol harvest could be applied.

It appears the Forest Service is using this 12 by 12 foot spacing as a guide to even reduce the number of seedlings and saplings that are not even 5 feet tall. This is much too early and is long before the trees have started to express their tree and apical dominance. Seedlings less than 1" diameter at the ground level should be left to grow until they are about 15 to 20 years old and then they could be spaced at 4 x 4 feet. Some research by Forest Service shows that the most productive one entry thinning should be done when the trees are about 30 years old. The spacing at this age should be about 9 x 9 foot spacing followed by a commercial thinning when the trees reach merchantable size of about 9 inches dbh.

LCC 7

It is important that the Forest Service not thin too early because doing so has significant negative consequences. Trees thinned too early and to too wide a spacing will not experience apical dominance and opening up the understory will also allow a whole new crop of regeneration to get started. Without apical dominance, trees will grow into a very poor form class that will be shorter and heavier limbed than average tree in the Black Hills. These trees will be also be at higher risk to wildfire due to high amount of ladder fuel.

We would suggest that the Forest Service budget a significant amount of money for future KV treatments in this area to take care of the large amount of pre-commercial thinning that is going to be needed.

We would question the proposed treatment POL/PCT that is scheduled for Unit 824030091. The RIS database has very little stand data but the information that is there indicates that it has a 3B habitat structure and the tree size is large. From ground observations it appears that there is a significant amount of commercial timber within the unit and would suggest a commercial harvest followed by a POL/PCT treatment.

LCC 8

Enhancing Vegetative Diversity

We do like the pine encroachment harvest recommendations. Pine is encroaching on several meadows throughout the planning unit. Over time the pine will change the grass type to a forest type. It is important the Forest Service remain vigilant in keeping the existing meadows as meadows.

There are a significant number of missed opportunities to improve the vegetative diversity. The Forest Service is planning some aspen regeneration prescriptions but we would have liked to see more. In several areas, aspen and birch communities are being over run by mostly pine. These areas need to have the pine removed and the aspen encouraged to regenerate. We looked at several draws that used to support a significant amount of riparian vegetation and beaver. These draws are now being over grown by mostly pine and some

LCC 9

spruce. We would have liked to have seen the conifers removed on frozen ground to encourage the aspen/birch to rein habit these areas. This would also help increase the water flow and improve the conditions for potential beaver occupancy.

LLCC 9

Most of the pine stands are generally around 100 years old. We support the Forest Services efforts to create a variety of age classes and tree densities across the landscape. Again, we would have like to have seen considerably more treatments.

Reducing Road Density

The Forest Service is proposing to significantly reduce the year around access in this project area. In some cases there is justification for this. Some environmental damage has been occurring in specific areas from both 4-wheel drive SUV's and ATV's. The Forest Service's proposal includes reducing the miles of existing roads open all year from 114.5 miles to 93 miles, reducing the seasonally open roads from 28.7 miles to 20.4 miles, reducing the miles of yearlong closures from 22.3 miles to 21.5 miles. Probably the most significant reduction is the number of miles of roads and trails that are going to be decommissioned; 30.6 miles. This appears to be quite high but we have not had enough time to evaluate every section proposed to be closed. Quite a few of the roads that are being proposed to be decommissioned are short spurs that most likely will not have a negative impact on necessary access if the current road system is left in place. Some of these roads that are being decommissioned are parts of historical roads that have already been closed through nonuse or by administrative order.

Off road and on trail recreational use of this area is significant. This presents a challenge to the Forest Service to manage so that resource damage is minimal. It is important that the Forest Service take a proactive approach on this and not just gate or decommission roads to try to eliminate the use. The use is there and needs to managed and directed.

LCC 10

Another significant issue is that there are some historical roads that predate the establishment of the Black Hills Forest Reserve that are being proposed for decommissioning or closure. These should be carefully evaluated for their historical public access importance. One such road is located in Benner Gulch. Historical maps indicate that this trail was being used in the late 1890's. It is currently being used by ATV's. An intermittent stream is located in this draw that appears to flow in some locations perennially and in other areas only in wet years or in wet periods during the year. Some ATV users have used these wet areas for mud bogging so it is understandable why the Forest Service is concerned about resource damage. The existing road does not run up the creek. We would recommend that the Forest Service consider a season closure when the soil conditions are wet and soft. It is hard to quantify the historical importance of this road. It does readily access areas to the north of the Rochford

to Merritt road that are presently more difficult to access using the Silver Creek road system. There are quite a few other yearlong closures in this area that in essence completely close the entire area to motorized traffic. We are not sure for this reason. This area is not a winter wildlife area nor does the area provide any special habitat needs to endangered species.

There are several other historical road sections that are being closed or decommissioned that also deserve to be mentioned. The yearlong closure on 204.1B does shut down a historical trail that connects allows access to the Gimler Creek area and the Rochford to Merritt Road. Another historical road section that is being decommissioned is a road that takes off from Rochford to Merritt road in the southeast corner of section 11 in T2NR4E that connects to 616.1 and then runs over to Gimler Creek.

LCC 10

If roads are to be decommissioned and the road may be important from a fire suppression standpoint we would prefer gates as the best method for decommissioning roads. Access to the Black Hills National Forest is an important part of our local custom and culture.

Enhancing Big Game Habitat

There are no specific management areas within this project area that emphasize managing big game. Given that, management of big game and in fact all species is practiced throughout the Black Hills Forest. There does appear that there is a significant number of deer and elk that use this area. Historically, this area has not been used as a winter range but more a summer and fall area. Elk are becoming more abundant and probably stay in this area all year.

Summary

Dean Rasmuson and I visited with the Northern District of the Black Hills National Forest about our concerns on April 9, 2004. One of major issues that surfaced is that the Forest Service is claiming that they did not have time to include more areas for analysis. Increased cultural resource requirements implemented in 2000 have slowed their ability to cover more ground. They also state that their attention has been directed to other projects so that not enough time has been spent on this one. The reason the Forest Service is in this predicament is that their Timber Sale program only sold 36 million board feet in 2000, 9.6 million board feet in 2001, 44.6 million board feet in 2002 and 39.1 million board feet in 2003. The 1997 Forest Plan set the allowable sale quantity at 83.5 million board feet. They are now trying to play catch up and also meet their targets, which has put strain on their system.

LCC 11

Research Rochford EA is example of what is wrong with the Forest Service's approach to forest management. There have been 4 different projects (10,499 acres) that have or will have applied vegetative management treatments to areas within the confines of the project boundaries over the last 25 years. This project will be the 5th one and yet this leaves almost 50% of the project area not being

treated over the last 30 years or more. In almost anyone's eyes this is not getting the job done on the ground.

The current Forest Service approach to managing the Black Hills National Forest is disjunct. The project areas are too large and the amount of areas being treated is too small. There appears to be many untreated areas that are being lost between projects. All one has to do is look at the past sales and then look at where the treatment are being planned. Why is the Forest Service not going back and treating the areas around past sales like Merritt and Unction that have been closed for over 10 years?

LCC 11

This project is prime example of missed opportunities.

Respectfully Submitted by

Bill Coburn
Chairman
Lawrence County Timber Committee

RESPONSE TO LAWRENCE COUNTY COMMISSIONERS

LCC 1. A comparison of the various alternatives and their response to the issues, including insects, hazardous fuels, timber harvest, road closures and big game habitat is available in Section 2.4 of the EA. A discussion of the project's response to sustaining future timber yield and vegetative diversity is available in Section 3.1.1 of the EA.

LCC 2. As discussed in Section 3.1.1 of the EA, both action alternatives would reduce the acres of medium or high risk of insect infestation, and achieve the purpose and need to reduce susceptibility to insects and disease. As the discussion indicates, numerous areas are not proposed for treatment because of a multitude of resource concerns, including cultural, botanical, topography, and wildlife.

LCC 3. After trees are cut and yarded (as applicable), the stands would be reviewed for post-cutting fuels treatments. Prescribed burning would not occur if it is not necessary to reduce fuel hazard or promote the site for natural regeneration. Whole-tree yarding may reduce the need for burning. Prescribed burn mortality limits on suitable ground are 10% or less of merchantable timber. If parameters are not available to meet this requirement, the treatment would be dropped from all or a portion of the unit.

