



United States
Department of
Agriculture

Forest Service

March 2018



Black Hills Resilient Landscapes Project

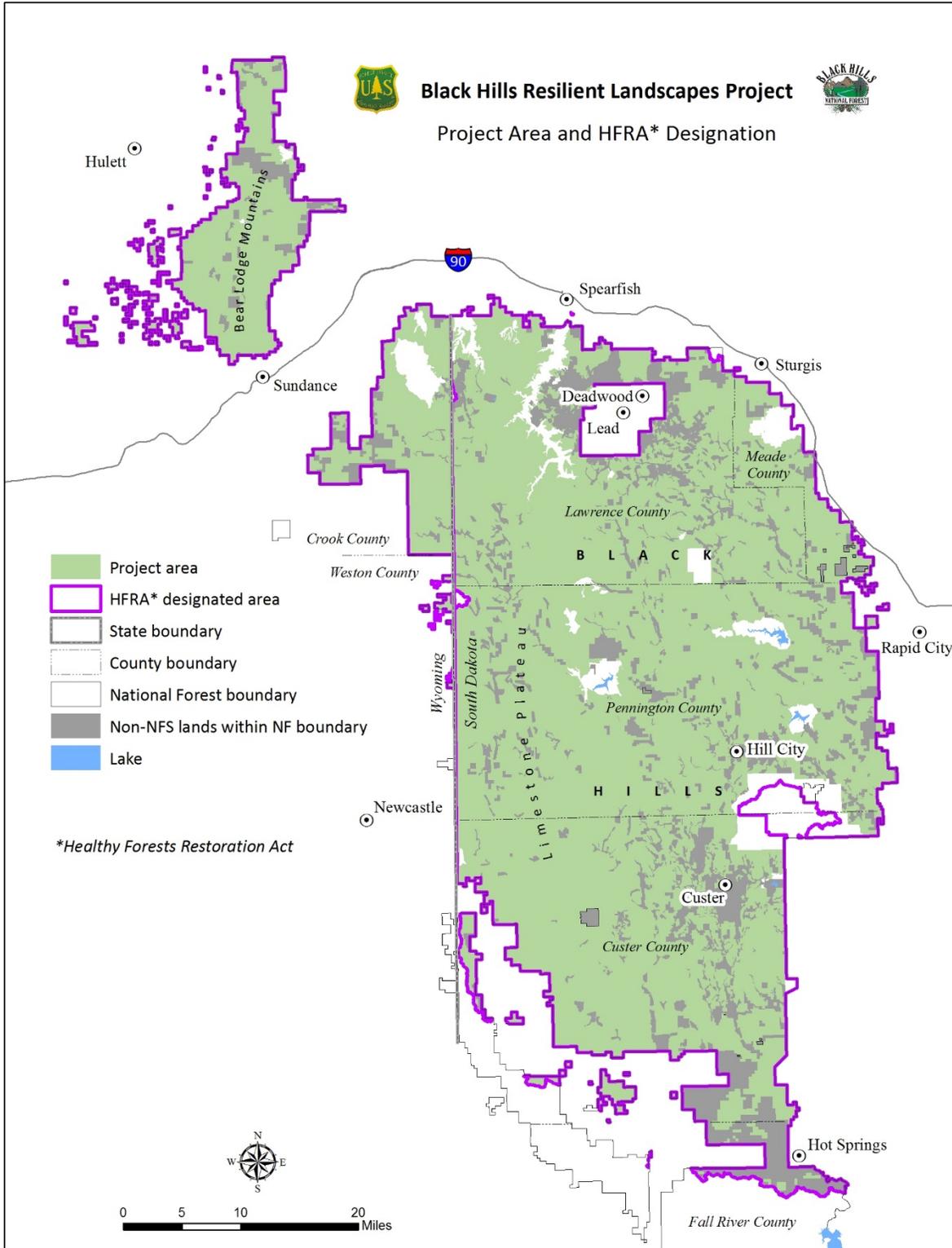
Draft Record of Decision



USDA Forest Service
Black Hills National Forest

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Figure 1. Project Area Map



Acronyms

ACHP	Advisory Council on Historic Preservation
BHNF	Black Hills National Forest
BHRL	Black Hills Resilient Landscapes (Project)
CFR	Code of Federal Regulations
CTA	Commercial Treatment Area
DEIS	Draft Environmental Impact Statement
EO	Executive Order
FEIS	Final Environmental Impact Statement
HFRA	Healthy Forests Restoration Act
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
MA	Management Area
NFAB	National Forest Advisory Board
NFS	National Forest System
POL	Products Other than Logs
ROD	Record of Decision
SHPO	State Historic Preservation Officer
USC	United States Code
USDA	United States Department of Agriculture

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1 Introduction

1.1 Project Location

The Black Hills Resilient Landscapes (BHRL) project includes approximately 1,098,000 acres of National Forest System (NFS) lands and approximately 226,000 acres of non-NFS lands in the Black Hills National Forest (BHNF), in western South Dakota and northeastern Wyoming. The project area does not include specially designated areas (e.g., Research Natural Areas, Botanical Areas, or Wilderness) or other ownerships.

1.2 Forest Plan

BHNF programmatic management direction is provided by the BHNF Land and Resource Management Plan (Forest Plan, USDA Forest Service 2006a), as amended and as supported by the Phase II Amendment Final Environmental Impact Statement (FEIS; USDA Forest Service 2005) and the 1997 Revised Forest Plan FEIS (USDA Forest Service 1996). The Forest Plan sets forth goals and objectives of management actions and further directs these actions through standards and guidelines.

Chapter 3 of the Forest Plan assigns a management emphasis to each area of the National Forest. Land management practices that are appropriate in one management area may be constrained in another. The BHRL project area includes all or parts of 10 management areas (FEIS, page 5).

