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Rattlesnake DEIS comments

General comments,

We concur with Richard Artley that this proposed timber sale looks like it was written by a timber company CEO. We find this a very frustrating DEIS to read. We have read Don Duerrs comments on this sale and share his frustrations on the endless attempts, for years to communicate with the Black Hills Forest Service and to have many concerns ignored. This is especially poignant for us with respect to this Sand Creek area, where we endlessly communicate our concerns about this special area with the Forest Service. I read in the old FS EIS on the Roadless Rule, that the Forest Service thought it should protect Roadless Areas, because the environmentalists fight very hard to protect them and thus it saves time and hassle for the FS to protect them (paraphrased). This is one of the most special areas on the Forest to the environmental community and the DEIS is so inadequate and frustrating..

We requested, under FOIA, a list of people who sent in scoping comments from Liz Krueger. We recognize over half the names on it as people likely to have sent conservation/environmental type of scoping comments (at least 25 of 48). Yet the "purpose and need" section (top of page 16 of DEIS) seems to lose the two items in it that are sympathetic to our concerns progresses (provide for biologically diverse ecosystems, protect basic resources).as the discussion immediately develops. Despite all these commentators and our own (PHAS) very long scoping letter with lots of issues raised, the FS can only find 5 significant issues, of which only one highlighted is a environmentalist type concern. Although we suggested many items to consider in alternatives, the alternatives considered by eliminated that appear to come from the conservation community are limited.

Also frustrating is the discussion about significant issue # 1.9.2 "Effects on Sand Creek IRA and Recreational Experience in the Project Area", which appears to have completely missed our concern about need for proactive ROS planning – you need plans for backcountry recreational experience in the area, with the IRA at the core of a connected system --- its not just about limiting FS actions as it cuts trees and builds roads, but its about making that ROS planning objective as part of the "purpose and need" -- you need to recognize and cherish the great potential the area has for semi-primitive and primitive ROS class recreations, and then the FS needs to proactively take steps in that direction to plan for those type of recreators and identify and preserve what they need.

Part of that is our dispute with you over the IRA is where the boundaries of the IRA should be – there is a dispute over the boundaries and your plan both now and during Cement is to cut within the disputed zone. You just don't hear that concern.

Another concern you need to hear, is that good high end ROS management, is not just about where roads are or aren't – it is also about "evidence of humans" – its about insuring that the evidence of human management of the landscape is absent or of minor visual impact to people walking through it. Please remember to consider the "evidence of humans" your management creates – how pristine or natural looking is the landscape after you finish. Please look at the attachment about ROS that we provide.

Of all the alternative we like D the best. However we are very concerned about all the timber sale activity around the Balm of Gilead. We believe that area to have exceptionally beautiful mixed

pine/hardwood stands, some with very large pine trees, lots of ferns and a very lush mix of hardwoods/ferns and large pines. There are also some 4A stands with exceptionally large yellow bark pines and some dense stands of pines with large yellow bark pines near Guidinger to the east, that we care about. . While our explorations to the South are limited, we think there are some stands there will large pines. As we disagree with you over your “log to prevent beetles” theories we are not impressed with your fear of beetles rationale. We thus object to the cutting of some of these stands.

We also do not necessarily object to controlled burns in Roadless Areas. However as there are rare plant communities in the Roadless area, we would need to consult with botanists to see how or if their presence constrains controlled burns. ,

Illegal Forest Plan provides inadequate protection

We question much of the Forest Service's rhetoric and theories about fire history and fire prevention, both in the PHASE 2 FEIS and as implemented and discussed in this Rattlesnake DEIS. We believe the PHASE 2 EIS is illegal and wrong and we incorporate by reference all of Prairie Hills Audubon Society's (PHAS) , Biodiversity Conservation Alliance (BCA's), The Wilderness Society and Sierra Clubs comments and appeals of PHASE 2, PHASE 1, 1997 BNF Land and Resource Management Plan Revision and the Travel Management DEIS. In our scoping letter we extended this incorporation by reference to other documents. We believe it wrong to continue to implement this flawed & illegal Land & Resource Management Plan (LRMP). Given the adverse impacts the Rattlesnake timber sale will have on other resources such as biodiversity, scenery and back-country recreation make it even more problematic.

