

From:

Storer, Robert

Sent:

Monday, February 8, 2021 11:12 AM

To:

Rose, Sharon

Subject:

01 (DNRC, Storer)--Comments on Calf Creek Proposal

Sharon - I took a quick look at the EA through Section 8.

- The last sentence on pg 4 the abbreviation (WSWB) seems incorrect thin it should be WSBW (western spruce budworm)
- Section 8 of the EA. I did see a described treatment of dead trees/snags however I did not see any
 detailed direction regarding treatment of Douglas-fir trees infected with dwarf mistletoe. In the
 introduction there was a brief note indicating these trees provide habitat for certain wildlife
 species. My comment is that it might provide the reader a better vision of the proposal if treatment of
 dwarf mistletoe infected Douglas-fir were briefly discussed.

I'm not sure what dwarf mistletoe infected tree retention would look like. Favoring Ponderosa pine (resistant to this dwarf mistletoe) should in some measure reduce the overall infection. Dwarf-mistletoe infected trees typically enhance ladder fuels (something the proposed treatment is proposed to retard). Dwarf mistletoe infected trees would also be more susceptible to being killed in a natural wildfire. I would think your proposed treatment would aim to reduce what is likely a current overabundance of mistletoe-infected trees (compared to natural conditions). My guess is that you would not leave a great deal of dwarf mistletoe infested trees. Purposes for leaving might include existing evidence of wildlife use, recruitment of potential dead trees/snags, and enhanced variability (clumps) especially on northern aspects.

Thanks for the opportunity to comment.

#2

From:

Mike Senior < grizdad171@protonmail.com>

Sent:

Saturday, February 20, 2021 9:59 AM

To:

Rose, Sharon

Subject:

02 (Senior)--[EXTERNAL] CALF CREEK WMA HABITAT RESTORATION PROJECT

Sharon,

I am a resident of Hamilton, a hunter, and advocate for wildlife. I have reviewed the Calf Creek WMA Habitat Restoration Project proposal. I believe the proposal is well intentioned, well written, and I am 100% in favor of the project as written.

Good luck with the project and I look forward to seeing the results of this endeavor.

Mike Senior

#3

From: Sent: James Haggerty <divtrail@gmail.com> Saturday, February 20, 2021 5:21 PM

To:

Rose, Sharon

Subject:

03 (Haggerty)--[EXTERNAL] I am in favor of the thinning

#4

From:

JC Gmail <jcarlson.ps139@gmail.com>

Sent:

Thursday, February 25, 2021 7:47 PM

To:

Rose, Sharon

Subject:

04 (Carlson)--[EXTERNAL] Calf creek plan

Hi Sharon,

Just a quick note to say I'm all for habitat improvement at Calf Creek WMA. Why not maximize the potential of this property for the use it was created for? I also think fire/fuel suppression is a good idea if controlled burns are not an option. Thanks for your work.

jim c

Hamilton

#5

From:

Dale Kerkvliet <dalekerkvliet@hotmail.com>

Sent:

Monday, March 1, 2021 12:42 PM

To:

Rose, Sharon

Subject:

05 (Kerkvliet)--[EXTERNAL] Comments: Calf Creek Draft Environmental Assessment

Attachments:

calf-creek-wma-habitat-restoration-project--draft-ea. dtk Commentspdf.pdf

Please see my attached comments.

Dale Kerkvliet, CF®
707 Aquarius PI.
Billings, MT
59105
dalekerkvliet@hotmail.com
406-273-8223

Date: March 1, 2021

RE: Draft Environmental Assessment Calf Creek Wildlife Management Area Habitat Restoration Project

I support the general proposal of this draft EA. However, I make the following observations/comments:

- The announcement and comment period are not conducive to adequate review because the Calf Creek Wildlife Management Area is closed to the public during this time period; therefore, precluding field review of the treatment areas.
- On page 26, there is a reference "MFWP 2015" that does not have a clear corresponding citation.
- Five times "the habitat type" is used but is not defined nor a citation used.
 - o If "habitat type" is referring to those known via Forest habitat Types of Montana¹,
 - "the habitat type" should be named and cited properly.
 - it would be very useful if "habitat type" as defined by Pfister, et. al. 1977 was used in this and future EA's. Habitat typing is a very useful tool to describe forest stands and evaluate their management options.
 - o "The habitat type" implies there is only one found in the treatment areas. I find this unbelievable as the elevation range—which is not given in the EA—from 4200 to nearly 6000 feet.
 - Whatever "the habitat type" is referring to needs to be cited so that a reviewer can consider whether or not the "habitat type" was correctly determined and, therefore, judge the merit of the proposed treatments.
- Prescriptions proposed are given by units, "grassland/shrubland restoration" and "forest restoration." However, they are not mapped; therefore, a reviewer can only make assumptions where which prescription will be applied.
- Promotion of aspen growth and regeneration is stated as a proposed action. However, aspen is not mentioned in the Ecological Setting nor Area Description. It is difficult to assess the need or the effectiveness of the proposed treatments. The Alternative B Proposed Action does not mention aspen and its potential response to treatment. I believe aspen management in Montana is in its infancy and not well understood. I strongly suggest using the "Aspen Functional Types of North America" and use the

¹ Pfister, Robert D.; Kovalchik, Bernard L.; Arno, Stephen F.; Presby, Richard C. 1977. Forest habitat types of Montana. Gen. Tech. Rep. INT-GTR-34. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest & Range Experiment Station. 174p.

methodology "Developing an Action Plan" recommended by the Western Aspen Alliance. ²

Sincerely,

Dale Kerkvliet, CF®

Calle Kerholis

707 Aquarius Pl.

Billings, MT

59105

² Rogers, Paul C. 2017. Guide to Quaking Aspen Ecology and Management with Emphasis on Bureau of Land Management Lands in the Western United States. BLM-UT-G1017-001-8000. 98 p. Logan, Utah, Western Aspen Alliance.

Sent from Mail [go.microsoft.com] for Windows 10

#6

From: Saladin Frank Pelfrey <walkinginnature@gmail.com> Sent: Tuesday, March 2, 2021 2:17 PM To: Rose, Sharon Subject: 06 (Pelfrey)--[EXTERNAL] Calf Creek project Hello, I am writing about the project up at Calf Creek, an area where I have spent many hours exploring and enjoying for several years. I am concerned about this project as there is scant information about the specifics of it. How will it be accessed, will it involve partial or complete closure of Calf Creek, just what areas seem to need to thinned or cleared, does it include the lower areas where the trees or spaced very far apart, does it include the old orchard up in the higher part of the refuge, does it include putting roads and skid roads into the area? The discussion so far presented is too sketchy for those of us who are invested in that area to form any type of opinion. Hook forward to your response, thank you Frank Pelfrey Hamilton MT.

7a, b

From:

Linda Schmitt < linda@schmittleslie.com>

Sent:

Thursday, March 4, 2021 12:26 PM

To:

Parke, Jason

Cc:

Rose, Sharon; Mowry, Rebecca

Subject:

07a,b (Schmitt)--Re: [EXTERNAL] Re calf creek

What periods of time will calf creek be closed to hikers? By month, please. What is the overall schedule — years.

On Mar 4, 2021, at 12:20 PM, Parke, Jason < JParke@mt.gov > wrote:

Hi Linda,

Sharon is correct, Hamilton Heights Road will be the primary access. From the parking area there is a short segment of private road to the north then there is a cattle gate that enters into the WMA. Most of the project would be accessed from this road. There are also a few areas south of Calf Creek that we have been talking to the neighbor about accessing through their property since they are also planning some forestry treatments within the same timeframe.

Please let me know if you have additional questions or need clarification.

Jason

----Original Message-----From: Rose, Sharon

Sent: Monday, March 1, 2021 3:53 PM

To: Linda Schmitt < linda@schmittleslie.com>

Cc: Parke, Jason < <u>JParke@mt.gov</u>>
Subject: RE: [EXTERNAL] Re calf creek

Hi Linda,

I also received your voicemail, but will answer in this email.

I'm guessing you've seen a copy of the draft EA, but if not, it's available on this FWP webpage: https://fwp.mt.gov/public-notices/news/2021/feb/calf-creek-wma-habitat-restoration-project--draft-ea

Looking at Figure 2 (pg 3) in the EA, it looks like Hamilton Heights Road (the access road into the WMA's parking area) would be the main haul road.

I've copied our forester, Jason Parke (jparke@mt.gov, 444-7329), as he's the project lead and can answer further road questions you might have. (Jason--Linda's email linda@schmittleslie.com, phone # 202-641-0033.) Sharon

Sharon Rose Comments Coordinator, Region 2 Montana Fish, Wildlife & Parks 3201 Spurgin Rd Missoula, MT 59804 Ph: (406) 542-5540 shrose@mt.gov Montana FWP 7a, b

----Original Message-----

From: Linda Schmitt < linda@schmittleslie.com>

Sent: Sunday, February 28, 2021 8:00 PM To: Rose, Sharon <shrose@mt.gov>

Subject: [EXTERNAL] Re calf creek

Do you know what road will be used to access calf creek to do this work? Thanks

Sent from my iPad Linda) a

Linda D Schmitt cell: 202-641-0033

#8

From:

sroubik@cybernet1.com

Sent:

Sunday, March 7, 2021 6:26 PM

To:

Rose, Sharon

Subject:

08 (Roubik, A)--[EXTERNAL] 4 Calf Creek

Attachments:

Calf Creek.docx

Please see attached comments regarding the Calf Creek project. Thank you and have a nice day.

Andy Roubik

Region 2 FWP Attn: Calf Creek Forest EA 3201 Spurgin Rd., Missoula 59804

March 7, 2021

Dear Sirs and Madams:

When we look to manage ecosystems, it is of course essential that we look at how the ecosystem functions pre-settlement. My perspective is that nature is perfect. I hope that this is also your perspective.

Regarding the Calf Creek management area, I think you are on the right track to reestablish a grass and sagebrush ecosystem.

My concerns center on the removal of organic material. In nature, when a fire moves through, the trees are killed but they are not removed. Their finer fuels like branches and needles are burned and the ashes nourish the soil with released nutrients. Sometimes the trunks burn too. Most trunks do not burn and remain on the site where they can nourish the soils with their slow release of nutrients. The logs also have many other benefits. Those that remain standing are of course essential for birds and insects too numerous to list. When the logs are on the ground, they provide habitat for rodents, insects, birds, carnivores, amphibians, and many other creatures. These rotting logs also have the ability to hold water, lots of water that helps all plants in the vicinity including grass and sagebrush.

For the above-mentioned reasons, I support enlarging the grasslands at Calf Creek with the idea that all material remains on the site. Branches and small trees could be piled some to be burned and the nutrients will release quickly, some piles to become habitat piles where rodents and others can flourish, and their nutrients released slowly. Larger logs can be limbed and left to rot to insulate the soil and contribute organic material which will keep the grass greener longer. These logs are also a direct benefit to elk calves who may lay against them on the south side to absorb the sun. Chipping some material and spreading the chips may also have a place in this project. By not removing any logs, just laying them down, ground disturbance would be kept to a minimum with the result of less weeds and more native variety because of less subsequent use of herbicides.

This is an opportunity to enhance and enrich these soils as harvesting will in the long run always reduce soil fertility (unless amendments are added at some point).

In nature, all material remains on the site. Let us do our best to mimic nature.

Sincerely,

Andy Roubik, 961-4143, andyroubik93@gmail.com

#9

From:

sroubik@cybernet1.com

Sent:

Monday, March 8, 2021 6:59 PM

To: Cc:

Rose, Sharon Rose, Sharon

Subject:

09 (Roubik, S)--[EXTERNAL] Calf Creek

Hello.

I believe that Calf Creek is important for elk calves as the name suggests. Grazing is important and with fire supression, we have lot wildlife grazing land. I feel that it is important to leave the organic material on the land so please consider making that a big part of the project. Also, with so many projects on the forest, we are left with weeds after the soil is disturbed by the machinery. I am very concerned about that. Please make an effort to consider a good plan to prevent the spread of weeds. If we clear trees to make grazing land for wildlife and instead weeds grow there due to disturbance, we have accomplished nothing. Thank you.

Sarah R Roubik, SRA 961-5212



From:

Jeff Lonn <jefflonn@hotmail.com> Monday, March 8, 2021 7:13 PM

Sent: To:

Rose, Sharon

Subject:

10a (Lonn)--[EXTERNAL] Public Comment: CALF CREEK WMA HABITAT RESTORATION

PROJECT

Thank you for the opportunity to comment on the Calf Creek WMA Habitat Restoration Project. However, because Calf Creek WMA is closed from Dec 1 to April 15, the public cannot access the areas delineated in the EA. If we cannot visit the area, how can we submit meaningful comments? I ask that you extend the comment period until May 15 to give the public 30 days to review the EA in the field.