Much of the area contained in location 082005 contains suppressed POL with significant snow bend and storm damage. Industry has expressed little desire to purchase and remove this material due to lack of a market. Existing fuel conditions consist of older scattered slash and a thick pine litter layer with an occasional common juniper shrub, indicating fire exclusion. Reintroduction of fire in ponderosa pine stands is anticipated to maintain and improve the health of the ecosystem. A detailed site-specific burn prescription would be included in the project burn plan to minimize mortality to overstory trees with a low-intensity underburn.

LCC 4. Similar to the discussion in LCC 2 above, resource constraints precluded treatment of numerous areas, including potential fuelbreaks and/or thinning projects.

LCC 5. As discussed in Section 1.2 of this EA, the original 1999 Research-Rochford project was withdrawn because of an appeal of the Revised Forest Plan related to species viability issues. Subsequently, the Phase I Amendment was prepared to address the appeal points. Although the current Research-Rochford EA is independent of the 1999 decision, it stands to reason that the application of the constraints of the Phase I Amendment would result in less timber volume than available prior to the amendment. The stands are being managed as required by the Revised Forest Plan, which not only contains volume objectives, but numerous goals and objectives related to the management of other resources.

LLC 6. The large cutting unit in Section 8, T. 2 N., R. 4 E., is a products-other-than-logs/precommercial thinning (POL/PCT) prescription. There is a smaller commercial thin/POL/PCT unit to the south of this unit in Section 17. Neither of the units are west of Minnesota Gulch. It is not clear from the comment where the access is deemed inadequate. The access to the POL/PCT unit in Section 8 is via NFSR 204.1.G and 204.1D. The access to the cutting unit primarily located in Section 17 is via NFSR 203.5 and unclassified roads north of the unit.

LLC 7. See Response to LLC 5 above. Appendix H-3 in the Forest Plan displays the Timber Management Zone for stocking manipulation. The graph indicates that no timber management regimes require more than 60% average maximum density, or 650 trees per acre at 5.5" quadratic mean diameter. Since trees grow, it is required that the number of trees be reduced so the size may increase and still stay within the management zone.

A double precommercial entry may be desirable in terms of timber productivity, but experience has not shown this practice to be practical in terms of entry cycles or funding availability.

LCC 8. The prescription for unit 0824030091 is to treat trees less than 9" DBH to promote further growth in the unit. There probably are commercially harvestable trees in the unit.

LCC 9. See response to LLC 5 above. Although we are not sure which specific draws the comment refers to, many of the wetter areas located in drainages contain high-probability sensitive plant habitat.

LCC 10. The road closure scenario was developed following completion of a roads analysis for the area. Under any of the alternatives, sufficient access would remain to support fire access and multiple use of the area. Approximately 26.9 miles of the 30.6 miles of roads proposed to be decommissioned are unclassified roads that were not built or sanctioned by the Forest Service, and have not been maintained by the Forest Service. It is important to note that under the no action alternative approximately 114.5 miles of road would be open year-long. Under either of the action alternatives, 93.0 and 80.1 would still remain open to year-round use.

LCC 11. Much of the resource inventory and survey for the Research-Rochford project was completed prior to the 1999 EA and decision. The withdrawal of the 1999 decision resulted in modification of the project to meet Phase I amendment direction. Although the IDT recognized there were opportunities to expand the Research-Rochford project into new areas, very few areas could be added because of limited inventory. In addition, projects other than Research-Rochford occupied the time of inventory personnel and new inventory could not be completed. The decision was made to proceed with a smaller project and not postpone the Research-Rochford project for several years to allow new inventory to be completed.



Comments on the Research-Rochford EA Project

General Comments: Pope & Talbot, Inc. recognizes the tremendous challenge that the USFS is faced with in preparing a suitable document and plan. Our intent is to assist the Black Hills National Forest in preparing a project that will have the most positive benefits for the national forest and all US citizens.

I. Area Description and Size

The Research-Rochford Draft Environmental Assessment is located in the southern portion of Lawrence county and the north end of Pennington County, along and between Highway 385 and the Rochford Road.

It covers 25,690 acres of National Forest and 2928 acres of interspersed private lands. 22,295 acres of this project fall within the 5.1 Management Area that emphasizes Resource Production.

Purpose and Need for Project

The stated purpose of this project is to implement the Revised Forest Plan by reducing susceptibility to insects and disease, reducing hazardous fuels, producing timber, sustaining future timber yield, enhancing vegetative diversity, reducing road densities, and enhancing big game habitat. **After review of the three alternatives we find that none of the proposed alternatives will substantially meet the intent of the stated purpose and need for the project area.** Reducing road densities appear to be the only objective that is being achieved.

P&T 1

This project was initiated as part of the Research-Rochford Peak EA in 1998 and signed by the Supervisor in 1999. The project was later withdrawn after the Chief's decision on administrative appeals, species viability and diversity. The Research-Rochford was reinitiated in May 2003 under the Phase 1 amendment guidelines. This is the second try at getting this project completed.

Vegetation Harvest Proposals

The commercial harvest proposals that are being proposed appear to be well thought out and will meet the vegetative needs on the ground. While most of the silvicultural prescriptions that have been recommended for this project area are well thought out, the amount of treatments is insufficient to meet the projects purpose and need. Only 2826 acres or 11% of the project area is being treated.

How Does the Proposals Meet the Purpose and Need of the Project?

Reducing Susceptibility to Insects and Disease

Currently there are 13,299 acres or 64% of the pine stands that have medium to high risk for mountain pine beetle. The proposed alternative only reduces the risk by 6.3 percentage point leaving 58% of the project at high to medium risk. As has been evidenced throughout the BHN, mountain pine beetles are at epidemic levels. Leaving 58% of this project at this high of level does not meet the Purpose and Need of the project. By leaving this many acres untreated the Forest Service is only escalating an already unhealthy forest health situation.

P&T 2

Reducing Hazardous Fuels

The proposed alternative would treat a total of 1218 acres of hazardous fuels including 285 acres around Wildland Urban Interface areas (WUI's) and 17 acres around Rochford. We agree with the proposed treatments to the extent that they are appropriately implemented. The Forest Service has several areas planned for prescribe burning to reduce fuels. There is a high probability that most of these acres will be whole tree harvested which will have a significant impact in how much residual fuel is left in the forests. The USFS needs to keep this in mind as they evaluate whether a site needs to be burned after it has been harvested. We understand that the Forest Service has some overall prescribe fire goals for the BHN, but we would encourage them to not burn unless it is really needed. We are concerned about one large prescribe burn in Unit 082005. Reviewing the RIS data indicates that one of the sites, Stand 12, is a 4C stand with 150 square feet of basal area per acre and 14,511 board feet per acre. This stand is much to heavily stocked to be prescribe burned without significant overstory mortality. This stand should be harvested before it is burned. In addition, the other stands that are included in the prescribe burn are not planned for any harvesting and will not have any new activity fuels. The last time they were harvested was most likely in the late 80's so the slash that exists is old and punky and does not present much of a fuels hazard. Based on this information we see that there appears to be no fuel reduction reason for doing this burn. Is the burn being done just to meet arbitrary prescribe burning goals?

P&T 3

One of the major problems regarding reducing the risk of large wildfires is that the Forest Service has not proposed any large landscape type planning to reduce the continuity of the crowns from south to north. Most of the largest and destructive wildfires that have occurred in the Black Hills have generally burned from south to north. This project area continues to retain a heavy stocking of trees over large areas. Large crown fires are the most destructive force that imperils our forest. It would be extremely helpful to have the forest crown broken up by hardwoods and lightly stocked stands of pine. The heavy crown cover on the northside of the road from Rochford to Merritt poses a serious risk to the

P&T 4

forests to the north. It would have been very beneficial for the Forest Service to create a fuel break along this slope. In several areas, large scattered old trees occur that have a heavy mid and/or understory. A thinning from below, highlighting these large, old trees would have significantly reduced the danger of crown fire and also improved the growing conditions and survivability of these old trees. In addition, opening up these south facing slopes so the snow would melt would be beneficial to the deer that use this area in the winter.