1.3 Healthy Forests Restoration Act

This project is proposed under Healthy Forests Restoration Act (HFRA; 16 USC §6591) authority. The entire project area lies within Designated Areas that were requested by the Governors of South Dakota and Wyoming (FEIS, page 7).

HFRA Section 104 requires collaboration with State governments, local governments, and Indian tribes, and participation of interested persons during the preparation of authorized projects. For this project, collaboration with the National Forest Advisory Board and involvement of tribes, agencies, and other interested parties has occurred and is continuing.

Analysis and documentation has been carried out in accordance with Section 602(d) of HFRA. Projects within the Designated Areas must “reduce the risk of, or increase the resilience to, insect or disease infestation” (602(d)(1)).

1.4 Purpose and Need for Action

Mountain pine beetle infestation, response actions, and wildfire have moved forest structure away from desired conditions. Beetle infestation also resulted in hazardous levels of surface fuels and other hazards to public safety. As beetle-killed trees continue to fall and new pine stands grow, the forest’s resilience to wildfire and future infestation is expected to decrease.

In response to these needs, described in detail on FEIS pages 8-13, the BHRL project would move landscape-level vegetation conditions in the project area toward objectives of the Forest Plan in order to increase ecosystem resilience to insect infestation and other natural disturbances, to contribute to public safety and the local economy, and to reduce the risk of wildfire to landscapes and communities.

2 Decision and Rationale

2.1 My Decision

Title I, Section 104 of HFRA requires development of the proposed agency action, the no action alternative, and an additional action alternative if one is proposed during scoping or the collaborative process and it meets the purpose and need. Because no alternatives that met the purpose and need were proposed during scoping or collaboration, I have the option of choosing either the No Action alternative or the Proposed Action.

I am authorizing the activities listed in Table 1 (page 2). Each of these activities will occur on up to a specified maximum acreage within a defined area, as described on FEIS page 17. Combined, all of these defined areas total approximately 676,600 acres. Because each activity will occur on a fraction of its defined area acres, and because more than one activity will occur in some areas, the total area where activities will actually occur is estimated at 400,900 acres. This includes approximately 298,900 acres of mechanized activities.

I have also decided to approve a programmatic Forest Plan amendment as presented on FEIS pages 39-40. The amendment replaces an out-of-date standard with the updated language found in the Regional Watershed Conservation Practices Handbook (USDA Forest Service 2006b).

The selected alternative includes the Proposed Action’s design features (FEIS, pages 40-44) and monitoring requirements (FEIS, pages 45-46). These measures represent all practicable means to avoid or minimize environmental harm.

I have determined that my decision is consistent with all laws, regulations, and agency policy. I have considered potential cumulative effects. I believe the Proposed Action provides the best balance of management activities to respond to the purpose and need while considering and incorporating issues and input provided by the public and other agencies.

Table 1. Summary of Activities

Fuel and Hazard Tree Treatments	Maximum Acres
Mechanical and manual fuel treatments (<i>shaded fuel break; thin, pile, and burn fuels; scatter, shred, or chip fuels; cut, lop, and scatter fuels</i>); includes up to 4,000 acres of shaded fuel breaks with commercial removal.	7,000 acres per year (70,000 acres total)
Prescribed fire (<i>broadcast</i>)	10,000 acres per year (100,000 acres total)
Hazard tree removal	As needed
Pine Structural Stage Modification	Maximum Acres
Overstory removal <i>By management area (MA):</i> MA 4.1: Approximately 7,670 acres MA 5.1: Approximately 129,890 acres MA 5.4: Approximately 41,210 acres MA 5.43: Approximately 250 acres MA 5.6: Approximately 6,190 acres	185,210 acres (total)
Precommercial and/or products-other-than-logs (POL) thin	25,000 acres per year (250,000 acres total)

Patch clearcut	
<i>By management area:</i>	
MA 4.1: 1,300 acres	1,900 acres (total)
MA 5.6: 600 acres	
Tree planting (MAs 5.1, 5.4, and 5.43)	5,000 acres (total)
Mechanical site preparation	4,000 acres (total)

Enhancement of Non-pine Vegetation and Within-stand Diversity	Maximum Acres
Removal of pine/spruce from aspen stands	6,000 acres (total)
Regeneration of aspen stands	4,000 acres (total)
Removal of pine/spruce from aspen inclusions in CTA* pine stands	22,500 acres (total)
Removal of pine/spruce from aspen inclusions in non-CTA pine stands	8,400 acres (total)
Removal of encroaching pine from oak stands	5,400 acres (total)
Removal of encroaching pine from grasslands	14,200 acres (total)
Uneven-age individual tree selection or group selection	9,600 acres (total)

Road Work	Maximum Miles
Road construction – Specified	18 miles (total)
Road construction – Temporary	39 miles (total)
Temporary roads on existing templates	182 miles (total)
Road conversion (unauthorized to system)	20 miles (total; part of 182 miles, above)
Road maintenance	2,500 miles (total; estimated)
Road reconstruction	375 miles (total; estimated)

*CTA: Potential commercial treatment area

My decision to select the Proposed Action is a site-specific one (see defined-area maps and descriptions in FEIS chapter 2 and detailed maps available on the project web site). The selected alternative also includes flexibility to define treatment locations within the defined areas. The analysis of effects is based on site-specific data (see Information Sources sections in chapter 3 of the FEIS) and relevant, often locally conducted research and monitoring.

I have been pleased with our collaboration with area residents and other interested parties. I sincerely appreciate the continued commitment and support of the collaborative participants and the local community. Together we have invested a lot of time and energy to design a resilient landscapes project that addresses the identified purpose and need at a landscape scale, protects environmental resources, and is consistent with the Forest Plan, regulatory laws, other Agency policy.

