October 19, 2023

Lesley Yen
Forest Supervisor
Inyo National Forest
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Bishop, CA 93514

Dear Supervisor Yen,

We appreciate the opportunity to comment on the Inyo National Forest (INF) Over-Snow Vehicle (OSV) Use Designation scoping documents.

Winter Wildlands Alliance (WWA) is a national nonprofit organization representing the interests of human-powered winter recreationists across the U.S.—backcountry skiers, splitboarders, snowshoers, Nordic skiers, and many others seeking non-motorized wintertime experiences on public lands. Our mission is to inspire and empower people to protect America's wild snowscapes. Our alliance includes 34 grassroots groups in 16 states, including groups with a strong interest in the INF—Friends of the Inyo and Snowlands Network. Thousands of WWA members who live near and/or visit the Inyo National Forest each winter enjoy Nordic and backcountry skiing/splitboarding, snowshoeing, winter hiking and other non-motorized activities and experiences on the forest, and some also enjoy conscientious and responsible snowmobiling and other motorized activities where appropriate.

Friends of Inyo (FOI) is a public lands advocacy organization and 501(c)(3) working to protect and care for California's Eastern Sierra public lands and wildlife. FOI has approximately 1,000 members primarily residing in Mono and Inyo Counties, with many supporters who are also a part of the Eastern Sierra's large tourist population, all of whom empower FOI to represent them in the best protection of the unique natural resources of our working area.

CalWild is a statewide non-profit that works to protect and restore the state's wildest natural landscapes and watersheds on agency-managed lands, including those of the Inyo National Forest. In recent times, CalWild has engaged on the Comprehensive Wild

and Scenic River Management Plans (CRMPs) for the Owens Headwaters and Cottonwood Creek; we were also heavily involved in the Land Management Plan revision process resulting in the INF's 2019 Land Management Plan.

The Range of Light Group (ROLG) is part of the Toiyabe Chapter of the Sierra Club and consists of 400 Sierra Club members in Inyo and Mono Counties who treasure our public lands, forests, and wildlife. Many Sierra Club members cross-country ski, snowshoe, hike, bike, and even snowmobile in winter on the Inyo National Forest.

Snowlands Network is an organization of 400 members who live in Northern California and Northern Nevada. Snowlands advocates for non-motorized backcountry winter recreation, including self-propelled skiing, snowshoeing, and snowplay. Snowlands' members often visit the Inyo National Forest in the winter season seeking opportunities for quiet recreation in non-motorized, conflict-free environments. Members of our organization will be significantly affected by the Over Snow Vehicle Use Designation decision.

1. Introduction:

With eight years of direct engagement in Forest Service winter travel planning under the 2015 OSV rule on six other national forest units in California, as well as on numerous other national forests across the west, we believe that this process affords the INF an important opportunity to establish a thoughtful, balanced, holistic and equitable winter recreation management plan for decades to come. We understand that the focus and mandate of this process is the designation of appropriate areas and routes for motorized OSV use. And we see that the INF in its Proposed Action (PA) considers this project as "not intended to be a comprehensive, holistic winter recreation planning effort." However, if approached thoughtfully and with careful, thorough consideration of relevant factors and minimization criteria, the process of designating appropriate areas and routes for motorized winter recreation will also serve to delineate and protect separate areas that are accessible to the public for a wide range of quality non-motorized winter recreation opportunities, while also protecting natural soundscapes, natural resources, watersheds and climate-resilient ecosystems.

Unfortunately, the INF's initial PA seems to ignore this opportunity to achieve balanced and equitable winter recreation management on the forest, or to achieve the Desired Conditions as stated in the forest's 2019 Revised Land Management Plan which called for the provision of "Recreation opportunities [that] provide a high level of visitor

satisfaction," and "a variety of motorized and non-motorized opportunities and recreation experiences."[1]

The INF has instead proposed to designate the vast majority of the forest's snow-covered landscapes, routes and trailheads outside of wilderness areas open to motorized OSV use, including right to the edge of communities and neighborhoods on all sides, ignoring the specific concerns and expectations of the majority of the public in favor of a small minority of motorized recreationists. We expect that in the development of an Environmental Assessment (EA)—or, if required, an Environmental Impact Statement (EIS)—the INF will approach this process with diligence and intention, consider the whole range of public comment, present a range of thoughtful alternatives, and arrive at a more equitable winter recreation management plan that will benefit the whole public and also the landscapes, ecosystems and watersheds we all depend on for decades to come.

2. Over-Snow Vehicle Rule Background

In response to the growing use of dirt bikes, snowmobiles, all-terrain vehicles, and other off-road vehicles (ORVs) and corresponding environmental damage and conflicts with non-motorized users, Presidents Nixon and Carter issued Executive Orders 11644 and 11989 in 1972 and 1977, respectively. The executive orders require federal land management agencies to plan for ORV use to protect other resources and recreational uses. Specifically, the executive orders require that, when designating areas or trails available for ORV use, the agencies locate them to:

> (1) minimize damage to soil, watershed, vegetation, and other resources of the public lands;
> (2) minimize harassment of wildlife or significant disruption of wildlife habitats;
> (3) minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands; and
> (4) minimize conflicts among different classes of motorized vehicle uses of National Forest System lands or neighboring federal lands.[2]

Thirty-three years after President Nixon issued Executive Order 11644, the George W. Bush Administration, citing unmanaged recreation as one of the top four threats facing the national forests, published the Travel Management Rule in 2005. The rule codified

[1] 2019 Inyo National Forest Revised Land Management Plan, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf

[2] Exec. Order No. 11644, § 3(a), 37 Fed. Reg. 2877 (Feb. 8, 1972), as amended by Exec. Order No. 11,989, 42 Fed. Reg. 26,959 (May 24, 1977).

the executive order "minimization criteria," but specifically exempted over-snow vehicles (OSVs) from the mandatory requirement to designate areas and trails in accordance with the criteria.[3] In 2010, WWA and 90 other organizations petitioned the U.S. Department of Agriculture to remove the OSV exemption from the 2005 Travel Management Rule. After this petition was denied, WWA successfully challenged the exemption in federal court. In the resulting 2013 decision, the court determined that Subpart C of the rule violated the mandatory executive order requirement that the Forest Service designate a system of areas and routes—based on the minimization criteria—where OSVs are permitted.[4] The court directed the agency to issue a new rule consistent with the executive orders and the revised Subpart C was finalized in January 2015. Given this history, OSV travel planning is of significant interest to WWA and our partners.

Revised Subpart C of the Travel Management Rule—the OSV Rule— requires each national forest unit with adequate snowfall and designate and display on an OSV use map (OSVUM) a system of areas and routes where OSVs are permitted to travel; OSV use outside the designated system is prohibited.[5] Thus, rather than allowing OSV use largely by default wherever that use is not specifically prohibited, the rule changes the paradigm to a "closed unless designated open" management regime and puts the onus on the Forest Service to justify OSV designations, rather than justifying why an area or route would be closed to OSV use. To support and inform designation decisions, forests must apply and implement the minimization criteria when designating each area and trail where OSV use is permitted.[6] 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 2015 OSV rule requires the agency to designate specific areas and routes for OSV use, and prohibits OSV use outside of the designated system.[8] In other words, subpart C requires forests to make OSV designations under a consistent "closed unless designated open" approach and not to designate areas as open essentially by default. Consistent with the closed unless designated open approach, subpart C requires that any areas designated for cross-country OSV use be "discrete," "specifically delineated,"

[3] 36 C.F.R. §§ 212.51(a)(3), 212.55(b).
[4] Winter Wildlands Alliance v. U.S. Forest Service, No. 1:11-CV-586-REB, 2013 U.S. Dist. LEXIS 47728, at *27-36 (D. Idaho Mar. 28, 2013) (explaining that OSV "designations must be made and they must be based on the [minimization] criteria") (emphasis in original).
[5] 36 C.F.R. §§ 212.81, 261.14.
[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] See 36 C.F.R. §§ 212.80(a), 212.81(a), 261.14.

and “smaller . . . than a ranger district.” Accordingly, the Forest Service may not adopt decisions that fail to specifically delineate discrete areas where cross-country travel is permitted. Although not required by the OSV Rule, we also encourage the INF not to designate small, isolated parcels of land that lack public access or do not provide meaningful OSV opportunities. Again, OSV designations must be justified and not designated as open by default.

To satisfy the Forest Service’s OSV designation obligations under the executive orders, the agency must apply a transparent and common-sense methodology for meaningful application of each minimization criterion to each area and trail.[9] That methodology should, at a minimum: provide opportunities for public participation early in the process;[10] incorporate site-specific data, the best available scientific information, and best management practices;[11] account for site-specific and larger-scale impacts;[12] account for projected climate change impacts, including reduced and less-reliable snowpack and increased vulnerability of wildlife and resources to OSV impacts;[13] and account for available resources for monitoring and enforcement.[14] Additionally, the INF must consider the “compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.”[15] The work that the Inyo has already put into developing its scoping documents is a good start on this methodology and in these comments we will provide suggestions for how to build upon the work you and your staff have begun.

[9] Idaho Conservation League v. Guzman, 766 F. Supp. 2d 1056, 1071-74 (D. Idaho 2011) (agency may not rely on “Route Designation Matrices” that fail to show if or how the agency selected routes with the objective of minimizing their impacts).

[10] 36 C.F.R. § 212.52(a).

[11] Idaho Conservation League, 766 F. Supp. 2d at 1074-77 (agency failed to utilize monitoring and other site-specific data showing resource damage); Friends of the Clearwater v. U.S. Forest Service, No. 3:13-CV-00515-EJL, 2015 U.S. Dist. LEXIS 30671, at *24-30, 40-52 (agency failed to consider best available science on impacts of motorized routes on elk habitat effectiveness or to select routes with the objective of minimizing impacts to that habitat and other forest resources).

[12] Idaho Conservation League, 766 F. Supp. 2d at 1066-68, 1074-77 (invalidating travel plan that failed to consider aggregate impacts of short motorized routes on wilderness values or site-specific erosion and other impacts of particular routes).

[13] 77 Fed. Reg. 77,801, 77,828-29 (Dec. 24, 2014) (Council on Environmental Quality’s revised draft guidance recognizing increased vulnerability of resources due to climate change and that “[s]uch considerations are squarely within the realm of NEPA, informing decisions on whether to proceed with and how to design the proposed action so as to minimize impacts on the environment”).

[14] Sierra Club v. U.S. Forest Serv., 857 F. Supp. 2d 1167, 1176-78 (D. Utah 2012) (NEPA requires an agency to take a hard look at the impacts of illegal motorized use on forest resources and the likelihood of illegal use continuing under each alternative).

[15] (36 CFR 212.55(b)(5)).

3. Compliance With Legal Minimization Criteria

The minimization criteria are the heart of any Forest Service travel planning process and we appreciate that the scoping materials include information about how the Forest has applied the minimization criteria to the routes and areas in the PA. We are supportive of the screening questions already developed by the INF, but also suggest the Forest include the following additional questions in this exercise, to better inform the analysis:

- *Would OSV use in the area, including at the staging area, create air quality impacts that would be detrimental to forest visitors?*

Motorized and non-motorized winter backcountry recreationists are often confined to the same plowed parking areas to prepare for their day on the forest. However, in these "staging areas" snowmobile emissions can be concentrated and lead to an additional source of conflict and potential health concerns. While technological advances have produced cleaner four-stroke engines (and even zero emission electric snowmobiles), the vast majority of snowmobiles still use two-stroke engine technology. In two-stroke engines lubricating oil is mixed with the fuel, and 20% to 30% of this mixture is emitted unburned into the air and snowpack.[16] In addition, the combustion process itself is relatively inefficient and results in high emissions of air pollutants.[17] As a result, two-stroke OSVs emit very large amounts of exhaust that includes carbon monoxide (CO), unburned hydrocarbons (HC) and other toxins.[18] Carbon monoxide impacts the human body's ability to absorb oxygen,[19] and thus OSV exhaust is particularly harmful to those who are engaging in aerobic exercise (skiing and snowshoeing).

In a study on the Medicine-Bow National Forest researchers documented a decline in air quality with increased snowmobile activity.[20] They measured higher ambient concentrations of CO_2, NO_x, NO, and NO_2 at a snowmobile staging site and found significantly higher concentrations of these air pollutants on days with significantly more

[16] Kado, N.Y., P.A. Kuzmicky, and R.A. Okamoto. 2001. Environmental and Occupational Exposure to Toxic Air Pollutants from Winter Snowmobile Use in Yellowstone National Park. Prepared for the Yellowstone Park Foundation and National Park Service. 152p.
[17] USDI National Park Service (NPS). 2000. Air Quality Concerns Related to Snowmobile Usage in National Parks. Washington, D.C.: Feb. 2000. 22p.
[18] Zhou, Y., D. Shively, H. Mao, R.S. Russo, B. Pape, R.N. Mower, R. Talbot, and B.C. Sive. 2010. Air toxic emissions from snowmobiles in Yellowstone National Park. Environmental Science and Technology 44(1): 222-228.
[19] Janssem, S., and T. Schettler. 2003. Health Implications of Snowmobile use in Yellowstone National Park. 27p.
[20] Musselman, R. and J. Korfmacher. 2007. Air quality at a snowmobile staging area and snow chemistry on and off trail in a Rocky Mountain subalpine forest, Snowy Range, Wyoming. Environmental monitoring and assessment. 133: 321-334.

snowmobile activity. The researchers concluded that snowmobile exhaust was degrading local air quality.

Concerns over human health related to snowmobile emissions have led to extensive research on snowmobile pollution in Yellowstone National Park,[21] and conclusions from these studies have led to a ban of older technology two-stroke engines from the Park. Emissions from OSVs emit many carcinogens and can pose dangers to human health.[22] Several "known" or "probable" carcinogens are emitted including nitrogen oxides, carbon monoxide, ozone, aldehydes, butadiene, benzenes, and polycyclic aromatic hydrocarbons (PAH). Particulate matter, also found in OSV exhaust, is detrimental in fine and coarse forms as it accumulates in the respiratory system and can lead to decreased lung function, respiratory disease and even death.[23] While these pollutants are more concentrated at OSV staging areas and parking lots, OSV exhaust on trails can linger for long periods of time and dramatically reduce the quality of the experiences of non-motorized users along the trail. This is an example of a specific conflict between uses that the INF is required to minimize in its designation of areas and routes for OSV use.

Due to concerns with air pollution, particularly at OSV staging areas or where OSV use is concentrated, in addition to screening for air pollution impacts as part of the minimization criteria exercise, we recommend separating motorized and non-motorized winter recreationists to the extent possible. Separate parking lots for motorized and non-motorized users in popular recreation areas can help skiers and snowshoers limit their exposure to snowmobile exhaust and thereby minimize conflicts between uses. Separating parking areas will also help to relieve congestion as snowmobile trailers take

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[21] See USDI National Park Service (NPS). 2000. Air Quality Concerns Related to Snowmobile Usage in National Parks. Washington, D.C.: Feb. 2000. 22p. http://www.nature.nps.gov/air/Pubs/pdf/yell/Snowmobile_Report.pdf; Bishop, G.A., J.A. Morris, and D.H. Stedman. 2001. Snowmobile contributions to mobile source emissions in Yellowstone National Park. Environmental Science and Technology 35: 2874-2881; Kado, N.Y., P.A. Kuzmicky, and R.A. Okamoto. 2001. Environmental and Occupational Exposure to Toxic Air Pollutants from Winter Snowmobile Use in Yellowstone National Park. Prepared for the Yellowstone Park Foundation and National Park Service. 152p; Janssem, S., and T. Schettler. 2003. Health Implications of Snowmobile use in Yellowstone National Park. 27pp; Bishop, G.A., D.A. Burgard, T.R. Dalton, D.H. Stedman, and J.D. Ray. 2006. Winter motor- vehicle emissions in Yellowstone National Park. Environmental Science and Technology 40(8): 2505-2510. http://www.nature.nps.gov/air/Pubs/pdf/yell/200604ESTBishop_etalSnowmobileEmissions.pdf; Bishop, G.A., R. Stadtmuller, D.H. Stedman, and J.D. Ray. 2009. Portable emission measurements of Yellowstone Park snowcoaches and snowmobiles. Journal of the Air and Waste Management Association 59: 936–942. http://www.nature.nps.gov/air/Pubs/pdf/yell/Bishop_YELL_JAWMA59_Aug_936_2009.pdf; Ray, J. D. 2010. Winter Air Quality in Yellowstone National Park: 2009-2010, Natural Resource Technical Report. National Park Service, Fort Collins, Colorado. http://www.nature.nps.gov/air/Pubs/pdf/yell/20092011_YELL_WinterAQ.pdf; and Zhou, Y., D. Shively, H. Mao, R.S. Russo, B. Pape, R.N. Mower, R. Talbot, and B.C. Sive. 2010. Air toxic emissions from snowmobiles in Yellowstone National Park. Environmental Science and Technology 44(1): 222-228.

[22] Eriksson, K., D. Tjarner, I. Marqvardsen, and B. Jarvholm. 2003. Exposure to Benzene, Toluene, Xylenes and Total Hydrocarbons among snowmobile drivers in Sweden. Chemosphere 50(10): 1343-7 and Reimann, S., R. Kallenborn, and N. Schmidbauer. 2009. Severe aromatic hydrocarbon pollution in the arctic town of Longyearbyen (Svalbard) caused by snowmobile emissions. Environmental Science and Technology 43: 4791–4795.

[23] Janssem, S., and T. Schettler. 2003. Health Implications of Snowmobile use in Yellowstone National Park. 27p.

up considerably more space than passenger cars and trucks, often leaving little or no room for non-motorized users to park at trailheads.

