Data Submitted (UTC 11): 3/25/2022 6:00:00 AM First name: Art Last name: Carter Organization: Title: Comments: Dear Mr. Jeff Underhill,

The authors and undersigned of this letter submit our collective comments on the Spruce Vegetation Management Project. Collectively, we represent decades of natural resource management, conservation, and outdoor enthusiasts specific to the Black Hills. Since the 1970's and prior to forest planning, many of us have worked as cooperators with the Black Hills National Forest on wildlife habitat projects, we have commented on all types of project, including timber, and some of us planned timber projects on Game Fish and Park's Game Production Areas and Custer State Park. Most of us are now retired but we all are landowners or life-time residents and we keep close contact with natural resource happenings in the Black Hills and are integrated into community discussions. We have the knowledge to speak to the concerns of this project. Thank you for the opportunity to review and comment on the this Project and for speaking with me, Art Carter, on behalf of our group, this past week.

Black Hills white spruce is our state tree and therefore, we will not mince words. This Black Hills white spruce reduction project is precedent setting in the collective decades we have experienced as natural resource managers and conservationists. In fact, this project deeply alarms us because the true purpose is not transparent and instead, captured as a need to prevent fire, bugs, and allow more pine to be established, at the expense of two incredibly rare Black Hills spruce plant community types; white spruce/grouse whortleberry and white spruce/twinflower habitat types (Hoffman and Alexander 1987). This species is a rare, isolated spruce species only found in the Black Hills. Below, we address the project's need to meet the 2006 Phase II forest plan direction for 20,000 acres of Black Hills white spruce and other targeted tree species.

We fully support logging as a viable, renewable use of the nation's resources and a needed vegetation management tool, but timber also needs to be a sustainable industry. As resource specialists, we realize that this forest has been managed by driving the system rather than working with its natural potential. Consequently, we are astute and care about what is logged, how much is logged within a certain time frame, when and where trees are logged, and we do recognized that commodity values from trees are needed by society. We also support jobs in a local economy and the need to sustain jobs. However, we do not support this project and its unsound, unsupported proposals. Our concerns are identified as issues which must be addressed in National Environmental Policy Act project analysis and meet the Forest Service's Chief in the remedies to "fix" the appealed 1997 Forest Plan which resulted as the 2006 Phase II Plan Amendment and a guarantee that the plan would ensure the viability of northern goshawks and American Marten.

Concerns-Purpose and Need Are Not Truthful. Project is Economically and Commodity Driven For One Forest User. Lack of Local, Relevant Science.

We are aware of the past National Forest Advisory Board meetings (Black Hills NF website) where special interests are desperately trying to find more timber volume in a pine dominated system that is nearly spent of its late successional ponderosa stands and a system which no longer can sustain the rate of logging concomitant with past fires, mountain pine beetle mortality, and human development. It would behoove the Forest Service to be transparent and truthful with its publics. This project is simply to scrounge and find additional, yet very short-lived, volume for one single interest: private timber enterprises.

It is common knowledge that the Forest Service is acting out through politics and economics and not for the best

of the Black Hills ecosystems and the millions of people that enjoy and own these federal lands. The public expects the Forest Service to be an exceptional steward of these lands. This project reminds us of the 1960's (pre-forest planning) where aspen was ripped and sprayed and pine was planted in its place. Or when Forest Service blew-up beaver dams. These actions were later realized as having violated basic public land ethics and we do not want to see the horrific removal of Black Hills white spruce included with past indiscretions.

In the grab for volume, the Forest Service continues to have on-going projects; one suggests using helicopter logging to find "volume" on steeper hillsides that normally are not logged or these ancient trees were left as reservoirs for late successional forested systems. Currently, there are at least 4 large-scale logging proposals for public review in addition to the ongoing landscape scale Black Hills Resilient Landscapes and Mountain Pine Beetle Record of Decisions. The level of logging of late successional and old growth conifers surpasses the 1980s - 1990s removals. https://www.fs.fed.us/rm/pubs_series/rmrs/gtr/rmrs_gtr422.pdf Table 4, P 24.

We request that the now supported and reviewed RMRS General Technical Report cited above be part of the project effects analysis as relevant and local science. Project analysis needs to disclose current timber harvesting activity as connected actions with cumulative effects and reasonably foreseeable actions and consequences.

In researching the national forest management act on the Forest Service website https://www.fs.fed.us/emc/nfma/index.shtml we came across this relevant and poignant citation on the first page:

"The days have ended when the forest may be viewed only as trees and trees viewed only as timber. The soil and the water, the grasses and the shrubs, the fish and the wildlife, and the beauty of the forest must become integral parts of the resource manager's thinking and actions."

-Senator Hubert Humphrey, 1976

This quote was from 1976, and here we are, 46 years later in 2022, and not meeting this foretelling statement for Black Hills National Forest. Forest planning is supposed to be a major legal avenue to avoid single interests dominating national forest projects. We argue that the Black Hills National Forest has regressed by proposing removal of Black Hills white spruce and only sees merchantable sized white spruce as a short-term timber commodity. Once these 25,000 acres are cut to meet the timber volume demand, then what? Once the hillsides are scoured, then what? Please explain how current logging and this project are sustainable, responsible forestry. Never in our collective years working on and with the Forest Service in South Dakota, have we seen a Black Hills white spruce logging proposal such as this. This project is not ecologically driven for the best management of Black Hills white spruce ecosystems because the scoping notice regurgitated forest components, played the tired bugs and fire scares, offered very little ecology of the species that rely on Black Hills white spruce, and how they would benefit by removing a very rare tree vegetative cover. This is not "restoration". National Forest Management Act and forest planning laws require a balance of multiple uses and not favor special interests at the expense of America's resources and forest ecosystem services. Forest Service is to maintain and improve vegetative diversity, not reduce it. We recognize that project level planning is not forest programmatic planning, but hear us out. We have substantive and on-point questions that require answers.

The treatments proposed are those commonly used for harvesting ponderosa pine and therefore, the scoping notice treats Black Hills white spruce as pine or worse, as an inferior tree species or a weed that must be replaced by the ever-present pine. Spruce is a critical native conifer that has a role in Black Hills ecosystems and is valued by society. This project lack relevancy and specific local science.

Concern-Analysis Must Take A Hard Look And Must Be Elevated To An Environmental Impact Statement

We raise the issue that the level of NEPA must be elevated to an Environmental Impact Statement, not conducted under an Environmental Assessment. This Spruce Vegetation Management Project appears to be rushed to appeal to special interests yet the Forest Service is required to take a hard look at environmental effects of planned actions, even after a proposal has received initial approval. Courts require the same criteria for EAs as EISs, but an EIS takes into account the human dimensions and economics in a significant manner or to a significant extent not already considered in initial project planning and commodity products the project purports to produce.(Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 109 S.Ct. 1851 (1989) (companion case to Robertson v. Methow Valley Citizens Council).