2.2 Permits, Licenses, Grants, and Authorizations

No federal permits will be needed for this project. Section 404 of the Clean Water Act authorizes the Secretary of the Army to issue permits for the discharge of dredged or fill material into wetlands. Silvicultural activities are exempt from the 404 permit process, as are associated road construction and maintenance that adhere to Best Management Practices (BMPs; 33 CFR §323.4). Treatment of noxious weeds using herbicide was authorized under a previous decision (USDA Forest Service 2003). Any required permits that are unforeseen at this time will be obtained prior to implementation.

2.3 Rationale for My Decision

In making my decision, I considered the purpose and need, public issues, the project's relation to other relevant environmental documents, and its compliance with applicable law, regulation, and policy. Each aspect of my decision is discussed below.

In response to public comments on the DEIS, three changes were made and analyzed in the FEIS. I considered these changes in making my decision (FEIS, p. 18):

1. **Increased acreage of removal of conifers from aspen stands:** Several commenting parties requested an increase in this activity, citing a belief that 2,400 acres was too low and pointing out that the original proposal was 6,000 acres. Based on reexamination of vegetation data, I believe 6,000 acres is a more appropriate figure. There are no changes to the effects as a result of this change. The change is reflected in Table 1 (page 2).
2. **Removed activities proposed in Bureau of Reclamation administrative areas at Deerfield and Pactola dams:** The Bureau expressed concern about possible effects of proposed activities near dam-related facilities at these locations. I agree with the Bureau's concerns and have omitted approximately 23 administrative acres from the defined areas where the activities may occur. This change does not alter the acreage of proposed activities or the project's effects.
3. **Omission of activities proposed in montane grasslands:** The DEIS analyzed effects of activities proposed on approximately 440 acres of montane grassland recommended for conservation. These activities were proposed based on erroneous stand delineation data and have been omitted. This change does not alter the acreage of proposed activities or the project's effects.

The effects of these modifications are consistent with the Forest Plan (FEIS, page 73).

2.3.1 How the Selected Alternative Responds to the Purpose and Need

The purpose and need for the BHRL project is to move landscape-level vegetation conditions in the project area toward objectives of the Forest Plan in order to increase ecosystem resilience to insect infestation and other natural disturbances, contribute to public safety and the local economy, and reduce risk of wildfire to landscapes and communities.

The selected alternative responds well to the specific elements of the purpose and need.

- **Increase ecosystem resilience to insect infestation and other natural disturbances:** The recent mountain pine beetle epidemic and response actions (FEIS page 1) substantially reduced the amount of pine forest at high risk of further infestation. Natural regeneration of pine is, however, resulting in the potential for development of future landscape-scale expanses of mature, even-aged pine forest, similar to the conditions that existed before the epidemic. These conditions decrease the forest's resilience to insect infestation, wildfire, and other disturbances.

The selected alternative will thin up to 250,000 acres of young pine. Thinning these stands will mitigate the immediate hazard of infestation by pine engraver beetles and reduce the potential for development of future hazard of mountain pine beetle infestation. Planned fuel treatments, including prescribed fire, will also reduce stocking of small pine trees. While beetle infestation will continue to occur over time, taking action now will begin the process of developing a forest that is resistant to landscape-scale epidemics. Because regeneration of pine has occurred almost simultaneously across such an extensive area, I believe it is critical to begin addressing the potential future hazard immediately.

The selected alternative will increase resilience of treated landscapes to future wildfires as demonstrated by effects on fire regime/condition class (FEIS, page 83). This increased resilience may persist for up to 20 years without further treatment.

- **Contribute to public safety and the local economy:** The selected alternative will reduce hazards to public safety by removing damaged or unstable standing trees in areas of high public use, treating fuel accumulations near communities and along egress routes, and decreasing the potential for large, intense wildfires (FEIS, pages 83-85).

The selected alternative will also yield various wood products to local and regional forest products industries (FEIS, pages 214-215). It will contribute to the maintenance of a forest industry infrastructure, which provides markets for forest products, employment, and benefits for local communities. I recognize the need for a strong forest products industry to help accomplish forest restoration and other vegetation treatments now and in the future. I believe it is important for the Forest Service to support local communities and I look forward to continuing our work and coordination with partners and local governments.

- **Reduce risk of wildfire to landscapes and communities:** In my review of the analysis in the Fire and Fuels section of the FEIS (pages 82-85), I found the planned activities will meet the purpose and need by reducing surface fuel loading, fuel contiguity, and other factors associated with the potential for severe fire effects. Overall, the selected alternative will moderate fire behavior compared to the No Action alternative. While wildfires will continue to occur, most fires in treated areas will remain on the surface with only pockets of crown fire. These effects will provide additional opportunities for control, potentially limiting fire size. Fire hazard will generally decrease in treated areas, resulting in increased resistance to development of high-intensity wildfire.

The programmatic Forest Plan amendment (FEIS, pages 39-40) will allow harvest systems that minimize buildup of logging slash to be used in additional areas. I believe this programmatic plan amendment is a valuable addition to meeting the purpose and need for this project and future projects on the BHNF. Currently, Forest Plan standard 1102 contains outdated language. The updated language (FEIS, page 39), which is part of the Regional Watershed Conservation Practices Handbook (USDA Forest Service 2006b), will better align the Forest Plan with regional guidance and eliminate confusion. There are no substantial adverse effects directly related to any of the substantive requirements at 36 CFR §§219.9 through 219.11. The updated language speaks to the soil resource (§219.10(a)(1)) only and continues to balance soil quality requirements and fuel loading concerns.

My decision also will move landscape-level vegetation conditions toward achievement of the following Forest Plan goals and objectives.

