



Norbeck Society
P. O. Box 9730
Rapid City, SD 57709

April 29, 2018

Mark Van Every, Supervisor
Black Hills National Forest
1019 North 5th Street
Custer, SD 57730

Re: Objections to Black Hills Resilient Landscapes Project

Dear Mark Van Every,

We have reviewed the Final Environmental Impact Statement and the Record of Decision for the Black Hills Resilient Landscapes project and you will find our Objections on the following pages.

We remain dedicated to supporting a management approach for the Black Hills National Forest (BHNF) that recognizes the imperative of protecting and strengthening the biocomplexity and resilience of our Black Hills forest ecosystems.

As always, we appreciate the authority provided to us by the National Environmental Policy Act for engagement with Forest management; we value the process and consider our participation not only a privilege, but a responsibility.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bob Burns".

Bob Burns, President
On Behalf of the Norbeck Society
robert.burns.sd@gmail.com
cell 605-390-6037

cc: Sen. J. Thune, Sen. M. Rounds, Rep. Kristi Noem

**Norbeck Society Objections
to the Black Hills Resilient Landscapes Project
and Draft Record of Decision
Issued by Mark Van Every
Black Hills National Forest**

April 29, 2018

The Norbeck Society submitted detailed and thoughtful comments regarding the Black Hills Resilient Landscapes Project, first during Scoping (September 2016), and again on the Draft Environmental Impact Statement (October 2017).

The Norbeck Society is not satisfied that the Forest has put forth an authentic effort to sufficiently address resilience in the forest.

Part A.

These Objections correlate with the issues raised in Norbeck Society comments on the Draft Environmental Impact Statement.

1. The Norbeck Society Objects to the use of the HFRA authority

Norbeck Society comment: Comment 5f.01. Use of HFRA authority is inappropriate.

Forest Response: As stated on FEIS page 7, the Secretary of Agriculture in 2014 designated treatment areas, including the project area, in accordance with HFRA sections 602(b)(1) and 602(c). The BHRL project's purpose includes reducing the risk or extent of, and increasing the resilience to, insect infestation in the area, in accordance with section 602(d)(1).

We recognize that the Black Hills was designated as a treatment area in 2014, but we find the HFRA authority inappropriate given current forest conditions and the damage to forest health, near-term and long-term, that the proposed actions will produce. Today, the Forest would not meet the criteria required for the HFRA authority.

- The forest is in a post-epidemic status. Populations of mountain pine beetles have returned to levels that are endemic and below since 2016. Current tree mortality via insect infestation in the Black Hills National Forest is at or below endemic levels and decreasing.
- The Black Hills Resilient Landscapes project will produce more harm than good. A large portion of the remedies presented in the proposed project, namely the heavy-handed mechanical treatments including the harvest of 185,210 acres of Structural Stage 4A stands, road-building, slash piling (large and small), and the 4,000 acres of Mechanical Site Preparation, will do very little-to-nothing in the way of reducing the risk and extent of insect infestation. These treatments will not increase forest resilience to mountain pine beetle infestation for the short term or the long term. They will actually damage forest health by increasing risk and

extent of insect infestation, catastrophic wildfire, and invasive weed infestation via ground disturbance, over-active ponderosa pine regeneration, road-building, and –importantly - lost opportunity to leverage real resilience on the forest through restorative actions.

How the Project and Record of Decision can be improved: Develop the project plan under an appropriate regulatory framework or modify the Action Alternative with a large reduction in commercial harvest and elimination of mechanical site preparation.

2. The Norbeck Society Objects to the Purpose and Need of the Black Hills Resilient Landscapes project, and the claim in it that the recent mountain pine beetle epidemic has moved the Forest away from Structural Stage objectives, and the characterization made in the Purpose and Need that meeting Structural Stage Objectives will somehow install resilience to the Forest.

Norbeck Society comment: Comment 5d.10. The purpose and need falsely implies that, before the mountain pine beetle epidemic, structural stage distribution was near Forest Plan objectives, and that structural stage objectives represent a natural condition.

Forest Response: The FEIS describes how the beetle epidemic changed forest conditions, and potential longer-term consequences of these changes, but does not imply that pre-epidemic conditions matched structural stage objectives. The FEIS acknowledges the changes caused by infestation and fire (pages 1 and 2). As stated on page 2, “Prior to the epidemic, acreage of dense, mature pine forest exceeded objectives.” The Forest Plan Phase II Amendment analysis determined that the objective structural stage distribution would provide a range of habitat to sustain native and desired non-native wildlife species. It does not claim that these objectives represent conditions at some certain point in history.

