January 23, 2019

Plumas National Forest
Attn: Katherine Carpenter
159 Lawrence Street
Quincy, CA 95971

Submitted online at https://cara.ecosystem-management.org/Public//CommentInput?Project=47124

Re: OSV Use Designation #47124

Dear Ms. Carpenter:

Please accept these comments on behalf of Winter Wildlands Alliance and Snowlands Network on the Draft Environmental Impact Statement (DEIS) for the Plumas National Forest Over-Snow Vehicle (OSV) Use Designation. Winter Wildlands Alliance (WWA) is a national nonprofit organization dedicated to promoting and preserving winter wildlands and a quality human-powered snowsports experience on public lands. WWA represents over 50,000 members and 41 grassroots partner organizations in 16 states, including Snowlands Network. Snowlands Network is a membership-based organization that advocates for non-motorized backcountry winter recreation. Snowlands and WWA members often visit Plumas National Forest (PNF) in the winter and spring seeking opportunities for winter recreation in quiet, non-motorized, conflict-free environments. Members of both organizations will be significantly affected by the OSV Use Designation decision.

Our organizations, together with the Center for Biological Diversity, were plaintiffs in the lawsuit that instigated the OSV planning effort, and we obtained the right in the Settlement Agreement to submit an alternative to be considered in the analysis. Our alternative, submitted August 3, 2015, has been incorporated in the DEIS as the basis for Alternative 3.

SUMMARY

Overall we are supportive of Alternative 2. We appreciate that Alternative 2 does not designate the area east of Bucks Lake Wilderness, the Bucks Creek Loop Trail, the Historic Lost Sierra Ski Traverse Route, and the backcountry ski zone on Thompson Peak by Susanville. However, we urge that the Forest Service also include specific amendments from Alternative 5 to protect the Middle Feather, Bucks Creek, Chips, Grizzly, & Adams Peak proposed Wilderness Areas, the Lakes Basin Snowshoe and Ski Trails, Little Jamison Basin and to no longer groom route 24N33 to help prevent OSV trespass into the Bucks Lake Wilderness.

Finally, in examining the maps in the DEIS we see that there are several small and isolated areas that are proposed to be designated for OSV use in each Alternative. As best we can tell, many of these isolated parcels are remnants from a GIS mapping exercise and would not make sense to designate because they are not connected to a larger OSV use area, there is no way for an OSV user to access them, and/or they don't really provide an OSV opportunity. In the final over-snow vehicle use map (OSVUM) the PNF should make sure that all designated OSV areas can be accessed by the public from an OSV-compatible access point.

Recommendations to improve Alternative 2

- We endorse Alternative 2 for the Antelope and Davis OSV Areas.
- For the Bucks OSV Area, do not designate the following areas for OSV use: west of Pipeline Road (24N24); 24N35 and 24N25Y; west of 23N19 near Lookout Rock; and do not permit grooming on road 24N33.
- For the Canyon OSV Area, do not designate the following areas for OSV use: west of the Chips Creek roadless area to the PNF boundary (except at Ben Lomond) and west of 26N26 to Yellow Creek.
- For the Frenchman OSV Area: do not designate any portion of the Adams Peak roadless area or lands east of the roadless area to the forest boundary for OSV use.
- For the Lakes Basin OSV Area: do not designate OSV use west of the Gold Lake Highway in the vicinity of the Lakes Basin and Graeagle Creek ski trails; do not designate the Little Jamison Basin open for OSV use.
- For the La Porte OSV Area: do not designate the portion of Onion Valley that is west of Placer Diggings, as well as Last Chance, Sawmill Tom, Washington Creeks, and the Dixon Creek/Buzzards Roost Ridge roadless area for OSV use.
- At a minimum do not designate OSV use within 500 feet of the centerline of the Pacific Crest Trail (PCT)
- PCT crossings should generally be no wider than 1/8 mile, but if the distance between crossings is greater than 5 miles, then up to ¼-mile wide crossing may be acceptable.
- Locate OSV area boundaries in a manner that avoids the PCT *and* corresponds with obvious physical or topographical features.
- Divide the large open area comprising the open parts of the Frenchman, Antelope, and Davis OSV areas into smaller, separate, non-contiguous parts by designating as closed to OSV travel areas that separate the large open area into smaller, isolated sections between which OSV travel is prohibited.
- Adopt Class 1 and Class 2 OSV categories as described in Alternatives 2 and 5
- Do not designate low elevation areas (generally below 5,000 feet) for cross-country OSV use.
- Do not designate isolated parcels that are not publicly accessible or are too small to provide an OSV recreation experience.
- Include a minimum snow depth restriction of at least 12 inches for OSV use on the forest.
- Set an OSV use season of December 1 – April 30.
- Incorporate adaptive management into the travel plan so that the plan is flexible and responsive to “abnormal” winters and snow conditions.
- Make thoughtful designations based on quality of experience and minimization criteria rather than numbers of acres.

These recommendations are explained in detail in the paragraphs that follow.

GOVERNING REGULATIONS

The OSV Use Designation project is governed by the National Environmental Policy Act (NEPA) and the 2015 Travel Rule.

NEPA Requirements

NEPA requires that the "*EIS shall document the examination of reasonable alternatives to the proposed action*."[1] When we submitted our Alternative in 2015 we provided an in-depth explanation of specific concerns related to OSV use on the PNF as well as details on a handful of areas that are extremely important to the non-motorized winter recreation community. These areas must not be designated for OSV use if the Forest Service is to minimize conflict between OSV use and other winter recreation use.

Travel Management Rule

In 2015, the Forest Service's Washington Office released the Over-Snow Vehicle Rule providing a framework for winter travel planning efforts on all National Forest lands.[2] The OSV Rule requires that forests designate routes and areas where OSV use is allowed, publish these designations on an OSV use map, and prohibit any OSV activity that is inconsistent with the published map. The PNF is in the midst of this OSV designation process and is among the first forests in the nation to implement the OSV Rule.