- **Forest Plan objective 10-07** prioritizes reduction of mountain pine beetle infestation risk. As described above, my decision includes activities such as precommercial thinning that will begin the process of developing stands that are at reduced risk of infestation. The selected alternative will contribute toward achievement of this objective.
- **Forest Plan goal 10 and associated objectives 10-01 and 10-04** focus on establishing and maintaining a mosaic of forest conditions to reduce occurrence of stand-replacing fire and to facilitate firefighting capability. The recent mountain pine beetle infestation resulted in an increase of hazardous fuels in the form of dead, fallen trees. Although the potential for crown fire has decreased because there are fewer closed-canopy stands, increased loading of dead fuels

means that more of the project area is susceptible to, and may potentially be affected by, large, intense wildland fires. In addition, the scale and density of developing young pine stands, combined with heavy accumulations of woody debris, further increase fire hazard and complicate fire suppression. As a result, the planning team identified a need to manage fuel accumulations and young pine stands.

The selected alternative will result in potential wildfire behavior that is more manageable as compared to the No Action alternative. Following project implementation, modeling demonstrates that most wildfires in treated areas will remain on the ground. The dominant fire severity in these areas is expected to be low to moderate. Though it will not be possible to treat fuels in all stands that were affected by beetles, planned activities will break up the contiguity of these areas.

Public comments indicated concerns about high fire hazard in the vicinity of communities. The selected alternative will decrease fire hazard, especially in areas near developed non-NFS lands and egress routes. Planned activities will contribute toward achievement of Forest Plan objective 10-01 by increasing the total area with moderate or low fire hazard to approximately 67 percent of the project area.

Because these conditions will increase the probability of success during initial fire suppression efforts, the selected alternative is likely to improve firefighter and public safety, reduce the potential for damage to communities and natural resources, and reduce suppression costs. For these reasons, I believe the selected alternative will contribute substantially toward achievement of Forest Plan goal 10.

- **Forest Plan objectives 4.1-203, 5.1-204, 5.4-206, 5.43-204, and 5.6-204** address desired distribution of ponderosa pine structural stages by management area. Structural stage classifies forest structure based on tree diameter and stand density.

By comparing existing and desired structural stage distributions across each MA, the planning team identified a need to:

- increase early succession (grass-forb) stage in MAs 4.1 and 5.6,
- increase young pine forest in MAs 4.1, 5.1, 5.4, and 5.6,
- decrease open, mature pine forest in MAs 4.1, 5.1, 5.4, and 5.6,
- increase moderately dense, mature stands in MAs 4.1, 5.1, 5.4, and 5.43,
- increase late succession forest in MAs 4.1, 5.1, 5.4, 5.43, and 5.6, and
- generally maintain dense, mature forest in MAs 4.1, 5.1, 5.43, and 5.6

See FEIS, Figure 3, page 6 for a map of management areas.

The selected alternative includes a number of activities that will change structural stage in pine forest, including overstory removal, patch clearcut, precommercial thin, POL thin, tree planting, mechanical site preparation, and shaded fuel break construction in mature forest.

Overstory removal harvest is a substantial component of my decision. This treatment method will release young stands from competition with older, overstory pine and reduce stocking levels in overstocked stands. Based on the analysis in the FEIS (pages 58, 60-63, 65), I believe this activity contributes significantly to meeting the purpose and need for this project. Overstory removal treatments will increase the acreage of early succession, younger pine across the project area.

As a result of the activities listed above, the selected alternative will generally move individual structural stages toward objectives in each MA. Additionally, the selected alternative will generally move conditions closer to the objectives than would the No Action alternative. Mature and late succession stages that are currently below objective levels will not increase immediately, though modeling indicates they are likely to achieve objectives over the next 20 to 40 years.

Averaged across each MA, the selected alternative will move overall distribution of structural stages closer to objective levels both in the near future and over the next 20 years as compared to the No Action alternative (Table 2).

Table 2. Average percent deviation from structural stage objectives by alternative and management area

Management Area	Existing	Selected Alternative	Selected Alternative + 20 Years	No Action + 20 Years
4.1	65	43	24	58
5.1	57	52	29	49
5.4	63	54	34	48
5.43*	106	104	75	76
5.6	51	34	21	53

**Management area 5.43 is an outlier due to the effects of recent wildfires.*

Management of the forest for variety in pine stand structure, size, and shape, distributed across the landscape, is essential to providing for wildlife species viability and reduced fire and insect hazard (USDA Forest Service 2005). I find that the analysis demonstrates that the selected alternative will move structural stage conditions toward these objectives (FEIS, pages 55-72). While unforeseeable events may affect future distribution of structural stages, I believe the selected alternative puts the forest on the best track to achieve these objectives both in the near term and over time.

In order to accomplish these Forest Plan objectives, my decision includes construction of up to 18 miles of new, permanent National Forest System (NFS) roads and conversion of up to 20 miles of existing, unauthorized roads to NFS roads. I am also approving construction of up to 39 miles of new, temporary roads and use of up to 182 miles of existing, unauthorized roads for temporary access. Proposed activities will require approximately 375 miles of road reconstruction and 2,500 miles of road maintenance.

Although there will be impacts to roads and trails during project implementation due to increased truck traffic, construction equipment operations, and additional vehicles using the roads, this level of road work would be seen by the public as normal because State, county, and Forest Service road projects and related heavy equipment traffic have been occurring simultaneously for decades (FEIS, page 185).

Other effects may include closures and traffic delays. Safety considerations will be included in road design for new and reconstructed roads and during active road work. New roads would not increase open road density because they would be closed to all motorized use after the project.

- **Forest Plan objectives 201 and 205** emphasize the importance of quaking aspen, bur oak, and grasslands. These plant communities diversify habitat and scenery while increasing ecosystem resilience to disturbance. Encroachment of pine is causing some aspen and oak stands and

grasslands to lose vigor and shrink. The planning team identified a need to maintain and perpetuate these ecosystem components.

The selected alternative includes regeneration of aspen and removal of conifers encroaching on aspen, oak, and grasslands. These activities will occur on a total of approximately 60,500 acres and will help to maintain species diversity, which has decreased over time due to fire suppression and other factors. Broadcast prescribed fire, which will occur on up to 100,000 acres, will also reduce conifer encroachment.