I also add a few following comments:

- 1. Your baseline air photos from 1954 hardly represent "historic conditions". Settlement by Europeans occurred about 75 years earlier. The 1954 conditions could have resulted from many different factors, including logging by the Anaconda Company and/or stand-replacement wildfire (which you claim did not exist.....but how do you know?). Your baseline for historic conditions should go back to at least 1910 before the fire suppression started that you claim is responsible for departure from historic conditions (a contentious claim in the scientific community).
- 2. You provide no evidence that the proposed "treatments" are effective in increasing wildlife forage. Please provide scientific studies, or even your own post project monitoring, that demonstrate this. You state that you will return the landscape to a "ponderosa savanna", but the Hayes Creek project (BNF, 2005-2010) resulted in a landscape that could be more accurately described as a knapweed savanna. It is an evenly spaced ponderosa pine plantation with an understory of knapweed, St Johns wort, and cheatgrass, in that order. None of these are great wildlife forage to my knowledge.

Please extend the comment period to allow the public, who own these lands, to visit the units and submit meaningful comments.

Sincerely, Jeff Lonn Hamilton, Montana

#106

From:

Mowry, Rebecca

Sent:

Tuesday, April 20, 2021 8:18 AM

To:

Rose, Sharon

Subject:

10b (Lonn)--Fw: Calf Creek questions

Attachments:

Baker - 2006 - Fire and Restoration of Sagebrush Ecosystems.pdf

From: Jeff Lonn <jefflonn@hotmail.com> Sent: Monday, April 19, 2021 5:36 PM

To: Mowry, Rebecca <RMowry@mt.gov>; Parke, Jason <JParke@mt.gov>

Cc: Mac Donofrio <macdonofrio@gmail.com>; Karen and Van <skarenvan@hotmail.com>; Michael Hoyt

<michael.hoyt@gmail.com>; Kierstin Schmitt <montanaks@gmail.com>

Subject: [EXTERNAL] Calf Creek questions

Jason and Rebecca,

Thank you for the excellent and informative field trip to Calf Creek WMA. A few of us spent another day at there with the map of treatment units, and I will submit more comments, but I have a couple questions/comments before I do:

- 1. You could probably tell that my biggest issue is running heavy equipment over the area and the profusion of weeds, especially knapweed, that is likely to result. I'm especially concerned that a feller-buncher will be used for much of the work, crushing the sagebrush and disturbing the soil. Soil disturbance by the feller-buncher in Bitterroot NF on the west side of the valley has resulted in what I call the knapweed savanna. And sagebrush is a slow-growing plant (Baker, 2006; attached). I counted annual rings on some dead stems, and the plants ranged from 32-60 years old, so recovery of damaged/killed sagebrush will be slow. Therefore, I think it is important to use non-mechanical methods as much as possible, even if it means doing less intensive treatments. For example, I visited unit GR-1 which is a large area with no roads—how do you propose to accomplish the conifer removal? I not want heavy equipment to drive all over this area, which still contains large areas of both healthy bunchgrass and sagebrush.
- 2. While the trees might be shading-out some sagebrush, I noticed that they are also shading-out knapweed. I suspect that as soon as you open the canopy, if ground is disturbed, knapweed will proliferate as it has over here on the west side knapweed savanna. I know that eradicating knapweed is a tough proposition, but you can at least prevent its spread fairly easily by limiting soil disturbance.
- 3. Regarding mountain big sagebrush, Baker (2006) found it is intolerant of any fire, slow growing with recovery times of 35-100 years, and has mean fire rotations of 70-200 years (mountain big sagebrush) or 35-100 years (mountain grasslands with a little sagebrush). Therefore, either fire intervals for Calf Creek WMA are significantly underestimated (which is what I suspect), or sagebrush was not part of pre-1910 conditions. Baker (2006) went on to say "Given these long rotations, fire exclusion likely has had little effect in most sagebrush areas." I know you want to preserve the sagebrush component, and that is OK with me. This is just some food for thought, because longer fire-free intervals may and should have implications for your forest treatments as well.
- 4. I'm glad you are following ICO guidelines. I hope this project does not get reduced to a simple fuel reduction project in order to get funding.

106

5. I noticed that the boundaries of the GR units spill over a bit onto the more northerly and more leeward aspects. I would think that conifers, both PP and DF, would be present just below the break in slope, and so ecologically it makes sense to keep them, at least the larger ones. I hope those boundaries are not to provide more commercial timber for the contractor.

Again, thanks for the field trip, for listening to our questions and thoughts, and for the papers and pictures, which I have yet to look at.

Jeff Lonn



From:

Jeff Lonn <jefflonn@hotmail.com> Friday, April 30, 2021 10:28 AM

Sent: To:

Rose, Sharon

Subject:

10c (Lonn)--[EXTERNAL] CCWMA Habitat Improvement Project Comments

Thanks for extending the comment period on the Calf Creek Habitat Improvement project, and thanks to Rebecca and Jason for the excellent field trip. However, I have serious concerns with this project, especially with your solution of using commercial logging and heavy equipment to improve forage.

You provide no scientific support that your heavy-handed treatments will improve forage, while there is ample evidence that they will spread invasive weeds and therefore degrade forage. For details and references, see the Friends of the Bitterroot comments, which I hereby incorporate into my own.

Re-opening over 10 miles of roads will degrade streams and the experience for the many local residents who value the CCWMA for quiet recreation. Although recreation is not an acknowledged purpose of the CCWMA, it nonetheless is an important use. When you "found" a loophole in the rules that allowed us access to the entire area before May 15th so that you would not have to extend the comment period, it shed doubt on the claim that the elk come first. It seems that, this time, ramming the project through quickly is the first priority.

This project's environmental effects should be analyzed together with the adjacent huge BNF Gold-Butterfly timber project. I have heard that the CCWMA project was suggested by the BNF Supervisor, and that concerns me. Do not allow log hauling through CCWMA from BNF.

To improve habitat, I suggest the following less costly and less harmful measures:

- 1. Keep the CCWMA closed to the public until May 15th.
- 2. Drop the commercial logging portion of the project.
- 3. Do any conifer removal by hand, non-commercially.
- 4. Do not use masticators, feller-bunchers, or any other heavy equipment. They will disturb the soil, kill the sagebrush and native grasses, and spread invasive weeds.
- 5. Make knapweed reduction a priority. Use bio controls and hand digging/pulling. Using herbicides will just replace the knapweed with cheatgrass.
- 6. Reduce the project size and proceed slowly. Monitor treatment successes and failures, and adapt accordingly. Avoid having your solutions become the next problems.
- 7. Use prescribed fire only in the summer or fall, when wildfire would have historically occurred. Do no spring burns.
- 8. Do reclamation work on the eroded roads in the western part of the CCWMA, but leave the naturally reclaimed roads as the tranquil trails they have become—do not reopen them. Reopening some of them (for example, the road along Gibbons Creek) may violate Montana SMZ laws.

#11a

Rose, Sharon

From:

Michael Hoyt <michael.hoyt@gmail.com>

Sent:

Monday, March 8, 2021 7:56 PM

To:

Rose, Sharon

Subject:

11a (Hoyt)--[EXTERNAL] CCWMA comments

Attachments:

CCWMA Comments - 8mar21.pdf

Please accept the attached Microsoft Word document as my comments for the proposed CCWMA project.

Additionally, I would like to be kept informed about this project as it moves forward including access to other comments, changes/additions, and the final EA. Please add my email address to the list of those who receive notifications.

Thank you,
Michael Hoyt
michael.hoyt@gmail.com
Corvallis, MT

Following are my comments for the Draft Environmental Assessment for the Calf Creek Wildlife Management Area Habitat Restoration Project – February 2021

March 8, 2021

The Proposal for this project states:

Montana Fish, Wildlife & Parks (FWP) proposes to conduct habitat restoration treatments on 1,116 acres of forest and grass/shrublands on its Calf Creek Wildlife Management Area (CCWMA), in Ravalli County (Figures 1 and 2). The objectives of the proposed treatments are: 1) improve elk and deer winter forage, 2) restore grass/shrublands through conifer removal, 3) promote stand conditions that would allow fire to burn at low-severity appropriate for the habitat type, and 4) promote aspen growth and regeneration. The treatments would involve the removal of conifer trees (both merchantable and sub-merchantable) through a combination of mechanical and non-mechanical treatments. (Section 8 Narrative Summary, below, includes a detailed description of the proposed action.) If approved by the Montana Fish and Wildlife Commission, the work would begin as early as December 2021. Mechanized treatments would not occur during the general rifle hunting season and would include efforts to minimize impacts during the archery hunting season (e.g., no logging on weekends). The purpose of this project is to improve wildlife habitat; this project would not be proposed if not for a need to conserve and improve wildlife habitat on the WMA.

<u>The first objective</u>, "improve elk and deer winter forage" cannot be met by this project as it (the project) is proposed to take place beginning in December 2021, the very time elk and deer are presumed to be foraging in the project area. Project activity during the same time that "winter forage" is assumed to be consumed would drive elk and deer from the area.

The second objective, "[to] restore grass/shrublands through conifer removal" is questionable. The project description contains no reference to records which indicate the project area ever contained more grassland than it now contains. Although could assume that there were more grasslands immediately after the area was last logged, there is no mention of proof that grasslands were once dominant in the area.

Those most familiar with this area understand that the driest portions of the area are mostly inhabited by two species well-adapted to dry conditions, Ponderosa pine and sagebrush. It is magical thinking to believe that grasses will establish themselves, with or without human help, in the driest areas. Yes, removing some trees and sagebrush may allow more bunch grass to grow, but more than likely the soil disturbance that will take place during removal will introduce more knapweed, one of the world's best plants adapted to dryness.

The third objective, "promote stand conditions that would allow fire to burn at low-severity appropriate for the habitat type" runs contrary to recent research. In fact, the locations in the CKWMA which contain the highest density of trees are also the most moist and unlikely to develop high-intensity fire because of the elevated moisture levels in the understory plants.

Other timbered (both merchantable and sub-merchantable) locations are populated with widely spaced trees and are unlikely to develop high-intensity, torching wildfires.

The fourth objective, "promote aspen growth and regeneration," is a disingenuous claim. It is well known that elk and deer use aspen as a food source. The continued presence of these two ungulates will keep aspen from spreading unless they (the ungulates) are continually on watch for predators. Predators other than coyotes have been almost entirely eradicated from the area on and near this project by trappers and hunters so it is highly unlikely that any increase in aspen will take place.

Given the descriptions included in the DEA, claiming that the "purpose of this project is to improve wildlife habitat" seems disingenuous. Currently, the majority of the grassy areas in the CCWMA are overrun with knapweed. If, in reality, the project was actually intended to improve wildlife habitat, it would make more sense to concentrate entirely on eradication knapweed. As proposed, the project appears to be a logging project masquerading as a restoration.

On page 25, (13.a) it states:

"This project would improve ungulate habitat conditions, restore historic forest characteristics, and reduce susceptibility of the subject stands to high-severity wildfire on and adjacent to the Calf Creek WMA. Work proposed in this EA may compliment similar forestry work on adjacent lands, but FWP does not anticipate any cumulative negative impacts to result if this project were completed.

However, no peer-reviewed research or scientific evidence is cited that substantiates claims that:

- 1. This project would improve ungulate habitat conditions;
- 2. restore historic forest characteristics; and
- 3. reduce susceptibility of the subject stands to high-severity wildfire on and adjacent to the Calf Creek WMA.

In addition, there is no mention of the cumulative impacts this project might have on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency undertakes such other actions. Because this project is adjacent to the Forest Service Gold Butterfly project and other known past and planned project, the omission of cumulative impacts seems particularly egregious.

Michael Hoyt

#116

From:

Michael Hoyt <michael.hoyt@gmail.com>

Sent:

Thursday, April 22, 2021 3:54 PM

To:

Rose, Sharon

Subject:

11b (Hoyt)--[EXTERNAL] Additional CCWMA comments

Attachments:

After Field Trip Comments - 22apr21.pdf

Sharon,

Attached are additional comments (inspired by the April 16th field trip) I wish to submit. Thank you for extending the comment period.