P&T 4

Producing Timber

The action alternative proposes to harvest 8 million board feet of timber. The 1999 Decision proposed harvesting 10.6 million board feet. One of the alternatives, Alternative 3, that could have been chosen by the Forest Service in the 1999 project had a predicted harvest of 15.6 million board feet. So, in a period of 5 years the harvest potential went from 15.6 million board feet to 8 million board feet, a 48% loss. The action alternative that proposes to harvest 8 million board feet is insufficient. The Forest Service states that one of the main purposes and needs for this project is to produce timber. This project fails to manage the timber resource in a substantive manner. The FS desperately needs to take a more aggressive approach toward managing and harvesting timber

P&T 5

There were many sites that we visited that are carrying very high stocking levels that could have been harvested to produce timber. In addition, it appears that many of the suitable tractor and cable logging sites have not been considered for harvesting. We ask why is the Forest Service not trying to manage these suitable sites through time as the Forest Plan requires?

One of the cutting units appears to have poor access to it. The CT/POL unit that is located just west of Minnesota Gulch in Section 8 is going to be extremely tough to harvest due to the proposed road location. There is an old road that existed in the late 1890's that provides access into Minnesota Gulch from the north which would give access to the north and east side of this harvest unit. This road was used probably as late as the 20 to 30 years ago and does have a road bed, an old wood Forest Service sign and also old culvert that has been pulled out of the creek.

P&T 6

Sustaining Future Timber Yield

The current RIS data base shows that there is 13,461 acres of ponderosa pine timber on suitable lands containing 84 million board feet and another 15 million board feet on 3239 acres of unsuitable ground. These volumes exclude the 3 timber sales that occurred within this project area since 1991 and the ongoing Minnex Timber Sale

P&T 7

The proposed alternative recommends that only 9.5% of the standing timber is available for harvest. From almost any forestry perspective this is too small. From a sustainable point, in order to keep the individual trees growing and healthy they need to be regularly thinned every 15 years or so. The growth on

this project is somewhere near 2.5% of the standing volume per acre per year which means that every year the 20,000 acres of pine on suitable acres is growing somewhere around 2.5 million board feet. So in 3.2 years, the growth will exceed the proposed harvest. Then consider that the Forest Service may not harvest this project for another 10 years it renders the current harvest as being woefully inadequate.

There are also a significant number of sites that have been precommercially thinned more than 20 years ago that again need to be precommercially thinned. The trees are mostly POL size and have been stagnated for some time. If they were precommercially thinned their diameter growth would be significant.

Throughout most of the project area, a tremendous amount of regeneration has become established during the 1990's when germination success was very high. This abundant regeneration poses quite a challenge to the Forest Service on what they should do. As we understand it, the current approach is to thin the regeneration to 12 X 12 to 14 x 14 foot spacing only one time before the stand becomes commercial size. The Forest Service asserts that they may only get one chance at thinning this regeneration. We hope this is not the case. We highly recommend applying two precommercial thinnings when you are dealing with over 5000 stems per acre. The first thinning should be done when the trees are about 15 feet tall and the lower side branches are starting to thin or even die due to effects of competition and apical dominance. The spacing should be around 4 x 4 foot reducing the number of stems per acre to around 2500. The second thinning should take place when the average diameter is between 4 and 5 inches to around 9 x 9 spacing. When these trees reach between 8 and 9 inches dbh, they would be carrying about 200 square feet of basal area. At this point in time a commercial thin/pol harvest could be applied.

P&T 7

It appears the Forest Service is using this 12 by 12 foot spacing as a guide to even reduce the number of seedlings and saplings that are not even 5 feet tall. This is much too early and is long before the trees have started to express their tree and apical dominance. Seedlings less than 1" diameter at the ground level should be left to grow until they are about 15 to 20 years old and then they could be spaced at 4 x 4 feet. Some research by Forest Service shows that the most productive one entry thinning should be done when the trees are about 30 years old. The spacing at this age should be about 9 x 9 foot spacing followed by a commercial thinning when the trees reach merchantable size of about 9 inches dbh.

It is important that the Forest Service not thin too early because doing so has significant negative consequences. Trees thinned too early and to too wide a spacing will not experience apical dominance and opening up the understory will also allow a whole new crop of regeneration to get started. Without apical dominance, trees will grow into a very poor form class that will be shorter and

heavier limbed than average tree in the Black Hills. These trees will be also be at higher risk to wildfire due to high amount of ladder fuel.

We would suggest that the Forest Service budget a significant amount of money for future KV treatments in this area to take care of the large amount of precommercial thinning that is going to be needed.

P&T 7

We would question the proposed treatment POL/PCT that is scheduled for Unit 824030091. The RIS data base has very little stand data but the information that is there indicates that it has a 3B habitat structure and the tree size is large. From ground observations it appears that there is a significant amount of commercial timber within the unit and would suggest a commercial harvest followed by a POL/PCT treatment.

P&T 8

Enhancing Vegetative Diversity

We do like the pine encroachment harvest recommendations. Pine is encroaching on several meadows throughout the planning unit. Over time the pine will change the grass type to a forest type. It is important the Forest Service remain vigilant in keeping the existing meadows as meadows.

There are a significant number of missed opportunities to improve the vegetative diversity. The Forest Service is planning some aspen regeneration prescriptions but we would have liked to seen more. In several areas, aspen and birch communities are being over run by mostly pine. These areas need to have the pine removed and the aspen encouraged to regenerate. We looked at several draws that used to support a significant amount of riparian vegetation and beaver. These draws are now being over grown by mostly pine and some spruce. We would have liked to have seen the conifers removed on frozen ground to encourage the aspen/birch to rein habit these areas. This would also help increase the water flow and improve the conditions for potential beaver occupancy.

P&T 9

Most of the pine stands are generally around 100 years old. We support the Forest Services efforts to create a variety of age classes and tree densities across the landscape. Again, we would have like to have seen considerably more treatments.

Reducing Road Density

The Forest Service is proposing to significantly reduce the year around access in this project area. In some cases there is justification for this. Some environmental damage has been occurring in specific areas from both 4 wheel drive SUV's and ATV's. The Forest Service's proposal includes reducing the miles of existing roads open all year from 114.5 miles to 93 miles, reducing the seasonally open roads from 28.7 miles to 20.4 miles, reducing the miles of yearlong closures from 22.3 miles to 21.5 miles. Probably the most significant reduction is the number of miles of roads and trails that are going to be

decommissioned; 30.6 miles. This appears to be quite high but we have not had enough time to evaluate every section proposed to be closed. Quite a few of the roads that are being proposed to be decommissioned are short spurs that most likely will not have a negative impact on necessary access if the current road system is left in place. Some of these roads that are being decommissioned are parts of historical roads that have already been closed through nonuse or by administrative order.

Off road and on trail recreational use of this area is significant. This presents a challenge to the Forest Service to manage so that resource damage is minimal. It is important that the Forest Service take a proactive approach on this and not just gate or decommission roads to try to eliminate the use. The use is there and needs to be managed and directed.

Another significant issue is that there are some historical roads that predate the establishment of the Black Hills Forest Reserve that are being proposed for decommissioning or closure. These should be carefully evaluated for their historical public access importance. One such road is located in Benner Gulch. Historical maps indicate that this trail was being used in the late 1890's. It is currently being used by ATVs. An intermittent stream is located in this draw that appears to flow in some locations perennially and in other areas only in wet years or in wet periods during the year. Some ATV users have used these wet areas for mud bogging so it is understandable why the Forest Service is concerned about resource damage. The existing road does not run up the creek. We would recommend that the Forest Service consider a season closure when the soil conditions are wet and soft. It is hard to quantify the historical importance of this road. It does readily access areas to the north of the Rochford to Merritt road that are presently more difficult to access using the Silver Creek road system. There are quite a few other yearlong closures in this area that in essence completely close the entire area to motorized traffic. We are not sure for this reason. This area is not a winter wildlife area nor does the area provide any special habitat needs to endangered species.

There are several other historical road sections that are being closed or decommissioned that also deserve to be mentioned. The yearlong closure on 204.1B does shut down an historical trail that connects allows access to the Gimler Creek area and the Rochford to Merritt Road. Another historical road section that is being decommissioned is a road that takes off from Rochford to Merritt road in the southeast corner of section 11 in T2NR4E that connects to 616.1 and then runs over to Gimler Creek.

If roads are to be decommissioned and the road may be important from a fire suppression standpoint we would prefer gates as the best method for decommissioning roads. Access to the Black Hills National Forest is an important part of our local custom and culture.

P&T 10

Enhancing Big Game Habitat

There are no specific management areas within this project area that emphasize managing big game. Given that, management of big game and in fact all species is practiced throughout the Black Hills Forest. There does appear that there is a significant number of deer and elk that use this area. Historically, this area has not been used as a winter range but more a summer and fall area. Elk are becoming more abundant and probably stay in this area all year.