Many of the public comments on the DEIS expressed interest in aspen. Based on this input, I chose to increase removal of conifers from aspen stands from 2,400 to 6,000 acres. I believe this figure more accurately represents the need for treatment. Effects of this change are disclosed in the FEIS (page 73). In addition, some parties requested widespread conversion of pine stands to aspen. Because forest species composition is currently in a state of transition following the recent mountain pine beetle epidemic, I do not consider large-scale cover type change to be prudent at this time.

Non-pine vegetation communities are critical to the resilience of Black Hills ecosystems to fire, beetle infestation, and other disturbances. The No Action alternative would allow continued decline of aspen, oak, and grasslands. In some cases, conifers could displace these communities. For this reason, I am choosing to take action at this time.

In making a decision between taking action and not taking action, I believe it is not only appropriate to select the action alternative, but it is the clear choice to meet the purpose and need. The selected alternative will allow us to begin addressing the changed conditions that have occurred across most of the landscape of the BHNF in recent years due to the mountain pine beetle epidemic, large fires, and our management actions in response to these events. We can now move toward meeting Forest Plan objectives across the entire forest landscape, which is not only more efficient and cost-effective than focusing on smaller areas but also appropriate for the scale of the forest-wide conditions we are working to resolve.

2.3.2 How the Selected Alternative Considers and Addresses Public Issues

The following public issues relevant to the analysis were identified and are described on FEIS page 16.

Potential negative effects on scenery from fuel reduction and timber harvest activities: The scenic integrity analysis in the FEIS (pages 195-203) documents that although fuel reduction will have short-term visual impacts (e.g., processed woody material on the ground, small patches of scorched ground after burning piles), these effects will diminish as revegetation occurs, blending into the surroundings in one to three years.

The analysis shows that commercial timber harvest and associated activities such as road construction may have a negative effect on scenery. Large slash piles, skid trails, and exposed soil will be visible for a time following timber harvest. Project-specific design features (FEIS page 41) will be applied to minimize these effects, especially in highly visible areas. The analysis discloses that, despite these measures, there will be periods when viewers may find these effects distracting and out of character with the landscape. I understand these concerns. I am confident, however, that the long-term benefits of conducting these activities justify the temporary negative effects.

Among planned activities, overstory removal and patch clearcut will result in the greatest change from existing visual conditions. Because harvest units will be designed in accordance with Forest Plan

guidelines, they will appear different from the existing condition but similar to natural forest openings or young stands. The resulting appearance will not be out of character for the area.

Potential increase in noxious weed infestation from ground-disturbing activities: The FEIS discloses that infestation of noxious weeds is likely to increase over time under either alternative. Forest Plan guideline 231 states that management should “prevent new infestations and manage to reduce established noxious weed infestations.” Because the selected alternative will reduce forest canopy and expose soil, it could result in a greater increase in noxious weed infestation than taking no action at this time. The analysis concludes, however, that taking no action would over time increase the potential for severe wildfire, which provides suitable conditions for weed infestation.

Continuing treatment of noxious weeds and adherence to project-specific and other design features (FEIS, page 40) will reduce the likelihood of new weed species introduction and substantial spread of existing infestations.

Noxious weeds are a source of increasing concern in the Black Hills area. I recognize this and support ongoing and new collaborative efforts to address the diverse causes of weed introduction and spread. While my decision may result in somewhat more weed infestation compared to taking no action, I believe the analysis demonstrates that this should not prevent taking action to respond to public concerns and work toward achievement of other Forest Plan goals and objectives.

Potential reduction in landscape-level structural diversity from timber harvest: The analysis shows that the selected alternative will move structural stage distribution toward Forest Plan objectives, both in the near future and in 20 years (FEIS pages 59-64). Figures 13-17 on FEIS pages 60-62 clearly indicate that the selected alternative will generally move structural stage distribution in each management area closer to the objectives as compared to the No Action alternative. The exception is in MA 5.43, where the effects of both alternatives would be similar. The selected alternative will diversify landscape-level structural diversity.

2.3.3 Environmental Documents Considered in Making the Decision

A number of documents were specifically incorporated by reference into the analysis in the FEIS for this project. Among these documents are the Forest Plan as supported by the Phase II Amendment FEIS (USDA Forest Service 2005) and the 1997 Revised Forest Plan FEIS (USDA Forest Service 1996); Forest Plan monitoring and evaluation reports; and resource reports and other supporting information and analysis.

2.3.4 Applicable Laws, Regulations, and Policies

For a complete discussion of how my decision complies with laws, regulations and policy, see section 5 starting on page 12 of this document.

3 Public Involvement

3.1 Project Scoping

The Forest Service solicited comments on the proposed action, potential concerns, and opportunities for managing the BHRL project area from members of the public, other public agencies, tribal governments, adjacent property owners, interest groups, and agency specialists. Various methods were used to request comments, as described below.

- A scoping letter was mailed on August 15, 2016 to approximately 103 interested parties, including adjacent property owners, American Indian tribal representatives, state and federal agencies, and other organizations. This letter included a description of the project area, an overview of the planning process, a general explanation of the proposed actions, and an invitation to comment.
- The Forest Service submitted a news release to local news media on August 22, 2016. This release introduced the project to the public by providing a description of the project area and an explanation of the proposal. The release also solicited public comment on the project.
- The *Federal Register* published a notice of intent to prepare the EIS on August 25, 2016 (81 Fed. Reg. 58470). The notice asked for public comment on the proposal by September 26, 2016. Twenty-nine comment letters were received.
- Project information was published in the BHNF Schedule of Proposed Actions and on the BHNF website.
- The NFAB discussed the project at its meetings during project development and scoping (March, April, May, June, and September 2016). These meetings were open to the public.

3.2 Draft EIS

The Forest Service solicited comments on the DEIS from interested parties, including members of the public, other public agencies, tribal governments, adjacent property owners, interest groups, and agency specialists. The following notification methods were used.