Purpose and Needs Generally

Since PHASE 2 ROD, the BHNF has turned out one timber sale project analysis after another, where the FS plans to “cut down the forest to save the forest”. The “purpose and need” is usually all about fighting catastrophic crown fires and bugs, & if a crumb is thrown to the protection of ecologic values, it's ironically expressed as a desire to provide diversity of forest structure stages and cover types (more reasons to cut trees!) . Every now and then scenery gets a nod, but scenery, as defined by the LRMP standard & guidelines, is enhanced by tree cutting!. All of of these “purposes & needs” are benefited by CUTTING MORE TREES!. Other values should have been protected by the Forest Plan, which should protect these other values from cumulative impacts of these iterative , narrow and biased “purpose and needs”, but the Plan in itself provided inadequate guidance to protect other values, thus many of the other values are never adequately protected with checks and balances. We appealed the 1996 Plan and Phase 1 & 2 and will likely appeal Travel Management ROD and we incorporate our past appeals of these forest planning efforts by reference.

Thus generally the “purpose and needs” for Forest timber sales, cumulatively ignore or slight the needs of back country recreation, scenery, and dense interior forest, old pine trees, large snags/litter, and old growth and old pine trees and very little or inadequate relief is found in protections for these values from the Forest Plan guidance. Also the Forest Plan provisions for type conversion to hardwoods remain inadequate to optimize the fire prevention, scenery and biodiversity benefit of hardwoods. Please analyze in this DEIS the cumulative nature of all the “purpose and needs” of timber projects since the summer of 2006 and the cumulative impacts of iteratively similar “purpose and needs”, that continuously neglect other resources that might not benefit from the BHNF ubiquitous timber sales.

We have such few areas of old growth and areas that could be semi-primitive non-motorized or primitive ROS class, any loss these areas, has phenomenal impacts – these impacts have to be seen on a forest wide perspective.

Recreation and protection of the back-country and the “semi-primitive” and “primitive” ROS classes was another failure of the LRMP, as amended. The Travel Management DEIS is underway, as a forest “project” not a forest plan amendment effort! The travel management DEIS has divorced or isolated what could be a great opportunity to finally address the entire ROS issue from forest wide view and fix its problems. The FS continues to prevent adequate integration of ROS planning with other forest planning efforts. If you want to talk about and analysis ROS you need to talk about timber, range, mining and roads, in the same analysis, as you have to talk about ‘evidence of humans” on the landscape, not just

where the roads are and are not. Thus iterative timber sale "purpose and needs" without back-country recreation objectives also neglect back country recreation protection, cumulatively creating extreme neglect when seen with past and future failures at Plan amendment/revision efforts.

The scenery inventory in the LRMP looks fancy, but it also is a joke --- it's a start/beginning to ask a computer to figure out what's pretty and where people care about visuals, but it's just a computer evaluation of beauty, tied merely to high use travel ways, which is inherently flawed.

We question if the true "purpose and need" for Rattlesnake is once again - GET OUT THE CUT and the other "purpose and need" items which are really camouflage.

Purpose and Need Rattlesnake

Within the Rattlesnake DEIS (top of page 16), it says a few "purpose and need" items are to "protect basic resources", and to "provide biologically diverse ecosystems". What is a "basic resource"? We are not aware of a definition of "protect basic resources" in the DEIS but this could be interpreted to mean just about everything. Unfortunately neither one of these gets a subsection on the "proposed action" section from page 16-19. We believe a "basic resource" includes also wildlife, rare plants, scenery, backcountry recreation, old growth, dense interior forest, old yellow bark pines, deciduous forests or deciduous under-story. As written this is very broad and we would contest any future attempt to narrow it. When it's taken literally as written this DEIS does not meet the "purpose and need" as it does not "protect all basic resources", nor does it "provide biologically diverse ecosystems", but rather goes off on the typical BBNF tangent (as described above).

We question why the Forest Service did not make withdrawing the Botanical Areas from mineral entry as one of the actions covered by this DEIS. We believe that the Sand Creek Botanical area is under credible threat from mining claims and mining exploration. We believe the FS has known this for at least 5 years. We don't know why a purpose and need of "protect basic resources" and to "provide biologically diverse ecosystems", combined with a review of the situation on the land, -- did not drive the FS to propose to withdraw the Sand Creek and Dug Out Gluch Botanical areas from mineral entry during this NEPA review! It is certainly a timely issue. We incorporate by reference our earlier letter to Steve Kozel sent 9/22/09 about this mineral withdrawal issue. Please discuss in your response if this issue (mineral withdrawal) was brought up during your ID team meetings on this project and if so -- why you did not include it and if not, why?.