The recently passed Mountain Pine Beetle epidemic moved the forest toward Structural Stage objectives, not away from them. The MPB epidemic coupled with several large fires in 2001 have been the most influential drivers in the forest moving so rapidly toward the Structural Stage (SS) Objectives of the 1997 Forest Plan.

How the Project and Record of Decision can be improved: The false pretense of the Purpose and Need makes it difficult to improve the Project and Record of Decision. The Purpose and Need and the Project detail should both be changed to demonstrate a genuine effort to promote resilience on the Forest.

3. The Norbeck Society Objects to the size of the project and its lack of Site Specificity.

Norbeck Society comment: Comment 5c.01. The project area is too big, the proposal is too vague, and the analysis is conceptual.

Forest Response: The proposal is site-specific (see defined-area maps and descriptions in EIS chapter 2 and detailed maps available on the project web site). Analysis of effects is based on site-specific data (see Information Sources sections in chapter 3) and relevant, often locally conducted research and monitoring (see Literature Cited).

The Project is not Site specific. Definition from the Forest Land Resource Management Plan for Site is “an area considered in terms of its physical and/or biological environment; for example, a riparian zone, a homogenous stand of vegetation, or a campground.” In the maps accompanying the FEIS, we see maps of large proposed areas, not maps of sites.

How the Project and Record of Decision can be improved: Decrease the size of the project area and discuss project plans in terms of sites, not proposed areas.

4. The Norbeck Society Objects to the proposed very large amounts of very heavy-handed mechanized treatments including 185,210 acres of Overstory Removal and the associated thousands of miles of Road Work.

Norbeck Society Comment 2d. Do not construct new roads, including temporary roads. Omit all new stream crossings.

Response: See FEIS page 51.

Norbeck Society Comment 5a.12. The DEIS states, “The purpose of overstory removal and subsequent thinning is to concentrate the site’s resources in the new stand so that its growth rate may increase, contributing to sustained timber yield over time and more rapid development of moderately dense, mature forest.” The massive amount of logging proposed will do very little in the way of promoting resilience especially when the project’s purpose is to perpetuate rapid growth into the moderately dense stands that are the bane of this forest. (2-29, 13-26, 37-7)

Response: The quoted statement from DEIS page 25 references moderately dense, mature forest (SS 4B) because this stage is currently below Forest Plan objective levels in four of the five management areas with SS objectives (DEIS page 11). Contributions of the proposal to ecosystem resilience are discussed throughout chapter 3 (e.g., pages 70, 73, 83, 91).

The aggregate damage of Pine Structural Stage Modification on 185,210 acres by Overstory Removal (in areas that currently have very low insect infestation and wildfire risk), and the 3000 plus miles of Road Work of various sorts is detrimental to the Resilience of the Forest and to maintaining a balance of the Multiple Uses of the Forest.

- In the FEIS/ROD the Forest makes the claim that the removal of the overstory “seed trees” in these 4A stands will “reduce the amount of regeneration because of the removal of seed trees”. In addition to the fact that these “seed trees” and the ones just harvested from the same stands have already dropped thousands of seeds, this contradicts every past Black Hills project plan stated reason for overstory removal which is to “liberate the understory” (see Nautilus Project, for examples), and it contradicts circumstances described in the 2002 work “Ecology, Silviculture, and Management of Black Hills Ponderosa Pine” by Sheppard and Battaglia (page 68) where the authors describe Black Hills Ponderosa Pine Silvics. Likewise, regeneration decreases as tree age and as disturbed ground calms. It is counterproductive to remove the few mature trees remaining while also further scarifying the soils. Sheppard and Battaglia (2002) also cite the use of prescribed fire to eliminate regeneration as a worthy endeavor under mature trees.
- The notion that the Project intends to reduce regeneration (implied: to a manageable level) by cutting seed trees also incites questions about how plan managers will meet the required certification of these stands as regenerated, and

also whether or not the goal is some form of type-conversion to grass or something else.

- This Project promotes deviance from compliance with the Multiple-Use Sustained-Yield Act of 1960. Recreation and Wildlife will suffer.

How the Project and Record of Decision can be improved: Reduce the acres of Pine Structural Stage Modification and make a commensurate reduction in the miles of Road Work. Add no more new roads. Use prescribed fire in the place of overstory removal on some stands.