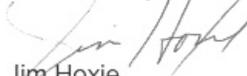
Summary

The current Forest Service approach to managing the Black Hills National Forest is not properly managing the timber resource. The project areas are too large and the actual amount of acres being treated is small. There are many untreated areas that are being lost between projects. All one has to do is look at the past sales and then look at where the treatments are being planned. Why is the Forest Service not going back and treating the areas around past sales like Merritt and Unction that have been closed for over a decade?

The stated purposes and needs for this project as outlined by the US Forest Service have not been met. It is unfortunate that so much time, money and energy has been expended with a product that produces so little on the ground resource management. I am hopeful that these comments will be viewed in a constructive manner and that future projects will accomplish more on the ground.

P&T 11

Submitted by



Jim Hoxie
Black Hills Resource Manager

RESPONSE TO POPE AND TALBOT, INC.

P&T 1. See LCC 1.

P&T 2. See LCC 2.

P&T 3. See LCC 3.

P&T 4. See LCC4.

P&T 5. See LCC 5.

P&T 6. See LCC 6.

P&T 7. See LCC 7.

P&T 8. See LCC8.

P&T 9. See LCC 9.

P&T 10. See LCC 10.

P&T 11. See LCC 11.



Working to Protect Native Species and Their Habitats

P.O. Box 1512, Laramie, WY 82073 (307) 742-7978 fax: 742-7989

April 23, 2004

Research-Rochford Project
c/o Dave Atkins
U.S. Forest Service
2014 N. Main
Spearfish, SD 57783

Re: Comments on Draft Environmental Assessment for the Research-Rochford Project

Dear Mr. Atkins:

Biodiversity Conservation Alliance, Native Ecosystems Council, and Jeremy Nichols submit these comments in response to the Draft Environmental Assessment ("DEA") for the Research-Rochford Project. As the Research-Rochford project involves a significant level of commercial logging and other tree cutting activities, hereafter it will be referred to as the Research-Rochford timber sale.

Once again, the Black Hills National Forest ("BHNF") has failed to take a serious and objective look at the environmental impacts of logging and road construction in the Black Hills and has failed to adequately protect the natural values of the Forest. The DEA exemplifies the fact that the BHNF is prioritizing extensive and intensive logging above species and habitat protection. The BHNF has made it all-too-clear that providing commercial timber is the overriding goal and objective for management of the Forest. Thus, while we have many concerns over the environmental impacts of the Research-Rochford timber sale and have many suggestions for ways the BHNF could implement the timber sale in more environmentally sensitive ways, we are sure that such concerns and suggestions will be ignored by the decisionmaker. Our experiences with the BHNF only buttress our cynicism. Nonetheless, we will express our concerns.

Concerns over DEA

Alternatives

The DEA fails to analyze in detail a range of reasonable alternatives. We are also dismayed at the fact an alternative that "Emphasize[s] the removal of smaller trees" was not considered in detail. The DEA asserts that, "Alternative C responds partially to this suggestion, but wholesale application of all these parameters would not follow the direction of the Revised Forest Plan or the goals and objectives for Management Area 5.1, and would not meet the purpose and need identified for the project." DEA p. 30. However, the DEA provides no information or analysis supporting this contention. We can find no information supporting the BHNF's contention that such an alternative "would not follow the direction of the Revised Forest Plan ." We can find no information or analysis supporting the contention that such an alternative would not meet the goals and objectives for Management Area 5.1. We can also find no information or analysis showing that such an alternative would not meet the purpose and need. The

BCA 1

BHNF seems only to be arm waving, but at the least has given no rational grounds for denying this alternative.

The BHNF also dismissed this alternative because "Convincing rationale to consider these changes was not provided." DEA p. 30. While it should be obvious to the responsible official why such an alternative was suggested, we will nonetheless provide a convincing rationale:

We are very concerned over the status of old growth ponderosa pine forest on the Black Hills. While the BHNF has not adequately identified old growth throughout the Forest, typically old growth ponderosa pine is associated with stands structural stage 5. Old growth is also typified by a complex structure, including abundant down woody debris and snags (dead and dying trees), although stands of old trees with a simple understory and dense canopy are also valuable. A number of species are dependent in some way (some entirely) on old growth ponderosa pine forest. Scientific studies have all found that pine marten, black-backed and three-toed woodpeckers, brown creeper, northern goshawk, northern flying squirrel, some rare and/or sensitive plants, snail species of concern, and other animals depend to some degree on old growth ponderosa pine.¹ Current estimates suggest that less than 1% of the entire ponderosa pine forest of the BHNF is old growth. All available information indicates this figure is below historical levels. Although estimates of historical old growth amounts vary, it is generally accepted that high-grading of large trees, continued and consistent even-aged management of stands of ponderosa pine, and logging in general has reduced old growth on the forest. Most of the remnant old growth lies within the Black Elk Wilderness Area or the Sand Creek Roadless Area, two widely separated portions of the BHNF. Thus, not only is the abundance of old growth of concern, but adequate distribution of this forest habitat type is also problematic.

Ponderosa pine in structural stages 4C and 4B are likely, if remained unlogged, to naturally succeed into old growth forest. Thus, deferring harvest of stands of 4C and 4B through the Research-Rochford timber sale would address the need to produce more old growth across the BHNF and the need to protect and restore biodiversity on the BHNF.

Although the BHNF may claim that the No Action Alternative addresses concerns over old growth, logging, etc., we remind the BHNF that it has itself stated that the No Action Alternative does not meet the purpose and need for the Research-Rochford timber sale. Thus, the BHNF has essentially eliminated any possibility of this alternative being selected. It is difficult to see how an alternative that has no chance of being adopted reasonably addresses public and environmental concerns over the Research-Rochford timber sale.

As it is, we do not feel the No Action Alternative is the best course of action. It does not incorporate any road closures or decommissioning, which is an important aspect of the Research-Rochford timber sale. We have suggested several alternatives that still provide commercial timber and meet a host of other goals and objectives. The No Action Alternative does not substitute for these alternatives. To suggest that the No Action Alternative addresses our concerns is nothing short of an insult to our intelligence and integrity. We request the BHNF revisit alternatives for the Research-Rochford timber sale.

Late Successional Forest

¹ Although these animals may live outside of old growth, old growth is generally identified as optimum habitat or the habitat where the species is most likely to persist in the long-term.

BCA 1

We question how the BHNF assessed impacts to late successional forest? In other words, how did the BHNF determine that impacts to late successional forest would not be significant?

We are also concerned that the DEA fails to adequately analyze the cumulative impacts to late successional forest. For instance, although the DEA claims there would be no cumulative impacts, wouldn't the timber sale, in harvesting stands of SS 4C and 4B, affect the future abundance and distribution of old growth forest? Why wasn't this cumulative impact considered?

BCA 2

Regardless of the BHNF's assumptions about old growth on the Black Hills, it is undeniable that the Research-Rochford timber sale will have impacts on future old growth abundance and distribution. Disclosing such impacts is vital to ensuring the public understands the impacts of the timber sale and that the decisionmaker is well informed.

Sensitive Animal Species

The DEA neither presents nor references population data that would provide a context for the BHNF's determination that the viability of sensitive species would not be negatively impacted and/or jeopardized as a result of the Research-Rochford timber sale. Additionally, the DEA fails to even explain whether a viable population of marten, goshawk, or black-backed woodpecker currently exists on the BHNF. A viable population is defined at 36 CFR § 219.19 as "one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area." As it is, neither the 1997 Revised Forest Plan or 2001 Phase I Amendment explain what constitutes a viable population of marten, goshawk, or black-backed woodpecker and whether viable populations actually are in existence. The BHNF has a duty to determine and disclose information regarding viability if it is going to assert that the Research-Rochford timber sale will not jeopardize the viability of these species.

BCA 3

The analysis of impacts to northern goshawk appears lacking. For instance, the DEA discloses that only one recent report of goshawk nest vandalism exists. Yet, in discussing this issue with biologists on the BHNF, we have heard accounts of vandalism affecting over 3 goshawk nests in the Northern Hills Ranger District. Although this cumulative impact did not occur in the project-area, it still seems relevant to the analysis and assessment of impacts to goshawk viability. The cumulative impacts discussion also entirely fails to discuss the impacts of recent fires, which have affected well over 10% of the entire BHNF. We are very concerned that fires have limited the availability of nesting habitat and that the Research-Rochford timber sale could pose significant cumulative impacts to goshawk nesting habitat.