The OSV Rule requires national forests with adequate snowfall to designate and display on an "over-snow vehicle use map" specific areas and routes where OSV use is permitted based on resource protection needs and other recreational uses. The PNF is obligated to comply with the minimization criteria outlined in Executive Order No. 11,644, 37 Fed. Reg. 2877 (Feb. 8, 1972), *as amended by* Executive Order No. 11,989, 42 Fed. Reg. 26,959 (May 24, 1977). The 2015 revised Travel Management Rule requires that the designation of areas and trails to be used by OSVs "*shall consider effects on the following, with the objective of minimizing:*

(1) Damage to soil, watershed, vegetation, and other forest resources;
(2) Harassment of wildlife and significant disruption of wildlife habitats;
(3) Conflicts between motor vehicle use and existing or proposed recreational uses of National Forest System lands or neighboring Federal lands; and
(4) Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands." [3]

The Travel Rule requires the Forest Service to designate *areas* for OSV use. *Section 212.1 Definitions* of the TR defines an area as "*A discrete, specifically delineated space that is smaller, and, except for over-snow vehicle use, in most cases much smaller, than a Ranger District*."[4] The definition of *discrete* in this context is "*consisting of distinct or unconnected elements: noncontinuous*."[5] Thus, the intent of the Travel Rule is clearly meant to require that areas open to OSV use will be moderate in size and separate from each other, and snowmobiles are prohibited from traveling from one designated area into another area because the intervening area is closed. If two specifically delineated OSV open areas are immediately adjacent to each other and snowmobiles may cross freely from one to the other, then for

[1] 36 CFR Section 220.5(e)
[2] 80 Fed. Reg. 4500, Jan. 28, 2015, 36 C.F.R. part 212, subpart C
[3] 36 CFR Section 212.55(b)
[4] 36 CFR Section 212.1 Definitions
[5] Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary, accessed 11/24/2018.

the purposes of the Travel Rule, the two areas must be considered as one, and the total size of the areas must be smaller than a ranger district.

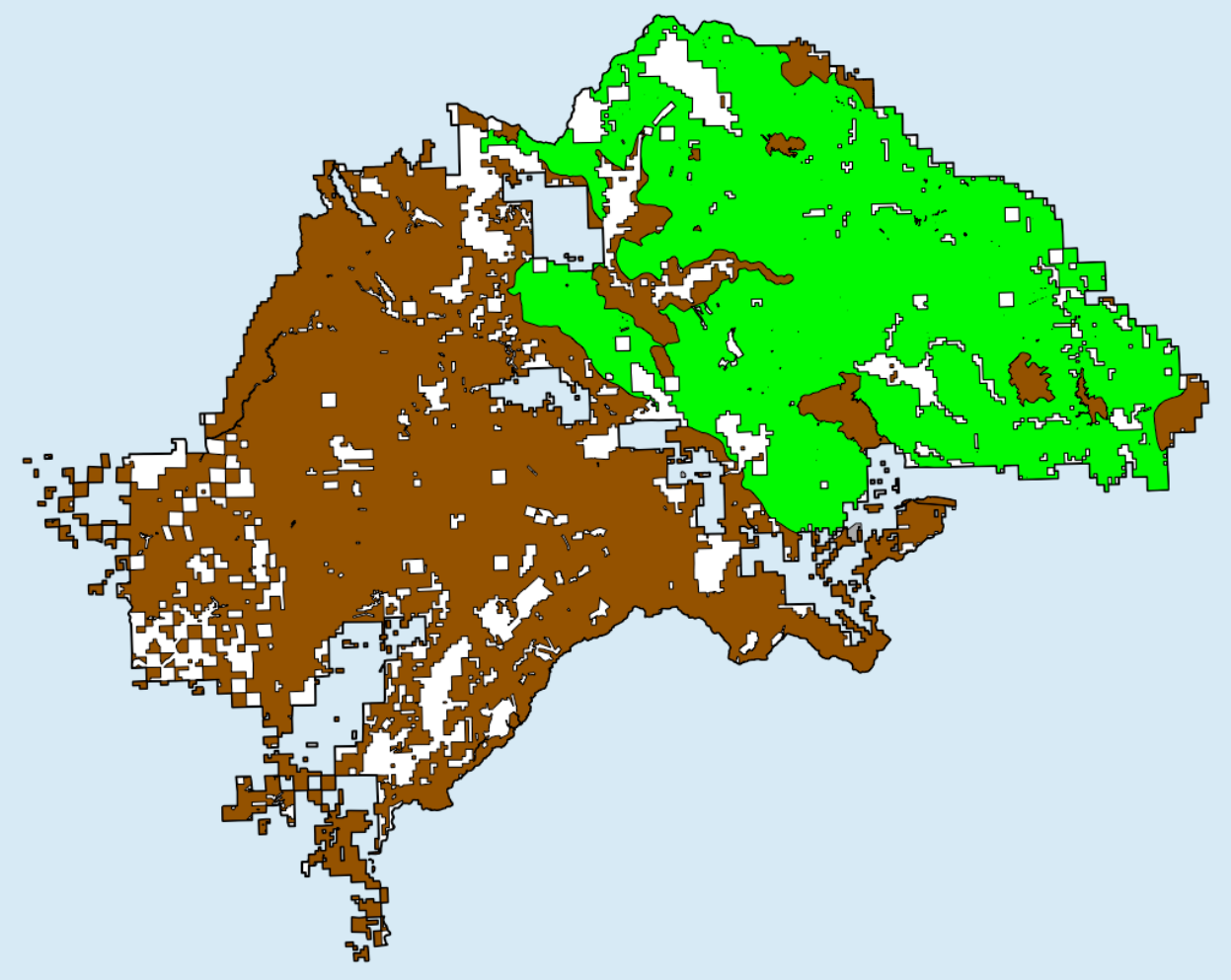
The OSV Rule is about far more than simply designating OSV use in places where OSV users would like to ride. The Forest Service must consider how OSV designations will impact other uses and forest resources and ensure that these impacts are minimized. This may mean restricting OSV use in areas where it is currently allowed, even in areas that are highly desired by OSV users. We appreciate that the purpose and need for this project, as outlined in the DEIS, includes promoting public safety and minimizing conflict and impacts. We worry, however, that the Forest Service is construing the purpose and need of this OSV designation process in such a way as to simplistically consider the issues at hand simply as "where do OSV users desire to recreate". In truth, the PNF must consider non-motorized recreation uses, the preservation of wilderness character, wildlife, and natural resources on a level playing field with the desires of the OSV community.