Fire & Beetles:

The Phase 2 Amendment FEIS and Appendices are internally inconsistent with respect to their discussion on effective measures for fire prevention; what works, when and the recommendations for extensive logging to prevent hot crown fires from spreading. In one place stand management is supposed to control this. In another chart it is factors not related to stand management that control or most affect this. Parts of the Appendix were not consistent with parts of the FEIS text. It thus violates the NEPA provisions with respect to scientific integrity and disclosure of impacts.

To my knowledge the main determinant of fire behavior is quite simply the weather. Weather factors include:

1. the weather on the day(s) of the fire -- including things like wind and heat,
2. the microclimate weather created by the fire itself -- things like the wind the fire creates and
3. the moistness of the forest that has been created by past weather.

Can the Forest be managed by logging to create stands of trees that are more fire resistant? Yes, aspen stands are more resistant to some fires and a forest could be managed to maximize aspen stands. I think the LRMP currently only provides for doubling the amount of aspen, which I think was about 4% of the forest - and thus can become about 8%. Aspen is not a commercial wood and maximizing aspen would reduce the area of the forest producing a commercial crop and reduce Allowable Sale Quantity (ASQ). (The ASQ is the amount of wood that can be sold on the Forest each year.) Other hardwoods may be less susceptible to fire than pine. Please discuss the role of all hardwoods and hardwood understories in fires. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Can the pine stands be managed to make them more fire resistant? The proponents of "logging to prevent fire" don't tell you the whole story. Unmanaged stands offer some values that make them more resistant to fire and managed stands also have some values that make them more susceptible to fire. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

In order to reduce the risk of beetle outbreaks the Forest Service cuts down trees and opens up the stands, making them less shaded and more sunny and more exposed to wind. One theory for why thinning stand reduces beetles is that the resulting microclimate of the opened stand is hotter. Beetles galleries grow more beetles on the north side of a tree. When the stand is hotter, it becomes less moist. So ironically, the forest conditions promoted as "healthy" because they limit beetles outbreak, also make the stand more susceptible to fires. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Yes, there is a short period of time when a beetle-killed tree has flammable, dry, red needles on it. The red needles on a tree, which was killed by beetles, will fall off within 2 years and fall on the ground to begin composting below the snags (dead trees). Nature quickly separates the flammable needles from the twigs and branches. If the entire stand is killed by the beetles, this can create a meadow, which is a "fuel break" by conversion of pine forest to a meadow. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

During drought and winter dormancy green needles on a live pine trees can be just as desiccated and just as flammable as red needles on a dead pine. A drought creates the conditions (desiccated needles) throughout the live forest, while the beetles only create it in forest subsets. After a timber sale the timber slash may lay on the ground with needles connected to branches/twigs. Thus a forest full of live pine trees and underlain with timber slash can provided especially ignitable fuel for both ground and crown fires. Conversely the beetle killed stands after a few years may provide open meadows, littered with fallen dead trees, and composted pine needles. During a summer drought, which is the greater fire hazard? Which has a greater risk of a crown fire? Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Closed canopy dense stands get less sunlight and wind and are more moist and cool. Old yellow bark pine trees have thick bark, which is resistant to fire. The needles, twigs and branches, which are more flammable than tree trunks are higher up. The old yellow barks may have longer distances between the ground and the needles/twigs, making it harder for a ground fire to reach the crowns of the trees. Historically the low intensity ground fires could just sweep by the big yellow barks, without burning them. A large majority of the Jasper fire was in SS 3 b pine (stands of medium density sapling/pole stands). Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