Michael Hoyt

116

After-Field-Trip (April 16, 2021) Comments on the Draft Environmental Assessment for the Calf Creek Wildlife Management Area Habitat Restoration Project (February 2021)

April 22, 2021

The Draft Environmental Assessment (DEA) for this project states:

"Montana Fish, Wildlife & Parks (FWP) proposes to conduct habitat restoration treatments on 1,116 [of 2,416] acres of forest and grass/shrublands on its Calf Creek Wildlife Management Area (CCWMA), in Ravalli County The objectives of the proposed treatments are: 1) improve elk and deer winter forage, 2) restore grass/shrublands through conifer removal, 3) promote stand conditions that would allow fire to burn at low-severity appropriate for the habitat type, and 4) promote aspen growth and regeneration. The treatments would involve the removal of conifer trees (both merchantable and sub-merchantable) through a combination of mechanical and non-mechanical treatments. ... If approved by the Montana Fish and Wildlife Commission, the work would begin as early as December 2021. Mechanized treatments would not occur during the general rifle hunting season and would include efforts to minimize impacts during the archery hunting season (e.g., no logging on weekends). The purpose of this project is to improve wildlife habitat (emphasis added); this project would not be proposed if not for a need to conserve and improve wildlife habitat on the WMA."

The DEA goes on to proclaim:

"A migratory elk herd uses the CCWMA for winter range (emphasis added) and is frequently observed on the open slopes throughout the fall, winter, and spring. Mule deer, white-tailed deer, black bear, mountain lion, wolf, moose, mountain grouse, and furbearing species call the WMA home throughout the year. A wide variety of nongame wildlife species use the CCWMA, including many bird, small mammal, and reptile species that are considered Montana Species of Concern (SOC). The WMA is a popular destination for recreation, especially hunting in the fall, and mountain biking and horseback riding in the summer; in fact, this WMA has a special "early open" period, allowing users to access part of the WMA beginning April 15. ..."

In the section under "Ecological Setting," the DEA asserts that:

"Primarily in response to fire exclusion, conifers have expanded into grass/shrubland habitats (emphasis added) and converted bunchgrass-sagebrush dominated systems to variably dense forest stands with forest associated understory species such as snowberry and pinegrass... . Forest succession towards mid-seral, closed-canopy stage reduces plant diversity and abundance, thereby reducing forage available to wildlife species. If left unchecked, conifer expansion could impact big game populations along with other wildlife species such as songbirds and small mammals.

"Forest conditions have also departed from their historic range of variability due to past timber management, fire exclusion, and forest succession. (emphasis added) Extensive timber harvest in the late 19th through early 20th centuries removed much of the mature timber in the area. Remnant trees and trees that regenerated from this early harvest form the overstory trees present today. Historically, fire frequency ranged between 5 and 50 years, and fire severity was typically low to moderate. (emphasis added) This predominant fire disturbance cycle

maintained open stands dominated by mature ponderosa pine. The combination of historic timber harvest and fire exclusion has resulted in a shift of species composition and structure. Today there is a relatively high-density of overstory trees, and Douglas-fir makes up a greater proportion of the species composition than it would have historically. Overall, there is a higher stocking of conifer trees across the CCWMA, which has led to decreased coverage of grasses, shrubs, and forbs. Dense sapling-sized trees create a "fuel-ladder," which has the potential to kill overstory trees in the event of a wildfire. If left unchecked, forest succession could negatively impact winter range habitat for big game and habitat for a variety of wildlife species that depend on more open conditions. As fuels continue to build up, the susceptibility of the area to stand-replacement fire would increase, which is atypical for the habitat type.

April 16, 2021 Field Trip

Let me begin by stating that I appreciated the field trip (for interested parties) which was put together by Rebecca Mowry and Jason Parke. It was informative and helped provide a more thorough understanding of this project's intent. Especially important to me was the fact that both Rebecca and Jason seemed open to the validity of science-based arguments offered by members of the public who participated in the field trip.

Necessity of Proposed Actions

Forest Composition and Structure

I want to address the assertion (Ecological Setting, first paragraph) that, "Primarily in response to fire exclusion, conifers have expanded into grass/shrubland habitats..." I do not believe there is data to backup that claim.

According to a current Forest Service (FS) map of Fire Starts, only six wildfires have impacted the CCCWMA with only two of those beginning on the Management Area (MA). The others began on either FS or private land. Other than the most heavily forested region of CCWMA, the MA is rated (by the FS) with having the lowest starts per square mile.

Of the wildfires allowed to burn near the MA, all four were to the east on lands managed by the FS. The prevailing winds moved those fires away from the CCWMA. This information was gathered from a FS Fire History map from 2019 showing wildfires back to 1870, a period of almost 150 years. The information contained on those two maps indicates that purposeful fire exclusion was not a factor in conifer expansion on the CCWMA. This FS and other data contradicts the prevailing belief that a century of fire suppression is directly responsible for the current status of our forests and refutes the claim that "Historically, fire frequency ranged between 5 and 50 years, and fire severity was typically low to moderate" (Ecological Setting, second paragraph) for the CCWMA.

There is an additional claim (Ecological Setting, second paragraph) that, "Forest conditions have also departed from their historic range of variability due to past timber management, fire

exclusion, and forest succession. Extensive timber harvest in the late 19th through early 20th centuries removed much of the mature timber in the area."

Since available data show that fire exclusion was not practiced to any great extent for the past 150 years in the CCWMA, the only DEA-listed reasons left are timber management and forest succession. The existence of old stumps is evidence that at some point many if not most of the trees capable of producing lumber were removed from the MA. It is therefore realistic to assume past logging had an impact at producing current forest conditions. It is also reasonable to assume that logging/thinning a forest now would have an impact on future conditions of that same forest. What is not logical is to presume that logging/thinning will reduce the possibility of catastrophic wildfire.¹

Interesting to me is that this DEA makes the assumption that the logging/thinning proposed as part of this project will produce a more desirable forest. That belief is outdated and not based upon the latest research. $^{2\ 3\ 4}$

There is no provision in the DEA for the possibility that not performing management activities (logging/thinning) in the current forest and allowing natural forest succession to occur is likely to produce a more natural forest. Whether by oversight or design, this DEA is sacrificing natural forest succession in order to produce income (from logging/thinning) which will offset a portion (however small) of the overall cost of this project. I do not believe that sacrifice should be made.

A forest and its multiple ecosystems can never reach a natural equilibrium if not left alone. Any and all management activities will disrupt naturally occurring processes and certainly cause unintended consequences. Far too many ecosystem components and their interconnectivity exist in a forest for anyone to gain a complete understanding. It is best to observe and study with the only intent being to gain knowledge. Interference with nature by humans has yet to produces positive results. Assuming that "this time will be different" is presumptuous and short sighted.

Grass and Shrublands

The primary management goal, as stated in the Calf Creek WMA Management Plan, is to provide habitat for a diversity of wildlife species and populations, with an emphasis on elk winter range. This DEA proposes to meet that goal by removing conifers encroaching on

¹ Bradley, C.M., et al. (2016) Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States? https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.1492

² Harris, N.L. (2016) Attribution of net carbon change by disturbance type across forest lands in conterminous US - https://cbmjournal.blomedcentral.com/track/pdf/10.1186/s13021-016-0066-5.pdf

³ Buotte, P.C. et al. (2019) Carbon sequestration and biodiversity co-benefits of preserving forests in the western United States - https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/eap.2039

⁴ McNulty, S.G. et al. (2014) The rise of the mediocre forest - why chronically stressed trees may better survive extreme episodic climate variability - https://www.srs.fs.usda.gov/pubs/ja/2014/ja 2014 mcnulty 001.pdf

⁵ Pearce, F. (2020) Natural Debate - Do Forests Grow Better With Our Help or Without https://e360.yale.edu/features/natural-debate-do-forests-grow-better-with-our-help-or-without

historically bunchgrass-dominated montane grasslands, increasing recruitment of forage and browse species, and promoting aspen growth and recruitment.

The DEA compares aerial imagery from 1954 and 2017 to "prove" that the MA has lost grassland to conifer encroachment. That comparison is not entirely convincing. The DEA includes no data that indicate why, in 1954, the MA contained more grassland than forest. Was it because the area had recently been used to graze cattle or to produce hay? Was 1954 the end of an especially wet or dry period? Had the grassy areas been recently logged? More information should be provided that indicates (or at least theorizes) why the MA contained more grassland.

During the April 16th field trip, it was repeatedly mentioned that the young trees (under 80 years of age) growing in the predominately grassy areas needed to be removed. The assertion was that, not only would this allow the land under the removed tress to grow grass and sagebrush, but it would stop further encroachment of trees into the grasslands. There are two problems with this approach.

The first has to do with the spread of the current, widespread infestation of two invasive plant species in the MA: cheatgrass and spotted knapweed. Both are present at high levels, especially spotted knapweed. Soil disturbance, from management activities implemented with restoration goals in mind, is often the main factor contributing to the spread of both species. The more a "treatment" disturbs the soil, the greater the likelihood cheatgrass and spotted knapweed will spread to new areas. Driving equipment over already weed-infested ground to remove young conifers will not only damage the existing slow-growing sagebrush but will certainly increase the spread of the existing weed species. That weed-spread will limit the establishment (let alone any increase) of the "preferred" grasses, something which is apparently the goal of removing the young conifers.

While walking the grassy areas of the MA during the field trip, I searched for the presence of young tree seedlings (ponderosa pine). I was able to spot only 3 that appeared younger than 10 years old. Such a deficiency would seem to indicate one of two things. Either the trees that are currently growing in the grassy areas are not producing seeds, which seems unlikely given the numerous cones on the ground or, climatic conditions are not conducive to the survival of tree seedlings. Based on recent research conducted at UM, it is likely that climatic conditions are the reason ponderosa pine seedlings are not surviving. Therefore, I suggest that the DEA's assumption that there will be an increasing spread of ponderosa pine into the remaining grassy areas is incorrect.

It is a "given" that the mechanical treatment proposed to remove the existing "young" trees from the MA's grassy areas will certainly increase the spread of invasive plants to the detriment of desired grasses. And, based upon the most recent peer-reviewed climate science, current

⁶ Dodson, E.K. and Fielder, C.E. (2006) Impacts of restoration treatments on alien plant invasion in ponderosa pine - https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2664.2006.01206.x

⁷ Davis. K.T. et al. (2019) Wildfire and climate change push low-elevation forest across critical climate threshold for tree regeneration - https://www.pnas.org/content/116/13/6193

hot and dry climatic conditions (which are already adversely affecting the viability of tree seedlings) will continue to intensify (hotter and dryer) into the foreseeable future.

Based on that information, I assert that this project should not remove the young trees growing in the grassy area. Doing so would be a waste of scarce resources and unlikely to accomplish the intended goal of the DEA. Rather than blaming tree encroachment for the supposed lack of good forage (grass) the project should acknowledge that spotted knapweed and cheatgrass are the real culprits and concentrate on the control/eradication of those two species of invasive plants.

Project Alternatives

Only two are offered by the DEA:

Alternative A: No Action

If FWP decides not to proceed with the proposed action, grass/shrubland and forest restoration, treatments on the Calf Creek WMA would not occur at this time. Elk and deer winter range would continue to experience conifer expansion and in-growth. Forest succession on the WMA would trend towards increasing canopy coverage, stressing water resources and shading out important forage grasses and deciduous vegetation. Aspen stands in the project area would continue to be stressed and out-competed by conifers, with subsequent impacts to nongame wildlife use of the WMA.

Alternative B: Proposed Action

FWP would conduct grass/shrubland and forest habitat improvement treatments on approximately 1,116 acres of the Calf Creek WMA as described in the Narrative Summary (Section 8, above). Following this action, FWP anticipates that important ungulate winter range condition would improve due to increased grass and woody browse recruitment. Habitat diversity would be expected to increase at the stand-level and across the larger landscape, providing habitat niches for a wide range of game and nongame wildlife.

If forced to select one or the other, I would pick the "No Action" alternative. However, my preference would be an unoffered alternative which concentrates on the control/eradication of the two most prevalent invasive plants, spotted knapweed and cheatgrass using biocontrol and non-mechanical methods (hand removal).

Given the predominance of recent, contradictory research, I do not believe any forest treatment is necessary to prevent catastrophic wildfire or increase forest health by removing understory plants, opening the canopy, or removing certain tree species to benefit other trees. All suggested treatments are designed to produce a forest that represents unproven, historical conditions, a silviculturist-imagined, perfect-world forest which yields an endless supply of readily marketable timber to industry.

There is also a matter of legality. The fact that the DEA provides only two alternatives, "do nothing" or "do what is proposed," is problematic and probably illegal. In 1997 the 7th Circuit Court held that "a federal agency' failed to examine the full range of reasonable alternatives..."

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(Simmons v. US Army Corps of Engineers -1997). As I previously suggested, there are other obvious alternatives and the DEA should address those to keep from running afoul of NEPA directives.

Conclusion

To reiterate, the primary management goal, as stated in the Calf Creek WMA Management Plan, is to provide habitat for a diversity of wildlife species and populations, with an emphasis on elk winter range. Focusing on providing wildlife habitat, especially for elk, can best be accomplished by focusing on simple, low-cost activities that improve the existing grassland on the MA (i.e. control/eradication of the two most prevalent invasive plants, spotted knapweed and cheatgrass).