- *Would noise from OSVs in this area/along this trail be audible from adjacent non-motorized areas?*

Or

How far would OSV noise from this area or trail travel on a typical winter day?

And

Would sound, emissions, or other factors from OSV use of the area or trail be compatible with the nearby populated area, neighborhood, or community or private land?

The Forest Service has previously recognized that OSV use creates noise that has the potential to impact wildlife and other recreation uses, therefore it is important to analyze this impact. For example, in the Stanislaus National Forest's OSV designation EIS, the Forest Service considered, by Alternative, the total acres of NFS lands designated for OSV use, and therefore potentially affected by noise, and the acres of Forest Service lands where noise is predicted to increase above ambient levels in sensitive areas (non-motorized recreation areas, communities, wildlife habitat) by 5 or more decibels as a result of moderate to high OSV use levels.[24]

Other national forests in Region 5 have conducted noise analyses as part of their OSV designation processes to understand the noise impacts of potential designations. Using the SPreAD-GIS model and average environmental factors for the winter season, the Forest Service modeled sound propagation away from point source sound locations along OSV trails and are located near non-motorized areas or trails.[25] While this modeling exercise does not perfectly capture noise impacts, it provided the Forest Service with at least some understanding of noise impacts resulting from potential OSV designations. Because most OSV use in Region 5 occurs along groomed trails, Region 5 forests chose to focus this modeling on trails. The INF may want to consider also applying this modeling to popular OSV play areas.

- I*s there a potential for conflicts between OSV use and other existing or proposed recreational uses to occur and/or are conflicts already known to be occurring?*

Motorized and non-motorized winter recreationists often seek out the same settings and look for similar experiences such as untracked or well-groomed snow, fun, and the

[24] See Stanislaus National Forest OSV Designation FEIS, available online at https://www.fs.usda.gov/project/?project=46311.

[25] See, for example, Stanislaus National Forest OSV Use Designation FEIS Volume 1 pages 106-116. Available online at https://www.fs.usda.gov/project/?project=46311.

enjoyment of the natural beauty of the mountains. But as winter recreation grows on Forest Service lands, so does the potential for impacts on natural resources and conflicts between these two user groups. In terms of recreation opportunity, OSV use adversely impacts the recreation experience sought by many non-motorized users, and high levels of motorized recreation can displace non-motorized use, while the reverse is rarely true. This is a phenomenon that has been well documented in Forest Service literature and analyses. Where displacement does not occur because of the high level of demand for a particular area or a lower density of OSV use, conflicts among uses may still be present and can be substantial. Additionally, advancements in technology and changes in use patterns among both user groups have increased the need for proactive management. While early snowmobiles were relatively slow and generally limited to groomed trails, today's OSVs can go almost anywhere a skier can go. New technologies, combined with growing numbers of people in the backcountry have led to increased use conflict. For more information on use conflict, and minimization approaches, please see Appendix 1: *Use Conflict in OSV Planning*.

Other national forests in Region 5 have identified several ways in which OSVs can impact the quantity and quality of non-motorized winter recreation opportunities for those seeking solitude and challenging physical experiences.[26] These included: designating OSV use in popular, highly desirable, non-motorized recreation areas; not preserving areas that are easily accessed by communities and visitors for winter non-motorized recreation opportunities; reducing the quantity of national forest lands available for quiet, non-motorized recreation; and increasing the distance of travel required in order to access desirable quiet, non-motorized recreation areas (perhaps to distances further than an enthusiast is physically able to travel).[27]

In turn, the Forest Service has stated that OSV designations can lead to conflict between OSV and non-motorized winter recreation by: increasing the area of overlap between non-motorized (e.g., snowshoeing, cross-country skiing, general snow-play) and motorized (i.e., OSV) use; designating non-motorized areas for motorized OSV use; OSVs consuming untracked powder desired by non-motorized winter recreationists, particularly cross-country skiers, snowshoers, and backcountry downhill skiers; OSVs compacting, tracking, and rutting the snow, making the snow surface difficult to cross-country ski, snowshoe, or walk on; OSVs creating concerns for non-motorized winter recreationists' safety where winter recreation trails and areas are shared with OSV usage; OSVs creating noise impacts that intrude on the solitude and/or natural soundscapes these enthusiasts seek; OSVs creating local air quality impacts that

[26] See for example, Stanislaus National Forest OSV Designation FEIS, available online at https://www.fs.usda.gov/project/?project=46311.
[27] Stanislaus National Forest OSV Designation FEIS, Volume I, page x.

intrude on the unpolluted air and solitude these enthusiasts seek; OSVs creating visual impacts that intrude on the unaltered scenery these enthusiasts seek; OSVs impacting the quiet characteristics of non-motorized trails; and OSVs impacting the Natural, Undeveloped, Outstanding opportunities for solitude or primitive and unconfined recreation in Wilderness Areas.[28]

Furthermore, the EA should consider whether to designate areas or trails by class of vehicle and include analysis of potential environmental effects from the use of the different vehicle classes (for example traditional snowmobiles versus OSVs over 50 inches wide or exerting over 1.5 pounds per square inch (psi)). The Tahoe National Forest used this type of analysis and differentiated between Class 1 and Class 2 OSVs, with Class 2 OSVs only allowed on designated groomed trails. As defined by the Tahoe, Class 1 OSVs include those that typically exert a ground pressure of 1.5 psi or less while Class 2 OSVs typically exert a ground pressure of more than 1.5 psi.[29]

It's also important to differentiate between mitigation and minimization, as mitigating impacts is not equivalent to minimizing impacts. Federal courts including the Ninth Circuit Court of Appeals have repeatedly affirmed the substantive nature of the agency's obligation to meaningfully apply and implement the minimization criteria. Efforts to *mitigate* impacts associated with a designated OSV system are insufficient to fully satisfy the duty to *minimize* impacts, as specified in the executive orders. *See* Exec. Order 11644, § 3(a) ("Areas and trails shall be *located* to minimize" impacts and conflicts.). Thus, application of the minimization criteria should be approached in two steps: first, the agency locates areas and routes to minimize impacts, and second, the agency establishes site-specific management actions to further reduce impacts.

4. Compliance with Area Size Requirement

The 2015 OSV Rule requires that areas designated for cross-country OSV travel be limited in size to no more than the size of a ranger district and that these areas be discrete and specifically delineated. The term discrete is generally accepted to mean "apart or detached from others; separate; distinct."

The PA specifies sixteen specifically delineated areas that would be designated for OSV cross-country travel and claims on page 27 that each of these areas is less than the area of a ranger district. However, these areas are not all discrete and are contiguous to each other and must be considered a single, designated area in the

[28] *Id.*

[29] *See* Tahoe National Forest Over-Snow Vehicle Use Designation draft ROD, page 2; Tahoe National Forest Over-Snow Vehicle Use Designation FEIS Volume 1, page 25, available at https://www.fs.usda.gov/project/?project=45914.

context of the OSV Rule. The Lee Vining, June Lake Loop, Mammoth to June West, Sherwin to Laurel, McGee, and Rock Creek areas defined in the PA form a contiguous area west of Highway 395. Together, this area comprises 91,100 acres. Similarly, the Mono Craters, Glass Mountains, Mammoth to June East, and Crowley Basin areas form a contiguous area east of Highway 395, which is 155,400 acres in size.

Each of these combined areas is less than the size of the smallest ranger district, so the PA does comply with the TMR in this respect. However, the area size requirement must be evaluated correctly based on the contiguous areas that will be designated in the final use map and not on the arbitrarily specified areas shown on maps as part of the environmental analysis.

5. Climate Change

The Forest Service must plan for OSV management in the context of a rapidly changing climate and address how changing winter seasons and snow packs, more intense storms, and more rain-on-snow events affect winter recreation. These climate-driven changes are already altering winter backcountry recreation use patterns and this trend is expected to continue.[30]

With fewer or smaller areas available for over-snow recreation, these uses will become more concentrated, which may lead to increased crowding, use conflict, new or increased wildlife impacts, and resource damage. For example, not only will there be fewer places with persistent snow cover, access to these areas may change or require travel on non-snow surfaces. Climate change is also altering wildlife behavior, sensitivity, migration patterns and habitat use. To preserve quality recreation opportunities, protect wildlife, and minimize natural resource damage, the Forest Service should consider the impacts of a changing climate and how the winter landscape may change over the life of the OSV plan. The INF should also address how it will manage shoulder-season OSV use to ensure OSVs are traveling on sufficient snow to protect underlying soils and vegetation. The shoulder seasons—late fall and early spring—can be a time of frequent and abrupt change in the mountains, with snow accumulating and melting quickly and snow cover changing daily. Snow accumulation is not an altogether steady process—an early storm may blanket the landscape with snow, only to have it all melt away before “real” winter sets in. Likewise, the spring melt doesn’t follow a smooth trend. Spring storms and unseasonably warm days can drastically change snowpacks, especially at lower elevations. Season dates can help to

[30] 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.

minimize impacts to natural resources, along with protecting sensitive and migratory wildlife, so long as they're enforced.

6. Wildlife and Vegetation

Wildlife

Over Snow Vehicles can cause mortality, habitat loss, and harassment of wildlife.[31] While most animals are well adapted to survival in winter conditions, the season creates added stress to wildlife due to harsher climate and limited foraging opportunities.[32] Deep snow can increase the metabolic cost of winter movements in ungulates up to five times normal levels[33] at a time when they are particularly stressed by forage scarcity and high metabolic demands. Disturbance and stress to wildlife from snowmobile activities during this highly vulnerable time is dire. Studies of observable wildlife responses to snowmobiles have documented elevated heart rates, elevated glucocoritcoid stress levels, increased flight distance, habitat fragmentation as well as community and population disturbance.[34]

In addition to the direct physiological stress of snowmobiles, evidence suggests that popular winter trails can fragment habitat and wildlife populations. Winter trails through surrounding wilderness areas or other core areas create more "edge effect" (the negative influence of the periphery of a habitat on the interior conditions of a habitat) and thereby marginalize the vitality of some species.[35]

In many instances, snowmobiles induce animal flight, causing increased energy expenditures. In Yellowstone National Park, where snowmobile-wildlife interactions have been most extensively studied, evasive maneuvers in response to snowmobiles have been documented in a number of species. These maneuvers result in increased energy expenditures for the affected wildlife. For example, Aune (1981) reported flight distances of 33.8 meters for elk and 28.6 meters for mule deer in response to snowmobiles in Yellowstone.[36] The energy cost estimates calculated for these impacts

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[31] Boyle, S. A., and F. B. Samson. 1985. Effects of Nonconsumptive Recreation on Wildlife : A Review. Wildlife Society Bulletin 13:110–116. See also Olliff, T., K. Legg, and B. Kaeding, editors. 1999. Effects of winter recreation on wildlife of the Greater Yellowstone Area: a literature review and assessment. Report to the Greater Yellowstone Coordinating Committee. Yellowstone National Park, Wyoming. 315 pages.

[32] Reinhart, D. 1999. Effects of Winter Recreation on Habituated Wildlife.

[33] Parker, K.L., Robbins, C.T. and Hanley, T. A. 1984. Energy expenditures for locomotion by mule deer and elk. Journal of Wildlife Management 48:474–488.

[34] Baker, E. and Bithmann, E. 2005. Snowmobiling in the Adirondack Park: Environmental and Social Impacts.

[35] *Id.*

[36] Aune, K.E., 1981. Impacts of Winter Recreationists on Wildlife in a Portion of Yellowstone National Park, Wyoming. Master's thesis. Montana State University.

were 4.9 to 36.0 kcal in elk and 2.0 to 14.7 kcal in mule deer per disturbance.[37] These energy expenditures are roughly equivalent to the necessary additional consumption of 4.3 - 31.7 grams of dry forage matter by elk and 1.8 - 12.9 grams by mule deer each time a disturbance occurs. Severinghaus and Tullar (1978) theorize that for white-tailed deer, during a 20-week winter with snowmobile harassment each weekend, “food enough for 40 days of normal living would be wasted just escaping from snowmobiles."

There are several wildlife species on the INF that merit consideration during this OSV planning process, including but not limited to Sierra Nevada bighorn sheep, mule deer, Sierra Nevada red fox, wolves, wolverine, southern Sierra Nevada fishers, and Bi-State sage-grouse. OSV use can be particularly harmful to ungulates, as these species are most vulnerable during winter. Ungulate winter ranges should not be designated for cross-country OSV use, and any routes designated within winter ranges should be carefully considered, with the minimum number of miles necessary to provide quick passage through these sensitive areas. Mule deer over-winter at lower elevations, making cross-country OSV contact likely under the current proposal. Likewise, migration corridors should be protected from OSV use, as these corridors are essential to population health and survival.

Sierra Nevada red fox (SNRF) are classified as a Threatened Species in California and a Region 5 Sensitive Species. The species is found at or around 6,500 feet in elevation and prefers areas with forest cover.[38] They avoid open areas and dense forests. Recent sightings have been concentrated in high elevation areas near Lassen Peak and Sonora Pass but the extent of their current distribution is unknown and it's entirely possible that SNRF currently are present on the INF. We encourage the Forest Service to work closely with the California Department of Fish and Wildlife to identify and minimize potential impacts to SNRF and other species.

Our most pressing concern with SNRF in regards to OSV use is in how OSVs may tip the competitive balance between coyotes and SNRF. Snow compacted by OSVs can become travel corridors that facilitate coyote incursion into red fox habitat. There are several studies in other areas that show coyotes heavily utilize snowmobile tracks[39]

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[37] Parker, K.L., Robbins, C.T. and Hanley, T. A. 1984. Energy expenditures for locomotion by mule deer and elk. Journal of Wildlife Management 48:474–488.

[38] Perrine, J.D.; Campbell, L.A.; and G.A. Green. 2010. Sierra Nevada Red Fox (Vulpes vulpes necator) A Conservation ASsessment. USDA Report.

[39] See Koehler, G.M. and K.B. Aubry. 1994. Lynx. In: Ruggiero, L. F., K.B. Aubrey, S.W. Buskirk, L.J. Lyon and W.J. Zielinski, eds. The scientific basis for conserving forest carnivores: American marten, fisher, lynx and wolverine in the western United States. pp. 74-98. U.S. Forest Service General Technical Report RM-254; Buskirk, S.W., L.F. Ruggiero, C.J. Krebs. 2000. Habitat fragmentation and interspecific competition: implications for lynx conservation. Pages 83-100 in Ruggiero, L.F., K.B Aubry, S.W. Buskirk, et al. Ecology and conservation of lynx in the contiguous United States. University Press of Colorado, Boulder, Colorado;

move into areas that are normally the domain of species better adapted to deep snows, such as lynx. Although it is likely that red foxes also exploit snowmobile tracks opportunistically, we are concerned that snowmobiles tip the competitive equation more in favor of coyotes. Coyotes and foxes utilize the same food resources and coyotes are known to prey on fox as well. Without snowmobiles packing down trails, the lighter red foxes may have just enough of an edge to coexist with the otherwise dominant competitor in lean winter times.

Just this past summer a wolverine was detected on the INF for the first time in over a century. This remarkable species is well adapted to winter landscapes, but also very sensitive to human disturbance, particularly from winter recreation.[40] It is also a Region 5 Sensitive Species. In general, to minimize impacts to wolverines the Forest Service should not expand the winter recreation footprint within wolverine habitat, restrict off-trail OSV use in denning habitat from February through April, and increase connectivity. In 2020 Winter Wildlands Alliance and the Yellowstone to Yukon Conservation Initiative published recommendations for winter travel planning in wolverine habitat, based on Heinemeyer 2019 and other research on how wolverines respond to winter recreation. These recommendations are to:

- **Limit the spread of winter recreation in wolverine habitat.** In high quality wolverine habitat where winter recreation use is already established, buffer recreation areas with closures to prevent recreation spread. Additionally, areas of moderate-to-high wolverine habitat that do not currently see high levels of winter recreation activity should be protected with closures to provide refuge for wolverines.
- **Manage for low recreation intensity in wolverine habitat.** In addition to limiting the spread of winter recreation, manage areas that currently experience low-moderate winter recreation so use does not increase. This could be achieved by limiting winter parking opportunities or requiring (and limiting) recreation use permits.
- **Establish seasonal (February - April) closures to protect female wolverine habitat during the denning season.** Importantly, closures should extend beyond denning habitat, as females need secure foraging habitat to successfully rear kits. Work with biologists to identify known female wolverine locations and establish closures in areas large enough to secure denning

and Bunnell, K.D., J.T. Flinders, and M.L. Wolfe. 2006. Potential impacts of coyotes and snowmobiles on lynx conservation in the Intermountain West. Wildlife Society Bulletin 34:828-838.

[40] Heinemeyer, K., J. Squires, M. Hebblewhite, J. J. O'Keefe, J. D. Holbrook, and J. Copeland. 2019. Wolverines in winter: indirect habitat loss and functional responses to backcountry recreation. Ecosphere 10(2):e02611. 10.1002/ecs2. 2611. Available online at https://www.fs.usda.gov/rm/pubs_journals/2019/rmrs_2019_heinemeyer_k001.pdf

habitat and where foraging needs can be met. around where each female is located. While each situation will be different, the closure area should be based on best available science (analysis is currently ongoing on the best recommended area size to support denning and foraging habitat), and should be in consultation with local and regional biologists who can provide insight into foraging challenges and opportunities.

- **Identify opportunities to improve wolverine habitat connectivity through winter recreation management by reducing disturbance along corridors that connect high-value habitats.** These steps could include requiring and limiting recreation use permits, designating recreational use within linear corridors, and closing use during the denning season.
- **Where demonstrated as necessary to provide access to high-value recreation resources or connectivity between communities, consider designating some linear winter recreation routes through areas that are otherwise closed**.