5. The Norbeck Society Objects to the level and pace of Commercial Harvest that this Project supports.

The proposal of commercial harvest on 185,210 acres clears the path for the extraction of product that exceeds limits of an Allowable Sale Quantity (ASQ) commensurate with current inventories. The existing ASQ was formulated at a time when the forest was very different. Executed as planned, this project will produce high volumes for about 10 years at which point harvest volumes will drop to near zero. Then the local timber industry will close down and the 1300 jobs associated with it will evaporate. This is not a Sustained Harvest and in terms of Forest Resilience, Restoration, and Health, is unnecessary. Forest Service responses to our comments are contradictory:

Norbeck Society Comment 5h.09. The pace of timber harvest is too rapid. Harvest levels are unsustainable.

Response: *The pace at which harvest occurs and the volume of timber sold annually are independent of the decision on whether to proceed with this project.*

Norbeck Society Comment 5b.03. The large supply of Forest Service timber depresses timber prices. (2-59, 13-58)

Response: *Commercial timber harvest levels associated with the Proposed Action* would be, on an annual average basis, less than BHNF annual output in recent years. This moderate level of output would not materially affect prices in the region.

It appears to the Norbeck Society that Forest Service actually *does* view the Proposed Action of *this* project as being linked to commercial timber harvest levels and the annual level of output. Also note, the Mountain Pine Beetle Response project appears to continue and will overlap with the Black Hills Resilient Landscapes project contributing to a total annual output similar to that of recent years.

How the Project and Record of Decision can be improved: Reduce the acres of commercial harvest to a level that supports a Sustained Harvest.

6. The Norbeck Society Objects to the plan for Pine Structural Stage Modification by Mechanical Site Preparation.

Norbeck Society Comment 3i.03. Further explain or omit mechanical site preparation.

Response: Additional information on mechanical site preparation has been added to the FEIS (page 30).

Norbeck Society Comment 3i.04. Mechanical site preparation would result in weed infestation.

Response: Potential effects of mechanical site preparation on weed infestation were disclosed on DEIS pages 100-101.

Norbeck Society Comment 3i.05. Replace mechanical site preparation with prescribed fire or hand-planting/hand-seeding.

Response: See FEIS page 30.

Comment 5a.27. There would be too many negative effects on native understory plants, especially from mechanical site preparation. "...Scarification designed to decrease competition of forbs with pine regeneration" would increase weed and other non-native species infestation.

Response: Mechanical site preparation is proposed to provide a suitable seedbed for pine in areas with non-native, sod-forming grasses (FEIS page 30) rather than to decrease competition from forbs.

During project implementation, areas where the vegetation is noted to be composed of largely native species of grasses, forbs, and shrubs may receive designation as a botanical resource warranting possible avoidance or other protective measures. Mechanical site preparation would not occur within 100 feet of fens or known rare plant sites (FEIS pages 42, 44).

Areas proposed for mechanical site preparation are "open, mature pine stands" with "thick sod formed by non-native grasses" (FEIS page 30). These conditions are not conducive to providing sustainable habitat to a native understory, though the actions of "disking, raking, or scarifying" are likely to further increase non-native plant occupation beyond grasses, including noxious weeds. The FEIS discloses potential effects of site preparation on native plants (page 93) and weeds (page 101).

There is no science that supports the use of Mechanical Site Preparation for the purposes described in the Project and its use will have the negative effect of promoting noxious weeds at an unacceptable level.

How the Project and Record of Decision can be improved: Eliminate Mechanical Site Preparation from the Project.

7. The Norbeck Society Objects to the plan for noxious weed management.

Norbeck Society Comment 5f.08. Do not take actions if funding will not cover resulting weed treatment costs.

Response: The potential for increased noxious weed infestation was identified as an issue to be addressed in the analysis completed for the BHRL project (FEIS page 16). The analysis is presented on FEIS pages 101-103 and includes trend data on funding and costs of noxious weed treatment for the past five years on the BBNF.

Funding of weed treatment comes from a variety of sources, which can vary by fiscal year. Annual funding of the Federal government is based on yearly appropriations as determined by Congress. Therefore, future funding available for weed treatment is unknown. Assumptions and estimates were developed based on available trend data. The BHRL project contains design features to contribute toward achievement of Forest Plan objectives 230 and 231 regarding noxious weeds and is consistent with Executive Order 13112 (Invasive Species).