40 CFR [sect] 1502.1 Purpose of environmental impact statement

The primary purpose of an environmental impact statement prepared pursuant to section 102(2)(C) of NEPA is to ensure agencies consider the environmental impacts of their actions in decision making. It shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. [hellip].Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses.

Because the driving factor of this project is harvesting the rare, endemic Black Hills white spruce simply to add to timber volume, and a finite amount at that, this project must be elevated to the appropriate EIS NEPA level and disclose impacts to the human environment including but not limited to: the no action alternative, a reasonable range of action alternatives, economics such as costs to harvest spruce, costs to rehab disturbed areas, commodity retail value of spruce, jobs provided during the project duration, timber industry needs, costs associated with the direct loss of societal values such as view sheds, interior forests, habitat alterations which harm spruce dependent rare plants and animal, and other economics of a short-term timber volume harvest. Values on losses of wildlife species and viability must also be estimated. Mature, merchantable Black Hills white spruce is not a viable, sustainable product in and of itself. It is a filler in composite materials and to our knowledge, there is no public demand just for Black Hills white spruce products. However, spruce has greater value than this as far as species diversity, wildlife cover, and even the production of Christmas trees. Some growers of Christmas trees consider Black Hills spruce to be the best of all other conifer species. Getting a permit to cut a Christmas tree is a real joy for people and they love the tradition of decorating their home with this native and rare spruce. The analysis must take into consideration all values of this plant community

40 CFR [sect] 1502.2 Implementation

(g) Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.

We contend that the Forest Service has already made an internal decision based on the fact that the first illconceived project of 2021, Pine and Aspen Restoration Project, was withdrawn following public feedback and incorrect use of NEPA authority. It appears as if the Forest Service is just going through the NEPA checklist but has every intention of moving forward with this much expanded project proposal, which is illegal. Instead of dropping the 2,800 project, Forest Service leadership has decided to take a forest-wide approach! This indicates that a decision at some level has already been made internally and with special interests receiving the benefits. Therefore, we object to the use of pre-decisional EAs which cuts out public participation, speeds the NEPA process to come to a project decision, and accelerates project implementation. This project is also being rushed prior to revising the outlived 2006 Phase II Plan under new 2012 Planning Rule. Again, the Forest Service must be transparent in its project planning path, include relevant, local science behind this project, and follow requirements for multiple uses and sustained yields. Concerns-Project Proposal Does Not Meet The National Forest Management Act (NFMA), Planning used for 2006 Phase II Amendment of the Revised 1997 Forest Plan, and Historical and Present Acres of White Spruce are Unsubstantiated

Forest plans must meet the requirements of the National Forest Management Act, and to do that, NFMA requires the Forest Service to revise its forest plans at least every 15 years in part because of changing conditions inherent in natural systems and dynamic social values. While exceptions are allowed for not having another Black Hills revised plan at this time, the current Forest Plan was initially approved in 1997 and then significantly amended in 2006 with "Phase II". The FS Chief's October 1999 Appeal Decision for the 1997 revised plan required the following deficiencies, among others, to be corrected and applied to the 2006 Phase II Plan as repairs to identified flaws:

- * Viability determinations for species
- * Standards and guidelines to maintain viability of species
- * Management Indicator Species requirements, and
- *

Monitoring direction for sensitive species.

15 years from 1997 Revised Plan = 2012. 15 years from 2006 Phase II = 2021. These plans have outlived existing conditions and very few projects should move forward until a revision is completed. The project proposal suggests that spruce acreage of 20,000 was either incorrect based on mapping capabilities during the 1996/2006 planning phases; or that white spruce has grown exponentially, at rates outside of known science. The 2021 Pine and Aspen Restoration Project (page 2) estimated 50,000 acres. The current 2022 scoping for Spruce Vegetation Management puts Black Hills white spruce at now 52,000 acres (a 2,000 acre increase in one year) using very limited FIA data 2017-2019 and/or the very inaccurate FSVeg estimates which range anywhere from 33,000 to 51,000 acres of white spruce. 52,000 acres reduced to 20,000 acres is a 38% reduction! At what level do scientists, not special interests and politicians, feel that this isolated spruce sub-species can be reduced to? The analysis must divulge what level of confidence or reliability will be placed on the final data outcome? No white spruce structural stages or soil types were presented with these data. However, we suspect that the natural expansion of white spruce, absent fire or other means, are small to pole-sized spruce. Forest Service has no market for these early structural stages so the ancient, large and old interior spruce stands have been targeted for market The herein 2021 cited RMRS General Technical Report at 39 states, "Based on the recent 2020 FSVeg database layer, the estimate of structural stages within the suitable timber base demonstrates that not all the sawtimber within a structural stage is available for harvest (Johnson 2020). As a result, the FIA standing live sawtimber volume estimate of approximately 5.9 million cubic feet is not fully available for harvest."

Forest Service doesn't appear to trust its own historic data from the 1996 Forest Planning efforts, which transferred into the 2006 Phase II Amendment, and Forest Service scientists and employees do not trust present data from FIA/FSVeg for pine or spruce. Forest Service employees readily let publics know that recently harvested acres are still not entered in the databases with correct structural stages, species, and acres. With such shaky data, Forest Service is too premature on this project and cannot make reasonable decisions on missing or bad science.

The Forest Service had 10 years between the 1997 Plan and 2006 Phase II Amendment to correct that spruce acreage, justify the result, but chose not to. Therefore, we find it impossible to believe that the slow growing Black Hills white spruce has expand another 32,000 acres in 16 additional years (2006 to 2022) AND that its expansion has such high growth yields as to be mostly of commercial sawlogs (> 9" diameter base height). Appendix H of the Plan only has timber stocking charts for pine. What science is being used to determine the

stocking rate of spruce?