BCA 4

We also question how the BHNF assessed impacts to northern leopard frog and Black Hills red-bellied snake? It is unclear whether Forest Plan Standard 3116 will be complied with. Although the DEA claims that this Standard will not be violated, there is no information or analysis presented in the DEA to suggest this is accurate.

BCA 5

Snail Species of Concern

We are concerned that the BHNF is not adequately protecting snail species of concern. The DEA states, "The [*Vertigo arthru*] colony would be avoided and would not be affected by any of the actions associated with any alternative." DEA p. 54. Yet the DEA fails to explain how the colony will actually

BCA 6

be avoided and thus fails to provide any information or analysis supporting the contention that the callused vertigo colony will not be protected.

We are also concerned that the BHNF has not adequately avoided colonies of snail species of concern. In particular, we are concerned about the impacts of logging and road construction on local hydrology, the edge-effects associated with logging and road construction, and the impacts of off-road vehicle use to snail colonies of special concern.

BCA 6

Management Indicator Species

The DEA fails to provide or reference population trend data for MIS, despite clear regulatory direction requiring such information before making project-level decisions. Although the DEA references some population data for birds monitored through the Rocky Mountain Bird Observatory, we can find no indication that this represents actual trend data.

We also seriously question the BHNF's analysis and assessment of impacts to brown creeper. According to Anderson and Crompton (2002), brown creeper avoid logged areas (by shelterwood cuts) and are sensitive to patch size.² The DEA makes no mention of this paper, its findings, or the inverse relationship between shelterwood logging and brown creepers.

BCA 7

Sensitive Aquatic Species

The cumulative impacts analysis for mountain sucker entirely fails to address the impacts of nonnative fish to this sensitive species. Additionally, there is no scientific basis for the finding that mountain sucker populations are resilient to disturbance of their habitat, as suggested by Isaak et al. (2003). According to a report by the South Dakota Department of Game, Fish, and Parks, mountain suckers were found in only 27 of 133 streams sampled in the Black Hills and only five streams produced densities of greater than 30 fish per 100 meters of stream. See, Attachment 1 to these comments. According to this report as well, mountain sucker are now extirpated from Beaver Creek in the southern Black Hills, the Cheyenne River, Chicken Creek, Crow Creek, Hat Creek, Spearfish Creek, and Spring Creek below Sheridan Lake.

BCA 8

Overall, the DEA entirely fails to analyze and assess the site-specific impacts of the Research-Rochford timber sale to mountain sucker. There is no information provided or referenced on populations of mountain sucker in the timer sale area, the cumulative impacts these populations may have experienced, and no adequate analysis or assessment of direct or indirect impacts to these populations. Although the BHNF claims that impacts to watersheds will be mitigated, there is no indication that the short-term impacts of the logging and road construction will not significantly impact the mountain sucker and its habitat.

Sensitive Plants

It is unclear to what extent high quality sensitive plant habitat has been surveyed and/or to what extent such habitat will be protected. Furthermore, it is unclear how the BHNF assessed impacts to sensitive

BCA 9

² Anderson, S.H. and B.J. Crompton. 2002. The effects of shelterwood logging on bird community composition in the Black Hills, Wyoming. *Forest Science* 48(2):365-372.

plant species and how the Forest overall concluded that impacting sensitive plant species and their habitats would not jeopardize species viability on the BHNF.

Snags

We are very concerned that snag standards are insufficient to protect snags and snag-dependent species. Through a recent Freedom of Information Act request, Brian Brademeyer of Native Ecosystems Council obtained the documentation the BHNF relies upon to support the effectiveness of snag retention measures and the ability of logging project to move snag densities toward meeting Forest Plan standards. This report, entitled "Snag Populations on the Black Hills National Forest," a USDA Forest Service Rocky Mountain Research Station publication by Leigh Lentile, Frederick Smith, and Wayne Sheppard, discloses average snag persistence to be around 15 years. The data presented in the report indicates that snag persistence is strongly correlated with stand density and tree age, a factor that the Research-Rochford timber sale DEA fails to address. Based on this relationship, it was determined mathematically that thinning, which reduces the basal area of forest stands, would decrease snag persistence significantly. It was also determined that, because so much of the forests of the Black Hills are young, snag persistence is also already much reduced.

Based on the data in "Snag Populations on the Black Hills National Forest," it can be seen that an existing 100-year old snag could be expected to persist for less than one year (only 7 months) after thinning a stand down to 40 basal area, even without direct damage to the snag through logging. By way of comparison, a 250-year old tree dying in an old-growth stand of 150 basal area could be expected to provide snag habitat for an average of 49.8 years, 4 times as long as a 100-year old tree. Similarly, reducing an existing stand (say 100-year old trees) from 110 basal area to 40 basal area would literally decimate existing snag habitat, reducing the future lives of existing snag from 6 years down to 7 months.

BCA 10

It was essentially determined, based on simple mathematical relationships, that stands of older and more dense trees support snags longer, thereby ensuring higher snag densities that comply with or exceed Forest Plan standards. Given that the Research-Rochford timber sale will create stands of younger, more open trees, it is difficult to see how snag retention measures will be effective.

Additionally, will safety hazard snags be logged? If so, we request the BHNF consider an alternative that, instead of cutting safety hazard snags, leaves a forested buffer around these snags equal to or greater than the height of the snag. This will address the need to retain existing snags for wildlife.

BCA 11

Soils and Waters

Although the DEA discloses that all streams are meeting their beneficial uses in the timber sale area, we question how much monitoring has actually been done? Furthermore, although DENR may claim that streams are not impaired, the agency has reported water quality violations for several streams in the Black Hills. The agency claims that these violations are not significant enough to warrant inclusion on the list of impaired streams.

BCA 12

However, while DENR may take such a skewed view of water quality enforcement and management, the BHNF is obligated under the Clean Water Act to fully comply with water quality standards. Nowhere in the Clean Water Act does it allow federal agencies latitude to violate water quality standards. Thus, we

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request the BHNF revisit its analysis of impacts to water quality and ensure that all applicable state water quality standards are complied with as a result of the Research-Rochford timber sale.

BCA 13

In discussing the impacts of mass movement, the DEA states, "Slumping may occur in areas where rock layers are parallel to the cutslope of roads, but would only affect the road, and would not pose a risk to downslope resources." DEA p. 77. We seriously question the accuracy of this statement. For one thing, why wouldn't slumping impact downslope resources? Does the BHNF have debris fences along its roads or have plans to install such fences? Additionally, the potential for slumping strongly indicates an increased erosion risk and higher potential for sediment transportation to streams as a result of storm events. These potentially significant impacts are entirely overlooked in the DEA. Also, can BMPs adequately mitigate the impacts of slumping in the Research-Rochford project area?

Overall, the BHNF seems to believe that the proposed road decommissioning and/or closing would alleviate sediment pollution problems and concerns. However, we can find no information showing that sediment pollution will be decreased or decreased to levels that adequately protect water quality and aquatic habitats.

BCA 14

We also question the effectiveness of BMPs. Although the BHNF claims that these measures are effective, we have seen no information or analysis showing that BMP application actually protects water quality in the context of water quality standards and/or adequately protect aquatic habitats. Furthermore, we have seen no information or analysis showing that BMPs protect soils and waters in light of high erosion risk, steep slopes, and in light of cumulative impacts already experienced by watersheds.

BCA 15

The DEA indicates that livestock grazing is causing some areas of the timber sale area to be near 15% soil disturbance. The DEA claims that these areas will not be directly impacted by proposed vegetative harvest or fuel treatments, and none of the alternatives would add to the cumulative effect on these areas. Although these areas of disturbance may not be directly impacted, the Forest Plan requires that soil disturbance be limited to no more than 15 percent of any land unit. It is unclear whether the BHNF is complying with this standard.

BCA 16

The DEA indicates that the cumulative impacts of off-road vehicle use are unknown (see, DEA p. 80). This is of great concern since the DEA discloses that off-road vehicle use could lead to detrimental soil impacts and, assumably, potentially significant watershed impacts (e.g., through stream fords, etc.). The level of uncertainty regarding the impacts of off-road vehicle use, while disconcerting, strongly indicates an Environmental Impact Statement is required to appropriately address this high level of uncertainty and the potential violation of federal law, namely violation of Forest Plan standards.