When you log, you open the stand and make it hotter and more exposed to wind. The loggers may leave timber slash on the ground, which is exposed to this hotter and drier microclimate. After the stand is opened, saplings and small trees will sprout underneath. In fact timber sales are designed by the Forest Service to maximize this regeneration of seedlings. In stands of saplings and smaller/shorter trees, the distance from the ground to the more flammable needles/twigs is shorter than with a taller tree. The shorter trees can be the torches that ignite first and provide a ladder effect from the ground to the crown of the bigger trees. There can be a crown fire in stands of immature trees, like the Jasper fire, which generally effected SS 3b stands. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Timber companies will pay the taxpayer to log out large pine trees. The taxpayer has to pay the timber companies to cut down small trees. A nationwide backlog of smaller, more flammable trees is a legacy of decades of a shortsighted logging program. The load of small pine trees on the forest is not just a result of decades of fire suppression, it is a result of a 3-step shelter wood program, designed to maximize pine regeneration in a forest where pine seedlings can grow like weeds. If the FS never does more than a commercial thin of the older yellow bark pines, the canopy closure and competition for water and other resources would have suppressed the establishment of the under story pines. When the Forest Service makes decisions to facilitate a maximum timber production - it creates the ladder fuel problem and the consolidated stands of 3b and 3c stands that may be too small in diameter to be commercially harvested. They may also be too young and below the "cumulation of mean annual increment"., thus opportunity to harvest them may be restricted. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Logging to reduce crown fire risk by opening the canopy, will create a vicious cycle. The first logging entry opens the canopy and as a result the more flammable small trees grow underneath. In order to pay for the thinning of all these new small trees, you subsequently will have to cut out more mature yellow-barks, that second cut then creates more small trees and in a few years you will have a third cut to cut more big trees, to pay for thinning more little trees. The forest is repeatedly opened up, desiccated and a new crop of more flammable little trees will constantly replace the big fire resistant yellow barks. Except you eventually run out of tall, commercial trees in the area. Eventually you may replace a closed canopy of old yellow barks with a closed canopy of younger, shorter trees, - 3b and 3c trees, which needles/twigs are much closer to the ground and thus less resistant to fire than the yellow barks you replaced them with. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

The cycle is self-perpetuating and insures jobs for loggers and Forest Service employees and financial gains for logging companies, but in the long term doesn't create a more fire resistant forest - it insures jobs and revenues. Some Forest Service employees have a vested interest in maintaining a managed forest, as they are paid to design timber sales. Is the only large timber company left in the Black Hills in Crook County and does that influence the Bear Lodge District? Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Forests will burn. You can't fireproof a forest. In the spring of 2002, various public figures in SD focused on the fire hazards associated with two roadless areas that were protected from timber harvest by legal decisions or negotiated settlements. Did these areas burn that summer? Have our unmanaged roadless areas burned since then? Please discuss this issue in your FEIS.

Roads are created during timber sales, which make the forest more accessible to people, who according to nationwide Forest Service statistics create most fires. The Forest Service reported in 1996 and 1998 that 90 percent of wildfires on National Forests were caused by humans. A person in a roadless area or other area with road closures is aware that he has to run out in front of any fire he or she starts. Please discuss the impacts of roads on fire risks and the futility of road closures to stop ATVs/OHVs. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Under Secretary of Agriculture James Lyons testified before Congress in February 2000, "Preliminary data also indicate that the degree of overlap between areas that the (U.S. Forest Service) has identified as having a higher risk from wildfires and inventoried road less areas is small. Many fire ecologist believe that un-roaded areas have less potential for larger, higher intensity, more severe forest fires than roaded areas. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

This area has lots of very high cliffs, some of which a relatively free of pine. Please discuss the role of high cliffs and cliffs with streams below on the spread/halting of fire. Can cliffs (with or without trees) or talus slopes be a fire break in some instances? If so please discuss and factor this in. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

This area has lots of mixed stands, where the presence of just a few large pines per acre causes the FS to be designating what is predominately a hardwood stand as a 4A pine stand. This is likely because the purpose of the inventories is to quantify commercial timber. This however skews the whole fire risk charts. A 4A pine stand with a tall mature aspen "under-story", must have a different fire risk than a 4A stand with a pine under-story or maybe one with short hardwood shrub size understory. Please discuss this issue.

If the Forest Service believes that it must manage the Forest to reduce fire, then the Forest Service can discuss strategies to maximize conversion of pine to hardwoods and meadows, retention of more old yellow barks and creation of an older age forest than it has now, with less small pine understory. It could reduce the rate at which it opens the canopy and sprouts pine seedlings, via seed cuts. (Timber treatments designed to sprout seedlings). It could put commercial thins, clearcuts and/or aspen near homes, not put seed cuts or "shaded fuel breaks" near homes. Please discuss this issue in your FEIS.