OPEN AREAS MUST BE SMALLER THAN A RANGER DISTRICT

The Travel Rule is very explicit in requiring that areas to be designated as open to OSV open-riding must be smaller than a ranger district. This requirement must be applied to the actual areas on the forest, and not a set of arbitrary areas drawn on a map. When the final Over-Snow Vehicle Use Map (OSVUM) is drawn, the contiguous open areas on that map must all be smaller than a ranger district.

The DEIS divides Plumas National Forest arbitrarily into a set of seven subareas, called *OSV areas*, all of which are smaller than any ranger district in the forest. While this is convenient for describing and analyzing geographical locations, features, and the varying conditions in the forest, it does not affect the final OSVUM map that designates where cross-country open-riding by OSVs is allowed. By dividing a large open area into smaller but adjacent subareas, the DEIS is attempting to circumvent or ignore the requirement on the size of open areas that is an explicit part of the Travel Rule.

Alternative 2 permits OSV use in all seven OSV areas. The open areas in the Frenchman, Antelope, and Davis OSV areas are adjacent and connected, and OSVs may travel freely from one area to an adjacent area. Therefore, these three areas designate a contiguous open area for OSV use that is significantly larger than a ranger district, in violation of the requirements of the Travel Rule that open areas be discrete, that is, non-adjacent and discontinuous. The contiguous open area is shown in green in the graphic, below.



We estimate the area of this open area to be 504,342 acres, or 41.9% of the forest.

By restricting OSV use below 5,000' the PNF may find logical ways to segregate the Antelope, Davis, and Frenchman OSV areas into two OSV areas along Red Clover or Squaw Queen Creeks. Rocky Mountain elk and wolves are moving back onto the PNF and both of these drainages provide lower elevation big-game habitat. Because there are more contiguous roadless areas along Squaw Queen Creek we suggest restricting OSV use along Squaw Queen Creek to segregate these OSV areas.

Recommendations

- Divide the large open area comprising the open parts of the Frenchman, Antelope, and Davis OSV areas into smaller, separate, non-contiguous parts by designating as closed to OSV travel areas that separate the large open area into smaller, isolated sections between which OSV travel is prohibited.

MINIMIZATION

The minimization criteria are the heart of travel management planning. They require the Forest Service, when designating routes and areas open to motorized travel, to: 1) minimize damage to soil, watershed, vegetation, or other resources of the public lands; 2) minimize harassment of wildlife or significant disruption of wildlife habitats; and 3) minimize conflicts between off-road vehicle use and other existing

or proposed recreational uses of the same or neighboring public lands. These minimization criteria were codified in the 2005 Travel Management Rule, as amended by the 2015 Over-Snow Vehicle Rule.

Forests must apply and implement the minimization criteria when *designating* each area and trail where OSV use is permitted,[6] not as a means of justifying existing management. Any areas where cross-country OSV use is permitted must be "discrete, specifically delineated space[s] that [are] smaller . . . than a Ranger District" and *located* to minimize resource damage and conflicts with other recreational uses.[7] The minimization criteria must come first, followed by drawing lines on the map.

Application of the criteria requires the Forest Service to minimize impacts — not just identify or consider them — when designating areas or trails for OSV use, and to demonstrate in the administrative record how it did so. This duty was recently confirmed by the Ninth Circuit Court of Appeals in *WildEarth Guardians v. U.S. Forest Service*[8] in which the Court held that the agency must "apply the minimization criteria to each area it designated for snowmobile use" and "provide a more granular minimization analysis to fulfill the objectives of Executive Order 11644, which the [Travel Management Rule] was designed to implement." More specifically, the Court held that "mere 'consideration' of the minimization criteria is not enough." The Forest Service must show not just that impacts have been studied, but specifically demonstrate how effective each of the Alternatives presented in the DEIS is in minimizing impacts from OSVs. As one of the first forests to implement the new OSV rule, it is critical that the PNF properly apply the minimization criteria.

MINIMIZE CONFLICTS BETWEEN MOTOR VEHICLE USE AND EXISTING OR PROPOSED RECREATIONAL USES OF FOREST SERVICE LANDS OR NEIGHBORING FEDERAL LANDS

Our organizations speak for the backcountry ski community, and for this reason we are particularly interested in minimizing conflict between OSV use and non-motorized recreation uses on the PNF. In our scoping comments and the Alternative that we submitted in November 2015 we identified several important non-motorized winter recreation areas. We are pleased to see that several of these areas are recognized and not designated for OSV use in Alternative 2, the preferred alternative, as well as in Alternatives 3 and 5.

IMPORTANT NON-MOTORIZED AREAS

Each of the seven areas that the PNF delineates as OSV use areas contain lands that are important for human-powered winter recreation or have high conservation value. Many of these areas already have some sort of special designation, or are designated non-motorized, in the Plumas Forest Plan, while others do not currently have any level of protection or recognition of their value for human-powered winter recreationists. Below, we outline our specific areas of concern and related recommendations.

Antelope OSV Area

We support how Alternative 2 proposes to manage the Antelope OSV Area. Alternative 2 protects a mixture of ecological, cultural, and recreational resources that are vulnerable to OSV use. These include a Maidu cultural site (Keddie Ridge SPNM area), globally rare Baker Cypress (Mud Lake/Wheeler Peak RNA), other unique vegetation (Eastern Escarpment), cross-country skiing and snowshoeing (Genesee Valley), and fantastic backcountry skiing (Thompson Peak). Thompson Peak is highly valued by skiers in

[6] 36 C.F.R. §§ 212.81(d), 212.55(b).
[7] 36 C.F.R. §§ 212.1, 212.81(d), 212.55(b).
[8] *WildEarth Guardians v. U.S. Forest Service*, 790 F.3d 920 (9th. Cir. 2015).

Susanville and others who live on the east side of the PNF, and we strongly support not designating it for OSV use.