The DEA documentation dealing with the cumulative impact of this, previous, and foreseeable future projects (not just those which happen on this WMA, but in the surrounding area) is inadequate to the point of being nonexistent (page 25, 13a). This is an increasingly important requirement of NEPA and should be corrected before moving forward.

It is problematic that this CCWMA project abuts the proposed Forest Service Gold Butterfly project. Apparently there have been (telephone) communications with the Forest Service about collaboration between this CCWMA project and the proposed FS Gold Butterfly Project. Although nothing has come of those discussions (so far), the fact remains that both projects are scheduled to run concurrently and have road systems that were once connected.

The potential for situations that could be detrimental to the CCWMA is possible and required study, discussion, and sufficient public notice. Currently, the Gold Butterfly project has a single point of access: Willow Creek Road. The likelihood that the FS will "pressure" the State to collaborate (possibly by offering GNA or other financial support) to allowing access across CCWMA in order to shorten the haul route for logs is sufficiently high enough to be worrying.

I suggest that the DEA be rewritten to:

- Include more alternatives, thereby conforming more closely to NEPA regulations;
- Incorporate a thorough investigation and reporting of the cumulative impacts of this, previous, and foreseeable future projects: a NEPA requirement;
- Focus on the control/eradication of spotted knapweed and cheatgrass; and
- Reveal all communications between the BNF and Montana FWP.

Sincerely,

1s/ M & Hoyt

Michael Hoyt Corvallis, MT

#110

From:

Michael Hoyt <michael.hoyt@gmail.com>

Sent:

Friday, April 30, 2021 11:06 AM

To:

Rose, Sharon

Subject:

11c (Hoyt)--[EXTERNAL] CCWMA comments

Attachments:

Additional Comments Regarding the Proposed Calf Creek Wildlife Management Area

Project - 30apr21.pdf

Sharon,

Please accept the attached 2-page addition to my previous comments on the proposed Calf Creek Project.

Thank you,

Michael Hoyt

#12a

From:

Karen and Van <skarenvan@hotmail.com>

Sent:

Monday, March 8, 2021 8:01 PM

To:

Rose, Sharon

Subject:

12a (Keele)--[EXTERNAL] Calf Creek WMA Restoration Project

Please accept my comments on the above proposed project.

Most importantly, the project area is and has been closed, long before comments were open to the public. How can the public make informed comments if we can't visit the area and see what you have planned on the ground? Please extend the comment period to one month after the area is fully open.

There are few large trees left on Calf Creek. Please limit any commercial cutting to trees under 12" dbh. Emphasize non commercial hand thinning, piling, and burning, with prescribed burns afterwards, preferably in the fall when shrubs are dormant.

There is mistletoe in the vast majority of Doug firs in the WMA. Dwarf mistletoe is endemic, omnipresent on our forests locally, and provides valuable cover and food for many species. It should not be an excuse to cut near all the large and living firs that remain in Calf. You will never eliminate it, nor will you isolate it to a small majority of firs going forward. Please save all Doug firs 12" or greater.

Calf creek is a rare low elevation recreation area in our valley that is heavily used. The "thick" woods are valued by forest visitors for their coolness and solitude. "Opening" the forest up and turning it into a dry, weedy plantation will destroy its character. Work on the many natural glades, thinning out the small encroaching trees. The many rough, old logging roads are intimate and enjoyable trails now. "Improving" them will change the character and recreational value for decades. Please avoid this.

I hope you're reaching out to, and hearing from the many horsemen who visit Calf. While I hike and bike at Calf, I believe my above suggestions would be supported by not just hikers and bikers, but by other users too—including horse folks.

Van P. Keele 564 Wapiti Loop Hamilton, MT 59840 406-363-0028

#126

From:

Karen and Van <skarenvan@hotmail.com>

Sent:

Monday, April 19, 2021 4:23 PM

To:

Rose, Sharon

Subject:

12b (Keele) & 13b (Savory)--[EXTERNAL] Calf Creek WMA habitat project comments

Attachments:

Calf Creek WMA comments.docx

Hi Sharon,

Here are my wife's and my comments on the proposed Calf Creek WMA habitat project. Will we get a confirmation that you received them? Thanks! Van

- —I support opening up some of the natural meadows/parks by cutting/girdling/removing encroaching conifers while retaining junipers. However, I don't support driving heavy machinery this way and that to pluck these small trees, while crushing sagebrush, compacting the soils, and damaging valuable native forage.
- —Remove the non-native Siberian pea shrubs. There's an extensive amount. Consider planting natives in their place.
- —Analyze the presence and prevalence of knapweed biocontrol insects in the WMA. Do not assume they exist in all knapweed colonies or that they're in sufficient numbers throughout the treatment units to the levels required for significant positive impact. Knapweed biocontrol is fairly effective and has the public's broad support (unlike herbicides which may also just allow cheat grass to supplant the knapweed). Reducing knapweed while increasing natives via biocontrols should be a centerpiece of your Calf Creek proposal. It makes no sense and does the WMA a disservice to ignore it. Significantly changing the makeup may benefit wildlife more than the expanded openings and certainly more than the commercial logging planned. The knapweed is overtaking the meadows faster than the encroaching conifers.
- —While recreation use and its quality isn't a "mandate" for Calf Creek WMA it is nevertheless very popular and the public deserves at least to be informed that recreation is not being considered and the project's impacts will likely change the character and diminish the recreation quality. The 10 miles of roads slated for reconstruction (excluding the haul route) will turn quaint high quality de facto single and double track trails into full blown logging roads. Keep in mind many "recreationists" go to Calf to view wildlife! I personally prioritize wildlife and habitat over recreation. Recreation for us is optional; for wildlife habitat is life or death.
- —Improving big game habitat and security should start with low hanging fruit: Keep the WHOLE WMA closed until mid May. And improve your oversight of the biennial WMA rules—through some clerical mistake the entire WMA is now unfortunately open, leading to disturbance and displacement of elk from areas on the WMA where they "should be." Displacing them from prime early spring forage areas due to human disturbance seems counter to your mandate and objectives.
- —Driving a feller buncher throughout the forest, especially in areas with healthy understory shrub communities and others that are weed-free, seems heavy-handed and counterproductive. Consider a greater amount of non-commercial cutting, piling, burning.
- —The eastern-most ridgeline (especially NE) of the project boundary, just east of Gibbons Creek, is planned for grassland restoration. For the most part it has a healthy bunch grass-sagebrush community which will be damaged with heavy machinery driving all the slopes to cut small encroaching conifers. Can this be done by hand to lessen the impact?
- —There are cabin remnants in the NE/E project boundary area that seems worthy as a cultural resource that your personnel have not noted. There's a p pine within its borders probably well over 100 years old. Has this been inventoried?
- —The cumulative impacts of the enormous Gold Butterfly project along the eastern border of the Calf project should be analyzed, including the proposed road construction for Gold Butterfly.

In summary, I support expanding the natural openings but your planned methods may cause too much damage directly and indirectly to the very native flora you're trying to protect or promote. Consider more hand and non-commercial work. Analyze existing biocontrols and incorporate a strong bio control aspect to the proposal. I'd be happy to help with funding. Would \$500 help? Ten miles of road reconstruction will not just adversely affect recreation but will spread weeds and impact big game movements and fragment habitat, compared to the existing condition of the "roads": bucolic, pleasant, often overgrown, and relatively wildlife-friendly.

Thanks for your attention, Van P. Keele Karen Savory 564 Wapiti Loop Hamilton, MT 59840 406-363-0028 Rose, Sharon #12c

From:

Karen and Van <skarenvan@hotmail.com>

Sent:

Friday, April 30, 2021 7:25 AM

To:

Rose, Sharon

Subject:

12c (Keele)--[EXTERNAL] Comments on Calf Creek WMA EA

I would like to make an addendum to my prior comments on the draft EA for Calf Creek WMA.

I recently hiked into the Gibbons Ck area of the project and believe there is a plan for reopening the old road in the bottom of the creek. The old roadbed is usually less than 25' from the creek and is most often only 10' wide; sometimes 8'. To allow hauling on this "road" would require more than blading in areas: it would likely require reconstruction or using fill. It appears that effectively using this road would require actions that would be in violation of Montana's Stream side law.

Thank you for adding this comment to my prior ones.

Van P. Keele 564 Wapiti Loop Hamilton, MT 59840 406-363-0028

From:

Karen and Van <skarenvan@hotmail.com>

Sent:

Monday, March 8, 2021 8:04 PM

To:

Rose, Sharon

Subject:

13 ♣ (Savory)--[EXTERNAL] Public Comment: CALF CREEK WMA HABITAT RESTORATION

PROJECT

I'm writing to request that you extend the comment period from March 8th to May 15th. The Calf Creek WMA has been closed since Dec 1 and will not be open again to the public until April 15. It is not reasonable to ask the public to make meaningful comments on an area that is closed to the public. Extending it to may 15th would allow those interested in making comments 30 days to walk area and make fully informed comments.

Thank you, Karen Savory Hamilton, Montana

From:

Mac Donofrio <macdonofrio@gmail.com>

Sent:

Monday, March 8, 2021 8:39 PM

To:

Rose, Sharon

Subject:

14 (Donofrio)--[EXTERNAL] Calf Creek

Hello,

This letter is a comment on the CALF CREEK WMA HABITAT RESTORATION PROJECT - DRAFT EA Please extend the comment period until public has a chance to walk the units free of closures and snow. The area has too much soil compaction and past logging and grazing. Further entry of machines and saws is costly and damaging to the soils and species.currently using the area as well as to the natural or as you say unnaturl tree species assemblage. Some of the roads are starting to heal a bit and should not be reopened. I think it would be OK to have some burns in there, and if they burn hot in places so be it. Elk would not complain, nor would a lot of bird species.

I just ask that you try not to burn up the sage and maybe rake out around some of those very old and often stunted Ponderosas.

If you can not handle the way nature is responding to your past management mistakes, burn it. Fall burn would be better but I doubt you all would dare.

Again please extend the comment period.

Thanks,
Mac Donofrio
Hamilton

Sent from my iPad

#15a

From:

michele dieterich <telechele@hotmail.com>

Sent:

Friday, April 2, 2021 11:24 AM

To:

Rose, Sharon

Subject:

15a (Dieterich)--[EXTERNAL] Calf Creek

It is my understanding that you are extending the comment period of Calf Creek and that you might do a field trip when the area is open. Can you send details? Thanks so much

Michele

Rose, Sharon #15b

From: michele dieterich <telechele@hotmail.com>

Sent: Friday, April 30, 2021 5:13 PM

To: Rose, Sharon

Subject: 15b (Dieterich)--[EXTERNAL] Comments on Calf Creek WMA habitat improvement

project

April 30, 2021

Fish Wildlife and Parks

Comments on Calf Creek Wildlife Management Area Habitat Improvement Project

E-mailed to shrose@mt.gov_

Dear project managers,

Thank you for the opportunity to comment on the Calf Creek Wildlife Management Area (WMA) vegetation project. The proposal for the Calf Creek WMA calls for commercial thinning and prescribed burning to improve forage. 1100 acres will be thinned, another 400 acres will be thinned and burned, and 10.4 miles of roads will be re-opened to accommodate log trucks, skidders and feller-bunchers. Skidders and feller-bunchers will also be required to roam off-road to complete the proposed project.

I have spent time in the Calf Creek WMA, riding my bicycle and hiking. It is a great place near town to enjoy the outdoors and the quiet trails covered in pine needles. Most of the trails are revegetated and hardly recognizable as old roads. Only one central double track in the meadow might need trail maintenance to remove bumps and reclaim non-trail areas. The Calf Creek WMA is such a popular place to recreate that it is, at times, hard to find a parking space.

The wide-open spaces are filled with knapweed. The forested areas have less weeds and more native grasses offering great forage for elk. There are hardly any small trees growing on the edges of the meadows. The forests also provide hiding cover and thermal cover for a host of animals.

The knapweed is probably the biggest deterrent to forage opportunities. Bringing in machines will exacerbate this problem by exposing soil and allowing for the spread of weeds. It would be pertinent to begin by controlling the knapweed. A survey of bio-controls would be a great start and the augmentation or addition of bio-controls where necessary. A comprehensive program to reduce knapweed to improve forage would increase forage without increasing weeds and subsequently reducing it.

A recent student thesis studied forage opportunities in the area. A look at the area's summer and winter forage and the effects of mechanized thinning, road re-opening and springtime prescribed burning on those important foods should be analyzed before planning this project. It is best to make sure that you do not do more harm when trying to do good.

Is there a need to improve forage? Are the elk numbers dwindling in the area? Please explain the reasoning behind the need to improve forage in the area. And please analyze the effects of the proposed management activities on all wildlife in the area.