FEIS must disclose how it is going to pay to remove the fire susceptible, sapling re-growth that follows logging, in the future, whenever it approves a timber sale. It must discuss that opening stands to fight beetles, also dries out the stands and makes them more fire prone. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

Please review the Grave's study's maps for the area and the Grave's text for the area. Please also note that at the turn of the century (19th to 20th) what constituted a merchantable pine tree was much different than now. The desired - average diameter of breast height of the pines in the entire stand - was much larger. For a single pine tree to be merchantable, Grave era standards required it to be much larger and to have branches at a much higher height than you do today. "Scattered timber" is not defined and could apply to pine stands that are dominated by immature/small pine understory, not tall old pine trees; reader can't know what it means.

Thus if you applied Graves era standards to the current forest, much of what you would say has high amounts of merchantable trees (under 2009 cutting standards), you would see a different mapping in Graves era. Much of today's forest would, in Graves era, have been called "scattered timber" or given a much lower density of merchantable timber. Also a large part of the forest had been logged by the time Graves's people were out inventorying the forest and thus Graves was reporting on the conditions after about 25 years of logging, with some stands may have been high graded. Also Graves inventory people did a much more thorough inventory in the places near settlements and a much more sparse inventory in places, like the Rattlesnake area, which were farther from higher density settlement. Thus the understanding of remote areas may be poorer. Please discuss these issues in the DEIS..

Please discuss the possibility that you have in general much smaller and younger trees now than then and that this is due not just to fire suppression, but also due to your timber quotas and three step shelterwood system – due to your strategy to cut large pines and replace with small ones, constantly. Please discuss how having a younger and shorter forest, instead of an older and taller forest, can contribute to forest fires. Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

There is evidence of both stand replacing and cool fires in the history of the Black Hills. Please discuss the science theory and literature disagreements and debates on the historic fire issue in the FEIS. Please also discuss the disagreements and debates on the issues of fragmentation and dense interior forest conditions

If you read the forest service literature carefully, you learn the thing the Forest's fire risk theories are aimed at is evaluating the risk of "catastrophic crown fires". Please discuss the other types of fires and whether your fire risks displayed in the DEIS, (displayed as a function of structural stage), applies to risk of other types of fire or just "crown fires and/or "catastrophic crown fires". Please discuss the risk of the area from all types of fires posed by each alternative. Can you even do this risk assessment? If you open up the risk evaluation to include all types of forest fire, will you find that all types of structural stages pose a risk for some sort of fire in some aspects or conditions. Thus is your ability to rate fire risk as a function of pine structural stage, purely conditioned on your ignoring many types of fire? If so why do you merely pick "crown fire" and why don't you discuss the other types of fire in each BHNF NEPA document? Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours

If your objective is to "reduce wildfire threats to private property" you must consider the risk posed for all types of fire, not just "catastrophic crown fires" or crown fires". Property damage can come from other types of fires too. If your objective is to protect late successional forests or rare plant communities from loss due to forest fires you also need to discuss the risk posed to them by other types of fires and rate the risk for those. How does a ground fire in the growing season, compare to "crown fire" for effects to our to "rare plants"? How do these other types of fire effect all your T & E, sensitive and local concern wildlife species, especially snails? Please discuss this issue in your FEIS and review all relevant scientific opinions, even those that don't agree with yours.

How many Forest Service silviculturists does it take to manage a wilderness? Is it job security for the Forest Service to promote forest "management" solutions that maximize the cut? Please discuss the possibility that the "healthy forest" initiative is a giant public opinion manipulation/spin following some seasons of forest fires, designed to find a more socially acceptable justification to cut timber, thus avoiding the FS having to say the real "purpose and need" is to "get out the cut", & thus supporting the timber industry and your FS & loggers job security. Please discuss this issue in your FEIS and review all relevant scientific and professional opinions, even those that don't agree with yours.

As far as we know there is only one major timber company left in Black Hills area and thus the submitted bids for major timber sales such as these are just from one company and are thus now smaller than in the past. Please discuss which companies can bid for which type of sales, and whether smaller or larger sales see more competition.

Please discuss regional and national timber markets . Please discuss this issue in your FEIS and review all relevant scientific and professional opinions, even those that don't agree with yours.