Bucks OSV Area

The Bucks OSV Area is adjacent to the Bucks Lake Wilderness and includes many other important resources in addition to the Wilderness area. We appreciate that Alternative 2 does not designate Black Gulch, east of the Wilderness to the Silver Lake Road (24N29X) or south of the Wilderness to county road 414 between Bucks Summit and Bucks Lake. This is a highly-valued backcountry ski zone. However, Alternative 2 could be improved by not designating the Bucks Creek Wilderness addition as proposed in Alternative 5 – the final plan should not designate the area west of Pipeline Road (24N24), nor should it designate 24N35 and 24N25Y for OSV use as these routes are not open for OHV use (see Attachment 1). Likewise, the final plan should not permit grooming on road 24N33 – grooming this route adjacent to the Wilderness encourages OSV trespass.

We appreciate that Alternative 2 does not designate the Mount Pleasant RNA, Fales Basin proposed Special Interest Area (SIA), Feather Falls Scenic SIA, Little Volcano Geologic proposed SIA, and Butterfly Valley Biological SIA. These specially designated areas protect unique vegetative communities, Maidu cultural sites, and unique geologic features. In addition, we appreciate that Alternative 2 does not designate the Little North Fork, Middle Fork, or Bear Creek Wild Rivers for OSV use.

Canyon OSV Area

The Canyon OSV area includes several eligible Wild and Scenic Rivers, two proposed SIAs, and a proposed Wilderness Area. We appreciate that Alternative 2 does not designate OSV use in the Yellow Creek and Squirrel Creek eligible Wild River corridors, and that it protects the serpentine plants and McNab cypress trees in the Red Hill and McNab Cypress proposed SIAs. In addition to what is included in Alternative 2, the final plan should not designate the Chips Creek proposed Wilderness area for OSV use (see Attachment 2). This is mapped in Alternative 5 and entails not designating the area west of the roadless area to the PNF boundary (except at Ben Lomond) and not designating the area west of 26N26 to Yellow Creek.

Davis OSV Area

Lake Davis is popular with cross-country skiers, and we appreciate that Alternative 2 does not designate the west side of the lake for OSV use. This will provide cross-country skiers and snowshoers with an opportunity to recreate in a non-motorized setting, while providing opportunities for OSV use on the east side of the lake as well as elsewhere in the Davis OSV Area. We support the proposed management in Alternative 2 for this OSV area.

Frenchman OSV Area

We are pleased that Alternative 2 protects the unique plant community in the Dixie Mountain proposed SIA and does not designate Little Last Chance Canyon for OSV use. We are also happy to see that Alternative 2 does not designate the Adams Peak roadless area for OSV use. This should be carried forward into the final plan. As the DEIS correctly notes, the Adams Peak roadless area receives little to no OSV use and is the only non-motorized area on the eastern escarpment. However, is unclear why Alternative 2 would designate a few isolated strips of land on the eastern boundary of the PNF to the east of the Adams Peak roadless area. These parcels are not connected to any OSV access point and are within an area that OSV users do not currently use. For these reasons, the final plan should not

designate any areas to the east of the Adams Peak roadless area for OSV use, in addition to not designating the roadless area (see Attachment 3).

Lakes Basin OSV Area

The Lakes Basin is a popular area for both motorized and non-motorized winter recreationists. While the PNF recognizes the importance of this area for OSV users, the Preferred Alternative does not fully protect opportunities for skiers and snowshoers in the Lakes Basin. We appreciate that Alternative 2 does not designate lands to the south and west of Plumas-Eureka State Park, as this is the epicenter of skiing and snowshoeing in the Lakes Basin. There are, however, other important ski zones within the Lakes Basin, particularly the area around the Lakes Basin cross-country ski trails. The area west of Gold Lake Highway (county road 519) and north of the Gray Eagle Lodge is a popular cross-country ski and snowshoe area and should not be designated for OSV use. Although we appreciate that Alternative 2 does not designate the Lakes Basin ski trail and Graeagle Creek trail for OSV use, the final plan should not designate the area surrounding these trails for OSV use either. Allowing OSV use up to the edge of these trails not only degrades the skier's experience on the trail, it is confusing for OSV users to understand where they are allowed to ride. The final plan should not designate OSV use west of the Gold Lake Highway in the vicinity of the ski trails. Likewise, the Little Jamison Basin should not be designated for OSV use in order to protect Wades Lake, Jamison Lake, and Little Jamison Creek, an eligible Wild and Scenic River. See Attachment 4 for a map of our proposed modifications to this OSV use area. We are supportive of other elements of Alternative 2 for this area, including not designating McRae Meadow (a proposed SIA) for OSV use.

La Porte OSV Area

The La Porte OSV Area contains several important conservation areas including South Branch Feather River eligible Wild and Scenic River (WRS), Onion Valley Creek eligible WSR, McCarthy Creek eligible WSR, Dixon Creek eligible WSR, Bald Rock roadless area, Beartrap roadless area, McRae Meadow proposed SIA, Mt. Fillmore proposed SIA, Fowler Lake proposed SIA, and Valley Creek botanical SIA. We appreciate that Alternative 2 does not designate OSV use in any of these areas. However, the final plan should also acknowledge and protect the long history of backcountry skiing in the Onion Valley and the Middle Feather proposed wilderness area by not designating the portion of Onion Valley west of Placer Diggings, as well as Last Chance, Sawmill Tom, and Washington Creeks. The final plan should also protect the Wilderness potential within the Buzzards Roost Ridge roadless area, which receives little, if any, OSV use, by also not designating this area for OSV use. See Attachment 5 for a map of our proposed modifications to Alternative 2.

PACIFIC CREST TRAIL

We support the Pacific Crest Trail (PCT) management described in Alternatives 2 and 5, wherein OSV use would not be designated within 500 feet of either side of the PCT except at designated crossing points. This management aligns with the direction in the PCT comprehensive plan. However, this 1,000-foot buffer should be considered a floor, not a ceiling and, importantly, the PNF should not think of the PCT corridor as a linear, nonmotorized "wall" passing through the forest. Instead, when designating areas for OSV use the PNF should locate OSV area boundaries in a way that avoids the trail, considering how topography affects the trail viewshed and soundscape. The Forest Service should consider the landscape through which the PCT passes and how that landscape affects the experience of trail users as well as OSV users. In roadless and semi-primitive areas, where the summer PCT experience is quite wild and motorized activity is not evident within the vicinity, OSV activity should similarly be far removed from

the trail. However, in roaded areas it may be acceptable to have OSV routes cross the trail more frequently.