15b

Re-opening roads and hauling logs will dump sediment into the area streams that flow into Willow Creek, a sediment impaired stream that is home to threatened bull trout. One of the haul roads to be re-opened parallels Gibbons Creek. There are places where sloughing and road failures have narrowed the road to less than 9 feet in width. There is little space between the edge of the road prism and the stream. Please check into streamside management zone rules to make sure you are not violating these regulations and consult with DNRC concerning this matter.

Cumulative effects of this project when combined with neighboring Gold Butterfly project should be analyzed, especially their combined effect on bull trout and Willow Creek. Bull trout are protected by the Endangered Species Act. Please explain how this project will be within the laws that protect bull trout. Has dialogue concerning bull trout been initiated with the US Federal Wildlife Service? Locations of prescribed burns should also be analyzed for effects to streams and bull trout. Are there spawning areas in the project area? Is the project area home to critical habitat?

Please also analyze the effects of both projects on sensitive and endangered species that enjoy both areas. With simultaneous projects, where will the animals go when dispersed by logging and road building activities? What of thermal and hiding cover throughout the area for these animals? How will the combined projects affect wildlife?

The commercial aspect of the project will require re-opening the old, revegetated roads that have become single-track trails so they can haul the logs out on trucks. Hauling logs and reopening roads will disturb wildlife. Roads fragment habitat and spread invasive weeds. Reopening roads will also affect the human environment. Hikers and horseback riders will experience dusty roads instead of vegetated trails. Opening the roads will also invite illegal OHV travel in and out of Forest Service lands and the WMA. How will this affect wildlife?

Machines will disturb soil allowing new small trees to grow and encroach on the meadow areas. Now the native grasses have a good hold on the meadows precluding conifer seedlings. Machines will change that. How will you maintain the meadows with new small conifer encroachment that is nearly non-existent at this time.

Have reasonable alternatives been analyzed? It seems what needs to be done in the area could be done without machines or log trucks. Much could be accomplished with hand thinning, leaving logs on the ground to provide hiding cover, habitat for small creatures, and future soils. The machines will disturb and displace wildlife. Machines will also crush sagebrush and spread weeds. Please provide information on and share actual projects where commercial thinning has in fact improved forage in places similar to the project area. Please also provide a comparison of the expected results of non-mechanical thinning and mechanical thinning including all the detrimental effects of each alternative.

Most prescribed burns happen in the spring when it is least likely for fires to spread beyond the desired area. Studies show that cool weather burning breaks down soil over time and spring burns disturb ground nesting birds and native grass forbs. Studies also show that the combination of thinning and burning increase weeds.

Intact forests are the best and most efficient way to mitigate climate warming. Please take a hard look at the carbon loss that thinning, subsequent blow down, and loss of vegetation and trees from reopening roads on the carbon storage capability of the area.

I am also concerned at the proximity of the 55,000 acre Gold Butterfly project. One re-opened road in the area will connect with a road that leads directly into the Gold Butterfly project area and a large clear-cut. I am concerned that there will be pressure on Fish Wildlife and Parks to allow log hauling

from Gold Butterfly to pass through the Calf Creek WMA. The WMA area is for wildlife, it is not a haul road for the convenience of the Forest Service. Please make it clear in the final decision that this will not happen.

Please keep me abreast of the project as it moves forward and provide the hearing date for this project with the Fish and Wildlife Commission.

Thanks very much for considering my comments.

Sincerely,

Michele Dieterich Hamilton, MT

#16

From:

jabailey34@aol.com

Sent:

Saturday, April 10, 2021 11:38 AM

To:

Rose, Sharon

Subject:

16 (Bailey)--[EXTERNAL] Re: Calf Crk WMA--Extended comment period & Field tour

Sharon: I did a fairly quick read on this proposal. Looks like a justified project with concerns for a variety of species taken into account. I see nothing about private cattle grazing on this WMA and presume there is none. Good. One consideration: How will the effects of all this activity and expense be evaluated - effects on "focal" wildlife species perhaps? Will there be any before and after data collected. Better yet, since responses of mobile animals may be affected by neighboring conditions, weather, etc. might there be any control vs. treatment data within the WMA for evaluating results? Evaluation is a critical part of "adaptive management". Jim Bailey, Belgrade

----Original Message-----

From: Rose, Sharon <shrose@mt.gov>
To: Rose, Sharon <shrose@mt.gov>
Cc: Rose, Sharon <shrose@mt.gov>
Sent: Fri, Apr 9, 2021 4:29 pm

Subject: Calf Crk WMA--Extended comment period & Field tour

Hi,

Attached is information regarding FWP's proposed Calf Creek WMA Habitat Restoration project, specifically notice of an upcoming extended comment period and field tour.

You can also view this news release on FWP's website at https://fwp.mt.gov/ ("All News," then "News Release").

(The direct webpage for this news release is https://fwp.mt.gov/homepage/news/2021/april/0408-calf-creek-wildlife-management-area-habitat-project-comment-period-extended-field-tour-offered)

Sharon

Sharon Rose

Comments Coordinator, Region 2 Montana Fish, Wildlife & Parks

3201 Spurgin Rd Missoula, MT 59804 Ph: (406) 542-5540 shrose@mt.gov Montana FWP



THE **OUTSIDE** IS IN US ALL.

#17

From:

Jose Correa <jacorrea4@gmail.com>

Sent:

Saturday, April 17, 2021 10:33 AM

To:

Rose, Sharon

Subject:

17 (Correa)--[EXTERNAL] CCWMA - Public Comment

Hello,

i am very excited to hear about the restoration efforts for the grasslands and timber harvest at Calf Creek. I have been using this area for various activities throughout the 14 years that I have lived in Hamilton.

Areas of concern for me are:

- Invasive weeds that are taking over the grasslands.
- Increased public use and erosion of the trails in addition to new trail development.
- Fire danger due to unmanaged timber stands.

Will the timber harvest be only in 2022 or will it cover more time? I was concerned of the impact to archery hunting but, if it is only one year, I agree with that.

Thank you, Jose Correa

#18

Rose, Sharon

From:

George Corn <gcornmt@gmail.com> Monday, April 19, 2021 11:21 AM

Sent: To:

Rose, Sharon

Cc:

Mowry, Rebecca; Leslie Nyce

Subject:

18 (Corn)--[EXTERNAL] Calf Creek Forest EA proposal for Calf Creek WMA.

I am in support of this habitat restoration project for the Calf Creek WMA. Due to subdivision development creeping up to the BR National Forest boundary on the East side of the valley, elk and deer winter habitat continues to shrink. Calf Creek is a Wildlife Management Area. It was established to serve the needs of elk, deer and other wildlife. As such this use must take precedence over other uses. It's important to note that the current landscape of the WMA is being restored to its historical condition in order to carry out the reason for its establishment. It's also important to note this project does not exclude other uses.

Thanks for the opportunity to comment. Please let me know my comments were received. Thanks --George Corn, Hamilton.

#19

From:

bonnie morgan <mrgnbnn@gmail.com>

Sent:

Tuesday, April 20, 2021 10:33 AM

To:

Rose, Sharon

Subject:

19 (Morgan)--[EXTERNAL] Calf Creek project comment

To FWP,

Thank you for scheduling the open house on the Calf Creek project. It was informative. I appreciate Rebecca Mowry's broad knowledge and concern for wildlife.

One concern I have is the erosion potential for the roads machinery will be using. The current roads in the area get deep ruts from runoff. How will the extra use affect the area? Another concern is weed management for a few years following the disruption of the soil. Will treated areas get reseeded with the native grasses to prevent an invasion of cheat grass?

Thank you for allowing recreation to continue in the elk management area.

Bonnie Morgan

P O Box 1120

Corvallis, MT 59828

#20

From: Sent: Jeff Lonn <jefflonn@hotmail.com> Wednesday, April 28, 2021 8:17 PM

To:

Rose, Sharon

Subject:

20 (Miller, FOB)--[EXTERNAL] Calf Creek Habitat Improvement EA comments from

Friends of the Bitterroot

Attachments:

Friends of the Bitterroot--Calf Creek EA comments.pdf

Friends of the Bitterroot respectfully submits the attached comments on the Calf Creek WMA Habitat Improvement project. Please send confirmation of receipt.

Jeff Lonn member, Friends of the Bitterroot

April 26, 2021

Sharon Rose

Region 2 FWP 3201 Spurgin Rd. Missoula, MT 59804

Re: Comments from Friends of the Bitterroot, regarding Calf Creek Wildlife Management Area Habitat Restoration Project

E-mailed to <u>shrose@mt.gov</u> Please acknowledge receipt.

Thank you for the opportunity to comment on the Calf Creek WMA Habitat Restoration Project. The following comments are submitted on behalf of Friends of the Bitterroot. They are based on the draft EA, an excellent day-long field trip led by Rebecca Mowry and Jason Parke of FWP, and several additional field days reviewing proposed actions, as well as past recreational visits to the Calf Creek WMA hiking and biking.

Montana Fish, Wildlife & Parks (FWP) proposes to conduct habitat restoration treatments on 1,116 acres of forest and grass/shrublands on its Calf Creek Wildlife Management Area (CCWMA). The Calf Creek WMA is located in the Bitterroot Valley of west-central Montana, in Ravalli County, on the west slope of the Sapphire Mountains south of Willow Creek. The nearest communities are Corvallis to the northwest and Hamilton to the west.

A significant omission in the EA is the lack of any discussion of the cumulative impacts of the CCWMA project with the enormous proposed Bitterroot National Forest Gold-Butterfly timber project, which lies adjacent to the CCWMA. Environmental effects of the two projects should be considered together. Apparently, the CCWMA project was suggested by BNF because "there may be efficiencies in doing the two projects together (from a FWP Commissioners meeting). This concerns us. For example, the roads proposed to be reopened on the CCWMA connect with logging roads on the BNF within the Gold-Butterfly project area. Although Rebecca and Jason assured us BNF logs would not be hauled through the CCWMA, we would like this confirmed in writing.

Comments below are referenced to pages in the EA:

EA p. 11. Purpose to "improve elk and deer winter forage". There appears to be little scientific evidence that your proposed activities will actually accomplish this objective. Papers sent by Rebecca in support of the proposed actions provide little evidence that the proposed activities will result in improvement of forage. Proffitt et al (2019) examine only fire's relationship to forage in coniferous forests and conclude:

"Our results also indicate fire most strongly affects elk nutritional resources on summer, not winter, ranges. We found that prescribed fires within our study area did not mimic the effect of natural wildfires. In dry forests recently burned by prescribed fire, summer herbaceous forage abundance was lower than in dry forests recently burned by wildfire. Winter herbaceous forage abundance was greater for this same

comparison; however, larger uncertainty existed in the estimates. Both summer and winter shrub forage abundance were greater in areas burned by prescribed fire as compared with wildfire; however, shrub forage species had relatively low importance in the diets of elk."

CCWMA was established to "provide winter range for elk" (EA, p. 1). Prescribed fire is proposed in CCWMA, but the study found that prescribed fire did not mimic the beneficial effects of natural wildfires. They state: "while prescribed burns may be valuable for other purposes, wildfires may be more effective for improving summer and winter nutritional resources in coniferous forests."

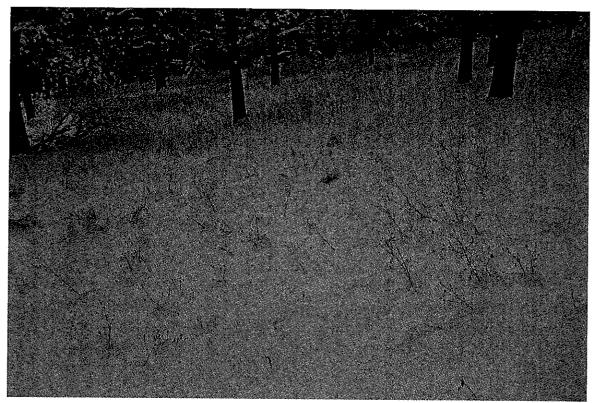
The Cook et al (2016) paper you sent examines elk nutrition in the mesic forests of the PNW, and has little applicability to the dry, inland forest of CCWMA.

The FWP-FS Elk Recommendations you sent recommended removing "conifers from areas that are desirable as grassland or shrubland areas; these are generally smaller trees on the edge between an opening". They did not advocate commercial forest thinning, stating: "While maintaining multi-layered canopies may be beneficial for elk on winter range, the group recognized that treatment of hazardous fuels in areas where winter range overlaps with a wildland urban interface may trump the needs of elk."