- The *Federal Register* published a notice of availability of the DEIS on September 15, 2017 (82 Fed. Reg. 43359). The notice announced the availability of the DEIS and initiated the 45-day comment period, which ended on October 30, 2017.
- The Rapid City Journal published a legal notice announcing the availability of the DEIS and proposed Forest Plan amendment on September 20, 2017. This notice solicited comments from interested parties.
- The Forest Service submitted a news release to local news media on September 14, 2017. The release announced availability of the DEIS and solicited comments.
- Public open houses were held at the Mystic Ranger District office in Rapid City, South Dakota on October 5, 2017 and at the Crook County Courthouse in Sundance, Wyoming on October 12, 2017. Each meeting was attended by less than 10 interested parties who met with Forest Service officials to review maps of the project area and discuss proposed activities.
- The NFAB discussed the DEIS at its meeting in September 2017, which was open to the public.

The Forest Service received 44 comment letters from 40 parties within the comment period. Four additional letters were submitted after the close of the comment period. Timely comments and Forest Service responses are presented in FEIS Appendix A. Comments prompted changes to the proposal, additional analysis of effects, and several clarifications in the FEIS.

3.3 Collaboration and Other Public Involvement

Collaboration with communities and the public is required by HFRA and has been an important aspect of this project. The National Forest Advisory Board (NFAB) is our formal collaborator on this project. Board members represent diverse sectors, including developed outdoor recreation, dispersed recreation,

economic development, the forest products industry, national and regional environmental organizations, historical interests, sportsmen's groups, livestock grazing, State natural resource agencies, and elected or appointed officials from Tribal government and State, local, or county government. Updates have been presented at all NFAB meetings since March 2016. Forest Service representatives have met with the NFAB committee responsible for reviewing project documents and drafting input.

The Wyoming State Forestry Division is a cooperating agency for this project. The Division was provided an opportunity to review the preliminary DEIS in June 2017 prior to its public release.

I believe the Forest has worked diligently to ensure collaboration and public involvement through mailings, news releases, public comment periods, open houses, and through NFAB meetings, which are open to the public. See also FEIS Appendix A, Public Comments on the Black Hills Resilient Landscapes Project Draft Environmental Impact Statement and Forest Service Responses.

4 Alternatives Considered

4.1 Alternatives Analyzed in Detail

HFRA Title I, Section 104, requires development of the proposed agency action, the no action alternative, and an additional action alternative if one is proposed during scoping or the collaborative process and meets the purpose and need. No alternatives that met the purpose and need were proposed during scoping or collaboration; therefore, only the Proposed Action and No Action alternatives were fully developed and analyzed.

The No Action alternative (FEIS, page 48) assumes none of the elements of the Proposed Action would take place in the BHRL project area in the next 10 to 15 years. Ongoing and reasonably foreseeable actions would continue, including timber harvest, precommercial thinning, prescribed fire, fuel reduction, noxious weed treatment, recreation, development of private land, prospecting and mining, livestock grazing, and use of surface and ground water. Public comments indicated both support for and objection to the No Action alternative. Because of the clear, existing needs in the project area, I am unwilling to forego action.

The Proposed Action (FEIS, pages 17-48) was designed to respond to the purpose and need for action and to move conditions in the project area toward the desired conditions described in the Forest Plan. This is the alternative I selected. This alternative protects key resources while addressing the needs in the project area. My rationale for this decision is described in Section 2.3 of this document.

4.2 Alternatives Not Analyzed in Detail

The interdisciplinary team considered eight additional alternatives that were not carried forward for detailed analysis. Descriptions of these alternatives and reasons for their elimination from detailed analysis are located on FEIS pages 49-51.

4.3 Environmentally Preferable Alternative(s)

Disclosure of one or more environmentally preferable alternatives is required (NEPA Section 101; 40 CFR 1505.2(b)). The environmentally preferable alternative is not necessarily the alternative that will be implemented and it does not have to meet the underlying need for the project. It must, however, cause the least damage to the biological and physical environment and best protect, preserve, and enhance historical, cultural, and natural resources.

In the immediate future, the No Action alternative is the environmentally preferable alternative. It would not directly cause ground disturbance or add new roads. Noxious weed infestation would be somewhat less than the probable results of the selected alternative. It would have no short-term negative effects on scenery. Over the course of coming decades, however, I find the selected alternative to be environmentally preferable because it will provide more diverse habitat, moderate potential size and severity of wildfires, and generally increase resilience to potential disturbance and environmental change. The Environmental Protection Agency (Region 8) provided comments on the DEIS but did not identify an environmentally preferable alternative.

5 Findings Required by Laws and Regulations

The EIS was prepared in accordance with the following laws and regulations.

5.1 Clean Air Act

The Clean Air Act of 1970, as amended (42 USC §7401 *et seq.*), protect and enhance the nation's air resources. Federal and state ambient air quality standards are not expected to be exceeded as a result of implementing the selected alternative (FEIS, pages 178-179). This action is consistent with the Clean Air Act.

5.2 Clean Water Act

The Clean Water Act, as amended (33 USC §1251 *et seq.*), regulates dredging and filling of freshwater and coastal wetlands. Section 404 of the Clean Water Act prohibits discharging dredged or fill material into waters (including wetlands) of the United States without first obtaining a permit from the U.S. Army Corps of Engineers. Wetlands are regulated in accordance with federal Non-Tidal Wetlands Regulations (Sections 401 and 404). Any permits required for watershed improvement activities will be acquired prior to implementation. This project is consistent with the Clean Water Act (FEIS, pages 159-174).