We appreciate that the PNF is working to align winter PCT crossing with summer PCT crossings, and we are generally supportive of the crossing points in Alternative 2. While we understand that there is a need for some crossings, particularly in the Lakes Basin, that do not correspond to the summer road network, we have concerns about the quarter-mile-wide crossings and the frequency of crossings proposed in Alternative 2. OSV crossings should be no more frequent than half-mile intervals. In addition, designated crossings should not exceed 1/8-mile in width. Frequent crossings any wider than 1/8-mile will cumulatively degrade the non-motorized nature of the trail.

On the PNF, outside of Wilderness, the PCT travels through semi-primitive and roaded natural (ROS) areas. The PCT comprehensive plan provides direction for how the PCT should be managed in these ROS settings. In semi-primitive motorized areas "The trail may be accessed by primitive roads or motorized trail routes no more frequently than one-half mile intervals. Roads, better than primitive, may be no closer than one-half mile from the trail."[9] In roaded natural ROS settings, "Roads, better than primitive, or railroads may cross the trail but no more frequently than one half mile intervals."[10] In a winter context, groomed routes should be considered "roads better than primitive".

Recommendations for minimizing conflict between OSV use and other recreational uses:

- We endorse Alternative 2 for the Antelope and Davis OSV Areas.
- For the Bucks OSV Area, we endorse Alternative 2 with the following improvements: do not designate the following areas for OSV use: west of Pipeline Road (24N24); 24N35 and 24N25Y; the area west of 23N19 near Lookout Rock; and do not permit grooming on road 24N33..
- For the Canyon OSV Area, we endorse Alternative 2 with the following improvements: do not designate the following areas for OSV use: west of the Chips Creek roadless area to the PNF boundary (except at Ben Lomond) and the area west of 26N26 to Yellow Creek.
- For the Frenchman OSV Area, we endorse Alternative 2 with the following improvement: do not designate lands to the east of the Adams Peak roadless area for OSV use.
- For the Lakes Basin OSV Area, we endorse Alternative 2 with the following improvements: do not designate OSV use west of the Gold Lake Highway in the vicinity of the Lakes Basin and Graeagle Creek ski trails; do not designate the Little Jamison Basin.
- For the La Porte OSV Area, we endorse Alternative 2 with the following improvement: do not designate the portion of Onion Valley that is west of Placer Diggings, and do not designate Last Chance, Sawmill Tom, and Washington Creeks or the Buzzards Roost Ridge roadless area for OSV use.
- At a minimum not designate OSV use within 500 feet of the centerline of the PCT.
- OSV crossings of the PCT should correspond with the summer motorized route (MVUM) system where possible, be no wider than 1/8 mile, and occur no more frequently than half-mile intervals.

[9] PCT comprehensive plan page 18, available at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5311111.pdf
[10] Id, page 19.

- Locate OSV area boundaries in a manner that avoids the PCT *and* corresponds with obvious physical or topographical features.

Minimize Conflicts Among Different Classes of Motor Vehicle Uses on NFS Lands or Neighboring Federal Lands

We support the proposal in Alternatives 2 and 5 to manage for two different types of OSVs, Class 1 and Class 2. Differentiating between smaller, more traditional OSVs and larger vehicles that have been equipped to travel over snow makes sense to us. These larger and heavier OSVs likely compress the snow far deeper than snowmobiles and timber sleds. Allowing these vehicles to travel cross-country would put soil and vegetation resources on the PNF at risk in addition to causing conflict with traditional, Class 1 OSVs.

Public land managers frequently classify and manage for different types of vehicle. For example, in Yellowstone National Park and the Lake Tahoe Basin Management Unit commercial snowmobile operators are required to use BAT machines (in Yellowstone all snowmobiles must meet BAT standards). Likewise, the Forest Service often restricts the size of boat motors allowed on certain lakes. In lakes such as Lake Tahoe, older technology personal watercraft are prohibited altogether. Water and snow-based recreation have many similarities, not least of which is the close interaction between human-powered recreationists and small-engine powered recreationists. In the same way that 2-stroke engines cause avoidable conflict on lakes, they do on the snow, and the Forest Service has the tools needed to minimize that conflict.

Recommendations for minimizing conflicts among different classes of motor vehicles:

- Adopt Class 1 and Class 2 OSV categories as described in Alternatives 2 and 5

Minimize Damage to Soil, Watershed, Vegetation and Other Forest Resources

The National Core Best Management Practices (BMPs) for OSV use in Forest Service Manual 7716 instruct the Forest Service to designate a minimum snow depth and OSV season dates and to manage by class of vehicle in order to protect underlying vegetation and soil. We are pleased to read in the DEIS that the PNF intends to use snow depth as a management tool, and that it has proposed also differentiating between two size-classes of OSV. We ask that the PNF consider how season dates could also be utilized to further comply with these BMPs as part of the overall goal of minimizing impacts to forest resources. Recent research examining early season snowpack loss in the Sierra Nevada, and implications that these changes have for OSV travel planning indicates that the onset of the over-snow recreation season in the Sierra has shifted by approximately 2 weeks.[11]

The Sierra Nevada is already seeing the effects of a changing climate, particularly in relation to the snow season. In a recent study, scientists identified an alarming and statistically significant decline in winter snow levels in the northern Sierra Nevada over the past 10 years.[12] Over this time period, the winter snowline in the northern Sierra Nevada has risen by approximately 1,200 feet. This trend is expected to

[11] Hatchett, B. J. and Eisen, H. G.: Brief Communication: Early season snowpack loss and implications for over-snow vehicle recreation travel planning, *The Cryosphere*: 13, 21-28, 2019 https://doi.org/10.5194/tc-13-21-2019

12 Hatchett et al. 2017. Winter Snow Level Rise in the Northern Sierra Nevada from 2008 to 2017. *Water*: *9*(11), 899; https://doi.org/10.3390/w9110899. Included in Attachment 6.

continue into the future. Due to these impacts, land managers and recreationists cannot assume that areas that supported winter recreation in the past will continue to do so into the future. These findings support the PNF's proposals to only designate areas at an elevation high enough to receive consistent snowfall for OSV use. It makes sense that in winter travel planning the PNF would only designate areas for OSV use that receive consistent and ample snow throughout the winter.