This new acreage information is unjustified and we request it be scientifically supported through the aid of RMRS scientists. Something is askew, illogical, and Forest Service has not taken the required "hard look" or conversely, admitted that the 1997 estimates may have been low. A target of 20,000 is not a "standard" (definition: required unless there is a forest plan amendment) but an "objective" (defined as a concise statement of desired measurable results intended to promote achievement of specific goals). Attainment of objectives is limited by the application of standards and guidelines. Objectives for spruce are either under-represented during the life of a Plan or over extended, similar to how the Forest Service has allowed extreme fluctuation in the ASQ. Allowable Sale Quantity is the quantity of timber that may be sold from the area of suitable land covered by the Forest Plan for a time period the Plan specifies. This quantity is usually expressed on an annual basis as the "average annual, allowable sale quantity" and usually applies for 10 years or longer. This level is considered the "ceiling" of timber quantity that can be harvested from suitable lands. However, the 2021 RMRS sustainability report demonstrated that the ASQ has been exceeded several times within a 10-year period. Therefore, to be so determined to meet one forest plan objective regarding the reduction of a rare spruce community seems contrary to allowing harvest levels to be exceeded.

Also, if the Forest Service is going to place 1897 as the reference standard for Black Hills white spruce distribution and abundance, then it should decide why some vegetative conditions are to be set back to that date, and others are arbitrarily not. Following the scoping notice's justifications to model 1897 vegetation (which is a best guess), Forest Service should be concerned about the incredible loss of aspen to pine, loss of late successional and old growth pine over this same time period, and loss of historical fire intervals which was one disturbance factor which kept the area in constant but natural flux. Where in the Plan does it state that any type of management will mimic 1897? Pictures of the 1874 Custer Expedition illustrate our point on how different the Black Hills would look and we know this is not realistic or feasible.

There is very little mention of late successional pine stands (SS3 - SS4) including old growth (SS 5) in the project proposal. However, it was mentioned in the 2021 Pine and Aspen project that this specific area had no late successional pine stands. Where did the late successional and old growth pine disappear to if equivalent spruce structural stages are still present? Furthermore, it stated on MA5.1 that forest-wide there was only 0.5% old growth vs. the 2006 Phase II Plan. And, the RMRS Sustainability Report lists less than 5%; this means very few areas show evidence of old trees of either conifer species. Please address why there is the need to keep this forest homogenous and young? No acreage is given for this SS for either pine or spruce and we recommend you address SS5 in the project analysis.

As stated above, monitoring is a requirement and was emphasized by your Chief as a reason why the Phase II Plan would provide for species viability. But, monitoring has not been publicly disclosed since approximately 2014. Until 2021, the Forest Service has not publicly announced a concern for spruce acreage until it was sought after as timber volume. The Forest Service has violated the 5-year requirement to determine if conditions or demands by the public have changed significantly. We believe this project violates these requirements, at a minimum, and cannot continue without a hard look, EIS, and/or significant Plan Amendment to match the impacts of and to the suspected 52,000 spruce acres.

NATIONAL FOREST SYSTEM LAND AND RESOURCE MANAGEMENT PLANNING

36 CFR Sec. 219.10 Forest planning--general procedure.

(3) (e) Plan implementation. As soon as practicable after approval of the plan, the Forest Supervisor shall ensure that, subject to valid existing rights, all outstanding and future permits, contracts, cooperative agreements, and

other instruments for occupancy and use of affected lands are consistent with the plan. Subsequent administrative activities affecting such lands, including budget proposals, shall be based on the plan. The Forest Supervisor may change proposed implementation schedules to reflect differences between proposed annual budgets and appropriated funds. Such scheduled changes shall be considered an amendment to the forest plan, but shall not be considered a significant amendment, or require the preparation of an environmental impact statement, unless the changes significantly alter the long-term relationship between levels of multiple-use goods and services projected under planned budget proposals as compared to those projected under actual appropriations.

(f) Amendment. The Forest Supervisor may amend the forest plan. Based on an analysis of the objectives, guidelines, and other contents of the forest plan, the Forest Supervisor shall determine whether a proposed amendment would result in a significant change in the plan. If the change resulting from the proposed amendment is determined to be significant, the Forest Supervisor shall follow the same procedure as that required for development and approval of a forest plan. If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures.

(g) Revision. A forest plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the plan have changed significantly or when changes in RPA policies, goals, or objectives would have a significant effect on forest level programs. In the monitoring and evaluation process, the interdisciplinary team may recommend a revision of the forest plan at any time. Revisions are not effective until considered and approved in accordance with the requirements for the development and approval of a forest plan. The Forest Supervisor shall review the conditions on the land covered by the plan at least every 5 years to determine whether conditions or demands of the public have change significantly.

Concern-This Project Violates the Sideboards of The 2006 Phase II Forest Plan

To act on 52,000 acres of white spruce should require the Regional Forester to take a significant forest plan amendment (now under the 2012 Planning Rules) because removal of 25,000 acres of spruce will have significant ecological and economic impacts that were not analyzed at that scale or proportion in the 2006 Phase II Plan Amendment! Effects analysis in the Forest Plan for 20,000 acres is a very different set of outcomes and formulas than effects analysis on 52,000 acres of Black Hills spruce being reduced more than half! Forest Service cannot substitute as proxy, the 2006 Phase II analysis for this project. This project should not proceed on a false premise and set of either apparently flawed historical assumptions or present miscalculations. Removal of late successional and old growth white spruce where it existed for hundreds of years, will significantly alter the long-term relationships between levels of multiple-use goods and services because these stands will not be replaced for over 200-300 years.

We are concerned that this project does not meet the 2006 Phase II Plan and the conditions under which it was approved upon appeal by your Chief, and was later tested in the courts when white spruce acreage was estimated at 20,000 acres. For reference, we cite forest planning regulations and national forest management act. The issues we raise with the Plan and requirements which went into Phase II are not outside the scope of this project because we point out substantive and relevant questions as they apply to spruce. We contend that removal of 25,000 acres of spruce (which includes acreage which was mapped in 1997 and carried over to 2006 Phase II) is detrimental to the species mentioned in the Appeal and court case, including Northern Goshawk and American marten. Projects must meet the 2006 Phase II level of analysis from the time of the ROD up to 15 years. This project is outside the scope of the Forest Plan analysis and should not proceed because of alleged significant condition and acreage changes in white spruce communities.

Further, we contend that harvesting more acres of spruce than what was known at the time of the 1997 and 2006 Phase II Plans, also violate Forest Planning regulations used in those time periods and NFMA. The forest plan simply did not and could not analyze the impacts (ecological and economical) to harvesting 25,000 acres of spruce when only 20,000 was estimated to exist! Significant wildlife and plant habitats will be severely impaired by mechanical impacts and mature tree removal. Removing native spruce will also significantly dry out the soils and microclimates, changing the composition of the understory and microbes. Drying out of sites will only make the areas more prone to fire, will not recover or withstand drought, and be intensively subjected to effects of climate change. These concerns must be addressed in an EIS analysis.