Like wolverines and Sierra Nevada red fox, gray wolves are rare but, with the recent re-establishment of a pack on the adjacent Sequoia National Forest, are potentially present or could be present in the future on the INF and must be considered in the analysis for this project.

It's also important that the INF consider and minimize impacts to bird species, from year-round residents such as Bi-State sage-grouse (BSSG) and various raptor species, to migratory songbirds. Noise from OSVs can be especially detrimental to birds during the breeding season, when many species rely on auditory communication to find mates. Anthropogenic noise, particularly that from motor vehicles, has been shown to alter bird behavior.[41] Snowmachine use has been demonstrated to alter the behavior of many birds that commonly inhabit snowy landscapes as the frequency and range of sounds emitted from snowmachines overlaps with their vocalizations. In a 2018 study on the Stanislaus National Forest, scientists documented that the listening area for white-breasted nuthatches was reduced by more than 90 percent within the snowmobile noise footprint zone, preventing intraspecific communication across a large area.[42]

[41] See Goodwin, S.E., and W.G. Shriver. 2010. Effects of traffic noise on occupancy patterns of birds. Conservation Biology 25:406-411; Ortega, C.P. 2012. Effects of noise pollution on birds: A brief review of our knowledge. Ornithological Monographs 74:6-22; and McClure, C.J.W., H.E. Ware, J. Carlisle, G. Kaltenecker, and J.R. Barber. 2013. An experimental investigation into the effects of traffic noise on distributions of birds: Avoiding the phantom road. Proceedings of the Royal Society B 280:20132290.

[42] Keyel, A.C., S.E. Reed, K. Nuessly, E. Cinto-Mejia, J.R. Barber and G. Wittemyer. 2018. Modeling anthropogenic noise impacts on animals in natural areas. Landscape and Urban Planning 180: 76–84.

BSSG alter their wintering habits based on conditions. In a heavy snowpack year, they will move, as they did this past winter, to where the sagebrush is tallest and sticks out of the snow. In a lighter snowpack year, they might be in their usual locations. They roost in the snow and let the snow cover themselves and then shake the snow off when the storm passes. The mating/lekking season is generally February-March. They nest in April-June and 95% of the nests are within 3.2 miles of the lek according to the 2012 BSSG Action Plan. The OSV plan should conform to the 2012 BSSG Action Plan and the LAWG's recommended protections. Off-trail snowmobiling in BSSG lekking areas should not be allowed

Whitebark pine

On December 15, 2022, the U.S. Fish and Wildlife Service published a final rule (87 FR 76882) to list the whitebark pine (Pinus albicaulis) as a threatened species under the Endangered Species Act. In our extensive experience backcountry skiing in whitebark pine habitat, we have seen whitebark saplings present above the snow even midwinter in areas with deep snowpacks. This is especially true near ridgelines or other wind-blown areas where the snow is shallower than surrounding areas such as near and along the crest of the Sherwins Range. We have frequently observed OSV damage to whitebark pine in such areas. As Forest Service timber managers know, snowmobile damage to trees is common. Gallatin National Forest survey data obtained in a 2008 FOIA request show that between 1983 and 1995, snowmobiles damaged between 12 and 720 trees per acre across approximately 72,393 surveyed acres.[43] Considering damage from OSV use can prevent whitebark pine saplings from reaching seed-bearing maturity, this is a serious issue for the future of the whitebark population. Furthermore, because whitebark pine grow in relatively low densities compared to other tree species, each individual sapling is critical to the persistence of a stand. In addition to more carefully considering how to protect whitebark pine from OSV-caused damage, the Inyo OSV plan should include a monitoring plan so that the Forest Service can accurately assess whether OSV use is cause for concern or not. The monitoring plan should include meaningful measures for assessing compliance with and effectiveness of the OSV plan, including but not limited to Threatened and Endangered species.

Regardless of the species of topic, the Forest Service may not rely on potential future mitigation measures, hypothetical future monitoring, and other generalized statements to demonstrate compliance with the minimization criteria.[44] While identifying potential impacts for future adaptive management actions and mitigation measures is an

[43] Winter Wildlands Alliance. 2009. Seeing the forest and the trees: assessing snowmobile tree damage in national forests. A report by Winter Wildlands Alliance, Boise, ID. See Appendix 2

[44] See, e.g.,WildEarthGuardians,790 F.3d at 932 (agreeing with previous district court decisions,including the holding that federal land management agencies are "required to place router specifically to minimize 'damage' to public resources, 'harassment' and 'disruption' of wildlife and its habitat, and minimize 'conflicts' of uses").

important part of the overall effort to designate a motorized system that minimizes impacts, it does not satisfy the obligation to apply relevant data to locate areas and trails to minimize impacts in the first instance.

7. Data and Ground Truthing

It is critical that this OSV plan be grounded in real data. Fortunately for the INF, winter recreation data for the forest—collected by the agency and by partners—abounds. Nationally, and in California, non-resort winter recreation is booming and according to the Snowsports Industries Association and International Snowmobile Manufacturers Association annual reports, participation in non-motorized, non-resort winter recreation activities consistently outnumbers snowmachine use by orders of magnitude.[45] The INF's own NVUM data shows that the percent of visitor participation in snowmobiling was just 0.3% in 2016 (the most recent report)— the lowest of any activity on the forest. There are well over 100 backcountry skiers/splitboarders, Nordic skiers, snowshoers and snowman builders to every one snowmobiler, and yet the interests and concerns of the former seem not to be considered at all in the INF's PA.

Last winter WWA worked with Friends of the Inyo and local volunteers to monitor winter recreation use on the INF. We conducted 80 visitor use assessments on the Inyo throughout the winter season. The details of our data collection efforts on the Inyo are contained within the attached 2022-2023 California Winter Recreation Data Collection Program report (Appendix 3). We plan to continue this effort throughout the upcoming winter season and beyond, and look forward to continuing communication with the INF regarding objective results and observations, as well as specific queries that could help inform the winter travel planning process.

We are glad to see the INF working with local cooperating agencies such as the Town of Mammoth Lakes and Mono County. We hope to see the incorporation and analysis of detailed recreation use and visitor monitoring data from these and other agencies in the INFs development of alternatives and application of minimization criteria.

Guidebooks are also an important source of data and localized topographical expertise to inform the OSV planning process. Dan Mingori and Nate Greenberg's *Backcountry Skiing: California's Eastern Sierra Guidebook*[46] describes in detail many of the areas

[45] The latest *SIA Participation Study 2022-2023* reports over 27 million non-motorized, non-resort winter recreationists, with double-digit growth year over year, versus a flat or declining 12 million resort skiers/snowboarders nationwide (https://members.snowsports.org/research/2022-2023-participation-study/). The International Snowmobile Manufacturers Association meanwhile reports 53,553 snowmobiles sold in the U.S. in 2023 [sic] and 1.26 million currently registered snowmobiles in the U.S. (https://www.snowmobile.org/snowmobiling-statistics-and-facts.html).
[46] Available at https://rakkup.com/guidebooks/backcountry-skiing-california-eastern-sierra/ or hard copy

and routes utilized by the backcountry ski and splitboard community. *Ski Tours in the Sierra Nevada - East of the Sierra Crest*, by Marcus Libkind, is another excellent resource. In addition to guidebooks, we encourage the INF to look to mobile apps such as OnX Backcountry, OnX Off-Road, and Strava to understand how and where winter visitors are recreating on the Inyo. Finally, we hope that INF line officers and the planning team will spend time on the ground and in the field during the winter season to monitor winter use patterns first-hand as well as to gauge visitor satisfaction and the actual and potential conflict between uses under current management scenarios.

This OSV plan is the Inyo's primary opportunity to set the vision for the future of motorized use and access on the forest for the next 10-30 years, and as such it's important that the EA and the planning process be proactive and forward-looking. Recreation technologies are rapidly changing, with new motorized over-snow uses emerging each year. We encourage the INF to look to and learn from other winter recreation forests as another source of data and potential management solutions as you proceed with this process.

8. Equity

Executive Order 13985, "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,"[47] requires federal agencies to prepare a plan for addressing any barriers to full and equal participation in programs, services, procurement, contracting, and other funding opportunities. In response to this order, the Forest Service published an Equity Action Plan in 2022, with a new plan recently published for 2023-2024. Action number 8 in this plan is to "Promote Access to Recreation and Outdoor Experiences in Underserved Communities."[48] This must include reducing barriers to and increasing equitable access for communities to natural soundscapes, snowscapes, and quality non-motorized recreation opportunities in winter. The OSV plan is an important path to accomplishing this for communities in the Eastern Sierra, in addition to promoting/providing equitable motorized access.

9. Recommended Alternatives

[47] See also "Executive Order on Further Advancing Racial Equity and Support for Underserved Communities Through The Federal Government," February 16, 2023: https://www.whitehouse.gov/briefing-room/presidential-actions/2023/02/16/executive-order-on-further-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/

[48] "Under this action, the Forest Service aims to promote research to better understand who visitors are, how they recreate, who is not recreating, and what barriers exist in underserved communities when it comes to accessing recreation opportunities. This action also aims to identify economic, community, and personal benefits of recreation and better understand preferences and satisfaction with recreation opportunities. Activities in this action include developing research-based strategies to reduce barriers and increase visitation by underserved communities and promoting use of the Native American Tourism and Improving Visitor Experience (NATIVE) Act in support of Tribal culture and the tourism enterprise." https://www.usda.gov/sites/default/files/documents/fs-equity-action-plan.pdf

Between late September and late December 2022, representatives from a variety of entities met in a series of facilitated meetings and limited site visits to discuss possible stakeholder-based pre-scoping recommendations for OSV designation and management on the INF. Unfortunately, representation in this process skewed heavily—numerically—toward groups and individuals with specific interests in motorized winter recreation rather than the interests of the majority of forest users. While there was some productive discussion and even some tentative verbal agreement on a number of points—such as, generally, a preference for separating incompatible uses wherever possible—this so-called "Collaborative Alternative Team" (CAT) failed to reach any definitive, written compromises or solutions. With the exception of a general initial proposal for the minimization of use conflict at Shady Rest Park, none of the compromises or proposals discussed during this pre-scoping process seem to have been incorporated into the INF's PA.

We understand that the INF's PA is merely a starting point and that the planning team will be developing a number of specific alternatives over the coming year to be considered and analyzed according to the specific minimization criteria. To that end, by way of illustration, we are including here a list of some of the geographical areas that were discussed during the pre-scoping process and/or are of specific concern to our members and partners, with the expectation that the INF will duly analyze and consider a reasonable range of alternatives for each. This list is by no means meant to be comprehensive or exhaustive, and we expect the INF team to do its own topographical ground-truthing, as well as monitoring and assessment of seasonal visitor use patterns and trends in order to develop alternatives that truly meet minimization criteria and are understandable and enforceable on the ground.

Roughly from north to south:

- Lundy Canyon: We understand that the roadway into the canyon along Mill Creek and Lundy Lake, from its winter closure, is occasionally used by OSVs for day tours and access to the Wilderness boundary. We expect to see an alternative that analyzes designating this roadway for appropriate OSV use. Designating the steep sides of the main canyon as open OSV riding areas makes no sense on the ground. Designating OSV travel along the cherry stem into Lake Canyon, along a route that is designated non-motorized in summer, would invite trespass into the Hoover Wilderness and significantly impact the wilderness character of the entire canyon.
- Tioga/Saddlebag: Given the sensitivity of this landscape, its contiguity with Yosemite National Park, the Harvey Monroe Hall Research Natural Area and the

Hoover Wilderness, and its world-renowned popularity as a human-powered Nordic touring, backcountry skiing and snowboard zone, especially in spring, plus the significant avalanche danger on the Tioga Road throughout the season, we do not see the rationale for designating this area open to motorized OSV use. We also look forward to seeing thorough consultation between the INF and Fish and Wildlife, Southern California Edison, CalTrans, Mono County, the National Park Service and other cooperating agencies on how best to protect and manage this zone.

- Lee Vining Canyon: Given the steep terrain on either side of the Poole Power Plant Road, and the canyon's popularity as an access corridor for backcountry skiing on the flanks of the Dana Plateau, we do not see the rationale for opening either the roadway or the surrounding terrain to OSV use.
- Parker Bench: Given the limited and complex terrain between State Route 158 (the June Lake Loop) and the wilderness boundary, and the zone's popularity for access to numerous backcountry skiing, snowboarding and winter mountaineering routes on Mount Wood and Mount Lewis, we do not see the rationale for designating this zone open to OSV use. It must also be considered that there are BSSG leks in this area. There have been 3 translocations of sage grouse to the Parker Meadow and a small population is getting re-established here.
- Obsidian Dome Nordic Area and Trailhead: As we understand it, this small area was established as a non-motorized Nordic ski area by community consensus and by Forest Order in the early 1990's. It is the only such area accessible within a short drive of the communities of June Lake and Lee Vining. It is also a popular access zone for backcountry skiing and snowboarding on Chicken Wing. We do not see the rationale for diminishing this historic protection by designating any of this area open to OSV use. Furthermore, many of our members and partners have reported increasing motorized trespass into this area in recent years, and we have provided the INF with specific documentation of several instances of such trespass during the 2022-23 winter season (see RIMS data report, Appendix 3). We look forward to seeing specific implementation strategies as part of the INF's final OSV plan, to include a combination of signage, education, monitoring and enforcement as means of minimizing conflict between uses. We also look forward to the INF's development and analysis of different alternatives for effectively separating uses in this area, as the current multi-use parking and staging scenario tends to maximize rather than minimize conflict between uses (with motorized OSV users having to cross through the non-motorized parking and trailhead in order to join—at difficult right angles—the groomed OSV network). Such an alternative should also include not designating OSV use at the

existing family snowplay area on the west side of Highway 395 at FS Road 2S11A.

- Upper Deadman Creek cherry-stem: as with the cherry stem in Lake Canyon described above, designating OSV travel into this narrow canyon would invite trespass into the Owens River Headwaters Wilderness and significantly impact the wilderness character of the entire canyon.
- Earthquake Dome: The north and east flanks of Earthquake Dome are a popular local backcountry ski and snowboard zone. We do not see the rationale for shrinking protections in this zone by expanding the area designated open for cross-country OSV use. We also look forward to seeing an alternative that does not designate the area around the historic Sierra Club blue-diamond Nordic touring and snowshoeing trail open to cross-country OSV use.
- Scenic Loop dispersed camping and family snowplay zone: We can see the need to provide a designated OSV route through this zone to access the groomed OSV network beyond, but we look forward to seeing an alternative that does not designate cross-country OSV use that would conflict with the popular family snowplay and dispersed camping zone on the east side of the Mammoth Scenic Loop. We anticipate seeing an alternative that analyzes designation of an OSV staging area at the intersection of the Inyo Craters Road.
- Shady Rest Trailheads and trail re-alignments: We generally support the alternative being developed by the Inyo NF and the Town of Mammoth Lakes (TOML) to separate motorized and non-motorized winter recreation in the Shady Rest area. This new proposed scenario should allow for dedicated motorized staging at the New Shady Rest Campground dump station at the corner of CA203 and Sawmill Cutoff Road, with a designated re-alignment of a groomed OSV route around the west side of Shady Rest Park along the existing multi-use pathway for direct groomed access to the groomed snowmobile trail network to the north of Shady Rest Park. The town's groomed Nordic ski and walking loops, accessible from the Welcome Center parking lot, as well as Shady Rest Park itself, should not be designated open to motorized over-snow use. This would minimize conflict between incompatible uses at one of the town's most popular winter recreation access points, and would be a huge improvement for all users over the current situation.
- Earthquake Fault: We would like to see an alternative that does not designate motorized OSV use in the Earthquake Fault area, thereby creating an opportunity for a dedicated, higher-altitude (climate resilient) non-motorized staging area for Nordic skiing, snowshoeing, family snowplay and backcountry ski/snowboard access to the east and north sides of Earthquake Dome and to the Sierra Club's historic blue diamond Nordic trail. As necessary, a snowmobile crossing could be

established across the roadway below the parking area to provide OSV access to the Cinder Shed and the groomed OSV network beyond.