Please discuss the history of timber sale prices and whether the BBNF is making money from timber sales, both in the short and long term expenses. Please discuss the long term economics of how you are going to pay to thin all the small pines this timber sale creates in the understory. Please discuss this as a federal deficit concern. Do your actions today, mandate future pre-commercial thinning for which you do not have the budget.. In order to pay for future pre-commercial thinning will you have to remove large yellow barks and will that future logging or forest budget impacts create impacts on biodiversity, scenery and back-country recreation resource needs, that's makes those resources not sustainable in the future?. If you spend many FS funds on thinning how can you spend it on campgrounds, wildlife or other types of projects? . Please discuss this issue in your FEIS and review all relevant scientific and professional opinions, even those that don't agree with yours.

As you always need to justify the cutting of trees that are younger than the "cumulation of mean annual" increment—you always allege it's being done for other resources than timber. Please quantify the amount of timber that is to be cut below the CMA and discuss if this will impact the long term ASQ. Please discuss if the various beetle and fires events, as well as all the cutting of trees below the CMA, and how this will effect the ASQ and whether a new NEPA evaluation of the ASQ (new since 1997) is needed. Please discuss this issue in your FEIS and review all relevant scientific and professional opinions, even those that don't agree with yours.

Only about 2%of the forest was in Semi Primitive Non Motorized or Primitive Recreational Opportunity Spectrum class. I believe less than 2% is in old growth. Designed late succession stands or SS 5 are often not truly such, but merely might become such in the future. Thus we really don't know what we really have as old growth. You can't ask the environmental and recreation community to sacrifice the scenery, our few roadless areas, late successional landscapes, dense forest, and backcountry remnants and all associated at risk species habitats for the sake of reducing fire risk and then not ask the timber industry to sacrifice its' ASQ to the same goal. Please discuss this equity issue in your FEIS.

Please provide a much clearer description about how you determine what is within the Wildland Urban interface; we are not entirely clear which areas you think are in the Wildland Urban Interface. We question if some of the areas qualify to be in the WUI. What area do you mean by "Tinton",? To our knowledge it does not have year round residences there. How do you evaluate second homes or mines in your WUI categories? If these WUI designations are based on county fire prevention plans, please discuss those county plans, and how they relate to WUI. Are county fire plans recognized on a federal level under federal law, rule or policy or just via a Forest Plan level? We believe the Forest Plan to be illegal. Please provide the citations.

We believe there is a great deal of controversy over how much thinning stands work to prevent the spread of beetles. Please discuss all the scientific and professional debate over the use of thinning to prevent spread or mitigate impacts of beetles on pine stands.

We also believe there are some issues/concerns in the Black Hills about how much you have to thin (how much you have to open the canopy) to see desired results at beetle spread/impacts mitigation. Please discuss any data from the Black Hills that shows that the level of thinning proposed in this DEIS to has sometimes been shown to be inadequate in other places in the Black Hills to achieve desired mitigations. Please discuss the possibility that" the cure is worse than the disease". If you have to thin stands around the Hills to extremes levels to mitigate beetle impacts, will you cumulatively have the same impacts as if you had let it take its course? Please discuss this issue in your FEIS and review all relevant scientific and professional opinions, even those that don't agree with yours.

We believe that beetles are a natural part of the forest and provide many positive values, please discuss the positive values that beetles provide. Please discuss the potential of beetles to achieve many of the objectives in your purpose and need – they open stands, create biologically diverse ecosystems, provide forage, watershed values, etc. Please discuss this issue in your FEIS and review all relevant scientific and professional opinions, even those that don't agree with yours.

Please discuss the possibility that your driving need to protect rare plant communities and late succssional stands from beetles and fire may in part be a result of the problem that your illegal LRMP, provides such low objectives and protections for old growth, & interior dense forests, that any impacts to these few tiny percents allowed has a big impact. In other words, you did not provide for an ecologically sustainable amount of old growth, old pine trees, interior forest, semi-primitive non-motorized and

primitive ROS classes in your LRMP, not enough to withstand the ecological events of the next 10-15 years.

. Many of these issues above have been raised in countless appeals and comments on projects and Forest Planning submitted by us and BCA, which included pages of scientific references, which we have filed with the Forest Service in the past. We incorporate by reference our and BCA's appeals and comments on the Moskee and Citadel Project Timber sales. These are recent projects that are near by to Rattlesnake -- to the south and east of this Rattlesnake area, and they were submitted to both Bearlodge and the Northern Hills District (both places where Liz Krueger works). You have heard these comments repeatedly before. We incorporate by reference PHAS and Hilding's, BCA's and Sierra Clubs comments on the Cement Timber sale, its appeals and BCA's litigation filings.