Therefore, this project violates the analyzed and approved sideboards of the 2006 Phase II Plan and cannot be allowed to continue in the proposed EA NEPA level of analysis and maybe not even an EIS. Below, B(1) no longer can be met in the 2006 Phase II Plan because it did not have the analysis to determine the effects of removing 25,000 acres of spruce, including the spruce which has already been harvested since 1997 when these acres were determined.

36 CFR Sec. 219.27 Management requirements

The minimum specific management requirements to be met in accomplishing goals and objectives for the National Forest System are set forth in this section. These requirements guide the development, analysis, approval, implementation, monitoring and evaluation of forest plans.

(a) Resource protection. All management prescriptions shall--

(5) Provide for and maintain diversity of plant and animal communities to meet overall multiple-use objectives, as provided in paragraph (g) of this section;

(6) Provide for adequate fish and wildlife habitat to maintain viable populations of existing native vertebrate species and provide that habitat for species chosen under Sec. 219.19 is maintained and improved to the degree consistent with multiple-use objectives established in the plan;

(7) Be assessed prior to project implementation for potential physical, biological, aesthetic, cultural, engineering, and economic impacts and for consistency with multiple uses planned for the general area;

(8) Include measures for preventing the destruction or adverse modification of critical habitat for threatened and endangered species;

(b) Vegetative manipulation. Management prescriptions that involve vegetative manipulation of tree cover for any purpose shall--

(1) Be best suited to the multiple-use goals established for the area with potential environmental, biological, cultural resource, aesthetic, engineering, and economic impacts, as stated in the regional guides and forest plans, being considered in this determination.

NATURAL HISTORY OF AMERICAN MARTEN IN THE BLACK HILLS

This local and relevant science must be used in project analysis. The American marten was reintroduced by

South Dakota Game, Fish and Parks in 2 releases between 1980 and 1993, totaling 135 individuals. Several of us in this letter participated in these efforts which were led by Blair Waite (we incorporate by reference, John Wrede's and Blair Waite's 2021 letters to the Forest Service on the Pine and Aspen Restoration Project). To our knowledge there has never been a trapping season, which can threaten viability of low populations. If the state is meeting their desires for this species viability, then the Forest Service should, too.

Twenty-two years ago, Fecske (2002) identified 131,000 acres of high quality habitat and determined that there was a stable marten population. The Fecske study has not been repeated and there has been significant pine tree mortality and pine and spruce removal on all land ownerships (connected actions) since then. There are two subpopulations, one in the Norbeck Wildlife Preserve-Black Elk Wilderness areas and a second subpopulation several miles away in the northern Black Hills. The highly fragmented habitats connecting the two subpopulations are not stable ecosystems due to development, logging, highways, reduction in riparian area conditions with spruce cover, and other stressors which make travel risky for marten. Risk includes high mortality due to vehicle collisions, starvation, predation, and lack of security cover for travel and living.

Marten are primarily devoted to late-successional, large diameter spruce trees and use ground level habitat like low-lying branches and course woody debris as highly suitable habitat to maintain healthy populations. This project considers the low-lying branches as ladder fuels and the ground debris as heavy fuel loads; both are slated to be heavily reduced in the project area and must be analyzed as to effects on marten. Marten require continuous canopy cover to move from one area to another, but will travel through other habitats and some opened areas when forced. Again, introducing high risk in less favorable habitats.

Marten are secretive and avoid large forest openings. They use spruce stands and downed trees for travel, thermal, security, and screening cover to safely raise young and forage for prey. This project proposes to use controlled fire and other mechanical methods to disturb, masticate, and reduce ground cover on a landscape scale level; detrimental practices to marten spruce habitats. Phase II includes slash retention standard 3117. In past Forest Service Wildlife Specialist Reports, biologists recommended that "in areas identified as important connectivity corridors for marten (see Fecske 2002 and Buskirk 2002) canopy closure of at least 50 percent should be maintained" pursuant to existing Forest Service standard 3115.

Concern-This Project Does Not Use Local And Relevant Science For Harvesting Black Hills Variety Of White Spruce And Avoidance To Further Impact Marten Habitat

36 CFR Sec. 219.15 Vegetation management practices.

When vegetation is altered by management, the methods, timing, and intensity of the practices determine the level of benefits that can be obtained from the affected resources. The vegetation management practices chosen for each vegetation type and circumstance shall be defined in the forest plan with applicable standards and guidelines and the reasons for the choices. Where more than one vegetation management practice will be used in a vegetation type, the conditions under which each will be used shall be based upon thorough reviews of technical and scientific literature and practical experience, with appropriate evaluation of this knowledge for relevance to the specific vegetation and site conditions. On National Forest System land, the vegetation management practice chosen shall comply with the management requirements in Sec. 219.27(b).

The suggested project treatments are common for ponderosa pine but need to be proven effective forestry and ecological practices for white spruce to avoid wind fall and to retain connected corridors for species that depend upon late successional white spruce. How connected corridors are determined must be included in the analysis.

Concerns-Openings May Violate NFMA And Do Not Consider White Spruce Ecology, Avoidance Of Openings By Marten, and Threats to Marten Viability

For decades, we worked with the Forest Service to create temporary openings in the forest for wildlife needs and some were strategically created on state lands, as well. We rarely saw the approval of Forest Service areas greater than 10 acres because industry did not want temporary, unstocked open pockets. Patch cuts are an even-aged silvicultural treatment and are used in the most recent Alvin and Theodore projects which are permitted to remove up to and over 40 acres of commercial pine because the planted pine in these areas are not native, are inferior, and are infected with gall rust.

We find it highly irregular that the Forest Service has gotten quite comfortable seeking even-aged cuts of up to and over 40 acres of commercial white spruce in favor of pine. This is not ecologically sound to punch huge holes in spruce (as has been done in the past within the 2021 Pine and Aspen planning area and can been seen from aerial imagery) to let pine invade, which seriously threatens connected habitats for marten. The Forest Service is favoring the dominant and abundant pine over a minor spruce component, for future commercial pine harvests. This is not how to manage for a balanced and diverse forest. This is not ecologically sound to create more of the same! We object to spruce or aspen clear cuts of up to 40 acres or over and justification for any openings must be analyzed for effects.

Analysis must state the criteria used to select timber to be removed to create openings, how the criteria would benefit or harm wildlife and their habitats, and how criteria would avoid rare species. We do not know of any forage shortages because past fires and the current aggressive logging are creating more than enough forage for wildlife and livestock well beyond the forage allocation rates in the Phase II Plan. Shading from spruce is necessary to maintain the ecology of stream sides and the aquatic organisms, including habitats and invertebrates for the American Dipper in Spearfish Canyon. Lastly, scoping for even aged clear cuts over 40 acres was not given the required 60-day public comment opportunity and is a violation of the 2(ii) regulation below.