The PNF should not designate areas that rarely receive sufficient snow for OSV travel, as these areas likely won't continue receiving snow into the future. Low elevation areas provide, at best, low quality OSV riding opportunities and generally don't receive enough snow to support OSV riding at all. However, they do contain other values such as habitat for species including the California red-legged frog, mule deer, and bald eagles. Considering that climate change is causing the PNF's snowline to move higher, designating low elevation areas for OSV use does not comply with the OSV Rule's requirement to conduct winter travel planning in areas that receive sufficient snow to support over-snow recreation. While we appreciate that the PNF did not designate areas below 3,500 feet in in the preferred alternative, the DEIS explains that snow is far more likely to accumulate above 5,000 feet.[13] If this is the case today, we can only imagine that there will be even fewer occurrences of snow accumulation at lower elevations in the future. Therefore, we suggest that the PNF not designate areas for cross-country travel below 5,000 feet. This does not preclude designating lower-elevation trail systems for OSV use. Considering the PNF is proposing to allow OSV use on designated trails with only 6 inches of snow, prohibiting off-trail travel at lower elevations will help protect forest resources while continuing to allow OSV recreation.

If the PNF choses to allow OSV use on designated routes with only 6 inches of snow the Forest Service must be more specific about how it will ensure that people do not take OSVs off-trail in areas with less than 12 inches of snow. We are concerned is that there is no way to ensure OSV users will stay on the trail, nor is there any explanation in the DEIS about how the Forest Service will inform users about where they can leave the trail if certain parts of open areas are open and others are not.

SNOW DEPTH

We are pleased to see that each action alternative in the DEIS includes at least a 12 minimum snow depth for all OSV use on the forest, as this standard will go a long way in minimizing impacts to vegetation, soils, cultural resources, and some wildlife species.

There are a number of ways in which the PNF can measure and enforce minimum snow depths, and we were pleased to see that the PNF described it's intended management and enforcement approach on page 35 of the DEIS. As winter backcountry recreationists, we are aware that there is never a uniform level of snow across the landscape and that some areas can have extremely deep snow while nearby wind-swept ridges or south-facing hillsides may have none. The PNF should also consider how it will inform the public of when OSV areas are open or closed (based on snow depth). We suggest working with local snowmobile clubs to share information via social media and posting information on the forest website.

[13] From pages 19 and 20 of Volume 1: "In general, adequate snow occurs in most years above 5,000 feet in elevation, with a deeper snowpack evident above 6,000 feet in elevation. Precipitation falls as either snow or rain, depending on the temperature during the storm event. On the Plumas National Forest, precipitation often falls as rain below 5,000 feet, even during the winter months"

We understand that the PNF (and other forests) has limited staff capacity for snow depth monitoring. For that reason, we are working with Dr. Ben Hatchett, a snow scientist at the Desert Research Institute, to develop a predictive model relating SNOTEL and SNODAS data to snow depth at OSV trailheads in the northern and central Sierra Nevada.[14] Although the model is still under development, several findings from the preliminary study are applicable for PNF OSV planning right now. One, it may be more useful for the PNF to consider minimum snow density (measured as SWE). Two, snow depth and density can change dramatically throughout the snow season, and it is important that land managers be responsive to these changes in order to guard against resource damage. And, three, it is possible to utilize existing snow measurement stations to determine when there is sufficient snow on the landscape to open specific OSV trailheads.

Finally, we would like to alert the PNF to ongoing research examining the issue of minimum snow depth. To our knowledge there has not been any quantitative research confirming a precise minimum snow depth necessary to protect against resource damage for Sierra Nevada snow conditions. However, we are also working with Dr. Hatchett at the Desert Research Institute to answer this question as well. Unpublished data from this ongoing research indicates that at least 18 inches of uncompacted snow is needed to protect against soil compaction. Likewise, the DEIS explains that a deeper (18 or 24 inch) snowpack will better protect sensitive plants. For these reasons, we suggest the PNF adopt the minimum snow depth standard in Alternative 3 in areas with sensitive soils, TES plant species, or other areas of resource concern.

SEASON DATES

To further comply with the requirement to minimize damage to forest resources, we urge the PNF to consider including OSV season dates as part of the final plan. Season dates should be considered bookends to the over-snow season, with minimum snow depth dictating more precisely when OSV use is allowed. Season dates help to protect forest resources in the shoulder season – both in the fall when people are eager to start their winter sports and in the spring when they are stretching the winter season to its very end. In both cases it is well documented that people – OSV users and skiers alike – are willing to travel over bare ground or ignore very low snow levels in order to reach areas with deeper snow. While skiers have the same impact as a hiker in this scenario, OSVs traveling over bare ground or minimal snow have the same impact as any other vehicle. These impacts include soil compaction, erosion, and vegetation damage. Season dates also help to separate uses to minimize conflict and minimize harassment of wildlife during the breeding season or other sensitive time periods.

As we discussed earlier in these comments, the snow season in the Sierra Nevada is changing significantly. On average, snow accumulation at OSV trailheads is now significantly later than was common 15 years ago.[15] In considering an appropriate season-opening date, the PNF should consider historic "opening dates" based on snow accumulation as described in the research cited here. We

[14] Hatchett, Benjamin. 2017. Evaluation of Observed and Simulated Snow Depths for Commencing Over Snow Vehicle Operation in the Sierra Nevada. Report prepared for Winter Wildlands Alliance. Included in Attachment 6. *See also* Hatchett, B. J. and Eisen, H. G.: Brief Communication: Early season snowpack loss and implications for over-snow vehicle recreation travel planning, *The Cryosphere*: 13, 21-28, 2019 https://doi.org/10.5194/tc-13-21-2019. Also included in Attachment 6.

[15] *Id*

suggest December 1 as an average opening date for the forest, but this may need to be adjusted depending on the elevation of various OSV trailheads.

As described on page 160 and elsewhere in the DEIS, the PNF uses April 30 as the assumed end to the OSV season for the purposes of wildlife impact analyses. Given the reasons stated in the DEIS[16] we suggest that the PNF winter travel plan set April 30 as the end of the OSV season and prohibit OSV use on the forest between May 1 and November 30. Considering OSV use drops off dramatically after March 31, an April 30 end-date is quite liberal and accommodates those who desire off-trail spring riding opportunities.