- Cinder Shed: We can see the value in establishing a sustainable higher-elevation motorized staging area here for more predictable seasonal access to the broader groomed OSV network.
- Minaret Vista: We would like to see alternatives developed and analyzed in conjunction with INF's analysis of the proposed Mammoth Mountain Main Lodge Redevelopment Project. Alternatives should seek to delineate separate motorized and non-motorized access routes to Minaret Summit and the popular Minaret Vista overlook. The INF should show its rationale for designating cross-country OSV use along San Joaquin Ridge above Minaret Vista.
- Agnew Meadows, Reds Meadow and Devils Postpile: The INF should show its rationale for designating cross-country OSV use beyond Minaret Summit into the Reds Meadow area and how it plans to enforce against motorized trespass into Devils Postpile NM and the Ansel Adams and John Muir Wilderness areas.
- Mammoth Lakes municipal boundary: Generally, in order to provide equitable access to natural soundscapes and non-motorized recreation opportunities, to minimize conflicts between uses and impacts to populated areas, the forest should develop and analyze alternatives that designate discrete OSV routes that move OSVs at low speeds to areas and routes well beyond communities and neighborhoods, where impacts to other uses and to populated areas are minimized.
- Mammoth Lakes Basin: Given the inherent conflict between motorized OSV use and all the other highly popular non-motorized uses in the Lakes Basin, we look forward to seeing the rationale for designating this area open to OSV use beginning on April 17—beyond merely that it may have been managed this way in the past. If there is indeed adequate rationale for designating OSV travel within the Lakes Basin beginning on April 17, it should be limited to existing roadways and not allowed right to the edge of the wilderness boundary. It should be noted that, according to the Mammoth Lakes Trail System website, current management is as follows: "On April 17 of each year, after the cross-country ski season ends and before roads are plowed, snowmobiles are allowed in the Lakes Basin *on existing roadways only, conditions permitting*."[49]
- Sherwins Front and Sherwins Meadow: The Sherwins Front—from Mill City, the Consolidated Mine and Mammoth Rock to Bardini Ridge and the Tele Bowls—is a renowned, world-class, frontcountry human-powered ski and snowboard area right at the edge of (and easily accessed from) the heart of Mammoth Lakes. Historically known as Sherwins Bowl, the area was first proposed for development as a commercial ski area in the 1950s and was formally designated

[49] https://www.mammothtrails.org/destination/76/lakes-basin-winter-access

for study as a winter sports site in 1967. In 1991, the Forest Service rejected a proposal to develop a lift-served commercial ski resort in this area, in part due to overwhelming opposition from the community and what was then the California Department of Fish and Game (now Department of Fish and Wildlife). The Sherwins Meadow is a popular and easily-accessible area for walking, Nordic skiing, snowshoeing and family snowplay along the base of the mountains and bounded to the north by the Snowcreek Development and Old Mammoth neighborhoods. The mountains and meadow are generally managed as non-motorized in summer—with singletrack trails open to equestrians, hikers and mountain bikers but not e-bikes, dirt bikes or ATV/UTVs—and were recommended to be non-motorized in winter in the community-developed Sherwins Area Recreation Plan (SHARP) as adopted by the Town of Mammoth Lakes in 2009. The Sherwins were classified as having High Scenic Integrity Objectives in the 2019 Revised Land Management Plan and were also classed on the Recreation Opportunity Spectrum (ROS) as "semi-primitive non-motorized." As with the Shady Rest proposal above, we hope to see the development of an alternative that would not designate any of the Sherwins area for motorized OSV use. This would protect the meadow and the popular backcountry ski and snowboard zones and uphill tracks for accessible quiet, non-motorized recreation and natural soundscapes, and would minimize safety concerns and conflict between incompatible uses. There is plenty of space at the propane tanks and borrow pit parking areas (with a new Sherwins Trailhead to be developed here) to create a simple, strategic separation between non-motorized and motorized staging. This would allow for direct OSV access to thousands of acres of cross-country snowmobiling to the south and east by way of a designated OSV trail that follows Sherwin Creek Road to the motocross area and beyond (rather than straight through the walking and sledding area and over the south-facing slopes and manzanita across from the Tele Bowls), effectively minimizing conflict between incompatible uses, creating a comfortable and welcoming non-motorized staging area for equitable access to the Sherwins and Sherwins Meadow, and allowing for a range of different winter recreation experiences for all people.

- Solitude Canyon: Just three years ago, in November 2020, then Mammoth District Ranger Gordon Martin rejected a proposal to build a sustainable non-motorized trail in Solitude Canyon, citing "Issues raised by the public, state agencies, and U.S. Forest Service staff as part of the NEPA scoping process [including]: concerns that this project has the potential to affect important migration corridors relied upon by the Round Valley mule deer herd; [and] that Solitude Canyon provides a greater value as a natural and informal dispersed

use area."[50] We look forward to seeing the INF's rationale for designating this Inventoried Roadless Area open to cross-country OSV use when it has already deemed a non-motorized trail to be too impactful.

- Long Valley: There are BSSG leks in the Laurel Ponds/Sherwin Creek area as well as in the area to the east of the Mammoth airport. There are about 30 leks in the area from the Upper Owens River to the foot of the Glass Mountains and from the Green Church to Crowley Lake. This whole area is a nesting zone for the South Mono Population Management Unit (PMU), which is the second largest sub-population unit and a core BSSG area. It is an important PMU to protect or the species will be listed. (The species currently has a USFWS candidate listing as threatened and so must be treated as listed until the review deems otherwise; all BSSG PMUs should be seasonally closed per the latest updated BSSG plan.) We look forward to a thorough analysis and consultation with federal and state wildlife agencies, USGS, USFS biologists and the Local Area Working Group with regard to how cross-country snowmobiling in this area would impact this sensitive species.
- Convict Lake: We understand that the Tobacco Flat area above Convict Lake to the south has historically provided cross-country OSV use opportunities and access to the McGee Crest, but we do not see the rationale for designating OSV use right to the edge of Convict Lake, where the plowed parking area along the lakeshore provides one of the few dedicated public-access non-motorized trailheads on the northern part of the INF, and where the terrain is clearly unsuitable for motorized use.
- Rock Creek: Given the popularity of the upper canyon for Nordic touring, walking, snowshoeing and backcountry ski/snowboard access, and the close proximity of wilderness on either side, we do not see the rationale for designating open OSV areas above the Sno Park. The steep terrain and dense vegetation on either side of the road in the lower part of upper Rock Creek Canyon seem to us to make no sense for cross-country OSV use. We look forward to seeing the rationale for this proposed designation.
- Southern INF: Perhaps we misunderstand the maps provided with the INF's PA, but we do not see the rationale and are deeply concerned if indeed the INF is proposing to designate motorized OSV routes on cherry-stemmed roadways into the John Muir Wilderness at Onion Valley, Whitney Portal, Tuttle Creek and Horseshoe Meadows. This would obviously invite wilderness trespass and greatly impact wilderness character in these zones.

[50] Inyo National Forest, Lakes Basin Connector Trails Project Revised Proposed Action, November 10, 2020.

10. Implementation

Once the plan is finalized, the Forest Service must develop educational resources that will help the public understand and comply with the new travel plan, ideally with buy-in and assistance from local partner organizations. These may include winter recreation maps and apps (pairing OSVUM data with additional information about responsible recreation and opportunities for all forms of winter recreation in the region), trailhead and trail signage, backcountry ambassador and snow ranger programs. We encourage the Forest Service to consider developing an implementation plan congruent with the OSV planning process. Both the White River and Gallatin National Forests created implementation plans shortly after finalizing their respective OSV plans and both provide good examples for an implementation plan. Meanwhile, neither the Lassen nor Stanislaus have implementation plans, nor appear to have given much thought to implementation during the OSV planning process, and both are now struggling to engage and educate the public or otherwise implement their new OSV plans. For example, the Lassen OSVUM was not publicly available last winter season and few visitors were aware of the new OSV designations, nor did the forest take steps to enforce the new plan. This is a frustrating situation for the many people and organizations who have engaged in the planning process.

The White River Travel Management Implementation Plan (TMIP)[51] was specifically focused on the 5-year period immediately following the publication of the travel plan. Recognizing that "without appropriate and adequate information and education materials available for the public, and personnel to create and distribute them, the designation process alone will not provide the change in awareness and behavior necessary to ensure that the desired positive effects of the new travel rule are realized,"[52] the TMIP initially focused on education. The forest budgeted $300,000 annually for new signs and other education materials to inform the public about travel plan designations and restrictions for the first three years of plan implementation. Education materials included up-to-date information posted on the forest website, public information kiosks, digital brochures and interactive maps, motor vehicle and over-snow vehicle use maps, visitor use maps, brochures on responsible use, specific brochures for high-use areas, brochures on safety in mixed-use areas, and talking points for forest staff. These talking points (and other materials) focus on positive messaging. Rather than emphasizing where people *can't* go for their desired activity, they tell the public where they *can* go. Much of the travel plan-related messaging and educational materials were developed with partners who had participated in the travel planning

[51] Available at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5365835.pdf.
[52] White River TMIP, page 6.

process. Partner organizations—including state agencies—provide funding, volunteer and staff time, and materials to develop and post information about the travel plan.

The goal of the education component of the TMIP was to provide sufficient information to the public so that enforcement would not need to be the primary focus for travel plan implementation. However, enforcement still plays an important role. At the start of the enforcement phase of the TMIP, the Forest increased the number of staff who were trained and certified as Forest Protection Officers (FPOs) and encouraged all staff to spend more time in the field, to increase Forest Service visibility and presence. The TMIP also calls for close coordination between forest law enforcement officers (LEOs) and district staff, with districts identifying priority or problem areas and LEOs coordinating with FPOs to carry out enforcement. Today, many years into implementation, the Forest continues to conduct routine patrols at identified "hot spots" where compliance is an ongoing issue—such as where Wilderness boundaries are near OSV routes.

The Gallatin Travel Plan Implementation Strategy[53] is not as detailed as the White River TMIP but it provides a basic outline for implementation. The 3-phase implementation plan started with setting the stage through educating the public about the new plan, identifying grants and volunteers to help with implementation, initiating monitoring, developing maps, and putting up new signs and removing obsolete signs. The second phase, 1-5 years after the ROD, focused on implementing any site-specific projects necessary to open routes designated in the Travel Plan, increasing enforcement through saturation patrols, formalizing relationships with partners through user group agreements, and designating and managing major forest access corridors. Phase 3 of plan implementation, 5-10 years out from the ROD, focused on implementing the site-specific projects necessary to provide for the non-motorized opportunities in the Travel Plan (the Gallatin Travel Plan addresses non-motorized as well as motorized uses, and addresses summer and winter uses), improving or creating new parking areas where needed, decommissioning roads and trails as called for in the Travel Plan, and conducting routine maintenance and improvements for roads, trails, trailheads, and parking areas.

As part of the EA and final decision, there should be a clear roadmap for implementing the new OSV plan—to include education, signage, monitoring and enforcement—as well as a specific commitment to revisit the plan on a regular basis as technologies, visitor use trends, climate and other shifts occur. We look forward to working with you in this future phase of travel management.

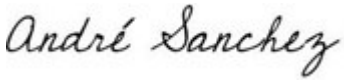
[53] Available at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5130759.pdf.

Thank you for your consideration of our scoping comments. We look forward to continuing to work collaboratively with the INF and other agencies and stakeholders to help develop equitable and balanced alternatives to be considered and analyzed in the EA or EIS. Please do not hesitate to contact us if you have any questions.

Sincerely,

David Page
Executive Director
Winter Wildlands Alliance

Allison Weber
Policy Associate, Water and Forest Campaign Manager
Friends of the Inyo



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Appendix 1: Use Conflict in OSV Planning

Use Conflict vs. *User* Conflict

A Fundamental Distinction in Winter Travel Planning

By David Page

The Forest Service Travel Management Rule outlines five specific criteria, known as "minimization criteria," that must be considered when designating roads, trails and areas for over-snow vehicle (OSV) use. Aside from (1) minimizing damage to natural resources, and (2) minimizing harassment or disruption of wildlife, the responsible official must also consider "with the objective of minimizing": (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."[54]

[54] 36 CFR 212.55 (b), emphasis added

A fifth criterion that must be considered, also relevant to minimizing conflict between uses, is the "compatibility of motor vehicle use with existing conditions and populated areas."[55]

Unfortunately, since the revised Subpart C of the Travel Management Rule (the OSV Rule) was finalized in 2015, we have heard frequent confusion regarding the concept and meaning of "use conflict"—from OSV users as well as from some key Forest Service line officers. At each opportunity for public comment we have heard from advocates for unrestricted OSV use that there is no evidence or data that "*user* conflict" occurs, or that if it does occur, it originates with non-motorized users (eg. cross-country skiers) who "hate snowmobiles" or simply do not understand that snowmobiling is an allowed recreational use in certain areas.[56]

By way of example, in the second public OSV planning outreach meeting held by the Inyo National Forest on Zoom on February 10, 2022, Simone Griffin, Policy Director for BlueRibbon Coalition, asked District Ranger Stephanie Heller how the Forest Service defines "*user* conflict" and what data there might be to document such conflict.

"This is something that comes up a fair amount," said District Ranger Heller, "and I will admit that it is a little bit of a nebulous term. This is one of those areas that we are going to have to delve into and develop as we get into this process. *User* conflict [emphasis added] can be very minor or it can be very serious; it can be constant and long-term or it can be transitory. We haven't defined that yet."

In fact, the Travel Management Rule is not so nebulous. The planning requirement is not about the minimization of conflict between individual *users* who might for one reason or another disagree with each other. It does not presume or insist upon prior demonstrated instances of hostility between individual people. Rather, the requirement is to minimize any inherent or possible conflict between two different recreational *uses*—or activities, or *user groups*—in this case between the *use* of motorized over-snow vehicles and other winter recreational *uses* such as cross-country or backcountry skiing. Or between over-snow vehicle use and the use of wheeled motor vehicles—such as Jeeps or ATVs, or fat-tire e-bikes.

[55] Ibid.
[56] See comments from Kevin Bazar, Sierra Snowmobile Foundation, and Amy Granat, CORVA, during Q&A section of Inyo National Forest Over-Snow Vehicle (OSV) Planning Kickoff 2 - February 10, 2022: https://www.youtube.com/watch?v=4eHnK1WGxN8

The concept of managing public lands for different, often competing uses is not new. It is embedded in the very mission of the Forest Service. The Federal Land Policy and Management Act of 1976 (FLPMA), based in part on the Multiple-Use Sustained-Yield Act of 1960 (based in turn on *A National Plan for American Forestry*, 1933), requires the Forest Service to manage national forests and grasslands for multiple uses. According to the FLPMA, the principal uses that must be balanced—in order to "best meet the present and future needs of the American people"—include but are not limited to "recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values."[57]

As early as the 1970's, Forest Service planners described the multiple use mandate as "the management of conflicts." In one early case study of winter recreation conflict, Robert L. Prausa, Branch Chief for Recreation Management for the Eastern Region of the Forest Service described "conflicts that must be dealt with" between snowmobile use and non-motorized uses in the Sylvania area on the Ottawa National Forest in Michigan. "The original management plan indicated that snowmobiling would be permitted in the area," he wrote. "Many of the groups who would like to see only nonmotorized use of Sylvania objected to this." Ultimately, the conflict was successfully addressed through thoughtful planning and designation: "[A]fter 2 years when snowmobiling was permitted only on designated trails and adjacent lakes, there was no

[57] Federal Land Policy and Management Act, 43 U.S.C.§1702; Multiple-Use Sustained-Yield Act of 1960

evidence of real conflict between various users of the area or between this mechanized use and resource productivity."[58]

Over the decades, as demand for dispersed recreation continued to grow on public lands, and as new forms of recreation and new technologies emerged, conflicts between the increasing variety of different recreational uses—not just between recreation and other principal public lands uses—increased. This was particularly true, starting as far back as the 1960s, with the explosion of motorized recreation on public lands.

When, in February 1972, President Nixon issued Executive Order 11644, the preamble read as follows: "An estimated 5 million off-road recreational vehicles—motorcycles, minibikes, trial bikes, snowmobiles, dune-buggies, all-terrain vehicles, and others—are in use in the United States today, and their popularity continues to increase rapidly. The widespread use of such vehicles on the public lands—often for legitimate purposes *but also in frequent conflict with wise land and resource management practices, environmental values, and other types of recreational activity*—has demonstrated the need for a unified Federal policy toward the use of such vehicles on the public lands."[59]

These numbers—as well as the conflicts and impacts they represent when left unmanaged—have continued to increase dramatically. In 2008, the Forest Service estimated the total number of all-terrain vehicles (ATVs) and off-road motorcycles in the U.S. to be nearly 10 million.[60] This number did not include over-snow vehicles. According to the International Snowmobile Manufacturers Association, there were more than 1.3 million registered snowmobiles in the U.S. in 2021.[61] Meanwhile, according to best available data based on equipment sales, total participation in non-motorized backcountry winter recreation (including cross-country skiing) has now grown to around 10.2 million people annually—nearly eight times the number of registered snowmobiles.[62]

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[58] Robert L. Prausa, "Multiple-use management for recreation in the east,"in: Larson, E.vH., ed. The Forest Recreation Symposium. State University of New York College of Forestry; 1971 October 12-14: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 96-102. https://www.nrs.fs.fed.us/pubs/other/recsym/recreation_symposium_proceedings_096.pdf

[59] Executive Order 11644, February 8, 1972: https://www.archives.gov/federal-register/codification/executive-order/11644.html

[60] "Off-Highway Vehicle Recreation in the United States and its Regions and States: An Update National Report from the National Survey on Recreation and the Environment (NSRE)," February 2008: https://www.fs.fed.us/recreation/programs/ohv/IrisRec1rpt.pdf

[61] https://www.snowmobile.org/snowmobiling-statistics-and-facts.html

[62] Snowsports Industries America (SIA), Participation Study 2020-21.

The purpose of Nixon's executive order was "to establish policies and provide for procedures that will ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, *and to minimize conflicts among the various uses of those lands*." Eventually, this became the basis of the minimization criteria outlined in the Travel Management Rule that now—since 2015—guides Forest Service OSV planning.

The need—in this case the requirement—to address and minimize recreation use conflicts is not unique to winter recreation. Use conflicts also exist in other seasons between fishing and jet-skiing, for example, between UTV use and the riding of dirt bikes, or between the shooting of firearms and developed camping. These conflicts are regularly minimized through thoughtful planning, education and signage, and active Forest Service recreation management.

But what is recreation conflict? As one recent literature survey of recreation conflict has noted, "conflict is most frequently understood as a result of goal interference among users, but it is also attributed to differences in social values, the subjective emotional state of the user, or sense of place."[63]

[63] Dave Marcouiller, Ian Scott, and Jeff Prey, Addressing Recreation Conflict: Providing a conceptual basis for management, Department of Urban and Regional Planning, University of Wisconsin – Madison, and the Wisconsin Department of Natural Resources, Bureau of Parks and Recreation: https://dpla.wisc.edu/wp-content/uploads/sites/1021/2017/06/Introductoryfactsheetv6_0.pdf

All of the *uses* mentioned above are legitimate recreational uses of National Forest lands. However, the fundamental objectives and expectations (goals) for one legitimate use (eg. solitude, quiet) are sometimes fundamentally incompatible with those of another legitimate use (speed, thrill). The survey authors continue: "There is a wide range of possible interactions amongst recreational users and groups that can represent both positive and negative outcomes. Conflict occurs when the interaction leads to negative outcomes for at least some of the participants."[64]

In other words, conflict does not have to rise to the level of outright confrontation between two people—or between all people within both or all user groups—in order to qualify as conflict. Neither does the conflict have to be recognized or understood by all parties in order to require minimization.