The current Forest Plan and NFMA do not allow clear cuts over 40 acres as a normal course of vegetation management (stems back to the clearcuts pre-forest Service laws when publics came unhinged at the sites of and damage to forests due to expansive clearcuts). There are reasons to halt large clearcuts and one factor is that they would diminish movements and corridors for marten. Some thinning and logging of ponderosa pine adjacent to late successional spruce does not preclude marten movements. Buskirk (2002) predicted that marten avoid large clear cuts in the Black Hills, but that it was unclear whether and to what extent marten avoid thinned ponderosa pine forests. Post-release movements of 1980's reintroduced martens moved through intensively managed ponderosa pine and thus, martens can move fairly long distances within the Black Hills but movement does not equate to having all the factors of high quality habitats when traveling nor does it equate to safety. Martens highest survival and reproductive success occurs in high-quality habitat dominated by mature and late-successional white spruce (structural stages 4B, 4C, and 5), not similar structural stages of ponderosa pine

36 CFR Sec. 219.27 Management requirements

(d) Even-aged management. When openings are created in the forest by the application of even-aged silviculture, the following management requirements apply:

(1) Openings shall be located to achieve the desired combination of multiple-use objectives. The blocks or strips cut shall be shaped and blended with the natural terrain, to the extent practicable, to achieve aesthetic, wildlife habitat, or other objectives established in the plan. Regional guides shall provide guidance on dispersion of openings in relation to topography, climate, geography, local land use patterns, forest types or other factors. As a minimum, openings in forest stands are no longer considered openings once a new forest is established. Forest

plans may set forth variations to this minimum based on site- specific requirements for achieving multiple-use objectives. Regional guides shall provide guidance for determining variations to this minimum in the forest plan, based on requirements for watershed, wildlife habitat, scenery or other resource protection needs, or other factors.

(2) Individual cut blocks, patches, or strips shall conform to the maximum size limits for areas to be cut in one harvest operation established by the regional guide according to geographic areas and forest types[hellip]..and 40 acres for all other forest types except as provided in paragraphs (d)(2)(i) through (iii) of this section:

(i) Cut openings larger than those specified may be permitted where larger units will produce a more desirable combination of net public benefits. Such exceptions shall be provided for in regional guides. The following factors shall be considered in evaluating harvest cuts of various sizes and shapes to determine size limits by geographic areas and forest types: Topography; relationship of units to other natural or artificial openings and proximity of units; coordination and consistency with adjacent forests and regions; effect on water quality and quantity; visual absorption capability; effect on wildlife and fish habitat; regeneration requirements for desirable tree species based upon the latest research findings; transportation and harvesting system requirements; environmental and forest pest hazards to regeneration, residual trees, and surrounding stands; and the relative total costs of preparation and administration, transportation requirements, harvesting, site preparation, planting, stocking control, and future stand tending of harvest cuts of various sizes and shapes. Specification for exceptions shall include the particular conditions under which the larger size is permitted and shall set a new maximum size permitted under those conditions.

(ii) Size limits exceeding those established in paragraphs (d)(2) and (d)(2)(i) of this section are permitted on an individual timber sale basis after 60 days' public notice and review by the Regional Forester.

(e) Riparian areas. Special attention shall be given to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. This area shall correspond to at least the recognizable area dominated by the riparian vegetation. No management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment shall be permitted within these areas which seriously and adversely affect water conditions or fish habitat. Topography, vegetation type, soil, climatic conditions, management objectives, and other factors shall be considered in determining what management practices may be performed within these areas or the constraints to be placed upon their performance.

(g) Diversity. Management prescriptions, where appropriate and to the extent practicable, shall preserve and enhance the diversity of plant and animal communities, including endemic and desirable naturalized plant and animal species, so that it is at least as great as that which would be expected in a natural forest and the diversity of tree species similar to that existing in the planning area. Reductions in diversity of plant and animal communities and tree species from that which would be expected in a natural forest, or from that similar to the existing diversity in the planning area, may be prescribed only where needed to meet overall multiple-use objectives.

Concerns-Viability of Fish and Wildlife Species and Spruce Ecology

The white sucker, American Marten, American Dipper, Ruffed Grouse, Golden Crowned Kinglet, American 3-toed Woodpecker, and other rare plants and animals all need considerations where spruce removal is planned. Many of these species are on Forest Service lists of concern such as the regional 2 lists, Species of Local Concern, or MIS. The 2006 Phase II Plan does not offer the ability nor did it analyze the possibility to dismantle historic late successional spruce stands and their replacement stands. Required monitoring to ensure the Chief's direction for Phase II species viability has not been accomplished. Tracking these species is a challenge but if any of these species have occupied or seasonally used white spruce within their home ranges, white spruce should not be removed even if it has expanded to drier sites until better studies can be conducted. When marten were reintroduced, the purpose was to restore an iconic interior forest species. Suitable marten habitat is already confined mostly to interior spruce, which is not well distributed in the planning area and across the Black Hills. We contend that the minimum number of species is not readily available in monitoring reports as they are missing since 2014 and the existing Forest Plan has outlived its relevancy and life expectancy of 15 years. Without relevant, substantiated facts, impacts cannot be ascertained and proper information will not be available to make a sound ecological and responsible decision.

36 CFR Sec. 219.19 Fish and wildlife resource.

Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired nonnative vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.

(a) Each alternative shall establish objectives for the maintenance and improvement of habitat for management indicator species selected under paragraph (g)(1) of this section, to the degree consistent with overall multiple use objectives of the alternative. To meet this goal, management planning for the fish and wildlife resource shall meet the requirements set forth in paragraphs (a)(1) through (a)(7) of this section.

(1) In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area shall be identified and selected as management indicator species and the reasons for their selection will be stated. These species shall be selected because their population changes are believed to indicate the effects of management activities. In the selection of management indicator species, the following categories shall be represented where appropriate: Endangered and threatened plant and animal species identified on State and Federal lists for the planning area; species with special habitat needs that may be influenced significantly by planned management programs; species commonly hunted, fished, or trapped; non-game species of special interest; and additional plant or animal species selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality. On the basis of available scientific information, the interdisciplinary team shall estimate the effects of changes in vegetation type, timber age classes, community composition, rotation age, and year-long suitability of habitat related to mobility of management indicator species. Where appropriate, measures to mitigate adverse effects shall be prescribed.