You state that mechanized equipment, like feller-bunchers and masticators, will accomplish much of the work. CCWMA already has an enormous knapweed problem in many of the open areas. Lavelle (1986) studied use of knapweed forage on CC and Threemile WMAs and concluded: "Areas dominated by spotted knapweed were not utilized as major feeding areas by deer and elk. Knapweed infestations seemed more detrimental to elk than to deer because the elk diet consisted mainly of grasses (which knapweed has replaced) compared to the evergreen shrub and tree diet of deer." Disturbance of the soil, grasses, and shrubs by machinery will result in extensive expansion of knapweed and other invasive weeds. Similar activity—commercial logging followed by prescribed burning—in the ponderosa forest on the west side of the valley at 4000-4500' as part of the BNF Hayes Creek project a decade ago--resulted in a hot, open forest with a ground cover of mostly knapweed that can best be described as a knapweed savanna. Your heavily mechanized treatments are likely to provide similar results. In fact, Fielder and Dobson (2006) concluded that the most effective way to increase invasive weeds in a ponderosa forest is commercial thinning followed by a prescribed burn.

Dodson, E.K., and C.E. Fielder, 2006, Impacts of restoration treatments on alien plant invasion: Journal of Applied Ecology **43**, 887–897.

Lavelle, D.A., 1986, Use and preference of spotted knapweed (Centaurea maculosa) by Elk (Cervus elaphus) and mule deer (Odocoileus hemionus) on two winter ranges in western Montana: M.S. thesis, University of Montana, Missoula, 72 p.



Winter view of the knapweed savanna created by BNF's Hayes Creek project using a feller-buncher (2010) followed by prescribed burning in spring, 2012. Elevation 4,200'.

EA p. 11, Purpose to restore grasslands/shrublands by conifer removal: Your 1954 air photo suggests this is necessary, but 1954 does not represent "historic conditions". Settlement by Europeans occurred about 75 years earlier. The 1954 conditions could have resulted from many different factors, including logging, farming, and/or stand-replacement wildfire. Your baseline for historic conditions should go back to at least 1910 before the fire suppression that you claim is responsible for the departure from historic conditions (itself a contentious claim in the scientific community). Almost no conifer seedlings were present in the areas of CCWMA we visited. Because ponderosa pine seeds need bare soil to germinate and thrive, perhaps the existing grasses and forbs are now preventing further encroachment. Driving heavy machinery across these areas to remove conifers will disturb soil and could have the effect of increasing seedling establishment, the opposite of your goal. A remedy would be to do the conifer removal by hand, non-commercially. This would also limit knapweed expansion and the destruction of sagebrush.



Picture shows dense ponderosa seedlings established in soil disturbed by BNF's Hayes Creek project, suggesting that your similar treatments may have the unintended consequence of increasing, rather than reducing, conifer encroachment. Elevation 4,200'.

We also observed that the marked boundaries of the GR units spill down into the more northerly and more leeward slopes. Conifers, both ponderosa and doug fir, would be expected to have been present historically in these areas, and so ecologically it makes sense to keep them, at least the larger ones. Hopefully, those boundaries were not drawn to provide more commercial timber for the contractor. Please move the boundaries of the GR units to the edges of the ridges.

EA p. 12, Purpose to promote stand conditions that would allow fire to burn at low-severity appropriate for the habitat type: There are no data to support the statement that, in CCWMA, fires historically burned frequently (every 5-50 years) at low to moderate severity, and have been absent during the last century due to fire suppression. First, if mountain big sagebrush (MBS) was common in pre-historic times as discussed on the field trip, then long fire-free intervals (>50 years) were also common. Baker (2006) found that MBS is intolerant of any fire, has long recovery times of 35-100 years, and has mean fire rotations of 70-200 years (MBS) or 35-100 years (mountain grasslands with a little MBP). Therefore, either fire intervals for CCWMA have been significantly underestimated, or sagebrush was not part of pre-1910 conditions. Baker (2006) went on to say "Given these long rotations, fire exclusion likely has had little effect in most sagebrush areas." Research by Michael Hoyt, using USFS fire

history data (included in his CCWMA comments), showed that fire suppression had nothing to do with conifer expansion in the CCWMA, so a "return to historic conditions of frequent fire" is not supported. There is also ample evidence in the scientific literature that fire frequency has been significantly overestimated for PP forests throughout the Rocky Mountains. Longer fire-free intervals argue for less treatment prior to re-introduction of fire. See reference list below.

- Baker, W.L., 2006, Fire and Restoration of Sagebrush Ecosystems: Wildlife Society Bulletin, v. 34, #1; p. 177-182.
- Arno, S.F.; T. D. Peterson. 1983. Variation in estimates of fire intervals: a closer look at fire history on the Bitterroot National Forest. Research paper INT-301. Ogden, UT: USDA, Forest Service, Intermountain Forest. and Range Exp. Station.
- Arno, S.F., Scott, J.H., and Hartwell, M.G., 1995, Age class structure of old growth Ponderosa Pine/Douglas Fir stands and its relationship to fire history: USFS Intermountain Research Station, Ogden Utah, Research Paper INT-RP-481, 29 p.
- Baker WL (2017) Restoring and managing low-severity fire in dry-forest landscapes of the western USA. PLoS ONE 12(2): e0172288. https://doi.org/10.1371/journal.pone.0172288. Frequent low severity fire rates have been overestimated in dry forests, meaning that understory shrubs and small trees could fully recover between low severity fires. Therefore less restoration treatment (thinning) is needed before reintroduction of fire.
- Baker, W.L., and Ehle, D., 2001, Uncertainty in surface-fire history: the case of ponderosa pine forests in the western United States: Canadian Journal of Forest Research. V. 31, p. 1205–1226. DOI: 10.1139/cjfr-31-7-1205. Examines the biases in fire scar studies, and finds that average fire return interval is much longer than previously thought.
- Baker, W.L., T.T. Veblen, and Sherriff, R.L. 2007. Fire, fuels and restoration of ponderosa pine Douglas-fir forests in the Rocky Mountains, USA. Journal of Biogeography, 34: 251-269. "Exclusion of fire has not clearly and uniformly increased fuels or shifted the fire type from low- to high-severity fires. However, logging and livestock grazing have increased tree densities and risk of high-severity fires in some areas. Restoration is likely to be most effective which seeks to (1) restore variability of fire, (2) reverse changes brought about by livestock grazing and logging, 3) ensure that degredation is not repeated."
- Brown PM, Kaufmann MR, Shepperd WD (1999). Long-term, landscape patterns of past fire events in a montane ponderosa pine forest of central Colorado. *Landscape Ecology* 14: 513-532.
- Fryer, Janet L. 2016. Fire regimes of Northern Rocky Mountain ponderosa pine communities. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). Available:

 www.fs.fed.us/database/feis/fire_regimes/Northern_RM_ponderosa_pine/all.html
- Odion D.C., Hanson C.T., Arsenault A., Baker W.L., DellaSala D.A., Hutto R.L., Kienner W., Moritz M.A., Sherriff R.L., Veblen T.T., Williams M.A. 2014. Examining historical and current mixed-severity fire regimes in ponderosa pine and mixed-conifer forests of western North America. PLoS ONE 9: e87852. "Our findings suggest that ecological management goals that incorporate successional diversity created by fire may support characteristic biodiversity, whereas current attempts to "restore" forests to open,

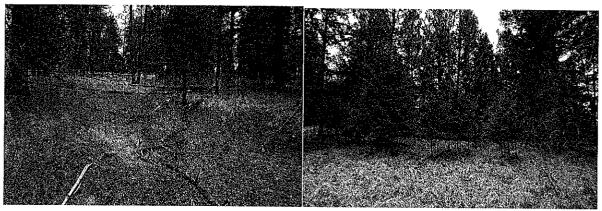
- low-severity fire conditions may not align with historical reference conditions in most ponderosa pine and mixed-conifer forests of western North America."
- Pierce, J., and Meyer, G., 2008, Long-Term Fire History from Alluvial Fan Sediments: The Role of Drought and Climate Variability, and Implications for Management of Rocky Mountain Forests: International Journal of Wildland Fire, v. 17, n. 1, DOI: 10.1071/WF07027
- Swetnam, T.W., and Baisan, C.H., 1996, Historical Fire Regime Patterns in the Southwestern United States
 Since AD 1700, in CD Allen (ed), Fire Effects in Southwestern Forest: Proceedings of the 2nd La Mesa
 Fire Symposium, p. 11-32: USDA Forest Service, Rocky Mountain Research Station, General Technical
 Report RM-GTR-286. Elevation and forest type were often weak determinants of fire frequency. Some
 of the variations in fire interval distributions between similar elevation or forest types were probably
 due to unique site characteristics, such as landscape connectivity (Le., ability of fires to spread into
 the sites), and land-use history. Differences in the sizes of sampled areas and fire-scar collections
 among the sites also limit ability to compare and interpret fire interval summary statistics.
- Williams, M.A., W.L. Baker. 2012b. Comparison of the higher-severity fire regime in historical (A.D. 1800s) and modern (A.D. 1984-2009) montane forests across 624,156 ha of the Colorado Front Range. Ecosystems 15: 832-847. Recent high severity fires in Ponderosa-Doug Fir forests in Colorado are not outside historical (1800s) averages.

In addition, there is little scientific evidence that thinning forests will reduce fire severity, and scant evidence that reducing fire severity is necessary or even desirable. Some recent research shows that canopy thinning and ladder fuel removal may actually increase fire spread and severity because it increases wind speeds and fuel dryness. See references below.

- Atchley, A.L., R. Linn, A. Jonko, C. Hoffman, J.D. Hyman, F. Pimont, C. Sieg, R.S. Middleton, 2021. Effects of fuel spatial distribution on wildland fire behavior. International Journal of Wildland Fire. doi:10.1071/WF20096
- Banerjee, T., W. Heilman, S. Goodrick, J.K. Hiers, and R. Linn, 2020. Effects of canopy midstory management and fuel moisture on wildfire behavior. Nature, Sci Reps 10:17312. https://doi.org/10.1038/s41598-020-74338-9
- Coen, J.L., E.N. Stavros, and J.A. Fites-Kaufman, 2018. Deconstructing the King megafire. Ecological Applications, 28(6), 2018, pp.1565-1580.
- Cruz , M.G., M.E. Alexander, and J.E. Dam, 2014. Using modeled surface and crown fire behavior characteristics to evaluate fuel treatment effectiveness: a caution. Forest Science 60:1000-1004.
- **EA p. 12, Treatments would include mechanized removal:** The significant adverse impacts of commercial mechanized treatment are discussed above in these comments. All objectives can be accomplished using non-commercial activities and without heavy equipment.

As an example, we visited unit FR-1. This unit had no commercial sized timber that needed to be removed to achieve objectives (see photos below). In most areas, prescribed fire could occur without any pre-treatment. A few areas had thicker, small diameter trees that could be removed by hand thinning if necessary.





Pictures above show the open character of FR-1. Commercial harvest is unnecessary prior to prescribed fire. Either fire or non-commercial hand thinning could be used to eliminate the small doug firs.

EA p 12: treatments for site improvements, maintenance, and reclamation of roads in order to facilitate logging and log hauling. You are proposing to open 10 miles of roads, many of which are shady single and double-track trails extensively used by hikers, bikers, and horseback riders (see photo below), turning them into wide dusty logging roads. Opening the road along Gibbons Creek that lies within the Streamside Management Zone (SMZ) may result in a violation of Montana's SMZ laws. Road construction is prohibited within the SMZ with only removal of vegetation and regrading of the original surface allowed. Widening or cutting and filling are prohibited. Based on our measurements, the original road prism is 10 feet, and in places it has narrowed to 8 feet. It is unsuitable for log hauling. Reconstructing/widening the road would be in violation of SMZ regulations. In addition, Gibbons Creek and several others are tributaries of Willow Creek, an already sediment-impaired bull trout fishery. Please analyze the effects of the proposed activities on bull trout in Willow Creek.

Conversion of the non-motorized trails to wide dusty logging roads will be very unpopular with local recreationalists. A better approach to roads would be to address the significant erosion and rutting problems that currently exist on the roads in the western part of the CCWMA. Leave the existing, naturally reclaimed roads as they are.



Picture shows typical trail following an old naturally reclaimed road that is planned for conversion to a logging road. This one is along Gibbons Creek, and its reopening may violate Montana SMZ laws.

EA p. 12 Prescribed burning. Historic wildfire would only have occurred in summer and early fall, when many grasses and forbs are dormant, so limit prescribed fire to these times. Spring burns harm groundnesting birds and grasses and forbs that are sending up shoots. Realize that sagebrush will not survive any fire, no matter the severity (Baker, 2006). Do any prescribed burning in the late summer or fall.