In fact, very often, recreational use conflict is fundamentally asymmetrical, with one user group (eg. cross-country skiers, fishermen, campers) feeling the impacts of a certain activity and another group (eg. snowmobilers, jet-skiers, target shooters) not feeling any impacts at all. This asymmetry does not mean that the conflict between uses is not significant or that it does not require minimization. On the contrary, it is often precisely the asymmetry that requires intervention—minimization—by the land management agency. "For example," the authors continue, "bird watchers may experience significant goal interference (antagonism) as a result of common use by all terrain vehicle users, yet the all terrain vehicle users view bird watching as generally supplemental to their

[64] Ibid.

activity. Thus, understanding relative compatibility must allow for a two-way interaction that could be, and often is, diametrically opposed."[65]

In winter travel planning, in order to minimize this sort of inherent and asymmetrical conflict (i.e. incompatibility) between different uses, the responsible official is required to designate certain trails and areas for over-snow motorized use that will not adversely impact other uses, as well as to *not* designate particular trails and areas for motorized use that are popular or more appropriate for quiet non-motorized recreational use such as cross-country or backcountry skiing or family snowplay.

Likewise, a user looking for the experience of riding a snowmobile on a smooth groomed trail would be disappointed to find deep ruts from a wheeled vehicle driving on that same groomed trail earlier in the day. The responsible official must not wait until there is a documented altercation between this snowmobiler and the driver of the wheeled vehicle in order to minimize conflict between these two *uses* of National Forest lands. Instead, they must, through travel planning, designate certain trails for the use of over-snow vehicles and also designate other trails elsewhere, where there is not generally snow, for the use of wheeled vehicles.

It should also be noted that a single *user* may participate in more than one of these *uses* or activities, and that therefore the impulse to lump individuals into fixed and discrete "user groups"—and to see them as always pitted against each other—is arbitrary and inaccurate. For example, as a frequent forest "user," I might one afternoon like to go for a quiet hike to look at birds and contemplate solitude, while on another day

[65] Ibid.

I might prefer to ride a two-stroke dirt bike. One day I might like to go for a quiet skate ski on the groomed trails at Deadman Summit, and then later that same day ride a snowmobile (OSV) to the top of Bald Mountain. I might even, as some “hybrid users” do, use a snowmobile, where appropriate, to access backcountry skiing.

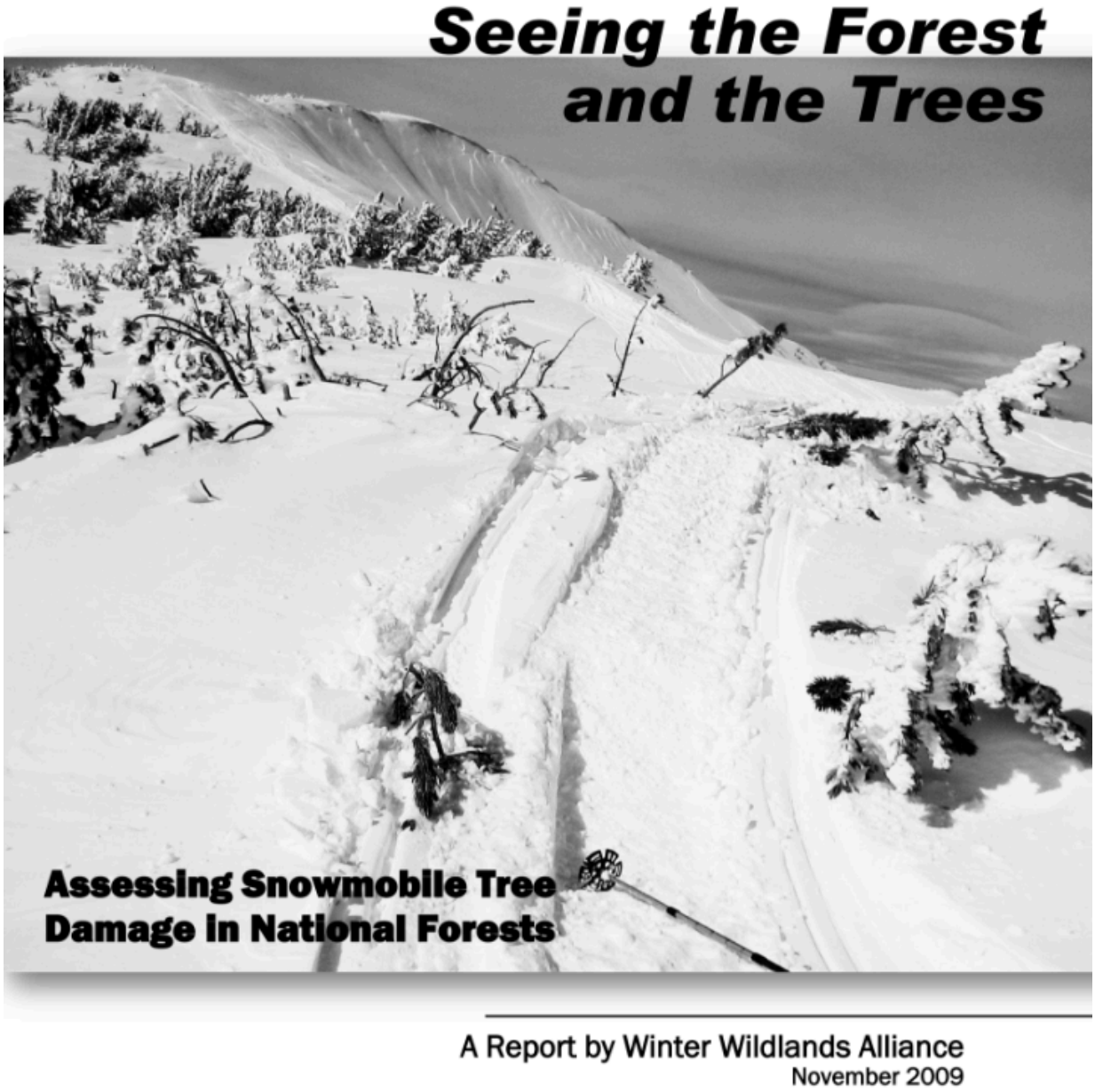
In all of these cases, and especially in the case of quieter, non-motorized recreation, it is to the great benefit of all users that the adverse impacts of one *use* upon another be minimized to the greatest extent possible in a clear and thoughtful travel plan.

SOLUTIONS & STRATEGIES

Fundamentally, minimization of use conflict is best achieved through the logical geographical separation (by agency designation) of incompatible uses. Other minimization strategies include but are not limited to:

- Thoughtful, strategic planning of motorized and non-motorized staging and parking areas at important trailheads (including, where possible, separation of uses, as well as partnerships with other agencies and user organizations for plowing and management);
- Improved access and connectivity for motorized opportunities that do not adversely impact non-motorized uses;
- Not designating motorized use (open play) areas in proximity to dwellings, family snowplay areas, or other non-motorized recreation areas;
- Creation and dissemination of accurate and easy-to-access winter recreation maps and digital apps for all users;
- Clear signage showing where motorized use is allowed and where it is not;
- Posted motor vehicle speed limits on shared-use trails;
- Development and dissemination of agreed-upon shared-use ethics for both motorized and non-motorized users;
- Limitation of motorized use to designated routes in certain shared-use areas;
- Buffering of non-motorized trails that travel through areas otherwise designated for cross-country motor vehicle use;
- Reduction of Wilderness incursions by locating over-snow vehicle area boundaries away from Wilderness boundaries;
- Utilization of soundscape modeling to better locate motor vehicle use areas to reduce sound impacts to populated or non-motorized areas and to other uses;
- Timing restrictions such as seasonal use designations or alternating year designations (especially useful if different recreation uses strongly desire access to a particular destination, such as a cabin).

Appendix 2



Typically, when land management plans address the environmental impacts of snowmobiles, the focus is on air quality, noise and wildlife impacts. Little has been documented regarding the impacts of snowmobiles on vegetation.

Recently, Winter Wildlands Alliance, a national nonprofit organization that promotes human powered winter recreation, learned that the US Forest Service, as part of forest re-

vegetation surveys, has gathered data documenting tree damage caused by snowmobiles in the Gallatin National Forest near West Yellowstone, Montana. The tree damage data show that in addition to well-documented impacts on air quality and endangered lynx, caribou and other animals, snowmobiles may be more directly and immediately impacting the health of forests. Simply put, USFS data demonstrate snowmobiles are chopping the tops off of trees, possibly in significant numbers.

As part of ongoing efforts to evaluate regeneration and thinning needs, the Gallatin National Forest (GNF) conducted regeneration transect surveys of previously logged timber stands. These surveys are required by NFMA (the National Forest Management Act), and look for a variety of damage types and causes, including insect-, disease- and human-caused damage. Through a Freedom of Information Act (FOIA) request, Winter Wildlands Alliance acquired and analyzed the Gallatin National Forest regeneration survey data collected through 1996, when funding cuts curtailed regular survey efforts.

Forest Service surveyors were asked to identify and quantify tree damage observed. Snowmobile damage wasn't difficult to identify—surveys often include notes such as "Broken tops from snow machines."

Gallatin National Forest surveys show that between 1983 and 1995, snowmobiles damaged between 12 and 720 trees per acre in the approximately 72,393 acres of harvested areas studied on the 1.8 million-acre Gallatin National Forest. Tree damage caused by snowmobiles was specifically noted on 366 acres, or 0.5% of areas surveyed.

The rate of tree damage throughout unsurveyed areas of forest may be even higher. The Gallatin's surveyed only areas that had been logged, which is a small portion of the overall acres used by winter recreationists. Surveyed sections were not necessarily heavily used by snowmobiles, though three mentioned the presence of snowmobile trails in the stand. Given that GNF snowmobile use has increased since surveys stopped in 1996, it's almost certain that additional surveys focusing on tracts used by snowmobiles would demonstrate even greater impacts. The three stands surveyed with the highest rates of tree damage had snowmobile trails within the tracts (see chart below).

Tree damage not only hurts the environment, it wastes taxpayer money. The areas surveyed by the GNF were re-planted by the Forest Service after logging. Allowing damage to continue unchecked disregards the investment we taxpayers have made into our natural resources. USFS policy should protect its investment in renewable forest products, not allow it to be destroyed by careless recreationists.

While this Forest Service data covers only one national forest, it clearly shows that the potential for tree damage from snowmobiles is significant across all Snowbelt forests and points to the need for better management of over-snow vehicles. Given the potential for snowmobiles to cause damage over many acres and miles of forest per day, prudent management policy would prohibit un-managed and off-trail over-snow travel in forested areas to reduce or eliminate future tree damage, and protect important natural resources and taxpayer investment.

Summary of tree Survey Data Provided by USFS

Timber Stand Number	Area name	Year logged	Year inventoried	Acres	Avg # damaged trees per acre	Total number of trees damaged
07-01-04-005	Little Teepee Creek Drainage	1969	1995	122	140	17,080
07-03-02-062*	Horse Butte Road*	1992	1995	15	514*	7710*
7-04-05-063	Madison Arm	1991	1995	12	5	60
7-07-02-037	Unknown	1960s	1983	68	23	1564
7-07-02-038*	Unknown*	1960s	1983	100	652*	65,200*
7-08-03-038*	Cream Creek*	1986	1995	60	725*	43,500*
	**surveys note the presence of a snowmobile trail in this stand*				**Total damaged trees**	**135,114**

Appendix 3

2022-2023 California Winter Recreation Data Collection Program

Program Summary

Winter Wildlands Alliance (WWA) implemented a Winter Recreation Data Collection Program during the 2022-2023 snow season to inform National Forests' winter travel planning and implementation in California. Assisted by volunteers and non-profit partners, WWA collected winter recreation data across the Sierra Nevada and California Cascades from November 2022 through April 2023 using the Colorado Mountain Club's Recreation Impact Monitoring System (RIMS) mobile and desktop application. Data collection efforts were focused primarily on the Inyo, Stanislaus, Lassen, and Plumas National Forests. More limited data was collected on the Lake Tahoe Basin Management Unit as well as the Tahoe, Eldorado, and Humboldt-Toiyabe National Forests. In addition to the data summaries presented in this narrative, all of the data collected is included in appendices to this report. Please see Appendix 1-8 for datasets for each forest.

WWA worked with volunteers and nonprofit partners to collect winter recreation data. Friends of the Plumas Wilderness (FoPW), Friends of the Inyo (FOI), Snowlands Network, and Tahoe Backcountry Alliance participated in this effort. WWA provided grant funding to FOI to support data collection efforts. Grant funding was also provided to FoPW to support its 2023 Plumas and Lassen National Forest Snow Monitor Program, which included data collection. To implement this program, FoPW recruited four volunteers from Feather River College who collected winter recreation data in exchange for college credit and avalanche safety equipment and training. Four additional WWA volunteers were based on the Lassen National Forest and the Stanislaus National Forest.

WWA also retained two seasonal contractors to collect data: one who focused on the Stanislaus National Forest and a California Data Manager based in Mammoth Lakes. In addition to data collection, the California Data Manager coordinated data collection efforts by volunteers and nonprofit partners throughout California and monitored data quality using ArcGIS Online. Our Stanislaus-based contractor also recruited volunteers to collect winter use data, cultivated relationships with Forest Service staff, and made recommendations on how to improve winter trailheads and SNO-Parks on the Forest.

As an integral part of this effort, WWA piloted a new Backcountry Ambassador program in conjunction with the RIMS data collection efforts on the Stanislaus, Lassen, Plumas, and Inyo National Forests. WWA is developing this program to augment Forest Service efforts to implement new OSV plans. Backcountry Ambassadors promote positive interactions between winter recreationists and advance winter etiquette, safety, and conservation education in the areas where over-snow activities are concentrated. This pilot program was supported by Patagonia, which donated jackets for Backcountry Ambassador uniforms. In partnership with specific National Forest units and Region 5, WWA will expand the Backcountry Ambassador program next winter, which should result in improved visitor experience, a reduction in use impacts, and an even-more robust RIMS dataset.

Image 1 and 2. Backcountry Ambassadors promote positive interactions between winter recreationists and advance winter etiquette, safety, and conservation education in the areas where over-snow activities are concentrated.

2022-2023 Winter RIMS Assessments

A total of 363 RIMS Assessments were collected by 17 people at 75 locations (Figure 1). Some of these assessments were collected at trailheads, while others included on-trail and off-trail data. In the following summary we analyze the locations where RIMS data collection was most robust. Weather conditions during this record-breaking winter challenged volunteers by limiting trailhead access. The frequent, powerful winter storms made data collection especially difficult for volunteers who were not based in the mountains and greatly affected data collection efforts in the Tahoe region in particular. However, the program was able to provide a useful snapshot of recreational use patterns during a winter of exceptionally high snowfall.

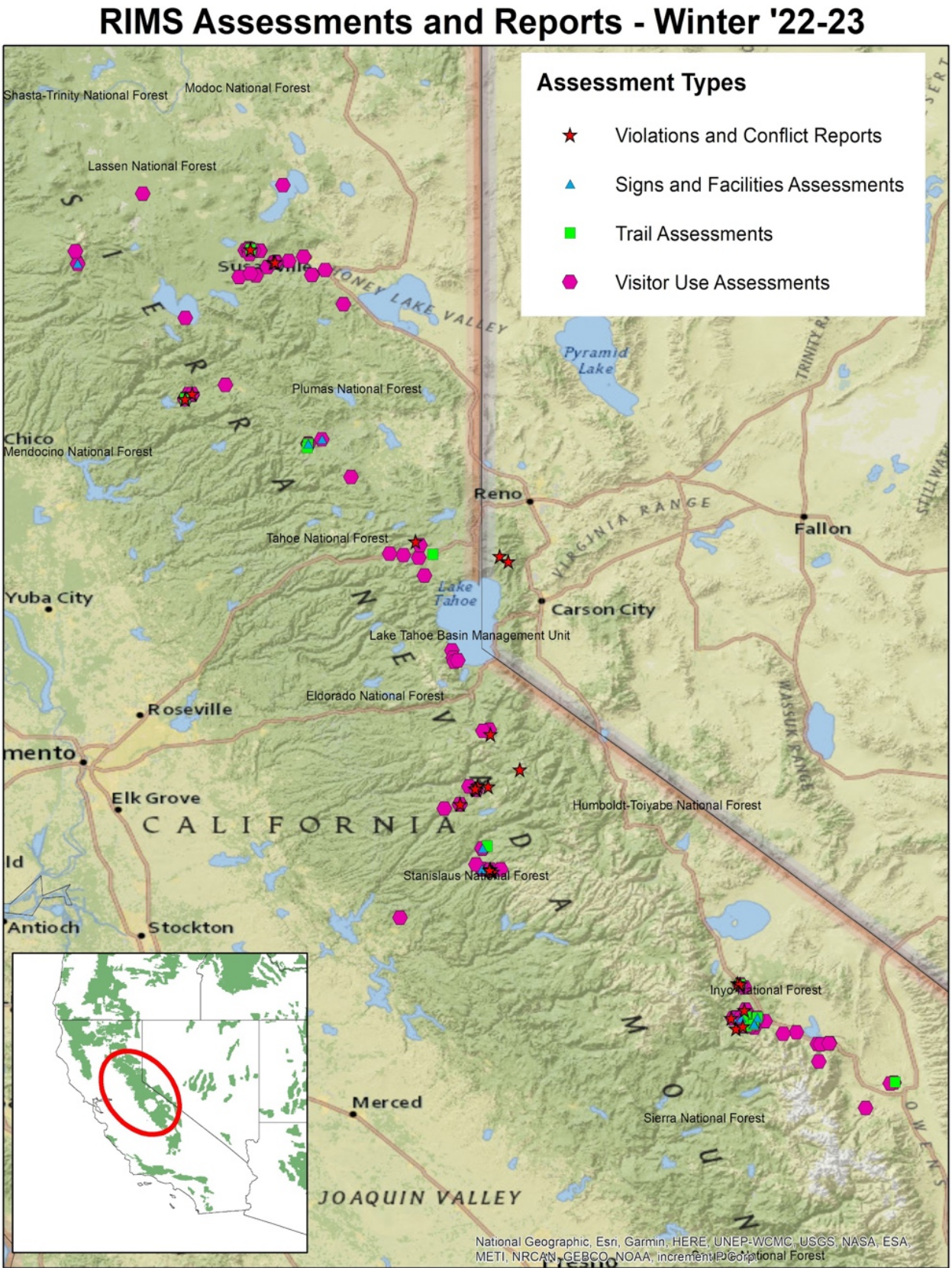


Figure 1. Out of the total number of RIMS Assessments, 280 were Visitor Use Assessments, 45 were Violations or Conflict Reports, 21 were Signs & Facilities, and 17 were Trail/Road Assessments.