BCA 17

The BHNF also needs to apply for a stormwater discharge permit for the proposed road construction.

BCA 18

Economics

The economic analysis entirely fails to address the economic benefits associated with wildlife viewing, recreational use of the Research-Rochford area, hunting, fishing, and other activities not directly associated with logging. It is difficult to understand how the BHNF has appropriately considered the costs and benefits of the timber sale by ignoring such economic benefits.

BCA 19

Other Concerns

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We request the BHNF analyze and assess the impacts of the Research-Rochford timber sale to the northern flying squirrel and Bear Lodge meadow jumping mouse. There is much concern over these species because of the loss of old growth and riparian habitats in the BHNF. There is no existing information or analysis showing that current management direction adequately protects these rare species and their habitats.

BCA 20

We are also concerned about the BHNF's contentions that road closures effectively mitigate negative environmental impacts associated with roads. According to officials, road closures do not even become effective until a closure order is signed. When does the Forest intend to get closure orders signed for roads? Additionally, most road closure and decommissioning seems to occur only when funding is available. Will funding be available to effectively close and decommission all roads proposed for such actions? Finally, how effective are road closures? We have visited the Black Hills many times and have seen gates torn down and/or destroyed by forest users, have seen people in vehicle and ATVs simply drive around gates, and have generally observed a widespread disregard toward any and all forest road closures. Given this situation, how will the BHNF ensure that a closed road will actually be closed?

BCA 21

Sincerely

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RESPONSE TO BIODIVERSITY CONSERVATION ALLIANCE

BCA 1. The alternatives considered in the EA are identified in Sections 2.1 and 2.3 of the EA and are based on IDT input and public comment received during scoping. The alternative emphasizing the removal of smaller trees is discussed in Section 2.3 of the EA. The “small tree only” harvest alternative would not follow the direction of the Revised Forest Plan. As explained in Section 1.5 of the EA, Forest wide Objective 303 to offer 838 MMBF of sawtimber and 21MMCF of roundwood has not been met for the current decade. Stands proposed for harvest are in Management Area 5.1 and are anticipated to help the Forest meet this objective. As the narrative further indicates, several stands in the project area require treatment to meet future timber needs identified in Objective 303. The purpose and need identified for the project includes producing timber and sustaining future timber yield.

Alternative C was developed to provide a better balance of structural stage diversity than Alternative B, and results in less treatment in both 3C and 4C stands. In addition, the no action alternative would involve no treatment in any stands, including 4C and 4B. Both of these alternatives address the commentator’s concern to eliminate and/or reduce treatment involving large trees. As the commentator points out, the no action alternative would not meet the purpose and need for the project and would not produce timber products or sustain future timber yield.

BCA 2. The project would not involve treatment in any late successional stands. Designated late-successional areas would be left untreated and are expected to provide future late-successional areas as identified in the Revised Forest Plan. The effects of the project on late succession habitat are discussed in Section 3.3.1 of the EA. As the discussion indicates, thinning and fuels treatments are anticipated to increase the growth of trees and decrease the likelihood that stands would be lost because of insects or wildfire. The late succession cumulative effects discussion acknowledges the effects of previous management on late succession.

BCA 3. Population data that is currently available for sensitive species and management indicator species is available in the BHNF monitoring and five-year evaluation report. Discussions of marten, goshawk, and black-backed woodpecker are available on pages 57, 58, and 55, respectively, of that document. The effects analysis for these species utilized this information.

BCA 4. See NEC 4. As discussed at the beginning of Chapter 3, the cumulative effects area for most resources, including the goshawk analysis, is the project area as depicted in Figure 8 in the EA. No known goshawk vandalism has occurred in this area. In addition, there have been no large, stand-replacing wildfires in the cumulative effects analysis area in recent decades.

BCA 5. Effects on northern leopard frog and Black Hills redbelly snake are discussed in Section 3.3.1 of the EA. Proposed treatments and/or new road construction under alternative B would not result in adding barriers between wetlands and known or suspected redbelly snake hibernacula. The project complies with Forest Plan Standard 3116.

BCA 6. This section of the EA has been revised to reflect the effects and mitigation associated with the snail colony in the project area.

BCA 7. Each analyzed management indicator species includes a summary discussion of population viability and trend based on available information. Please refer to the wildlife BE and specialist report for additional information. Additional analysis has been incorporated into the discussion of the brown creeper based on Anderson and Crompton (2002).

BCA 8. Additional analysis and data contained in the project record (Wildlife BE and Specialist Report) is included in the final EA discussion for the mountain sucker. The scientific basis for the finding that mountain sucker are resilient to disturbance of their habitat is found on page 26 and 28 of Isaak et al. (2003). The South Dakota Department of Game, Fish and Parks (SDGFP) report referenced by the commentator is a draft planning document that to our knowledge has not been finalized. The information in the SDGFP document is derived from the same data that exists in the BHNF Geographic Information System and the SDGFP Annual Stream Survey reports. Both of these sources were used to analyze project effects to fisheries.

BCA 9. Sensitive plant inventories were completed in high-probability habitat. As indicated in the sensitive plant discussion in the EA, no populations of sensitive plants are known to exist in any proposed treatment areas and all high-probability sensitive plant habitat would be avoided under both action alternatives. The assessment of effects and conclusions concerning species viability are based on EA effects analysis, the application of BMPs and WCPs, and the avoidance of known populations of sensitive plants and high-probability sensitive plant habitat.

BCA 10. See NEC 12.

BCA 11. Safety-hazard snags are not "logged". They are only cut if they present a safety hazard to forest users. As a dead tree, they have no commercial value. All snags are retained unless they represent a safety hazard. This measure combined with green tree retention standards would meet Revised Forest Plan direction for snags.

BCA 12. The South Dakota Department of Environment and Natural Resources (SDDENR) is responsible for administering the Clean Water Act in South Dakota. The 2002 South Dakota 305(b) Water Quality Assessment indicates that existing water quality violations are under the threshold required to list a waterbody as impaired. The effects analysis for soils and water did not identify that the project would violate standards associated with the Clean Water Act, and in fact would improve sediment and streamflow conditions through road decommissioning and road closure.

BCA 13. The downslope resource referred to in Section 3.4 of the EA consists of a small intermittent stream channel and associated riparian area. This stream is located about 700 feet from proposed road 205. The possible slumping that is described would consist of approximately a cubic yard or two of rocky material falling out of the cutslope and onto the road surface. Movement would end once the material landed on the road surface, and would not reach the stream downslope. South Dakota BMPs recommend that "roads should be located a safe distance from streams". In this case, 700 feet is considered to be a safe distance. Sample calculations using the buffer equation in Appendix J of the BHNF 1996 Land and Resource Management Plan indicate that buffer distances of 125 feet or greater will prevent material from reaching the stream.

BCA 14. Disconnecting sediment sources (such as roads) from streams is a well-established way of reducing sediment input to streams (WCPs, chapter 10, design criteria). Since water quality in the analysis area already meets state standards, decommissioning of roads is intended to improve water quality even further and reduce the risk of future water quality impacts. Roads can be disconnected through revegetation, construction of waterbars, rolling dips, etc.

BCA 15. BMP effectiveness has been demonstrated through monitoring as noted by Macy (1997) and the U.S. Forest Service (2004b).

BCA 16. As indicated in Section 3.4.3 of the EA, none of the alternatives would result in total soil disturbance exceeding 15% of the project area.

BCA 17. Water quality standards are being met in this area, even with existing ORV impacts. Monitoring of conditions, and subsequent management actions, would ensure that those standards would continue to be met.

BCA 18. Road construction for silvicultural activities is exempt from this permitting requirement (SDDENR, 2003).

Citation: South Dakota Department of Environment and Natural Resources (SDDENR). 2003. South Dakota Department of Environment and Natural Resources Water Quality Investigation of the United States Forest Service's Mercedes Timber Sale. Pierre, SD: SDDENR.

BCA 19. As indicated in Section 3.11 of the EA, the economic effects analysis for this project was conducted using Quicksilver, a Forest Service economic analysis program. This is primarily an economic efficiency analysis. This project-specific EA tiers to the economic analysis in the Revised Forest Plan Environmental Impact Statement. That document contains further discussion of economic effects of the BHNF timber management program.