5.3 Endangered Species Act

I considered impacts to federally listed or proposed species, as determined by the U.S. Fish and Wildlife Service. These species include the black-footed ferret (endangered), the northern long-eared bat (threatened), and Leedy's roseroot (a threatened plant). Effects on these species were analyzed in the Wildlife and Botany Biological Assessments prepared in accordance with the legal requirements set forth under Section 7 of the Endangered Species Act of 1973, as amended (ESA; 16 USC §1531 *et seq.*). These effects are disclosed in Chapter 3 of the FEIS and summarized here. The Proposed Action will have no effect on the black-footed ferret or Leedy's roseroot. The Proposed Action may affect the northern long-eared bat, but implementation involves no purposeful take and the action area is located wholly outside of the white-nose syndrome zone. Based on this information, I met my ESA Section 7 consultation responsibilities by using the 4(d) rule streamlined consultation framework. My decision includes the design features listed in Chapter 2 of the FEIS and described in this ROD that will avoid or minimize the potential adverse effects of management actions on the northern long-eared bat. There will be no adverse modification of critical habitat because none is designated on the BHNF.

On February 13, 2018, we received a letter of concurrence from the Fish and Wildlife Service, stating, in part, "We concur with your determination and any taking that may occur incidental to this project is not prohibited under the final 4(d) rule (50 CFR 17.40(o))."

5.4 National Environmental Policy Act

The National Environmental Policy Act (NEPA; 42 USC §4321 *et seq.*) requires federal agencies to complete detailed analyses of proposed actions that may significantly affect the quality of the human environment. The Act's requirement to prepare an environmental impact statement is designed to provide decision makers with a detailed accounting of the likely environmental effects of a proposed action prior to adoption and to inform the public of (and encourage their comments on) such effects. The FEIS analyzes the alternatives and displays the environmental effects in conformance with NEPA standards. I find that the environmental analysis and public involvement process comply with each of the major elements of the requirements set forth by the Council for Environmental Quality for implementing NEPA (40 CFR §§1500-1508).

5.5 National Forest Management Act

The National Forest Management Act (NFMA; 16 USC §1604) and the Multiple-Use Sustained-Yield Act of 1960 (16 USC §§528–531) give direction to National Forests to develop Forest Plans that 1) ensure consideration of the economic and environmental aspects of various systems of renewable resource management, including the related systems of silviculture and protection of forest resources, to provide for outdoor recreation (including wilderness), range, timber, watershed, wildlife, and fish; and 2) provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives, and for steps to be taken to preserve the diversity of tree species. As set forth by these Acts, the BHNF Forest Plan, as amended, sets specific standards and guidelines to follow during project-level planning and implementation. By the inclusion of design features as part of my decision to minimize or eliminate environmental effects from this project, as well as the inclusion of standards and guidelines from the Forest Plan, as amended, I have determined this project complies with NFMA.

5.6 National Historic Preservation Act

The National Historic Preservation Act (NHPA) provides comprehensive direction to federal agencies to identify, evaluate, treat, protect, and manage historic properties. It expands the National Register of Historic Places (NRHP) and establishes the Advisory Council on Historic Preservation (ACHP) and State Historic Preservation Offices (SHPOs). NHPA Section 106 directs all federal agencies to take into account effects of their undertakings (actions, financial support, and authorizations) on properties included in or eligible for the NRHP. Section 106 is implemented by ACHP regulations (36 CFR §800).

As reported in FEIS chapters 1 and 2, I anticipate implementing BHRL activities on NFS lands in both Wyoming and South Dakota. Since 2009, the BHNF has been a signatory to a programmatic agreement (renewed in 2014) that governs undertakings on NFS lands located in the state of Wyoming (USDA Forest Service 2014). Appendix F of that document addresses vegetation management projects. Subsection B of Appendix F specifically addresses landscape-scale projects such as the BHRL project, for which specific effects cannot be identified prior to the Agency signing a project decision. That stipulation, in addition to others, is cited as the legal authority for this project on NFS lands in the state of Wyoming.

The BHNF and the South Dakota State Historic Preservation Officer executed a vegetation management programmatic agreement in order to fulfill the Agency's NHPA Section 106 obligations for this and other potential undertakings (USDA Forest Service 2018). Stipulations in that document govern how the Forest Service implements projects under authority of the BHRL Record of Decision.

Tribal governments were consulted and invited to participate in the development of the programmatic agreements that will govern how the Forest meets NHPA Section 106 mandates for BHRL project

activities. Tribal authorities will continue to be consulted when exact project locations associated with BHRL activities are identified during the implementation phase. This will permit Tribal representatives to submit location-specific comments where desirable.

5.7 Other Laws and Executive Orders

Executive Order 11988

This order requires that federal activities generally avoid occupancy and modification of floodplains. The selected alternative will not change floodplain function or value and complies with EO 11988 (FEIS, page 171).

Executive Order 11990

Executive Order 11990, Protection of Wetlands, requires that federal activities generally avoid modification or destruction of wetlands. The selected alternative complies with EO 11990 and will not negatively affect wetlands (FEIS, pages 171-172).

Executive Order 12898

A specific consideration of equity and fairness in resource decision-making is encompassed in the issue of environmental justice. EO 12898 provides that “each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” No adverse effects from the selected alternative have been identified on minority or low-income populations (FEIS, page 211).

Executive Order 13112

This order requires federal agencies to avoid actions that will spread invasive species unless the benefits of the actions clearly outweigh the potential harm and all feasible and prudent measures to minimize risk of harm will be taken. The analysis shows that the selected alternative will comply with this order (FEIS, pages 101-102).

6 Administrative Review or Objection Opportunities

This draft decision is subject to predecisional administrative review (objection) pursuant to 36 CFR §218, Subparts A and C, for planned activities and also 36 CFR §219, Subpart B, for the programmatic Forest Plan amendment. Objections, including attachments, must be filed via postal service, e-mail, hand-delivered, or messenger service to: Objection Reviewing Officer, Regional Forester, US Forest Service Rocky Mountain Region, 1617 Cole Blvd, Building 17, Golden, CO 80401; fax to (303) 275-5134; or email to r02admin_review@fs.fed.us. Office hours for hand-delivery are Monday through Friday 8:00 AM to 4:30 PM, excluding holidays. Electronic appeals must be submitted in a commonly used format (such as .doc, .docx, .pdf, .txt, or .rtf) with subject: BHRL FEIS. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

It is the objector’s responsibility to ensure timely filing of a written objection with the reviewing officer pursuant to 36 CFR §§218.9(a) and 219.56(c). All objections are available for public inspection during and after the objection process.