(3) Biologists from State fish and wildlife agencies and other Federal agencies shall be consulted in order to coordinate planning for fish and wildlife, including opportunities for the reintroduction of extirpated species.

(5) The effects of pest and fire management on fish and wildlife populations shall be considered.

(6) Population trends of the management indicator species will be monitored and relationships to habitat changes determined. This monitoring will be done in cooperation with State fish and wildlife agencies, to the extent practicable.

Both types of Black Hills white spruce communities have significantly high basal areas and never has this been a concern in the decades of our experience with the Forest Service. Not in practice, not in forest planning, and not in project level discussions. To consistently play the fire, fuel loads, ladder fuels, and insect infestation threats are tiring. The insects which infect or cause spruce mortality, their life cycles, and their current abundance and distribution, must be included in an EIS analysis. The science of white spruce must be addressed. This species should not be treated as if it were pine or an inferior tree species. Large spacing between spruce trees only causes wind throw (which we have seen for years on the Northern Hills District). Animals and spruce-adapted plants depend upon the moist, wind-protected microclimates of dense spruce and opening spruce is counter-intuitive.

Concerns-Forest Service Proposals Are Contrary to Past Stewardship for White Spruce Communities and Lack Of Required Monitoring

In 2011 through approximately 2013, Forest Service was challenged on the Phase II Forest Plan Amendment and nine timber projects designed under Phase II. Allegations included that Phase II and subsequent timber projects were designed under a flawed plan which did not ensure the viability of several species, including American Marten, a Region 2 sensitive species (US District Court, District of WY Case 1:11-CV-340-SWS, Case 11-CV-340J). We also reviewed the 10th Circuit Court of Appeals, Biodiversity et al. vs. Jiron et al. Case 13-1352 (2014). Upon review of court documents, we gathered the following information to use as stark contrast between Forest Service court defenses and today's Black Hills Spruce Vegetation Management project. In these challenges, the Forest Service prevailed because of the applied science and informed decision-making which went into the 2006 Phase II Plan and standards for spruce habitats and marten at that time.

Black Hills white spruce is the only tree and plant community-habitat type which provide highly suitable and required habitat characteristics necessary for the spruce obligate marten. In the legal challenges referenced, pine was to be thinned around Black Hills spruce to promote the growth of spruce trees whereas in this 2022 spruce reduction project, pine will be favored. We find it extremely disturbing that in 20 years, the Forest Service has gone from being an advocate for marten (their own selected region 2 sensitive species which represents late successional Black Hills white spruce communities) and usually has managed vegetation to maintain what small percent white spruce habitat remains, to now advocating radical spruce removal in the 2022 Spruce Vegetation Management project. Today, these very same white spruce/mixed tree habitats are suddenly dubbed as fire, insect, and pine threats regardless of the ecological functioning and services that this minor tree component disproportionately provides. We remind the Forest Service that the Chief's direction on the Phase II Amendment, required control of forest fragmentation in areas having the potential to be occupied within the planning period, not elimination of all distance between the two marten subpopulations in the Black Hills. This project must explain how in 20 years, Forest Service management has completely flipped direction when it used to be an advocate for Black Hills white spruce and the many wildlife and botanical species which rely upon this rare habitat to one as relegating Black Hills white spruce as a threat to an already ubiquitous pine ecosystem. The project analysis must explain this complete turn-round.

The project scoping map indicated the real potential to remove spruce spans from the Norbeck Wildlife Preserve all the way north to the areas where marten were reintroduced in the 1980s and 1990s and beyond. THESE ARE THE VERY FRAGEMENTED TRAVEL COORIDORS that marten require to have the only two subpopulations

interact and REMAIN A VIABLE BLACK HILLS POPULATION, a FS Planning Rule requirement. Neither subpopulation can sustain itself and be considered "viable" under Forest Service regulations and certainly will suffer population declines with severely altered habitats in the Norbeck area and northern Hills.

If information on population size, recruitment, and survival were available, Buskirk (2002) states that it would be possible to begin to parameterize a model of population persistence (population viability analysis) for marten in the Black Hills. Despite Fecske (2002), Buskirk (2002) and Smith (2010) studies, there are no available data on the following to calculate viability and persistence:

* natal or maternal dens of martens, but den sites could represent an important habitat need of martens.

- * courtship and breeding
- * pregnancy rates or litter sizes
- * recruitment
- * parental care in martens
- * site fidelity of martens
- * survival and reproduction
- * population trends and densities
- * regulatory mechanisms
- * demographic stochasticity
- * temporal variation
- * variation among individuals
- * long-term forecasting
- * genetic variation
- * resource competition
- * parasites, diseases, or mutualistic interactions
- * effect of insect outbreaks on spruce to marten habitats

The science suggested that home range information combined with habitat occupancy could provide a coarse measure of population size, but that theory has not been tested and peer-reviewed.

Marten can be monitored through track counts (Smith 2010). Golden-crowned kinglets and American three-toed woodpeckers are easily and efficiently monitored as an indicator of abundance distribution and condition of spruce habitat. Ruffed grouse using these wintering areas can be surveyed in the spring with drumming counts. Any data that the Forest Service has on these Black Hills white spruce wildlife species should be included in the project analysis. Viability of these species is a requirement for management and is defined in terms of probability of population persistence over specified periods, typically centuries (paraphrased from Buskirk 2002). Further, Buskirk states, "Whether the marten population has reached the carrying capacity of the habitat, is still growing, or is dwindling is likewise not known" and still remains undocumented in 2022.

Concern-Unsupported Contention That Dense Spruce Are Insect Prone And Increase Fire Danger And Spruce Mortality

There is no information available on the effect of insect outbreaks on marten habitat in the Black Hills. Martens have evolved with fire in the broad sense of the term, although they tend not to prefer forest types, particularly dry-site types, with a history of frequent fires. Drying out sites by removing spruce will impact marten

Concern-High Quality Suitable Habitat Availability Need Updating Before This Project can Proceed

Buskirk (2002) assumed in his assessment "that martens in the Black Hills select for and exhibit their highest survival and reproduction in stands dominated by mature or old-growth white spruce (structural stages 4b, 4c, and 5). This assumption is reflected in the mapping of presumptive marten habitat quality shown by Black Hills National Forest (1996b, Figure H-15), which assumes that only 7674 ha (1.2%) of the Black Hills National Forest is high-capability habitat for marten (structural stages 3, 4, and 5 are assumed suitable). Only about 225 ha of old growth (stage 5) white spruce are mapped in the Resource Information System (RIS) data base (Black Hills National Forest 1996b, III-134)[hellip].areas of high quality marten habitat in the Black Hills National Forest is very limited relative to the size of the forest, and relative to the area likely needed for population viability for martens. I further hypothesize that mature or old-growth white spruce-dominated habitats serve as source habitats for martens that disperse to other, lower-quality habitats - particularly ponderosa pine stands throughout the forest. A prediction deriving from this assumption is that mature to old-growth spruce stands should have older, territory-holding martens, whereas presumed lower quality habitats should hold younger, more transient animals[hellip].ponderosa pine forest near white spruce forest likely is important in stand connectivity and home range integrity in the Black Hills, and in predicting the presence of martens on a site, although it is not mapped as suitable habitat by the Black Hills National Forest." At what level of acreage reduction will spruce viability be a concern? This needs to be determined. Eradicating spruce and planting ubiquitous pine are deliberate attacks on spruce community viability as well.