BCA 20. This EA discloses effects to Federally listed threatened and endangered species, USFS Region 2 sensitive species, and management indicator species. The northern flying squirrel and meadow jumping mouse are not included within any of these categories.

BCA 21. The implementation of a travel management plan for the entire BHNF is outside the scope of this document. The implementation of this project, including road closures and decommissioning, would take place during and following completion of associated timber sales. Funding for any part of the project depends on these events. Gate vandalism and lack of respect for road closures can certainly present management problems. It requires continual hard work by not only Forest Service employees but also Forest users.

Black Hills Forest Resource Association

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April 23, 2004

Mr. Dave Atkins
Northern Hills Ranger District
Research-Rochford EA
2014 North Main St.
Spearfish, SD 57783

Dear Mr. Atkins,

This letter is in response to the District's request for public comment on the Research-Rochford Draft Environmental Assessment. The Black Hills Forest Resource Association and its members appreciate this opportunity to submit input, and we recognize the exhaustive amount of work required of the District and its staff to develop projects such as this one. We hope our comments are helpful to you, and look forward to talking with you further as Research-Rochford progresses.

First, we heartily concur with the District's assessment of Purpose and Need for the Research-Rochford EA. However, we find the Proposed Action and EA itself representative of an apparently malignant trend toward insufficiently applied silvicultural practices in project analyses on the Northern Hills Ranger District and elsewhere on the Black Hills National Forest. For reasons such as incomplete biological, botanical, and cultural resource surveys, improperly applied Forest Plan and Phase I Amendment management direction, and others, recent project decisions are progressively treating smaller and more disparate portions of the overall project area, most commonly neglecting the forest stands which cry out most for management. We believe this flies in the face of all that's been successful about forest management in the Black Hills, we're in no uncertain way incensed by it, and we trust this sentiment will discernibly permeate a majority of our comments on Research-Rochford.

BHFRA 12



Purpose and Need

As previously stated, we thoroughly agree with the stated Purpose and Need of reducing susceptibility to insects and disease, reducing hazardous fuels, producing timber, sustaining timber yield, enhancing vegetative diversity, reducing road densities, and enhancing big game habitat in the Research-Rochford EA. Frankly, the project fails to meet any of these purposes or needs, save for reducing road densities.

The EA states (p.5) that the project's proposals are "based on a comparison of desired conditions and existing conditions." Strangely, the EA does not present a comparative desired and existing distribution of vegetation structural stages (VSS).

A renewable resource

We recognize that there are other 'desired conditions' to consider, but isn't VSS somewhat integral among them, not to mention a significant issue within the analysis? The EA hints at what we suspect is the proposed action's material neglect in treating overstocked stands via its disclosure of the absurdly small reduction in mountain pine beetle risk across the project area (pg 33), but is silent on more quantitative information. Why?

BHFRA 2

The EA's Purpose and Need statement also neglects to mention the singular Forest Plan goal for biological elements in Management Area 5.1 (5.1-201), which is to "Manage tree stands to **emphasize** timber products, forage production, and water yield." Did this central concept somehow clude the District's attention in the development of Research-Rochford? From our review of the EA and the RIS data for the project area, the proposed action would appear to manage tree stands for just about anything but timber products. Excluding the currently active timber sales in the vicinity, and limiting the discussion to suited lands, the Research-Rochford project area contains around 84 million board-feet of standing inventory, of which the District proposes to harvest 8 million board-feet (nine percent). Estimated growth, assuming 20,000 acres of suitable pine type, on these stands is approximately 2.5 million board-feet annually. This means that, hypothetically, the project area **would re-grow one and one-half times the proposed harvest volume within the term of a five-year timber sale contract**. Does this constitute management with an emphasis on timber products? Timber stands require maintenance in order to support their continued productivity. Many of the stands in Research-Rochford are stocked at egregiously high levels and their growth has stagnated as a result. Allowing this condition to persist at its current extent throughout the project area can in no way be construed as managing for emphasis on timber products -- now or in the future.

BHFRA 3

Research-Rochford's project area is bordered on the north and southwest by large outbreaks of mountain pine beetle which have and continue to generate tree losses on the stand-replacement order, and the project area itself shows pockets of mountain pine beetle activity (another item unmentioned in the analysis). This is particularly important because Forestwide Guideline 4201(a) recommends that management activities:

BHFRA 4

"(are planned) with consideration for *potential* insect or disease outbreaks. Use integrated pest management strategies where insect or disease outbreaks may adversely affect management objectives. Utilize preventive vegetation management practices, including silvicultural treatments, to protect forest stands from insect and disease epidemics." (emphasis added)

Guideline 4201(d) further recommends:

"Consider spatial array of stand conditions when planning harvests to reduce their potential for mountain pine beetle epidemics. For example, if consistent with management objectives, silvicultural treatments may be appropriate adjacent to dense mature stands (e.g. late successional habitat and thermal cover) to limit potential spread."

We find no mention of this management direction in the EA, nor does the proposed action reflect any apparent heed paid it. The EA categorizes 63 percent of ponderosa pine type acreage at high or moderate risk of mountain pine beetle infestation. We recognize that Forestwide Objective 228 simply requires that the acreage at medium or high risk is 'maintained or reduced.' However, we there should exist some measure of good faith on the part of the District in implementing this direction; if the objective was not to meaningfully reduce at-risk acres, why bother to spend the time and money completing a project? To illustrate this point, we would go so far as to ask whether the District could demonstrate that the reduction in high and moderate risk acres afforded by the proposed action, about 5 percent, would be statistically significant given the average standard error and confidence limits of the stand data. The proposed action doesn't pass the red-face test with regard to reducing mountain pine beetle risk.

BHFRA 4

The Purpose and Need discusses Forestwide Objective 224's direction to "Reduce hazardous fuels commensurate with risks..." However, no assessment is offered of what degree of risk upon which we are to judge the commensuration of fuel treatments. Furthermore, the EA fails to respond to Forestwide Standard 4113, which states:

"Reduce the threat of wildfire to public and private developments by following standards in the National Fire Protection Association Publication 2900, Protection of Life and Property from Wildfire, and reduce the fuel loading to acceptable standards."

BHFRA 5

Stand data clearly indicate that fire risk exists at a high level away from public and private developments as well; though, again, no quantification is offered in the EA. The EA does indicate that over 2000 acres of WUI exists within the project area, of which the proposed action would treat an abysmally small 285 acres. In what reasonable way does a combined 3000 acres of somewhat overlapping commercial, fuel, and prescribed fire treatments amount to a significant reduction of risk across a 25,000-acre landscape? In what reasonable way does 285 acres reduce the threat of wildfire to public and private developments?

Thus far the proposed action has threefold failed to meet the purpose and need: it does not meaningfully reduce the susceptibility to insects and disease, it does not reduce hazardous fuels commensurate with risks, and it does not sustain future timber yield. For lack of information to the contrary, we must assume that it fourthly does not meaningfully enhance vegetative diversity. Last, by virtue of omission, it does not meet with Management Area 5.1 direction to manage tree stands to emphasize timber products.

BHFRA 6

Project Analysis

By now we hope our dissatisfaction with the proposed action and project analysis is apparent. Perhaps most disquieting about the Research-Rochford project is its conspicuous descendant progression from the original (1999) Research-Rochford and Peak EAs. The 1999 proposed action would have harvested 10.6 MMBF of sawtimber along with a variety of other treatments. In fact, one of the alternatives proposed to harvest 15.6 MMBF and was entirely compliant with Forest Plan direction. Coupled with

BHFRA 7

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an estimated standing inventory growth of 15 MMBF (again, assuming 2.5 MMBF annual growth) during the period of time between the 1999 EA and the current EA, the decrease in proposed management between the two is entirely incomprehensible.

We fully understand the requirements of the Phase I Amendment with regard to its prohibitions on managing certain vegetative types across the forest in response to species viability concerns, fictitious though we believe them to have been. We also understand the onerous biological and cultural resource survey requirements and corresponding Forest Service Manual direction which is to be implemented in the event surveys are incomplete, equivalently ridiculous as we believe it to be as well. We furthermore understand that both these factors have, for reasons we'd like to discuss at a later time, played upon the analysis of Research-Rochford.