The FEIS is available at <http://www.tinyurl.com/BHRLProject> or by request (see contact information below).

Objections Filed Under 36 CFR §218, Subparts A and C:

The planned activities implementing the BHNF Forest Plan, as amended, are subject to objection under 36 CFR §218. Objections will only be accepted from those who submitted project-specific written comments during the scoping period or DEIS comment period (§218.5). Issues raised in objections must be based on previously submitted comments unless based on new information arising after the designated comment periods. Objections must comply with requirements of §218.8(d). Documents may be incorporated by reference only as provided for at §218.8(b).

Objections, including attachments, must be filed within 30 days from the publication date of the legal notice in the *Rapid City Journal* (Rapid City, South Dakota), the newspaper of record. The publication date in the newspaper of record is the exclusive means for calculating the time to file an objection. Those wishing to object to this project should not rely upon dates or timeframe information provided by any other source.

Objections Filed Under 36 CFR §219, Subpart B:

The programmatic Forest Plan amendment is subject to objection under 36 CFR §219, Subpart B. Only those who previously submitted substantive formal comments specific to the proposed plan amendment are eligible to file an objection under §219.53. Objections must be based on previously submitted substantive formal comments attributed to the objector unless the objection concerns an issue that arose after the opportunities for formal comment. Incorporation of documents by reference is permitted only as provided in §219.54(b). Objections must meet the minimum content requirements of §219.54(c).

Objections, including attachments, filed under 36 CFR §219, Subpart B must be in writing and filed with the Objection Reviewing Officer within 60 calendar days following the publication of a legal notice in the *Rapid City Journal* (Rapid City, South Dakota), the newspaper of record, announcing the Opportunity to Object (§219.56). The publication date in the newspaper of record is the exclusive means for calculating the time to file an objection. Those wishing to object should not rely upon dates or timeframe information provided by any other source.

7 Implementation

Implementation will occur under the Final Record of Decision (ROD), which will be issued following the close of the objection resolution periods (36 CFR §§218.12, 219.58). If no objections are received, implementation of the decisions may begin on, but not before, the fifth business day following the close of the objection filing periods (§§218.12(c)(2), 219.58(c)). If an objection is received, the Final ROD will not be signed until the close of the objection resolution process (§§218.12(a), 219.58(a)).

The FEIS will be filed with EPA and notice of its availability posted in the Federal Register. Implementation may not occur until 30 days after publication of the Federal Register notice. The Federal Register notice is not tied to objection process timelines.

8 Contact Person

This document and the FEIS may be viewed and downloaded at <https://tinyurl.com/BHRLProject>. For additional information concerning the decision, contact Anne Davy, Project Manager, email adavy@fs.fed.us or by phone at (406) 273-1836. For questions on the Forest Service objection process contact Kelly Honors, Forest Environmental Coordinator, at the Forest Supervisor's Office, 1019 North 5th Street, Custer, SD 57730, email khonors@fs.fed.us, or by phone at (605) 673-9200.

9 Responsible Official

Mark Van Every
Forest Supervisor
Black Hills National Forest

10 References

- USDA Forest Service. 1996. *Final Environmental Impact Statement for the Revised Land and Resource Management Plan for the Black Hills National Forest*. USDA Forest Service, Black Hills National Forest. Custer, South Dakota.
- USDA Forest Service. 2003. *Environmental Assessment for the Black Hills National Forest Noxious Weed Management Plan*. USDA Forest Service, Black Hills National Forest. Custer, South Dakota.
- USDA Forest Service. 2005a. *Final Environmental Impact Statement for the Phase II Amendment to the 1997 Revised Land and Resource Management Plan for the Black Hills National Forest*. USDA Forest Service, Black Hills National Forest. Custer, South Dakota. Available online:
https://www.fs.usda.gov/detail/blackhills/landmanagement/planning/?cid=fsm9_012673
- USDA Forest Service. 2005b. *Record of Decision for the Phase II Amendment to the 1997 Revised Land and Resource Management Plan for the Black Hills National Forest*. October 2005. USDA Forest Service, Black Hills National Forest. Custer, South Dakota. Available online:
<https://www.fs.usda.gov/detail/blackhills/landmanagement/planning/?cid=STELPRDB5112510>
- USDA Forest Service. 2006a. *1997 Revised Land and Resource Management Plan for the Black Hills National Forest, as Amended by the Phase II Amendment*. USDA Forest Service, Black Hills National Forest. Custer, South Dakota. Available online:
<https://www.fs.usda.gov/detail/blackhills/landmanagement/planning/?cid=STELPRDB5112303>
- USDA Forest Service. 2006b. *Forest Service Handbook 2509.25, Watershed Conservation Practices Handbook*. Rocky Mountain Region Amendment No. 2509.25-2006-2, effective May 5, 2006. Available online:
http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/91137_FSPLT3_2553041.pdf
- USDA Forest Service. 2014. *Programmatic Agreement among the USDA Forest Service, Wyoming Forests, Wyoming State Historic Preservation Officer, and Advisory Council on Historic Preservation regarding Compliance with the National Historic Preservation Act on the National Forests and Grasslands of Wyoming*. Manuscript on file, Supervisor's Office, Black Hills National Forest. Custer, South Dakota.
- USDA Forest Service. 2018. *Programmatic Agreement among the Black Hills National Forest and the South Dakota State Historic Preservation Officer regarding Vegetation Management Projects Implemented in the State of South Dakota*. Manuscript on file, Supervisor's Office, Black Hills National Forest. Custer, South Dakota.