Regional sensitive species are classified as such because of their low population and distribution and because there is very little known about the reproductive needs of species such as Black Hills marten. Sensitive species are those plant and animal species identified by the Regional Forester for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density and significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution (FSM 2670.5).

"The most important threats to the viability of martens in the Black Hills include poorly regulated trapping, intensive timber harvest in certain habitats, and the stochastic processes that result from small population size." Stated again by one of the referenced authors: "The factors most likely to be limiting to martens in the Black Hills are extensive cutting of white spruce forests, fuel wood cutting in or near spruce-dominated stands, high-intensity fires over large areas of spruce-dominated forest, and weakly regulated trapping[hellip].and extensive conversion of late successional white spruce to early successional stages could have negative population-level effects on the species."

The effects of timber harvesting in white spruce forest on martens would depend on structural features over the successional sequence. Early and mid-successional stages of white spruce dominated stands may have more physical structure and more berry-producing shrubs than the same stages in ponderosa stands, making them correspondingly better habitats for martens. However, the appropriate frame of comparison would seem to be the uncut stand, and no evidence currently shows that carrying capacity for martens can be increased by timber harvest in any pattern, at any scale.

We assert that the Forest Service has not conducted a recent study on the habitat attributes present for marten and other spruce obligates. This significant lack of scientific data demonstrates that at a minimum, the project alternatives should not remove late successional and old growth (3C, 4B, 4C and 5) spruce and pine stands and avoid areas along riparian areas. The Forest Service's proposal to significantly reduce Black Hills white spruce is premature and falls outside all ecological concepts for proper forest management.

References:

- * Fecske, D. Field Evaluation of a Habitat Model for the American Marten, 2002.
- * Buskirk, Steven, Conservation Assessment for the American Marten in the Black Hills National Forest, South

Dakota and Wyoming, 2002.

* Smith, J, et al. 2010. Evaluating Detection Probabilities for American Marten in the Black Hills, South Dakota. J. Wildl. Manage.

Concern-Inadequate Descriptions of Treatments and Management Areas and Effects to Wildlife

The scoping notice states that "Follow up maintenance treatments are proposed to ensure regeneration requirements are met and to encourage pine and aspen seedlings and saplings over spruce."

Encouraging ponderosa pine is not needed in a ponderosa dominated ecosystem which has the most successful reproduction in its range. We are very familiar with the past research of Dr. Charles Boldt. In fact, one of his works is cited in the 2021 RMRS GTR https://www.fs.fed.us/rm/pubs_series/rmrs/gtr/rmrs_gtr422.pdf. The forest is already very young and even aged and to replace spruce with pine seedlings and saplings (structural stages 1 and 2) has not been addressed in the 2006 Phase II plan. These treatments need to be fully described in an EIS.

The project also has not offered how areas are going to be determined to remain spruce and which are slated for harvest. Interior spruce forests and mixed forests have existed since before European settlement. It is ecologically normal to have mixed stands.

Concern-Aspen Restoration Which Results in Multiple Age Classes

While we support and applaud the proposal to increase aspen, we feel that efforts must be made to minimize the impact to Black Hills white spruce. In the 20 plus years we worked with the Forest Service on aspen regeneration, it was generally unsuccessful in small acreages due to removal of too much ground debris, not controlling cattle movements for upwards of 10 years in order for aspen terminal buds to get out of the reach of browsing, igniting prescribed fire after aspen has regenerated and burning off the regeneration, and today's much higher numbers of elk than back in the 1970s -1980s. Diet overlaps among big game and livestock are well documented in western forest literature. We can visit numerous sites today that were historic aspen treatments and there are not multiple age classes of healthy aspen trees; a sign of unsuccessful restoration. We are highly concerned that the Forest Service does not take aspen restoration seriously but that it sounds good in project planning and meeting 2006 Phase II Plan targets. The EIS must demonstrate how past indiscretions will be avoided and how some measurable level of success in aspen recruitment will be met.

Concern-Misrepresentation Of Management Areas' Emphasis

Forest Service defines management areas as separate areas of a Forest designated in the forest plan where different uses and activities are generally suitable. The scoping notice is inadequate in the definition of the management areas selected for this project. The notice over generalized that management area emphasize active management and commodity production. No, commodity production is a potential outcome of how vegetation is treated within some management areas and if it is identified as within the suitable timber base but commodity production is not required. The ASQ is an estimate of what volume is removed but is not a contract and does not require all management areas to equally contribute to volume. The Norbeck Wildlife Preserve is an example of this. And, Spearfish Canyon does not have commodity production emphasis! The analysis needs to go back to what the Phase II Plan states as the emphasis of that area. If all management area goals and objectives? The Multiple Use and Sustained Yield Act is to ensure not all uses are expected to occur on all acres. We fear that the biggest and best of spruce will be high-graded for removal.

Concern-Allowable Sale Quantity

Has the Forest Service adopted the 2021 General Technical Report authored by Forest Service scientists at the Rocky Mountain Research Station and recently upheld upon review? https://www.fs.usda.gov/rmrs/bhnftimberreport If so, what is the new direction for harvests that are sustainable for both pine and white spruce? Has the Forest Service re-evaluated the ASQ in the 2006 Phase II forest plan and volumes harvested in the past and which are also already sold? This is relevant to this project and is not outside the scope because if this project was transparent, the main reason to harvest white spruce is to add to the volume and ASQ, what percent of the ASQ does the Forest Service anticipate will be met by Black Hills white spruce. Until the public has an answer as to what the ASQ will be (forest plan or otherwise), this project should not move forward.