EA p. 12 Noxious weed control. Knapweed is already a big problem in the CCWMA, so focusing on reducing knapweed would be a less costly and more effective way to improve forage than would logging. Reducing knapweed while increasing natives via biocontrols should be a centerpiece of your Calf Creek proposal. Knapweed biocontrol is fairly effective and has the public's broad support. In contrast, using herbicides typically just replaces the knapweed with cheatgrass. Use of herbicides also requires that their effects on wildlife, including all organisms in the food chain, be analyzed. Stick to hand pulling/digging and bio-controls like knapweed weevils. This area is supposedly managed for the benefit of wildlife.

EA p. 12 Conifer removal using improvement cuts. An "improvement cut" is a silvicultural treatment designed to grow the most trees the fastest in order to maximize timber production. Should this method be used in a WMA where wildlife is supposedly the priority? There is ample scientific evidence that humans cannot tell which individuals, or even which species, will be best adapted to survive a changing climate or future disease and insect outbreaks (see reference list below). Abandon the commercial logging activity and let nature select which trees will be fittest for survival.

8

- Bailey, J.K., Deckert, R., Scheitzer, J.A., Rehill, B.J., Lindroth, R.L., Gehring, C., and Whitham, T.G., 2005, Host plant genetics affect hidden ecological players: links among *Populus*, condensed tannins, and fungal endophyte infection: Canadian Journal of Botany, v. 83, p. 356–361 (2005) doi: 10.1139/B05-008. *Genetic differences in Cottonwoods that cannot be visually determined have profound effects on the forest ecosystem.*
- Carswell, C., 2016, Genetic research lays foundation for bold conservation strategies: High Country News, June 8, 2016. Pinyon pines susceptible to moths turn out to be the most drought resistant and survive over healthy appearing ones.
- Christiansen, E., R.H. Waring, and A.A. Beeryman. 1987, Resistance of conifers to bark beetle attack:

 Searching for general relationships: Forest Ecology and Management, v. 22, p. 89-106. Review of factors in bark beetle resistance showing complexity and suggesting it is difficult to determine visually which trees will be resistant.
- McNulty, S.G., Boggs, J.L., and Sun, G., 2014, The rise of the mediocre forest: why chronically stressed trees may better survive extreme episodic climate variability: New Forests, v. 45, p. 403-415. Finds that the healthy looking trees are not the ones that best survive climate change due to slower growth and higher root to foliage ratios. You cannot select for adaptive trees; only nature can do that.
- Six, D.L., Biber, E., and Long, E., 2014, Management for Mountain Pine Beetle Outbreak Suppression: Does Relevant Science Support Current Policy? Forests, v. 5, p. 103-133, doi:10.3390/f5010103.

 Thinning results in less live trees afterwards than just letting MPB go their course. You may actually be selecting the wrong (genetically less resistant) trees by thinning.
- Six, D.L., Vergobbi, C. and Cutter, M., 2018, Are survivors different? Genetic-based selection of trees by mountain pine beetle during a climate-change-driven outbreak in a high-elevation pine forest: Plant Science, Plant Sci., 23 July 2018 | https://doi.org/10.3389/fpls.2018.00993 Genetic differences that cannot be determined visually determine the variable susceptibility to bark beetles in lodgepole pine.
- Sthultz, c.M., Gehring, C.A., and Whitam, Deadly combination of genes and drought: increased mortality of herbivore-resistant trees in a foundation species: Global Change Biology, v. 15, 1949--1961, doi: 10.1111/j.1365-2486.2009.01901.x The least vigorous pinyon pines with growth slowed by moth caterpillars had much greater survival rates during drought than healthy appearing trees.
- EA p. 13 Ground-based logging equipment would be required to operate under relatively dry, frozen, or snow-covered conditions in order to minimize impacts to soil and vegetation. How will FWP ensure this requirement will be followed? CCWMA does not generally experience long frozen or snow-covered conditions. On BNF projects, these requirements are often specified, but rarely enforced, resulting in significant, widespread adverse soil impacts.
- **EA p. 13** To minimize the spread of noxious weeds, all equipment would be cleaned and inspected by **FWP**. With all the noxious weeds already present at CCWMA, this requirement will be senseless. BNF projects always include the same requirement, and it does nothing to prevent weed invasions. While noxious weeds like knapweed and cheat grass are difficult to eradicate, it is relatively easy to prevent their spread. Simply avoid soil and ground disturbance, which again argues for non-commercial treatments only.
- **EA p 13 Unit prescriptions.** Add an upper diameter limit for harvest of 16 dbh to live trees in addition to the one for snags. This would ensure that most large trees are retained, in line with the ICO principles

Jason says he is using. We support the ICO principles and hope that you do not drop them to qualify for funding as a fuel reduction project.

Summary: Treatment of 1,116 acres is nearly half of the CCWMA. The choice between the No Action and Preferred Alternatives is an all-or-nothing approach. We would prefer an alternative be developed which concentrates on the control/eradication of the two most prevalent invasive plants, spotted knapweed and cheatgrass using biocontrol and non-mechanical methods (hand removal). Because the efficacy of the proposed conifer removal and forest thinning to improving wildlife habitat is unproven and may have unintended detrimental consequences, FWP should apply these measures slowly and carefully. Project size should be reduced, and FWP should apply conifer removal and forest treatments carefully and non-commercially, without heavy machinery and road reopening. This would allow monitoring and evaluation of results and the opportunity for adaptive management, avoiding the Severide Principle that states: "Most problems begin as a solution". Try not to let your solutions become the next big problem.

We ask that you please keep us fully informed of all further developments on the Calf Creek WMA project proposal. It is our intention that the references cited in this letter be included in the project file. Please contact us if you need a copy of any of the cited references.

Sincerely,

Jim Miller, President Friends of the Bitterroot PO Box 442 Hamilton, MT 59840 millerfobmt@gmail.com

#21

Rose, Sharon

From:

heather@exitrealtybv.com

Sent:

Thursday, April 29, 2021 1:21 PM

To:

Rose, Sharon

Subject:

21 (Lupton, S&C Cattle Co)--[EXTERNAL] Feedback for Calf Creek Project

laron,

with Rebecca Mowry regarding the Calf Creek WMA Habitat Restoration Area project today. The neighboring 600 acret of Calf Creek is owned by the Cumming family, and then we are west of them with 160 acres. After my conversation today, I felt it necessary to weigh in with public comment about the Calf Creek restoration project.

2 Cumming property and our property have forested area that needs management due to the heavy fire risk because e infestation. DNRC Forester Thayer Jacques visited our property last fall and agreed our land, as well as the Cummi in dire need of management/thinning for the betterment of the resident wildlife and overall forest health.

very much in favor of this project as a forest fire would be devastating to these mountains and the resident wildlife on and vegetation. There is a high potential of a forest fire due to the deadfall and declining tree health due to disea a tinder box at present. We're very concerned with the volatile conditions at hand, and if there is any fire within thes ins, it will likely devastate thousands of acres on both the Calf Creek WMA and adjoining private property owners.

hopeful this project will move forward to allow for a healthier forest via management and thinning. If the forest is de the resident wildlife population will likely move on to "greener pastures" which is a huge draw and value for this area currence for us to see the massive resident elk herd across Calf Creek, the Cumming property, as well as our propert, the pheasants, quail, mule and whitetail deer, and many other birds are ever present here as well.

I to live over off N Gold Creek in Hamilton and the Roaring Lion fire in 2016 absolutely devastated the landscape and ealth. Our trees there were ripe for the picking with the wood beadles and we would be heartbroken if Calf Creek and t parcels were to be decimated in that manner.

e been working with the Cumming family to try and see if our properties could be thinned/managed as well for the se st health. We have had a difficult time acquiring loggers willing to work on our property since they deem it a "small j

of the mind that if the Calf Creek project moves forward, we can hopefully utilize the logger that wins the bid for the Hopefully since their equipment would be in the area we could employ them to manage our forest health as well.

I is to minimize the risk of forest fires and truly believe this can be achieved through proper forest management and . If the forest is destroyed by fire, the wildlife that we so cherish will likely move from the area and the overall healtl ountains would be affected for generations.

ould please keep us in the loop with any forward momentum with the project, as well as which contractor wins the bitork, we would really appreciate it.

egards,

Lupton 2-4527



affeather V

REAL ESTATE BROKER EXIT REALTY BITTERROOT VALLEY

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Heather Exit Realtor

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#22a

From:

Kierstin Schmitt <montanaks@gmail.com>

Sent:

Tuesday, March 9, 2021 6:48 AM

To:

Rose, Sharon

Subject:

22a (Schmitt)--[EXTERNAL] Calf Creek WMA

Hello,

I'm writing regarding Calf Creek WMA & the proposed restoration/logging project. I only just received notice of this proposal and would appreciate an extension of the comment period to 1 month after the area is open to the public in May. I live close by & have recreated on the area for the last 25 years so this is a very important place for the public and the wildlife alike. There are several issues with this plan that the public will want to review and visit the areas before commenting appropriately. For example, the proposed cutting of 18' diameter Ponderosa in areas where other species are preferred, expanding (improving) roads and no discussion of the actual science related to how this helps the elk population. Please consider extending the comment period to June so the public has time & awareness of this project and can review the areas of the project.

Thank you, Kierstin Schmitt Corvallis, MT

22-6-1

Rose, Sharon

From:

Kierstin Schmitt <montanaks@gmail.com>

Sent:

Thursday, April 29, 2021 11:08 PM

To:

Rose, Sharon

Subject:

22b1 (Schmitt)--[EXTERNAL] Comments on Calf Creek

Comments on the Draft Environmental Assessment for the Calf Creek Wildlife Management Area Habitat Restoration Project (February 2021):

I have lived within 1 mile of Calf Creek WMA for 25 years and have spent many many day a hiking and biking the area and I'm pretty familiar with it. What draws me to Calf Creek is the stunning beauty, the chance to see wildlife, wildflowers, non-weed infested native landscapes, sweeping views of the valley and sky, and it's proximity to my house. My daughter & I have shared time hiking there since she was born 22 years ago. It's a special place in the valley for it's intrinsic value, aesthetic and it's abundance of space for wildlife & the native landscape to thrive. I recognize that there are concerns about the "encroachment" of trees in the elk-favored grasslands, fire concerns, and a desire to increase preferred species.

The proposed project on the surface may make sense to some people based on what's written in the DEA. I, however, do not agree with all that is presumed about the needs of this WMA. Specifically, my concerns about this project stem from a nebulous desired outcome of improving elk habitat, using unproved practices of using commercial logging to improve forage, the potential for a significant increase in weed populations (knapweed & cheatgrass especially), the expansion of existing roads from what are now tranquil trails for wildlife and humans, the potential for those roads to be used by the state to haul logs for the Gold Butterfly project, the lack of a comprehensive review of the combined impacts of the Gold Butterfly and Calf Creek projects, the use of commercial logging as a means to fund the FWP forest management program at the expense of the very wildlife this project presumes to help, the proposed use of heavy machinery & mechanical extractive equipment, the introduction of aspens where water is a increasingly scarce resource and most importantly, the belief that by interfering in the natural process of a native landscape that the wildlife will be better off than if we left it alone.

What I want to see happen is a shift in focus to how to improve life for the elk and other creatures that inhabit Calf Creek using the least intrusive, least disruptive and least expensive methods. If anything, keeping Calf Creek closed until mid-May seems like a simple start. Working on the existing weed infested areas with biocontrol and IPM, using non-commercial treatments if any tree removal is required and provide more alternatives than no action and this flawed proposal.

I appreciate the genuine desire to help the elk and Rebecca & Jason seem passionate about their project, However, when we take the personal and personnel effort out of the equation, I think the truth will be revealed, that this project does not justify the time, energy, money, disturbance, disruption and destruction it will create.

Thank you for your time and appreciate the opportunity to comment,

Kierstin Schmitt Corvallis, MT

22.62

Rose, Sharon

From:

Kierstin Schmitt <montanaks@gmail.com>

Sent:

Friday, April 30, 2021 8:37 AM

To:

Rose, Sharon

Subject:

22b2 (Schmitt)--[EXTERNAL] Re: Comments on Calf Creek

Good morning, I've reformatted my letter for easier readability.

Comments on the Draft Environmental Assessment for the Calf Creek Wildlife Management Area Habitat Restoration Project (February 2021):

I have lived within 1 mile of Calf Creek WMA for 25 years and have spent many many day a hiking and biking the area and I'm pretty familiar with it. What draws me to Calf Creek is the stunning beauty, the chance to see wildlife, wildflowers, non-weed infested native landscapes, sweeping views of the valley and sky, and it's proximity to my house. My daughter & I have shared time hiking there since she was born 22 years ago. It's a special place in the valley for it's intrinsic value, aesthetic and it's abundance of space for wildlife & the native landscape to thrive. I recognize that there are concerns about the "encroachment" of trees in the elk-favored grasslands, fire concerns, and a desire to increase preferred species.