The BHRL Project plans for existing noxious weed infestations to increase while producing more infestations with the knowledge that there is not money to address them.

How the Project and Record of Decision can be improved: Reduce the acres of Pine Structural Stage Modification and make a commensurate reduction in the miles of Road Work. Add no more new roads. Eliminate Mechanical Site Preparation from the Project.

8. The Norbeck Society Objects to the proposed acreage target for Prescribed burning.

Norbeck Society Comment 5k.11. Increase prescribed fire. Add more understory thinning and prescribed fire in WUI.

Response: The Forest Service agrees that there is a need for additional prescribed fire. Based on past accomplishments, however, it is not realistic to propose more than 10,000 acres of prescribed fire per year. Even during those years when burning conditions have been favorable on multiple days, accomplishments have not quite reached 10,000 acres. Limiting factors include the resources necessary to implement and monitor the burn, the brevity of periods during which conditions are favorable for burning, and funding. Proposed mechanical and manual fuel treatments would take place a) in WUI, b) along egress roads providing access to WUI, and c) around infrastructure, which is typically in WUI. The proposed 7,000 acres per year is similar to recent average annual accomplishments, which are limited by funding and capability using agency employees and contractors. PCT/POL may also occur in WUI. Eighty-nine percent of the potential prescribed fire acres are in WUI. All of these activities would reduce the number of small pine trees.

Reducing the acreage of commercial harvest would decrease the fuel load on the ground and free up resources for conducting prescribed burning.

How the Project and Record of Decision can be improved: Increase the target acreage for prescribed burning and reduce the acreage of commercial harvest.

Part B.

These Objections do not relate to the Final Environmental Impact Statement or the Record of Decision and do not correlate with the issues raised in Norbeck Society comments on the Draft Environmental Impact Statement because they concern issues arising after the formal comment deadline:

1. The Norbeck Society Objects that “Actionable Directives” from the Norbeck Society Draft EIS comments were not used to modify the existing Black Hills Resilient Landscapes action alternative or used as the basis for a new action alternative.

The Norbeck Society DEIS comments were structured in such a way as to include “Actionable Directives” for each issue brought up. These provided a solid starting point for another Action Alternative. Upon receipt of the FEIS/ROD, we see that there is no such Alternative, nor is there a modification of the Project encompassing these Actionable Directives:

- Reduce harvested acres in BHRL dramatically.
- Increase thinning or removing understory pine from the proposed 7,000 acres per year to at least 10,000 or even more acres per year, while minimizing the disturbance footprint.
- Do more hand-thinning and prescribed burns on the forest to reduce ponderosa pine populations.
- Include more acres for annual Rx burning maximums.

- Strive for even more heterogeneity than the Structural Stages advised in the outdated FLRMP. This would move forest conditions more towards the healthy conditions as noted in the recent work of Russell Graham.
- Take into account the ecological needs of each stand to be treated and have clear objectives about how actions will improve the land.
- Consider a much longer cycle of time between harvests.
- Implement leave-no-trace or “Tread Lightly” practices for logging.
- Add no new roads and limit reconstruction
- Reduce grazing on the Forest.
- Restore large quantities of native tree and shrub communities on the Forest.
- Do more monitoring of water quality and riparian/wetland condition to better track improvements/declines and develop a knowledge and experience base that supports active achievement of high quality water resources on Black Hills National Forest.
- Eliminate Mechanical Site Preparation from the Project.
- Add the area proposed for Mechanical Site Preparation to Rx burn acres.
- Develop a knowledge and experience base to support widespread restoration projects on native grasslands in the Black Hills.
- Develop a knowledge and experience base to support rehabilitation and restoration of Black Hills Montane Grassland plant communities.
- Engage and partner with communities and people. They will benefit from that engagement and will potentially be able to volunteer to help make the forest safer to live and work in.
- Treat funding for actions that accomplish noxious weed management as limiting factors to BHRL activities rather than ceilings to break through.
- While invasive species are brought under control in the near term, limit disturbance in areas where the understory is an intact native plant community or composed primarily of native species.
- Set a higher number of acres of hardwood restoration per year (increasing the acres of prescribed burning will help with this).
- Do not use coppice methods to regenerate aspen.
- Instead of cutting pine and spruce trees from within aspen stands, remove conifers in swaths around the perimeter of aspen groves to give room for aspen to spread outwards and minimize soil disturbance in existing stands.
- Develop a broader knowledge and experience base to support widespread restoration of aspen, birch, and bur oak plant communities in the Black Hills.
- Properly classify, inventory, and protect old and large trees.
- Leave the older, bigger trees in any stand being mechanically treated.
- Management Areas for late succession, regardless of current condition, should continue to be managed for these characteristics.