The Cement timber sale was in the South half of Rattlesnake and many of the same areas will be impacted in similar ways. It was however prior to PHASE 2 amendments ROD. We incorporate by reference the same entities scoping comments on Welcome Sand.

We attach by reference Richard Artley's compiled science attachments, full of quotes from scientific and professional sources.

Wetlands,/Streams

We express our concern that the FS frequently does not do an adequate wetlands inventory. That it finds the big ones and misses the little ones. Until we see the administrative record, we may not be able to verify this.

But we will be concerned about roads, log landings, and other disturbance activities in small wetlands. We have also seen in the past that you miss small perennial sections, when the stream is a mix of intermittent and perennial, for example upper Surprise Creek is perennial, Sand Creek between the Ida May Placer and the confluence with Corral Creek has some perennial sections mixed with intermittent sections. This level of water detail, is frequently overlooked or missed by the FS. We hope you have it all correct, but are not sure at this point.

We place a high priority on protection of water influence zone areas from adverse impacts of roads and logging activity and full compliance with the Clean Water Act and high concern for the protection of the water in Sand Creek and Spotted Tail Creek.

Big Tree

Jean Adams has told us of a very large tree pine tree, she saw on the slopes of Surprise Gulch. We hope you will consult with her and protect this unusual tree.

Exotics and noxious weeds

Your attitude about noxious weeds is a little cavalier. Noxious weeds and invasion/threat of invasion by exotics to the rare plant communities is a big problem in the area. One specific area of concern is that your building of a trail along Dugout Gulch brought in exotics with the imported gravel and each year it gets worse. There just seem to more exotics and noxious weeds up there each year – it's increasing and this is a big deal in an area with so many special plant communities.

Mt lions

Mountain lions should be seen as a species of local concern and impacts them discussed. Of special concern is roads density impacts. Mt Lions are only present as breeding population in SD in the Black Hills, or at least that is what GFP thinks or alleges. It is also the only place they are willing to manage to preserve them. But we think both SD and Wyoming combined are over -harvesting. There are lots of Mt lion tracks up there in the winter.

Roads

We object to the increase in roads, the conversion of non-system to system roads and the repair or reconstruction of existing roads. There are dot sequences on the Alternative maps, that look like roads, but that aren't explained in the legend, are these supposed to be "old roads in IRA" – the legend does not match the map.

We object specifically to the reconstruction along Green hill/Lytle hill area.

Where are big and large trees.

We would like more maps that show where the older and bigger pine trees are – which 4A, 4B and 4 C stands are dominated by younger black bark pines and which by older larger yellow barks. Having this knowledge helps us to evaluate alternatives.

Alternative B

We especially object to cuts in the disputed zones of the IRA. We object especially to over story removals and seed cuts, especially in areas we have identified for a consolidated back country recreation plan as Semi-primitive Areas, which we have discussed with Kozel in the past and provided maps to FS at various times. The overstory removal in Upper Surprise/Rattlesnake is especially offensive.

Shell Game,

As we have written in Cement comments we disagree with various of your SS designations.

Prescribed burns

We usually favor prescribed burns, but need the advise of specialist on how or if to do this or limit such, in areas where rare plants and rare plant communities and rare snakes and snails or other small creatures who can't run live.

Cutting in IRA

We don't see how you can comply with the Clinton era roadless rule and have cutting of small pines in an IRA, at this time. Thus this should not be in any alternative you chose.

ROS,

We have written to the FS endlessly about your failure to manage for high-end ROS (primitive and semi-primitive ROS). We incorporate by reference our Cement comments and appeals where we discuss this. We incorporate by reference, our exhibit - "NOTES ON ROS - DRAFT WORK IN PROGRESS", We incorporate by reference our exhibit - "Statistics on ROS and Visuals" . We incorporate by reference our appeals of the PHASE 2 amendments, the 1997 LRMP. We incorporate by reference our appeal of the Citadel Project. We incorporate by reference our comment and scoping on the Travel Management DEIS. Like Don Duerr we get tired of saying the same facts and law over and over again to deaf ears.