RIMS Visitor Use Assessments are used to count the cars and OSV trailers in the trailhead parking lot, the number of people encountered and which winter activity they were participating in, and the number of dogs encountered on-leash and off-leash (Table 1).

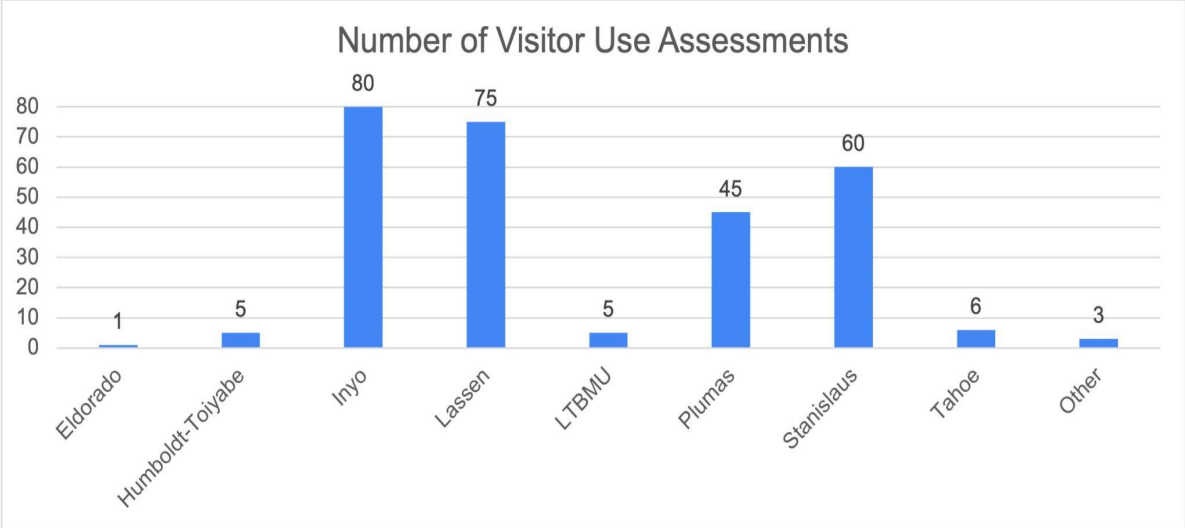


Table 1. The total number of Visitor Use Assessments collected on each National Forest.

RIMS Violation and Conflicts Reports are used to report OSV violations, parking violations, and use conflicts (Figure 2 and Figure 3). Violation and Conflicts reports are confidential reports, meaning they are not viewable by other app users.

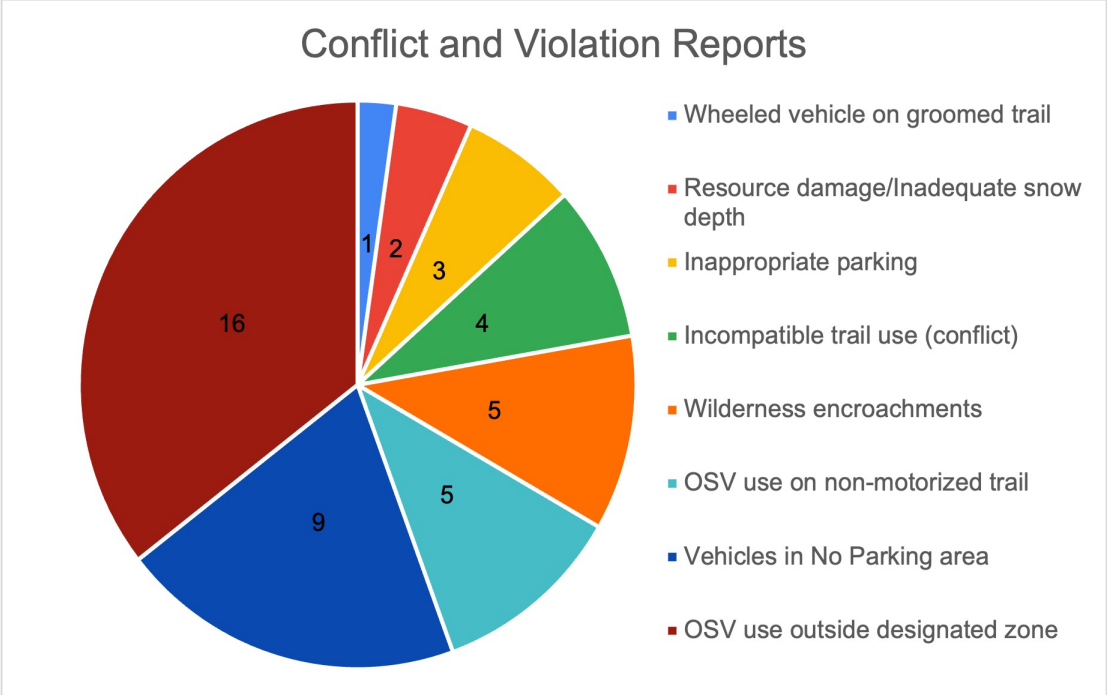


Table 2. The most recorded violation and conflict assessment was “OSV use outside designated zone”, followed by “Vehicles in a No Parking Area”.

RIMS Violations and Conflict Reports - Winter '22-23

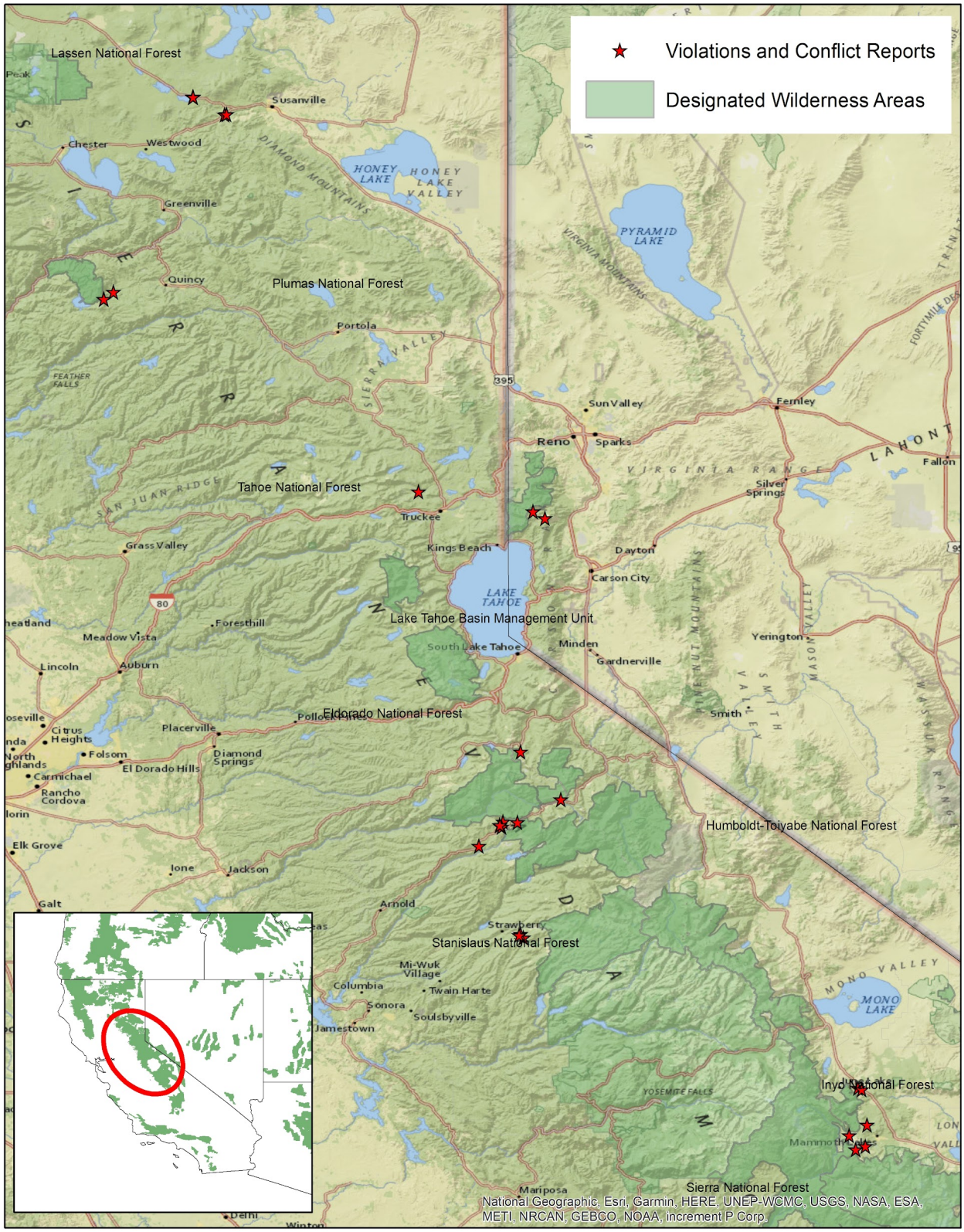


Figure 2. Violation and Conflict reports were clustered around Mammoth Lakes, the Highway 108 corridor, the Highway 4 corridor.

Signs and Facilities Assessments are used to report issues and successes with signage, waste containers, bathrooms and other facilities. Trail and Road Assessments are used to report on the condition of trails including downed trees, trash, and dog poop.

Plumas National Forest

Backcountry ambassadors and volunteers on the Plumas National Forest focused on three trailheads: Bucks Summit Staging Area (24 days), Gold Lake Staging Area (6 days), Big Creek (16 days) Staging Area, and Janesville Grade (1 day). Bucks Summit provides backcountry skiing access as well as recreational OSV access. OSVs reported included snowmobiles, tracked passenger vehicles, and tracked UTVs (Table 4). There was a clear increase in visitation on weekends at this trailhead (Table 3). Volunteers did not report any interactions with motorized recreationists and reported positive interactions with skiers at Bucks Summit Staging Area. Inappropriate parking and vehicles in no parking zones were reported four days this winter, sometimes affecting plowing (Image 3).

Image 3. Vehicles left for long periods of time in the Bucks Summit parking lot affected plowing. This photo was taken on January 18, 2023.

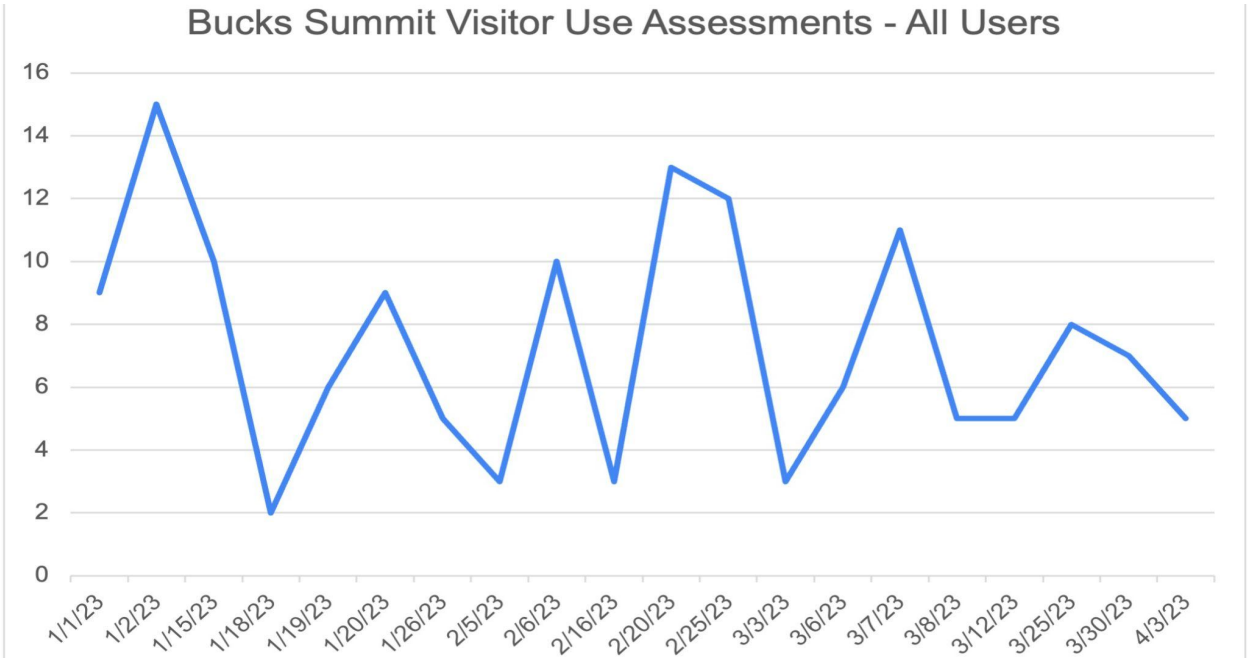


Table 3. Visitor use increased on the weekends and decreased on weekdays at Bucks Summit. Use was especially high close to the New Year and during Presidents Day weekend.

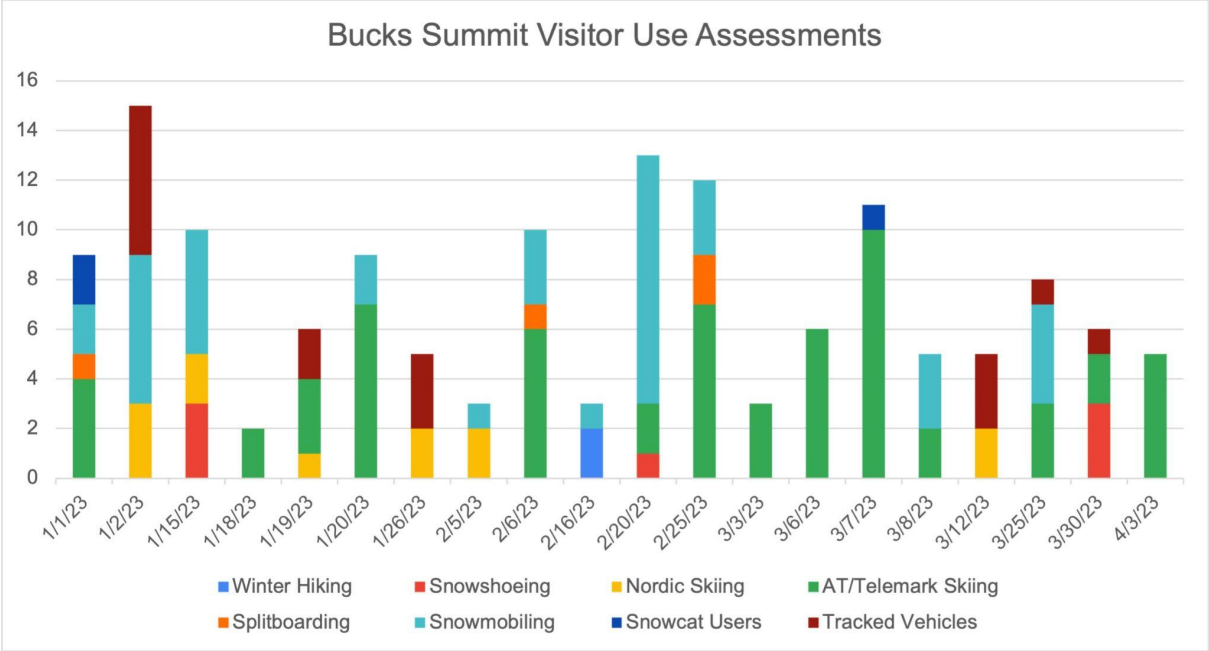


Table 4. Many different winter activities were reported at Bucks Summit including both motorized and non-motorized use.

Volunteers also collected data at Big Creek Staging Area, which provides access to Bucks Lake (Table 5 and Table 6).