36 CFR Sec. 219.27 Management requirements

(3) Not be chosen primarily because they will give the greatest dollar return or the greatest output of timber, although these factors shall be considered;

(6) Provide the desired effects on water quantity and quality, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation uses, aesthetic values, and other resource yields; and

(c) Silvicultural practices. The following management requirements apply to timber harvest and cultural treatments:

(2) The selected sale schedule provides the allowable sale quantity for the first planning period. Within the planning period, the volume of timber to be sold in any one year may exceed the average annual allowable sale quantity so long as the total amount sold for the planning period does not exceed the allowable sale quantity. Nothing in this paragraph prohibits salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow, or other catastrophe, or which are in imminent danger of insect or disease attack and where such harvests are consistent with silvicultural and environmental standards. Such timber may either substitute for timber that would otherwise be sold under the plan or, if not feasible, be sold over and above the planned volume.

Regarding Planning Reg (2) above: The scoping notice mentions "insects" but fails to discuss how insects have threatened white spruce as required in the 2006 Phase II Plan and how advocating for pine over spruce mitigates insect threats to spruce. In a forest well known for mountain pine beetle infestations, the insect may attack spruce but it is a dead end; it cannot live out its life cycle and fly if burrowing into spruce. What insect species attacks Black Hills white spruce and how significant is its life requirements to harming or killing spruce? What are the advantages to forest health in favoring the insect-attracting pine over rare white spruce? Analysis must document how there is imminent danger from insect outbreaks on white spruce, and how reducing spruce will reduce insect infestations to pine. Explain the concerns about spruce mortality from insects and fire. Since the 2006 Phase II Plan, how many acres of spruce have been the dominant fuel of wildfires? Document for Black Hills spruce, fire mortality and spread of fire through spruce stands as opposed to pine stands. Which fires started in spruce stands? How does fire danger play into a need to reduce spruce when pine is the dominant fire carrier? Again, the rush to cut 25,000 acres of white spruce due to fire and insects was not analyzed in Phase II and is outside its sideboards.

(4) Cultural treatments such as thinning, weeding, and other partial cutting may be included in the forest plan where they are intended to increase the rate of growth of remaining trees, favor commercially valuable tree

species, favor species or age classes which are most valuable for wildlife, or achieve other multiple-use objectives.

(5) Harvest levels based on intensified management practices shall be decreased no later than the end of each planning period if such practices cannot be completed substantially as planned.

Concerns-Current Structural Stages, Tree Species Abundance, and Mapping

Black Hills Forest Service needs to indicate the current structural stages of spruce, pine, and aspen across the planning area and juxtaposed to the forest as a whole. There was no indication in the scoping notice that the forest plan structural stage objectives were being met in the planning area and that pine is under- represented in the stages 1 and 2. Please provide this information.

The map supplied was inadequate and does not allow for us to go out and look at areas prior to the preparation of analysis which is not fair and transparent to publics. The Black Hills needs to put a pause on this project and develop more useful scoping documents for public review.

Concerns-Connected Actions, Cumulative Effects , And Reasonable Foreseeable Actions and Consequences

Spruce has been harvested throughout time under the 1997 and Phase II Plans which relied on the 20,000 acre estimate. Therefore connected actions and cumulative effects must be disclosed in analysis. The suggested EIS for this project must include how much spruce has been harvested since 1997 and especially within the past 10 years under the two large landscape-scale Records of Decision for the Pine Beetle Response and Resilient Forest projects, all Healthy Forest Restoration Act projects, other authorities, and categorical exclusions. Connected actions include harvests from other land ownerships. We have recently seen log trucks in Rapid City hauling whole spruce trees although we do not know which land ownerships these trees were harvested. What are the reasonable foreseeable actions and consequences of continued spruce harvesting concomitant to past spruce harvests on a landscape scale basis?

Concern-Economics and Spruce Products

This project is driven by timber needs for volume, there is no disguising that. Therefore, the board feet of spruce anticipated to be removed, the duration of this removal project, and the products that are derived specifically just from spruce need to be fully described to the public. What are the costs of this harvesting campaign juxtaposed to the short-term products from harvest? One purpose and need was to provide jobs. How long will jobs be retained with a product that has a very limited removal? How long will jobs be retained with the concern that your own scientists have with the sustainability of heavy harvests and high ASQ's? Most importantly, what are the long-term economic impacts to viability of both timber and wildlife habitats and the Black Hills spruce ecosystem?

Closing

In closing, we do not support this spruce project in its proposed design for the concerns and issues listed above. It is being planned in a hurried fashion by contractors who do not know the area's ecology and history, and is well outside the existing 2006 Phase II Forest Plan sideboards. The viability threats to species which require Black Hills white spruce are real. This proposed project has not proven to be ecologically driven but instead is being driven by a need for a limited volume of late successional spruce for one forest user group. Therefore, the project is premature and requires a "hard look". As professionals and Black Hills conservationists, we believe it is ecologically and ethically wrong to diminish our state tree from an already under-represented 3% to 1% in acreage (percentages are estimated and our best of our ability to make some sense out of the conflicting data presented in the scoping notice). It is hard for us to fathom how the Forest Service would propose or allow such a "dastardly deed". Please keep us involved in future correspondence at the stated contact information below.

Submitted by Black Hills residents:

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* Margie Helgeson, M.S. Rapid City. Lifelong Black Hills landowner

* Daniel W. Uresk, PhD. Rapid City. Retired Research Biologist, 45 years, Rocky Mountain Research Station, Forest Service.

* Gary Brundige, PhD. Rapid City. Former natural resource program manager and wildlife biologist in Custer State Park for 25 years. Current NEPA compliance program manager and wildlife biologist for Ellsworth Air Force Base, SD.

* Leon Fenhaus, Rapid City. Lifelong landowner and conservationist.

- * Les Rice, Black Hawk, SD. Retired Game, Fish and Parks state big game biologist and researcher.
- * Russell Payton. Rapid City. Lifelong Black Hills Landowner and Wood Craftsman.
- * Joyce Payton. Rapid City. Lifelong Black Hills Landowner and Hospitality Industry Leader.
- * Barry Parrish, Retired Wildlife Biologist
- * Harold Messner, Rapid City. Retired, Lead Field Supervisor, Rocky Mountain Research Station, Forest Service.

* John Wrede, Rapid City. Retired Game Fish and Parks Regional Game Manager for western South Dakota, and former Conservation Officer (see letter submitted in 2021 for the Pine and Aspen project and incorporate that letter)

* Blair Waite, Custer, SD. Retired Game, Fish and Parks trapper and Conservation Officer, furbearer specialist, former president of SD Trappers Association, and lead biologist for American Marten reintroduction referenced herein. (see letter submitted in 2021 for the Pine and Aspen project and incorporate that letter)