- Implement thoughtful action towards moving stands into old and large status in a variety of ways.
- If saving 5% as old growth actually provides 1% old growth in the current system, then 20% must be saved to get 5%. Delineate the 20% that will be managed to become Structural Stage 5.
- Make a forest plan amendment for increasing the percentage of SS5 on the forest, and then assure the condition of the rest of the forest will support this.
- No mechanical treatments in intact spruce communities.
- Develop a knowledge and experience base about scenery management in BHRL that focuses on restoration and resilience.
- Understand the full economic picture and do not prepare plans that pave the way for an economic bust when timber mills close. Realize that timber is not the only thing with economic value here in the Black Hills.

How the Project and Record of Decision can be improved: Either develop a new action alternative or modify the current Action Alternative in the Record of Decision.

2. The Norbeck Society Objects that the Project and Decision select whole tree yarding as the primary method used in commercial harvests and that, because of the large number of acres proposed for commercial harvest, the Project will produce a large quantity of logging debris.

With an already large back-log of pile burning from the past decades of logging, the many additional slash piles created by the Black Hills Resilient Landscapes Project create two problems:

1. The effort to keep up with burning these piles will detract from the Forest's ability to carry out the targeted acres of broadcast burning.
2. The piles pose grave dangers outlined by Darren Clabo recently and reported in the Rapid City Journal on April 21, 2018:

In the article titled "Legion Lake Fire -- Logging debris piles fueled Legion Lake Fire, expert says," Seth Tupper writes: Stacked waste piles from logging operations supplied some of the fuel that grew the Legion Lake Fire to its historic size, State Fire Meteorologist Darren Clabo said Thursday at a conference in Rapid City.

Without those piles to fuel the fire, Clabo said, "It would've been a little 7-acre postage stamp that we wouldn't be talking about here today."

Clabo, who is also a research scientist at the South Dakota School of Mines & Technology, said the fire's origin point was near some "machine piles." He described the piles as stacks of unwanted tree tops left behind after logging.

When the fire hit the “old, dead tree stuff” in the piles, Clabo said, flames shot 100 to 200 feet high like, “the largest bonfire you could ever imagine,” and embers were spread by strong winds.

The 185,210 acres of 4A proposed for commercial harvest / overstory removal have current insect and fire risks categorized as low. Once the tree tops are on the ground, the potential of these fuels to become dangerous accelerators of a wildfire is very high.

How the Project and Record of Decision can be improved: Decrease the number of acres of commercial harvest to an amount that can be paired with timely prescribed broadcast burning.

Conclusion: The Norbeck Society believes that the Black Hills National Forest is the beneficiary of competent and capable employees who care about the forest and understand the issues that we have outlined in our comments and these Objections. We also understand the political and budgetary pressures that could derail progress toward resilience in this landscape. It is paramount that the Decision made for this Project reflects a loyalty to the health and resilience of a forest belonging to all Americans; in this Decision, the Norbeck Society expects an authentic and honest effort from the Forest Service.

In an effort to support the duty of this Federal Agency to preserve and protect the resources held in the Black Hills National Forest, the Norbeck Society asks for the following Remedies to the Objections stated above:

1. Develop the project plan under an appropriate regulatory framework or modify the Action Alternative with a large reduction in commercial harvest and elimination of the use of mechanical site preparation.
2. The Purpose and Need and the Project detail should both be changed to demonstrate a genuine effort to promote Resilience on the Forest.
3. Decrease the size of the project area and discuss project plans in terms of sites, not proposed areas.
4. Reduce the acres of Pine Structural Stage Modification and make a commensurate reduction in the miles of Road Work. Add no more new roads. Use prescribed fire in the place of overstory removal on some stands.
5. Reduce the acres of commercial harvest to a level that supports a Sustained Harvest.
6. Eliminate Mechanical Site Preparation from the Project.
7. Increase the target acreage for prescribed burning and reduce the acreage of commercial harvest.
8. Either develop a new action alternative or modify the current Action Alternative in the Record of Decision.
9. Decrease the number of acres of commercial harvest to an amount that can be paired with timely prescribed broadcast burning.