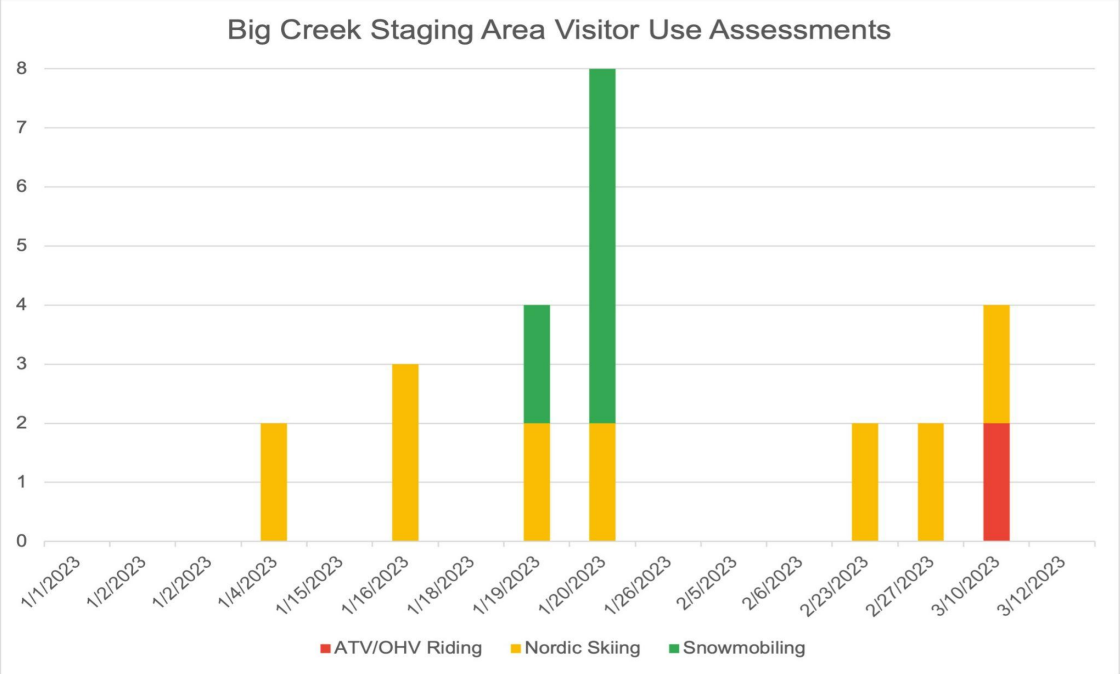


Table 5. Data from Big Creek Staging Area shows that this is another mixed-use trailhead. The most-counted winter activity was Nordic skiing, but volunteers also noted snowmobiling and ATV/OHV riding.

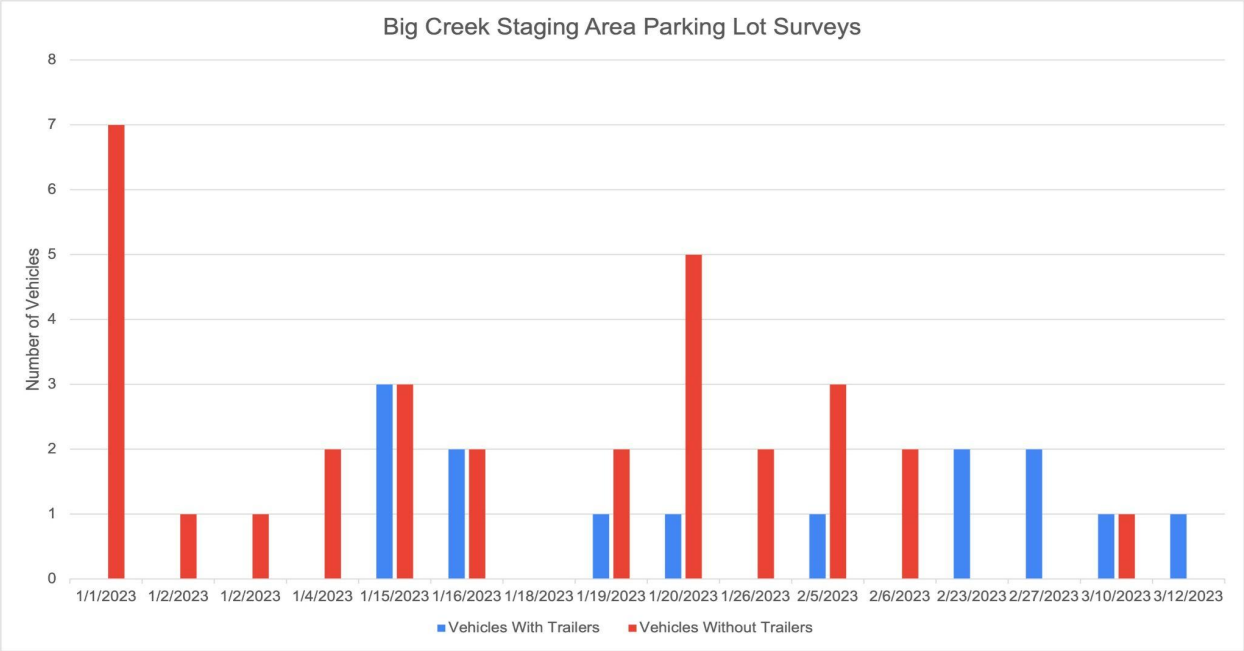


Table 6. The parking lot surveys at Big Creek Staging Area also show that it is a mixed-use trailhead. The majority of vehicles counted did not have trailers, suggesting more non-motorized use.

Gold Lake Staging Area is another mixed-use trailhead that provides OSV and non-motorized access. Backcountry Ambassadors observed vehicles with license plates from California, Nevada, Washington and Montana, and observed both vehicles with and without trailers (Table 7). Snowmobiles were the only OSVs observed and volunteers noted only positive interactions with all user groups (Table 8). Backcountry Ambassadors reported that the facilities at Gold

Lake Staging Area were in good condition and recommended better signage related to backcountry use and regulations. This may have been due to the record snowpack covering signs, but volunteers also noted some signs that were bent over and required maintenance.

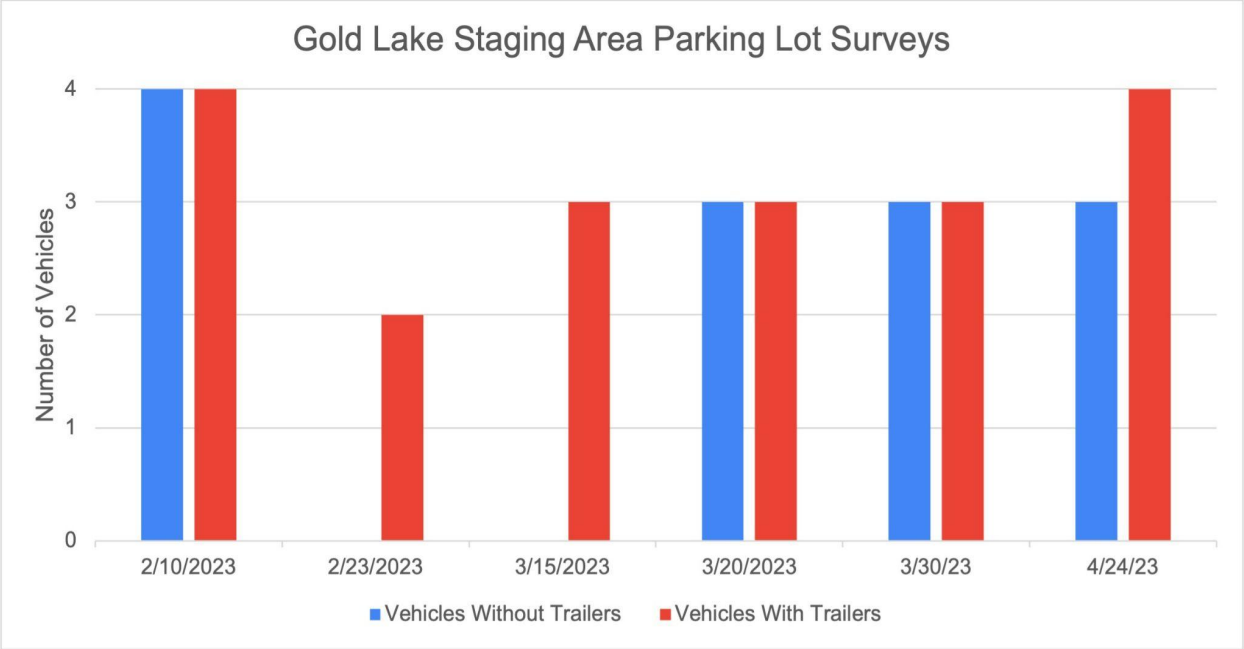


Table 7. Vehicles parked at the Gold Lake Staging Area over the winter season indicated that the trailhead is used for both motorized and non-motorized use.

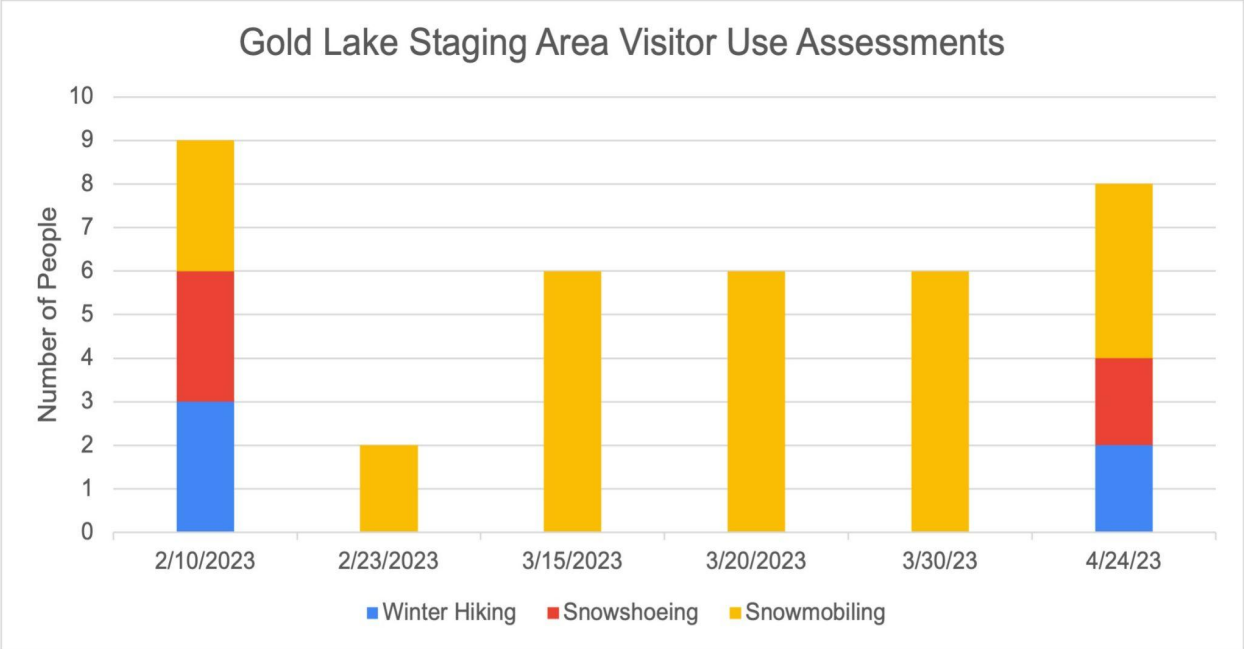


Table 8. Winter hiking, snowshoeing, and snowmobiling were reported at the Gold Lake Staging Area.

Lassen National Forest

The majority of RIMS data collected on the Lassen National Forest were collected at Hog Flat (49 days) and Goumaz Road at Hog Flat (6 days). Hog Flat is designated as a non-motorized area while Goumaz Road is groomed for snowmobiles. One volunteer noted that Goumaz Road is also great for Nordic skiing because the trail stays smooth due to low snowmobile use. Backcountry ambassadors and volunteers also collected more limited data at Bizz Johnson National Recreation Trailheads (5 days), the McGowan Lake Trailhead (2 days), Lake Almanor Trail (2 days), Fredonyer SNO-Park (3 days), Willard Hill Road (2 days), Big Springs along Highway 44 (3 days), and FS 29N05 (1 day). There were no negative interactions noted by the volunteers.

Image 4. The Backcountry Ambassador reported evidence of snowmobile use on Hog Flat two days in February. This photo was taken on February 17, 2023 (40.44319741, -120.8710573). The other violation occurred in the same area on February 1, 2023. The Backcountry Ambassador noted a lack of signage at the trailhead indicating the new non-motorized designation and reached out to the Forest Supervisor at Lassen National Forest about this concern. The Backcountry Ambassador noted that they did not see any new signage posted over the season.

Image 5. Backcountry Ambassadors reported that signs at the McGowan Lake Trailhead were in need of repair on February 10, 2023.

Image 6. The Backcountry Ambassador reported snowmobile use on the Bizz Johnson National Recreation Non-Motorized Trail near the Devils Corral Trailhead (40.39563765, -120.7836759) for almost a mile between mile markers 7 and 8 on February 2, 2023.

Image 7. This Backcountry Ambassador found that someone had walked in existing ski tracks on Hog Flat, Goumaz Road, and the Bizz Johnson Trail three days this season. This photo was taken on March 23, 2023 on Goumaz Road (40.44336798, -120.8710621). The Backcountry Ambassador suggested that the Lassen National Forest post information at the trailheads to educate recreationists about the etiquette of staying off of existing ski tracks.

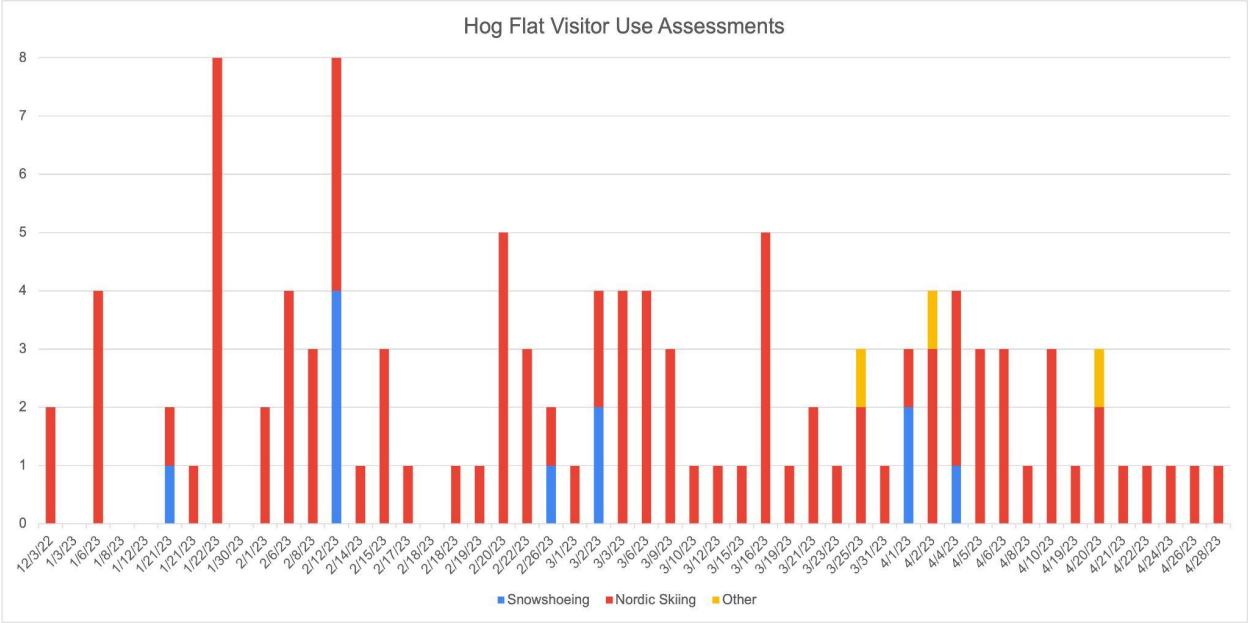


Table 7. Nordic skiing was the primary winter activity recorded at Hog Flat.

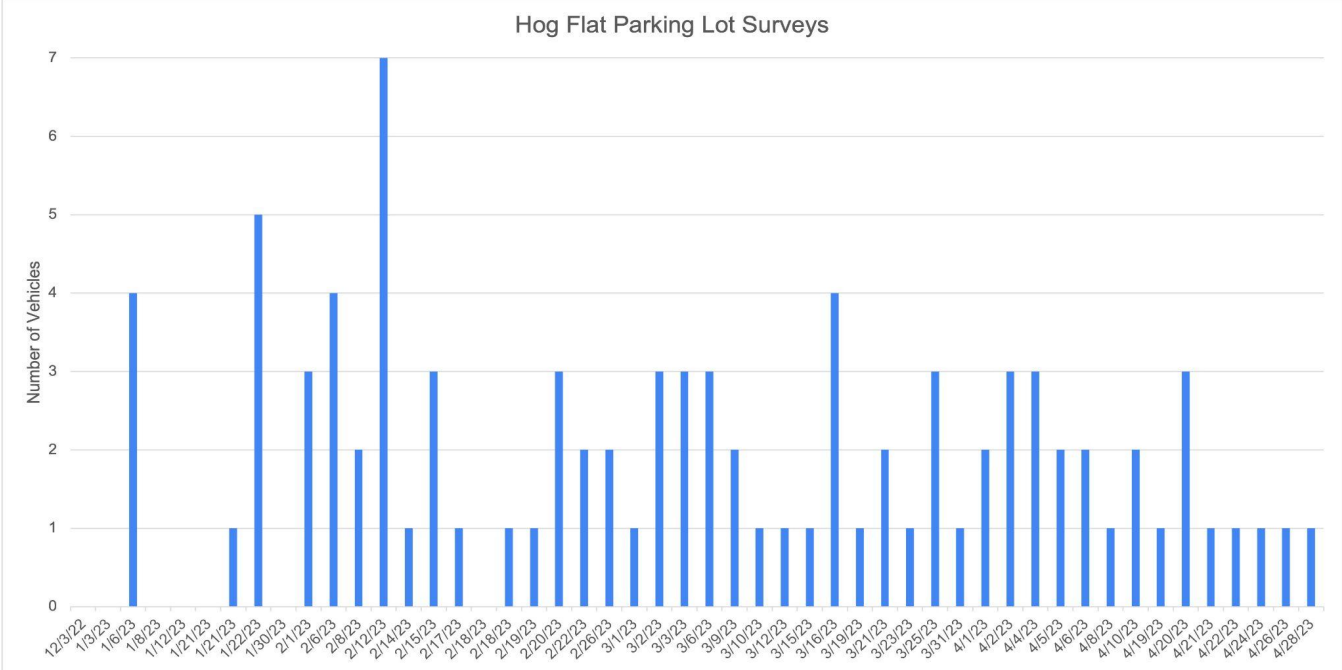


Table 8. Hog Flat had consistent, low to moderate use throughout the winter.