Given that climate change is altering snow seasons in the Sierra Nevada, including on the PNF, the Forest Service should consider a variety of adaptive management strategies as part of this travel plan in order to further minimize impacts to soils, vegetation, and other natural resources. Several potential adaptive management tools are presented in in the following table from Hatchett and Eisen 2019[17]:

Adaptation Measure	**Benefit(s)**	**Challenge(s)**
Requirement of minimum snow depth off trail, but not on roads, or a lower minimum snow depth on roads	Allow OSV use even under extremely low snow conditions; grooming could be utilized to maximize snow depth on road	Preventing users from going off trail under low snow conditions; enforcement
Ensure high elevation access via a right-of-way	During warmer/drier years, snow conditions are likely to be better (deeper snowpack) at higher elevation	User group conflicts; presence of Wilderness at high elevation; impacts to snow-dependent wildlife species; demand; parking
Removal of blanket opening dates	Prevents opening before SWE_{min} achieved and will limit damage to landscape	Resources required to obtain snow condition information
Identify corridors that collect/retain more snow	During otherwise poor snow conditions, these areas may allow OSV recreation to occur, particularly at lower elevation areas	Need for data on these corridors
Trade-off: closure of low elevation/sensitive habitat for improved high elevation access	Eliminate chance of damaging landscapes in low elevation regions, increase in the number of days/year that OSV recreation can occur by enhanced high elevation access	Need for collaboration between stakeholders/user groups to identify areas where compromise could occur. May be opposed by those who must travel much further for OSV use.
Fee increases to enhance access and offset impacts from higher demand (i.e., restoration projects)	Would provide for additional resources to monitor trailhead conditions, improve parking/bathrooms at trailheads, fund restoration projects and creation of low-snow OSV trails	Fees are generally opposed by members of the public.

Recommendations for minimizing damage to soils, watersheds, and other forest resources:

- Do not designate low elevation areas (generally below 5,000 feet) for cross-country OSV use.

[16] DEIS pg. 160: "Based on surveys of Forest Snow Parks and designated OSV route access points, OSV use was documented until the end of April, at which point snow levels no longer allow continued use of designated OSV routes (California Department of Parks and Recreation 2010). Therefore, for the purpose of this analysis, April 30 is used as a cut-off date for the maximum period of interaction between snowmobiles and wildlife."

[17] Table 1: Adaptation strategies to address loss of early winter snowpack for OSV recreation. from Hatchett, B. J. and Eisen, H. G.: Brief Communication: Early season snowpack loss and implications for over-snow vehicle recreation travel planning, *The Cryosphere*: 13, 21-28, 2019 https://doi.org/10.5194/tc-13-21-2019 Included in Attachment 6.

- Mandate a minimum snow depth of 12 inches for OSV travel on the forest, with greater depth restrictions (18 inches) in areas with sensitive soils, TES plant species, or other areas of resource concern.
- Set an OSV use season of December 1 – April 30.
- Incorporate adaptive management into the travel plan so that the plan is flexible and responsive to "abnormal" winters and snow conditions.

MINIMIZE HARASSMENT OF WILDLIFE AND SIGNIFICANT DISRUPTION OF WILDLIFE HABITATS

The DEIS provides a fair amount of information about wildlife habitat on the TNF and possible OSV impacts, but it fails to go into enough detail for the reader to ascertain whether or how each alternative minimizes harassment of wildlife and significant disruption of wildlife habitats. The Forest Service must demonstrate in the EIS how it has located OSV area boundaries to minimize harassment of wildlife and significant disruption of wildlife habitat.

We appreciate that volume two of the DEIS includes wildlife habitat details for each OSV use area and trail, along with information about plant communities, recreation use conflicts, and other concerns. This is very informative. However, although the tables in Appendix D tells us how many Protected Activity Centers (PACs) are within a particular area, or whether that area contains designated, suitable, or occupied habitat for listed and sensitive species, they don't give us any indication of how this information informed the development of each alternative. For example, concerning PACs – were area boundaries drawn to exclude buffered PACs? It does not appear so. Likewise, it does not appear that trails were located to avoid these areas. This leaves us wondering how the Forest Service will enforce mitigation measures if disturbances are detected? How will the Forest Service monitor for disturbance in the first place? The answers to these questions should be clearly spelled out in the EIS. At the very least, the tables in Volume Two should include information for all of the alternatives under the column headed "If the trail or area is designated, what measures will be taken to manage OSV use to minimize these effects?", not just Alternative 2.

Many of the forest plan standards and guidelines, and other conservation measures cited in the DEIS in relation to old forest-dependent species pertain to vegetation projects, not winter recreation or motor vehicle use. It is unclear how these measures or standards relate to the project at hand. For example, in discussing goshawk PACs the DEIS lays out standards and guidelines from the forest plan concerning canopy cover and snags, but there is no explanation of why this information is relevant to, or informs, winter travel planning.

Although we would like to see more details around the PNF's monitoring plan, we were glad to read that the PNF would institute limited operating periods (LOPs) around raptor nest sites and marten den sites if disturbance is noted. Given that LOPs are a conservation measure intended to protect species from disturbance during sensitive times of the year, it seems reasonable to apply LOPs to OSV travel as well as a measure for minimizing impacts. However, the DEIS does not include a monitoring plan, nor does it explain what a limited operating period would entail. The FEIS should include detailed monitoring plans for all species that the Forest Service believes OSVs have the potential to disturb. The FEIS should also clearly articulate what actions the PNF will take if disturbance is detected. We assume that a limited operating period means that OSV use would be prohibited on specific trails during the dates listed, but the DEIS does not clearly explain that this would be the case.

Addressing the minimization criteria should be part of the system design rather than relying on possibly un-enforceable mitigation measures. Designated OSV areas and trails should be located to avoid PACs, sensitive reproductive habitat, and occupied critical habitat. For amphibian or other hibernating species, if the PNF can demonstrate that OSVs do not impact these species during the hibernation period it may be acceptable to designate occupied habitat for OSV use during the hibernation season. In this case, however, there should be a seasonal restriction whereby OSV use is not allowed in occupied habitat once there is potential for individuals to have emerged from hibernation. The only instance where it is evident that the PNF has located the actual boundaries of OSV areas to minimize impacts to wildlife is in regards to eagle nests. We are supportive of this conservation measure and believe the PNF should apply a similar approach for other sensitive wildlife species.