BHFRA 7

Some aspects of the analysis pertaining to these issues remain somewhat mysterious, however. For instance, there are three goshawk nests within or proximate to the project area (420 acres for each nest stand and PFA), and 169 acres of spruce habitat reserved for American marten. So, how does 1429 acres "protected" from treatment account for the vast decrease in management between the 1999 and current EAs?

Similarly, we understand that a snag survey was not completed for the project area, but we find no Forest Plan or Phase I Amendment direction which would justify the maintenance of 5 green tree replacements per acre in all harvest prescriptions. Forestwide Standard 2301 does require 4 snags per acre > 10" DBH on north- and east-facing slopes, and 2 snags per acre on south- and west-facing slopes. If our foresters' math is correct, the required minimum green tree replacement should average a maximum of 3 trees per acre -- not 5. Why was this number chosen? Does it account for the decrease in harvest between the 1999 and current EA?

BHFRA 8

We also understand that the standards for archaeological surveys changed in 2000, warranting a new survey for the project area to bring it up to Level III standards. Apparently, some units from the 1999 EA were dropped due to lack of cultural resource survey data and these partially account for the copious decline in harvest volume. What becomes puzzling is that Chapter 3.9 (Heritage Resources) of the EA states that of the 25,690 acres of NFS lands in the project area, 22,595 acres have been inventoried to current cultural resource survey standards. So, are we to assume that the remaining 3,095 acres account for the units proposed for harvest in the 1999 EA that were dropped from treatment? If-so, why weren't these units inventoried first and the surveys for non-harvested areas completed last?

BHFRA 9

On page 39 of the EA, lack of botanical survey clearance is also cited as reason for deferring treatments within the project area. However, Chapter 3.3.3 (Sensitive Plants effects analysis) cites several species recorded within the project area and gives no indication whatsoever that surveys were incomplete. Which is it?

BHFRA 10

Also on page 39, 'steep slopes' are cited for unit deferment. Please enlighten us as to where the Forest Plan might have issued a prohibition on harvesting 'steep slopes'.

BHFRA 11

Many suitable acres within the project area and across the Northern Hills Ranger District are on 'steep slopes'; should we cease to manage them, too? There are logging systems readily capable of harvesting, when combined with a well designed silvicultural prescription, 'steep slopes' without any adverse environmental effects. These include cable and tractor yarding and are perfectly legitimate implements of forest management in the Black Hills. Moreover, fire behavior is decidedly more extreme on 'steep slopes'. The District should be seeking out and treating all the 'steep slopes' they can find, particularly on suited acres, not summarily dismissing them from harvest.

BHFRA 11

Proposed Action

In addition to being insufficient to meet the Purpose and Need, there are several other aspects of the proposed action which give us concern. The first of these are the amount and methods of precommercial and noncommercial thinning proposed. The second is road closure. The third is mitigation measures.

A significant number of sites within the project area were precommercially thinned in prior treatments and require a follow-up thinning. These stands are of POL size and have stagnated, yet the proposed action's description of silvicultural treatments leaves us with little idea of how many of these stands would receive needed management. Some aspects of the proposed thinning prescription are troublesome as well. Our understanding is that the District plans to administer only one precommercial thinning, to approximate 12'x12' spacing, prior to the stand's growth into the sawtimber size class. This prescription is apparently to be applied to trees as small as five feet in height and one inch in diameter. We believe the first thinning should come when the trees have reached at least 15 feet in height and have begun to self-prune lower branches, reducing the stand to a 4'x4' spacing at about 2500 stems per acre. The second thinning should come when the average stand diameter is 5 inches, reducing the stand to 9'x9' spacing. One thinning at an early age is simply not enough, and will result in many, many stagnant, squatty, limby stands which may never grow into the sawtimber size class. Stand such as these are prototypical 'ladder fuel' stands, and carry a high susceptibility to mountain pine beetle.

BHFRA 12

The proposed action would significantly reduce the amount of year-round road access within the project area. We concur that unacceptable resource damage is happening in a variety of areas for a variety of reasons, and believe some of the closures are warranted. It is apparent that the area is highly used by off-highway and off-road vehicles, in addition to hunters and other recreationists. Be this as it may, the Forest Service is well acquainted with the ineptitude of gate or berm closures in deterring some individuals from using an area. We therefore question the expenditure of taxpayer money on 16 new gates within the project area. We recommend 1) maintaining existing uses (such as those trails currently used by four-wheel drive clubs), 2) designating, with signs, appropriate areas for ATV use, rather than trying to eliminate use, 3) installing erosion control measures or restoring vegetative cover to correct resource damage. More specifically, the yearlong closure on Forest Road 204.1B eliminates access to an historic trail connecting the Gimler Creek area and the Rochford/Merritt Road; we recommend leaving this road open. As an aside, we think it's pretty bogus to veil road closures in big-game habitat

BHFRA 13

effectiveness values when the existing condition (no-action) meets or exceeds (EA p. 60, 61) recommended Forest Plan summer and winter HABCAP values for both elk and deer.

Some mitigation measures offered for the action alternatives are needed and justifiable; others appear arbitrary and problematic. Among the latter is the stipulation on p. 27 that "portion of certain units should be restricted during wet conditions..." This practice on the Black Hills National Forest started out to protect legitimately sensitive soils during legitimately sensitive times of the year, and has expanded to include virtually all soils year-round. Please identify which soils and under what precise (not just "wet") conditions dry or frozen-ground operations would be required. The proposed action also includes a mitigation measure which would limit skidding to dry or frozen conditions "to reduce or eliminate soil color contrast." Frankly, never have we heard something so ridiculous. Please enlighten us as to where the direction for this measure originated. Also, please enlighten us as to how skidding under frozen and presumably snow-covered conditions would *reduce* the 'soil color contrast'. Lastly, the proposed action would require visual marking within 300 feet of several primary travel corridors. We understand the need to maintain scenery objectives, but visual marking often creates an unsafe condition for operators, particularly when trees on a slope are marked on the uphill side only. We recommend that the stand is cut-tree marked with at least a conspicuous stump mark showing on the downhill side.

BHFRA 14

Thank you for your time and attention to these concerns. Please do not hesitate to contact me with any questions you might have about our comments.

Sincerely,



Aaron Everett
Forest Programs Manager

RESPONSE TO BLACK HILLS FOREST RESOURCE ASSOCIATION

BHFRA 1. See LLC 1 and 11.

BHFRA 2. Habitat/vegetation structural stage information is available in the Wildlife BE and Specialist Report and was utilized in habitat capability and goshawk analyses.

BHFRA 3. See LCC 1 and 11.

BHFRA 4. See LCC 2.

BHFRA 5. See LCC 4.

BHFRA 6. See LCC 1. The management direction for Management Area 5.1 is management for wood products, water yield, and forage production, while providing other commercial products, visual quality, diversity of wildlife and a variety of other goods and services consistent with Revised Forest Plan goals and objectives. The Research-Rochford treatments are within Management Area 5.1 and are designed to meet this direction.

BHFRA 7. See LCC 5.

BHFRA 8. See NEC 5 and 6. The Revised Forest Plan as amended by Phase I, establishes the minimum green tree retention direction. More trees would be left to allow for greater latitude in distribution. For instance, from a wildlife perspective, clumping of trees is preferred as compared to single trees. Additionally, retention of five trees per acre facilitates on-the-ground timber marking and eliminates the need to take aspect into account. The difference in volume between the 1999 EA/Decision and the current EA is attributable to several factors, as explained in LCC 11.

BHFRA 9. See above response.

BHFRA 10. See BCA 9.

BHFRA 11. This has been clarified in the EA. The steep slopes discussion refers to areas not treated because of road construction concerns associated with steep slopes.

BHFRA 12. See LCC 7.

BHFRA 13. See LCC 10 and BCA 21.

BHFRA 14. The mitigation measure indicating operations in portions of certain units should be restricted during wet conditions applies to Citadel soils on 10% to 30% slopes and Virkula and Pactola-Virkula-Rock Outcrop soils. These soils are prone to compaction and rutting when wet. The sale administrator would determine under what conditions the mitigation would be applied.

The mitigation to reduce or eliminate soil color contrast from skidding only applies to areas of high and medium scenic integrity adjacent to primary travel corridors. The EA has been modified to reflect this change. Implementation of this mitigation would be by the sale administrator.

Visual tree marking adjacent to roads is designed to maintain scenic integrity objectives and often requires extra effort by operators to maintain safe working conditions.