Specifically, my concerns about this project stem from:

- a nebulous desired outcome of improving elk habitat,
- using unproved practices of using commercial logging to improve forage,
- the potential for a significant increase in weed populations (knapweed & cheatgrass especially),
- the expansion of existing roads from what are now tranquil trails for wildlife and humans,
- the potential for those roads to be used by the state to haul logs for the Gold Butterfly project,
- the lack of a comprehensive review of the combined impacts of the Gold Butterfly and Calf Creek projects,
- the use of commercial logging as a means to fund the FWP forest management program at the expense of the very wildlife this project presumes to help,
- the proposed use of heavy machinery & mechanical extractive equipment, the introduction of aspens where water is a increasingly scarce resource
- and most importantly, the belief that by interfering in the natural process of a native landscape that the wildlife will be better off than if we left it alone.

What I want to see happen is a shift in focus to how to improve life for the elk and other creatures that inhabit Calf Creek using the least intrusive, least disruptive and least expensive methods. If anything,

22.62

keeping Calf Creek closed until mid-May seems like a simple start. Working on the existing weed infested areas with biocontrol and IPM, using non-commercial treatments if any tree removal is required and provide more alternatives than no action and this flawed proposal.

I appreciate the genuine desire to help the elk and Rebecca & Jason seem passionate about their project, However, when we take the personal and personnel effort out of the equation, I think the truth will be revealed, that this project does not justify the time, energy, money, disturbance, disruption and destruction it will create.

Thank you for your time and appreciate the opportunity to comment,

Kierstin Schmitt Corvallis, MT

On Apr 29, 2021, at 11:08 PM, Kierstin Schmitt < montanaks@gmail.com > wrote:

Comments on the Draft Environmental Assessment for the Calf Creek Wildlife Management Area Habitat Restoration Project (February 2021):

I have lived within 1 mile of Calf Creek WMA for 25 years and have spent many many day a hiking and biking the area and I'm pretty familiar with it. What draws me to Calf Creek is the stunning beauty, the chance to see wildlife, wildflowers, non-weed infested native landscapes, sweeping views of the valley and sky, and it's proximity to my house. My daughter & I have shared time hiking there since she was born 22 years ago. It's a special place in the valley for it's intrinsic value, aesthetic and it's abundance of space for wildlife & the native landscape to thrive. I recognize that there are concerns about the "encroachment" of trees in the elk-favored grasslands, fire concerns, and a desire to increase preferred species.

The proposed project on the surface may make sense to some people based on what's written in the DEA. I, however, do not agree with all that is presumed about the needs of this WMA. Specifically, my concerns about this project stem from a nebulous desired outcome of improving elk habitat, using unproved practices of using commercial logging to improve forage, the potential for a significant increase in weed populations (knapweed & cheatgrass especially), the expansion of existing roads from what are now tranquil trails for wildlife and humans, the potential for those roads to be used by the state to haul logs for the Gold Butterfly project, the lack of a comprehensive review of the combined impacts of the Gold Butterfly and Calf Creek projects, the use of commercial logging as a means to fund the FWP forest management program at the expense of the very wildlife this project presumes to help, the proposed use of heavy machinery & mechanical extractive equipment, the introduction of aspens where water is a increasingly scarce resource and most importantly, the belief that by interfering in the natural process of a native landscape that the wildlife will be better off than if we left it alone.

What I want to see happen is a shift in focus to how to improve life for the elk and other creatures that inhabit Calf Creek using the least intrusive, least disruptive and least expensive methods. If anything, keeping Calf Creek closed until mid-May seems like a simple start. Working on the existing weed infested areas with biocontrol and IPM, using non-commercial treatments if any tree removal is required and provide more alternatives than no action and this flawed proposal.

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2262

destruction it will create.

Thank you for your time and appreciate the opportunity to comment,

Kierstin Schmitt Corvallis, MT

#23

From:

Dylan Flather <dylan.flather@gmail.com>

Sent:

Thursday, April 29, 2021 11:22 PM

To:

Rose, Sharon

Subject:

23 (Flather)--[EXTERNAL] Comments on Calf Creek

I would like to recommend the following regarding the Calf Creek Wildlife Management Area (WMA) proposal:

- 1. Do not use machines in the Calf Creek WMA
- 2. Knapweed should be controlled before considering ground disturbing management activities.
- 3. The area's winter forage should be surveyed and analysis completed on the effects of mechanized thinning and burning on all big game winter food sources.
- 4. Cumulative effects from the neighboring 55,000 acre Gold Butterfly project should be analyzed before this project moves forward.
- 5. Recommend only non-commercial treatment: non-commercial work could meet project objectives without increasing weeds, disturbing wildlife, and turning popular trails into dusty roads.

Overall, I would like to see a comprehensive weed management program with bio-controls and trail rehabilitation where needed instead of the current proposal with commercial harvest.

Thank you for your consideration,

Dylan Flather

#24

From:

Sean <macnee@gmail.com>

Sent:

Friday, April 30, 2021 10:01 AM

To:

Rose, Sharon

Subject:

24 (anon 1)--[EXTERNAL] Calf creek small habitat restoration project.

Hello,

I'd like to comment on the calf creek WMA habitat restoration project.

I am opposed to this and don't think logging or heavy machinery have a place to be used up there. I'm a dirt biker, hiker, mountain biker and member of search and rescue. I think logging and changing the area is a bad idea.

Thanks

Sean.

Sent from my iPad

#25

Rose, Sharon

From:

Jenny West <jennywest30@yahoo.com>

Sent:

Friday, April 30, 2021 10:59 AM

To:

Rose, Sharon

Subject:

25 (West)--[EXTERNAL] Comments of Calf Creek

Dear FWP,

I grew up in the Bitterroot Valley and I am frequent hiker and mountain biker of the Calf Creek area. I am opposed to the Habitat Restoration Project. I think that the methods proposed to be used to extract timber, build a logging road, and mitigate the influenced zones, will do more harm than good. Reading the EA report had my gut in knots. The methods used to extract logs is far too invasive. To build a 10 mile road and rip up vegetation along the way to make it 30 feet wide, is far more damaging than cutting trees that are proposed. A Commercial logging operation is not going to be as sensitive as a non-commercial thinning project. Also, look at the the invasive WEEDS such as knapweed and cheat grass from the horses that use the area. Weeds are taking over the native grasses more so an 80 year old ponderosa pine tree. Also, I have never in all my years of hiking up at Calf creek have seen an aspen tree. Aspens require water and a root system so more aspens can grow.

Our recreation areas in the Bitterroot Valley are all getting hit hard with logging and burning. Larry Creek and Lake Como both had prescribed burning done this spring. Coyote Coulee has undergone a huge logging/thinning project that has a huge logging road ripped up the middle of the trail system. When is enough enough?

I can see the concern and desire to help the elk, but I feel a less invasive methods can be used to minimize impact up at Calf Creek. Methods such as spot thinning treatments, burning, and working on the existing weed infested areas with biocontrol treatments would be a great start.

Thank you for your time!

Sincerely,

Jenny West 621 N.4th Street Hamilton, MT. 59840

#26

From:

Gary Cuffin <gcuffin@gmail.com>

Sent:

Friday, April 30, 2021 1:26 PM

To:

Rose, Sharon

Subject:

26 (Cuffin)--[EXTERNAL] calf creek

Is this necessary so close to an urban area? Do the benefits justify tyhe cost, and the inconvenience to the local residents? The biology seems far from proven. My opinion is that more research needs to be done before this tact is taken.

Gary Cuffin 349 Moose Hollow Victor From:

Aimee Kelley <aimee@greatbearnativeplants.com>

Sent:

Friday, April 30, 2021 4:50 PM

To:

Rose, Sharon

Subject:

27 (Kelley)--[EXTERNAL] Concerns about Calf Creek Project

Hello,

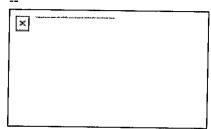
I am resident here in Hamilton.

I have concerns about the project proposed up Calf Creek.

I am most concerned about the *alomst* inescapable reality there will be a significant increase in noxious weed populations in the area. Currently, the Bitterroot National Forest has a wildly low budget to manage weeds and I am concerned this area would not receive the attention it deserves.

I am an avid runner and hiker and am concerned about the widening of these trails to be used as logging roads for this and future projects

Aimee Kelley 406-381-9829



406-381-9829

https://greatbearnativeplants.com [greatbearnativeplants.com]

#28

From:

Gary Milner <garymt1915@gmail.com>

Sent:

Friday, April 30, 2021 6:45 PM

To:

Rose, Sharon

Subject:

28 (Milner)--[EXTERNAL] Calf Creek comments

Attachments:

Calf Creek Comments.docx

Hello Sharon, please find attached my comments about the Calf Creek Project. Would you please email me back so I'll know you received them? Thank you.

Sincerely, Gary Milner PO Box 961 Corvallis, MT 59828 April 30 2021 Sharon Rose Region 2 FWP 3201 Spurgin Rd. Missoula, MT 59804

Thanks for the opportunity to comment on the Calf Creek WMA Habitat Restoration Project. I live approximately one mile from the project area and like many, frequent it often. I believe restoring grass/shrublands and improving elk and deer winter forage are appropriate management goals, however, I would like to see a very different approach taken.

Even when I first visited the area over two decades ago, I was stuck by the abundance of spotted knapweed. This in a state management area with the primary management goal of providing winter range for elk. I would like to see far less emphasis on the removal of conifers and more emphasis on bio controls and perhaps timed small-scale mowing near the West entrance. I believe if the agency was committed to improving ungulate forage, bio controls and educational outreach programs could have been implemented years ago.

Large old trees are a rarity in the Bitterroot Valley. It is not unusual to see some large Doug Fir trees mixed with Ponderosa Pine. I believe some Fir trees are appropriate for the area even though the area is relatively dry. Old Growth trees and Old Growth stands are rare in the Bitterroot due to excessive logging in the past. These trees (individuals and groups) should be left and ecological integrity should be placed ahead of economic interests. I hope you will not cut any trees over 12 inches DBH regardless of species.

In the Draft Environmental Assessment, you mention dwarf mistletoe, diseases and insects. Those are naturally occurring components of the ecosystem and should not be used as an excuse to log trees.

It is my understanding that the project will build or reconstruct 10 miles of roads. I walk on many of these "roads" that have long been naturally restored and are now pleasant trails that harbor a lot of life. 10 miles of roads in a project area of 1,116 acres seems like an incredibly dense network of roads. Are there standards for road densities in this type of habitat or MA? I hope those trails above and near Stuart Creek will be left alone. This area from my observations, actually has the least amount of knapweed. It seems removing conifers and opening the area up will encourage spotted knapweed growth as the area will be exposed to more sunlight, be drier, and suffer from soil disturbance. Does work on that section and the Gibbons creek section comply with Montana Streamside Management Zone laws? If one of the goals is to restore the area to "historic conditions" then less roads seem in order. These creeks are also tributaries to Willow Creek which is a know bull trout creek and sediment impaired. Will the work have impacts on Willow Creek fisheries?

The DEA states that "Noxious weed spread would be mitigated by pre-treating infestations prior to ground disturbing activities. . ." What will the pre-treatment be? The DEA also states that's equipment is to be washed before entering the WMA. This is a good idea but given the abundance of spotted knapweed in the area it seems the machinery will be transporting weeds regardless. The machinery will be transporting weeds to areas (which are few in the MA) that do not have weeds.

It has been my experience that restoration, reseeding, and general reclamation work is often dependent on funding and sometimes does not happen at all or years after logging has finished. The DEA suggests

restoration treatments are expected to be partially offset by the sale of merchantable timber byproduct. This does not sound like a guarantee that restoration work will happen in a timely manner. Can you provide a timeline that clearly states when restoration work will be initiated and completed? Given the amount of visitor use the area receives, I believe this will be an important component of public support.

As you know the MA is adjacent to the Gold Butterfly Timber Sale. How will both of these projects influence elk and other wildlife? What are the cumulative effects of these projects? The cumulative effects of these projects should be brought forth to the public. Is the MA to be used as a haul route for log trucks associated with the Gold Butterfly project?

The area that is primarily located in Sections 7 and 8 along and near the Stuart Creek drainage to me is special. Those rocky outcrops, large Ponderosas and Firs, the juniper, and all the riparian variety make that area unique and valuable habitat for many plants and animals. It is also a special place for human visitors. I would hate to see machinery brought into that area. I encourage you to not allow heavy machinery in that area.

In conclusion, I hope you will provide another alternative that relies less on timber removal and instead focuses more on bio-controls and non-mechanical treatments. Many people use that area and I would hate to see the use of chemicals as a management tool there. Chemicals should not be used. I hope you will reconsider the project size and road reopening and provide the public with a summary of how you will monitor/evaluate the project in terms of achieving the stated goals.

Sincerely,

Gary Milner PO BOX 961 Corvallis, MT 59828