In other OSV plans that we have reviewed in Region 5 the Forest Service has modeled functional habitat connectivity for marten and considered how each alternative potentially impacts habitat connectivity. This analysis is missing from the PNF DEIS, and the DEIS does not explain how the forest intends to protect high quality marten habitat and habitat connectivity. For a sensitive species such as marten, considering how to manage the forest to protect the habitat the species depends upon should be the first consideration, not an afterthought. In addition to simply promising to monitor for disturbance to marten and adapt OSV management as necessary, the OSV plan should proactively protect high quality habitat by designating OSV areas and trail in locations that avoid high-quality marten habitat or connectivity corridors.

Without more information beyond what is included in the DEIS we are unable to offer detailed comments regarding specific areas. For example, although we believe the PNF should not designate Sierra Nevada yellow legged frog occupied habitat for OSV use, we cannot provide detailed boundary adjustment comments because we don't know where occupied habitat is located. Likewise, although we would like to see the PNF locate designated OSV areas and trails outside of high value marten connectivity areas, without knowing where those areas are we cannot provide informed suggestions.

Recommendations for minimizing harassment of wildlife and impacts to wildlife habitat:

- Include more information in the FEIS to help the public understand how OSV areas and trails are located to minimize impacts on wildlife species and wildlife habitat.
- Design the system of OSV areas and trails with the intent and purpose of minimizing impacts to wildlife rather than relying on mitigation measures to address impacts in the future.

CLIMATE CHANGE

It is well documented that climate change is leading to a reduced snow season in the Sierra Nevada. Not only is the season getting shorter, the physical footprint of where snow occurs is shrinking.[18] This means that in the future winter recreationists will have less space in which to recreate. Even in the high Sierra, where climate impacts are projected to be less severe than other locations, scientists predict that the snow season will decrease by at least 20 percent by 2050.[19] This change is already happening. As we've

[18] Wobus et al. 2017. Projected climate change impacts on skiing and snowmobiling: A case study of the United States. *Global Environmental Change* 45 (2017) 1–14. https://www.sciencedirect.com/science/article/pii/S0959378016305556.

[19] *Id.*

already discussed in these comments, recent research in the Tahoe region reveals that snow accumulation is now occurring significantly later than it did just 10 years ago, and the average winter snowline has moved significantly uphill.[20]

Climate change and accompanying changes in snow accumulation and snowpack on the PNF will have significant repercussions for winter recreationists. As the total acreage covered by deep snow decreases there will be less space for recreationists to spread out to avoid conflict. Likewise, as traditional winter trailheads lose snow cover for all or part of the traditional winter season, use patterns will change.

The PNF winter travel plan should be forward-looking and proactively address the conflict and access issues predicted to occur as snowpack continues to retreat.

Recommendations:

- Do not designate low elevation areas (below 5,000 feet) for cross-country OSV use.
- Include a minimum snow depth restriction of at least 12 inches for OSV use on the forest.
- Make thoughtful designations based on quality of experience and minimization criteria rather than numbers of acres.

ECONOMIC IMPACTS

According to the PNF's visitor use monitoring surveys and the DEIS, very few visitors to the PNF participate in snow sports. Nationally, however, undeveloped skiing (backcountry skiing, splitboarding, and cross-country skiing) are on the rise[21] and the Forest Service and USDA both see backcountry skiing as a top activity in terms of growth, predicting participation increases between 55%-106% by 2060.[22] In contrast, as noted in the DEIS, OSV registrations in California are on the decline, and snowmobile sales nationally have declined precipitously over the past decade.[23] For these reasons, we believe the DEIS should explore the economic benefits of non-motorized winter recreation on the forest and the benefits that improving non-motorized recreation opportunities may have for the region's economy.

MONITORING AND ENFORCEMENT

An OSV plan is meaningless if it is not enforced. In addition, given that much of the PNF's approach for complying with the minimization criteria relies on adaptive management, a fully developed and realistic monitoring plan is an essential component of implementing the proposed OSV plan. We are concerned that many of the minimization measures within this proposed plan are limited by the caveat "as time

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[20] Hatchett et al. 2017. Winter Snow Level Rise in the Northern Sierra Nevada from 2008 to 2017. *Water*: *9*(11), 899; https://doi.org/10.3390/w9110899.

[21] See https://winterwildlands.org/wwa/wp-content/uploads/2018/08/2018-Trends-and-Impact-Report.pdf

[22] Cordell, Ken H. (2010) Outdoor recreation trends and futures: a technical document supporting the Forest Service 2010 RPA Assessment. USDA Forest Service Southern Research Station. Available at: www.srs.fs.usda.gov/pubs/gtr/ gtr_srs150.pdf and USDA Forest Service. (2016). See also National Visitor Use Monitoring Survey Results; National Summary Report. Available at www.fs.fed.us/recreation/programs/nvum/pdf/508pdf2015_National_Summary_Report.pdf

[23] SnoWest Magazine, October 2017, pages 10-12. *Fronts and Forecasts. Snowmobile Sales: No Snow = Low Snowmobile Sales.* United States snowmobile sales dropped from 114,927 units in 1993 to 50,659 units in 2017. Although unit sales do not decrease every year, the overall trend is downwards. This trend is in part driven by low snow years.

and funding allow."[24] Given that time and funding are two resources the Forest Service notoriously has very little of, this does not give us much confidence that monitoring and education are meaningful elements of this plan. The final plan should include a section that groups all of the education, monitoring, and enforcement elements into a single section so that the public can easily understand these components of the OSV plan and hold the Forest Service accountable if necessary.

CONCLUSIONS

Thank you for the opportunity to submit comments at this stage in the Plumas OSV use designation process. We appreciate the substantial amount of work that has gone into this analysis, and we hope that our comments will provide helpful information for the Forest Service to develop a Selected Alternative that meets the interests of all stakeholders and complies with the OSV Travel Rule.

Sincerely,

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[24] For example, page 176 of the DEIS states "In addition, the objective of minimizing impacts to wildlife during the winter would be addressed by developing a public outreach program to raise public awareness of winter wildlife habitat, wildlife behavior, and ways to minimize user impacts, *as time and funding allow*." (emphasis added)