Basically the high end ROS is a step child/Cinderella child on this forest. You can't have much area in high end ROS designations (Semi-primitive/Primitive ROS Class) and still crank out the ASQ and cater to your belief that you have to manage every acre of the forest continuously to fight fire and bugs and provide for wildlife etc and all you other rationalizations of the BBNF ASQ and annual timber output.. Thus you just plug your ears and ignore the issue and the folks who use this forest who want quality high end ROS experiences are left table scraps.

Please fully disclose how much of this forest has high end ROS designations, and of those areas how many have qualities to actually meet the ROS criteria for that class of ROS. How many areas that truly have the qualities that would qualify them for high end ROS classes are assigned some other lower ROS class (like the 3.7 area is within the Sand Creek IRA). Please fully disclose the inadequate state of ROS planning on this forest and the degree to which back-country recreation is neglected. Please disclose how your plans will significantly contribute to that problem, how you fail to see a great

opportunity and a real need. Please discuss if your plans will result in an irretrievable commitment of back-country recreation resources as you log and reconstruct roads around the Sand Creek IRA.

Scenery,

We have also endlessly written about scenery in the past. Please fully disclose the inadequacy of the Scenery Management System inventory conducted during the 1997 LRMP and how its assigned SIOs are a joke and despite endless requests, the FS never chooses to re-evaluate assigned SIOs at the project level.

We incorporate by reference our exhibit - "Statistics on ROS and Visuals". We incorporate by reference our appeals of the PHASE 2 amendments, the 1997 LRMP. We incorporate by reference our appeal of the Citadel Project. We incorporate by reference our Cement comments and appeals where we discuss this. We incorporate by reference our comment and scoping on the Travel Management DEIS. Like Don Duerr we get tired of saying the same facts and law over and over again to deaf ears.

Please disclose how Joby Timm did the SMS analysis for this forest and how a computer decided what was pretty. Please disclose how the areas seen from major highways are the important areas and the back country is not important in the visual hierarchy. Please disclose the inadequacy of your visual planning that fails to protect the visual resource in the face of your aggressive timber program.

Fragmentation and interior forests

Please discuss all the conflicting science that disagrees with you on whether the Black Hills historically had dense interior forests.

Species irony.

After skimming the charts about wildlife/plants on pages 96-106, we learn that the Forest thinks it will help many of the species associated with old growth, old trees, interior forest conditions etc by preventing forest fires and beetle infestations that might remove their habitat. We devoted a large section of this letter to contesting your bugs and fire theories – we do not accept these rationales, which we think are just rationalizations for a decision already made. Your timber cutting and roads will happen, will effect many of these habitats, the alleged fires and bugs events may never happen.

Your discussion of MIS, sensitive species, T & E and species of local concern needs to be improved.

Oak is native and very slow growing, leave it alone and in 100 years it may actually grow into a tree. Oak is very important summer cover and the acorns (mast) is a critical wildlife food for small mammals, turkey, big game. When you keep suppressing oak, it won't become mature enough to produce mast. Please discuss how many years it takes to produce mast and what strategies will work to produce larger oak trees, that are old enough to produce masts. Also, Carolyn Hull Sieg had a paper out (maybe with Severson?) on the importance of oak and it may be site specific for the Black Hills; please review this.

Maybe the oak can become dense understory, but if so the burden is on the FS to show why it is a problem and juxtapose that - with its benefits. You must justify why FS wants to suppress or thin. You must define "too dense" or whatever it is you think defines a "problem" stand of oak under-story is, that determines when you want to prevent, suppress or thin such oak under-story.

And, if you ever claim it's a fuel problem (which I don't think you have in this DEIS yet) you need to start citing from the literature that explains where/how our oak is a fuel problem. I don't think our oaks are like the volatile oaks like in California.

Also please discuss how our oak sprouts with disturbance (cutting, fire) as can other deciduous trees in the area and how opening up the canopy may result in aspen and oak regeneration. Don't both add to the biodiversity and beauty of the area? Please discuss the impacts of mixed stand on scenery and recreation as well as biodiversity.

If you create a big game emphasis area in a zone that produces oak under-story, why can't you just accept the oak. Is the underlying issue really about the big game or the regeneration of pine for the timber industry?

Thanks,

Nancy Hilding
For Self and Society