Stanislaus National Forest

Backcountry Ambassadors and volunteers monitored trailheads on the Highway 108 corridor including Pinecrest Winter Recreation Area (3 days), Dodge Ridge (1 day), Crabtree Nordic Trailhead (10 days), Gooseberry Road Trailhead (8 days), the Highway 108 SNO-Park (4 days), Leland Meadows Road, and Herring Creek Road (2 days). On the Highway 4 corridor, Backcountry Ambassadors and volunteers monitored Round Valley SNO-Park (11 days), Lake Alpine SNO-Park (15 days), and Spicer SNO-Park (7 days).

WWA's Stanislaus-based seasonal contractor reported on her experiences and recommendations at the end of the season. She reported that USFS provided substantial education through interpretive events and signage on the Highway 108 corridor and recreation staff on the Highway 4 corridor. The most common issues on the Stanislaus National Forest this past season were due to illegal parking, pet waste, litter, and other conflicts coming from snowplay visitors. We recommend the USFS educate the public about the difference between snowplay areas and the SNO-Parks that are better suited for backcountry access. This would allow the public to continue to engage in snowplay and would provide better backcountry access for other types of winter activities. Our Stanislaus-based contractor suggested promoting Pinecrest Winter Recreation Area for snowplay.

She also reported that multiple OSV violations were documented during SledFest at Bear Valley Ski Resort (Image 7). Some of these violations occurred at the non-motorized Round Valley SNO-Park, where no prior violations had occurred during the season, as well as on Mount

Reba. We recommend that the Forest Service amend the Special Use Permit to include a requirement for more signage marking the boundaries of the ski resort and the Mokelumne Wilderness, as well as OSV designations near the resort and at adjacent SNO-Parks. We also recommend providing an OSVUM to all event attendees, amending the Special Use Permit to include funding for a USFS LEO to be on call, and including funding for a USFS ranger with over-snow capabilities to be present during the entire event. The WWA contractor also reported that some SledFest attendees rode snowmobiles through private property and were exceeding the speed limit on the groomed roads. Although there was an effort by event organizers to mark the official route to take through town, some attendees ignored this or may have been unaware of the route. To avoid this situation in the future, we recommend that the Special Use Permit lay out a clear plan for parking in the village, travel between the village and the resort, and adequate enforcement. As a final recommendation on SledFest, we suggest that the Stanislaus National Forest should consider whether the event and Special Use Permit warrant technical environmental review due to potentially significant impacts outside of normal ski area operations. These impacts included one snowmobile that needed to be removed by a helicopter from a designated non-motorized area outside of the ski area boundary.

After spending a winter testing out the Backcountry Ambassador concept, our seasonal contractor reported that making recommendations and assisting with placement of signs is the most important role a Backcountry Ambassador can fill on the Stanislaus National Forest. She also noted that a Backcountry Ambassador should monitor areas outside of the parking lot and groomed trails where the USFS staff primarily have a presence, utilizing a snowmobile and a backcountry ski or splitboard setup to travel longer distances from the trailhead. This is important for monitoring Wilderness boundaries and compliance with other remote OSV area boundaries, such as in Pacific Valley. The contractor suggested establishing a once a month outing with USFS staff to maintain positive communication. Backcountry Ambassadors can also assist by submitting snow and avalanche reports as forecasting for the Stanislaus is very limited, especially on the Highway 108 corridor.

Highway 4 Corridor

Lake Alpine SNO-Park is mostly used for motorized access, receiving traffic from Bear Valley village and Bear Valley Snowmobile Rentals, but it is also popular for snowplay (Table 9). Motorized use is prohibited north of the highway, but there are no boundary signs and no map at the SNO-Park. We recommend better signage in the immediate vicinity of the SNO-Park. WWA would be interested in working with the USFS and Bear Valley Snowmobile Rentals to provide maps and education. Because there is conflict stemming from motorized and non-motorized users sharing the narrow, groomed road, we recommend and would support efforts to re-establish a previously existing non-motorized winter trail that parallels the highway on the south side.

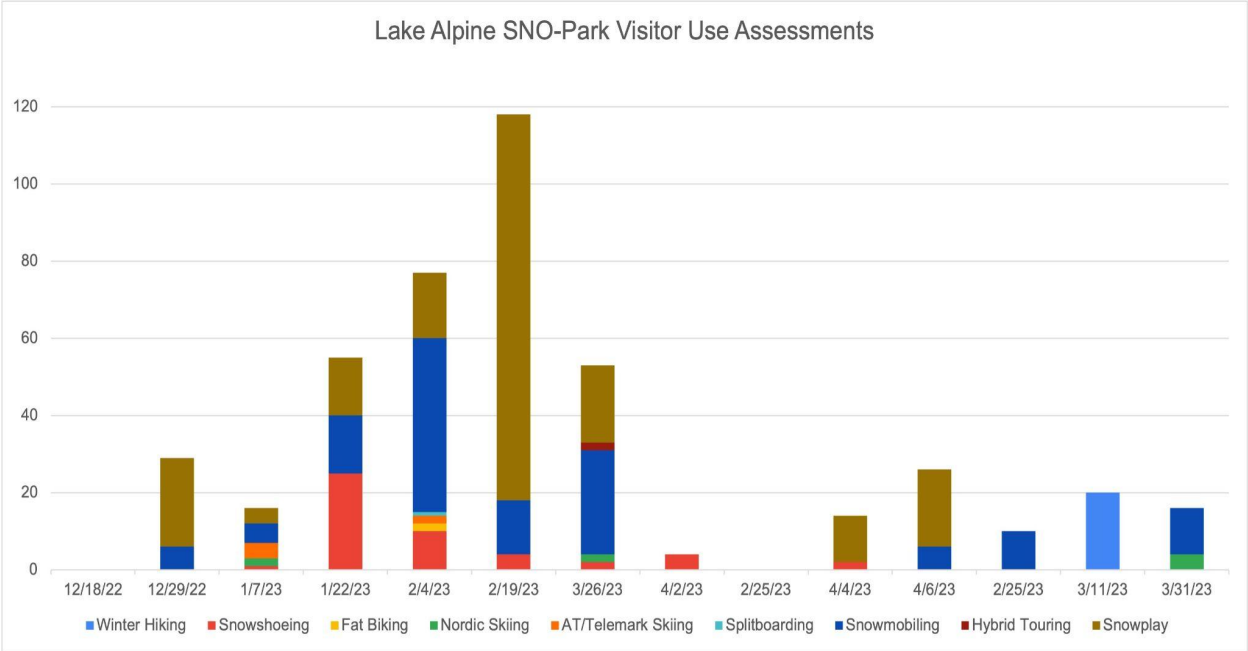


Table 9. The Lake Alpine SNO-Park is a mixed-use trailhead. The most-recorded winter activities were snowplay, snowmobiling, and snowshoeing. Although no winter activities were reported on December 18, 2022, the Backcountry Ambassador reported 47 vehicles without trailers and 13 vehicles with trailers.

Round Valley SNO-Park is a non-motorized trailhead that is heavily used for snowplay, but is also used for other winter activities including non-motorized overnight trips (Table 10). Illegal parking was reported several times and parking conflicts were reported between snowplayers and other non-motorized users. Appropriate parking was not obvious over the winter, which could be remedied by better signage. The only signage was inside the restrooms which were frequently blocked by plowing. Additionally the terrain rolls into a creek, providing one main path into and out of the parking lot. This can become a dangerous and difficult return to the parking lot for backcountry users when there are over fifty people sledding and engaging in other snowplay activities.

OSV violations occurred near Round Valley SNO-Park during SledFest (Image 8). The OSVUM was reported missing from the restroom on April 22, 2023, after CalTrans had begun to clear snow from Highway 4 and there was no visible signage indicating that this trailhead is designated for non-motorized use. We recommend increased monitoring and enforcement for a minimum of two weeks after CalTrans starts to clear snow from the highway in spring in addition to better signage throughout the winter and increased education and signage during SledFest.

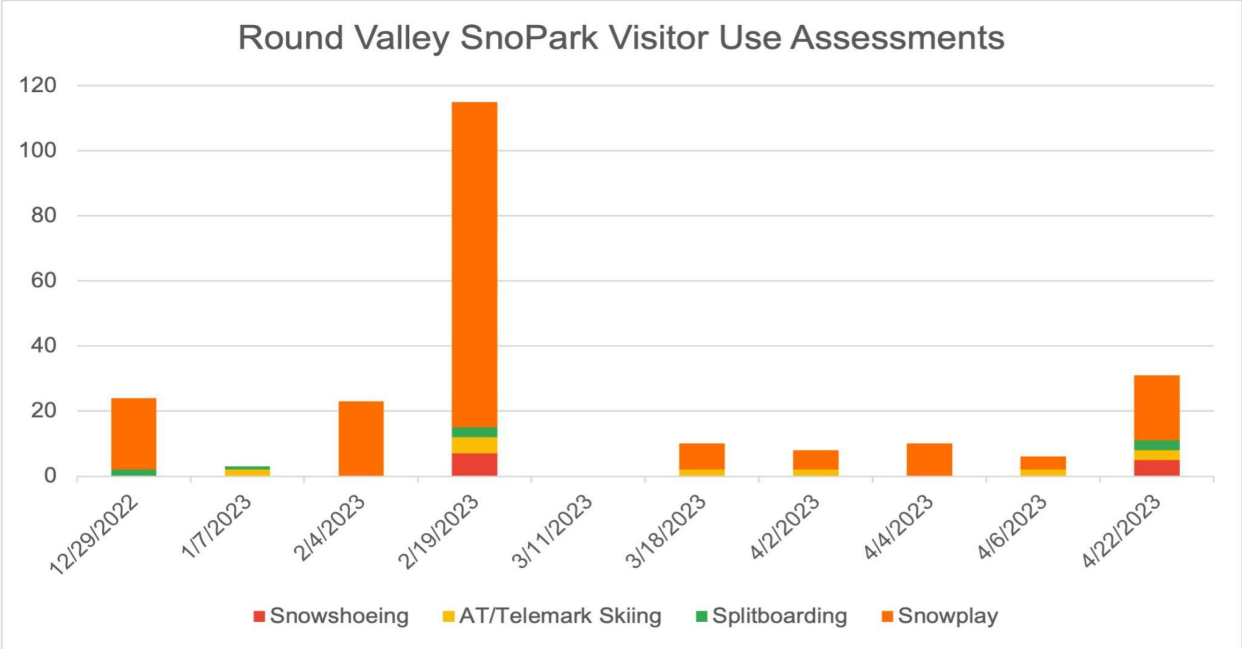


Table 10. Snowplay was the most-recorded type of winter activity at the Round Valley SnoPark on the Stanislaus National Forest.

Image 8. Snowmobile and timbersled tracks were reported in the Poison Canyon area near Round Valley SNO-Park on April 22, 2023 (38.49403, -120.0102834). The OSVs were seen by a backcountry skier in the area before SledFest. This area is closed to OSVs.

The Backcountry Ambassadors also visited Spicer SNO-Park, noting a strong USFS presence on the weekends. This trailhead is mostly used for snowplay and snowshoeing (Table 11). The seasonal contractor reported that the parking lot at Spicer SNO-Park could fit many additional vehicles if parking signs were more clear.

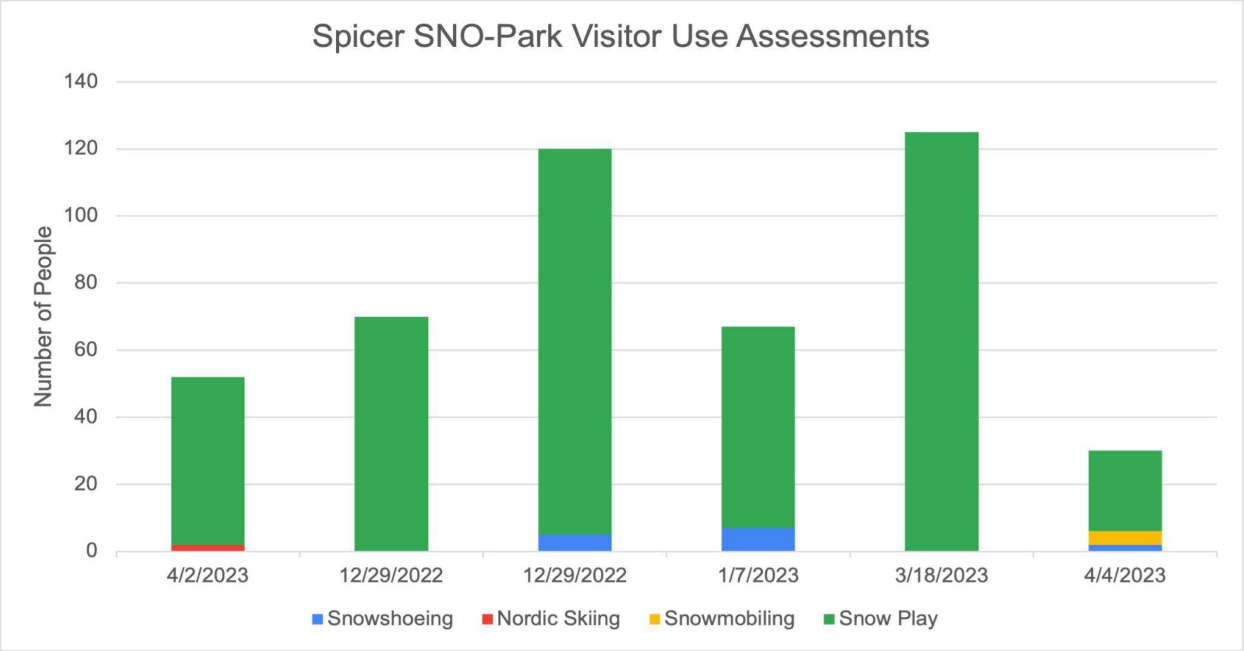


Table 11. The most reported type of winter recreation at Spicer SNO-Park was snowplay.

Highway 108 Corridor

The WWA contractor reported that Pinecrest Winter Recreation Area is an important trailhead for snowplay (Table 12). This trailhead does not offer much backcountry access, but when it is not open and accessible snowplayers are displaced to areas where they interfere with backcountry access. During this record snow year, there were weeks of only one open bathroom, limited parking, and insufficient trash service (Image 9). However, signage was exceptional.

Image 9. An overflowing waste receptacle at Pinecrest Recreation Area on January 30, 2023.

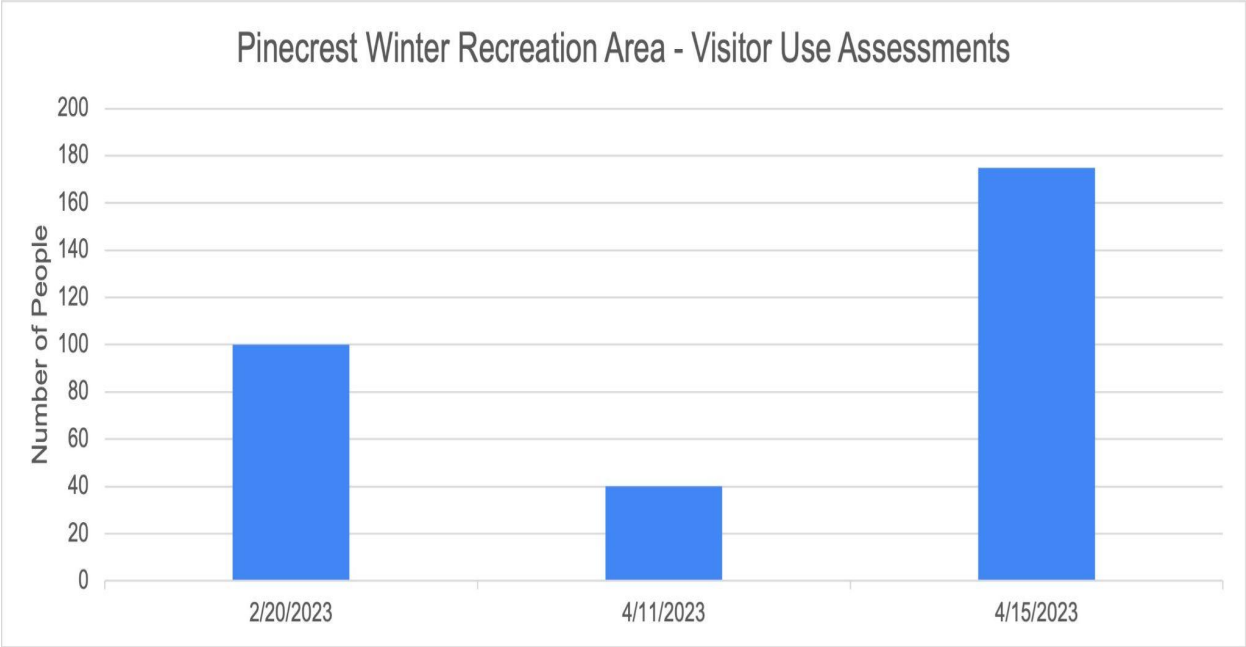


Table 12. Only three RIMS Visitor Use Assessments were taken at Pinecrest Winter Recreation Area. However, high use was reported during all three visits.

Crabtree Nordic Trailhead received light, but consistent non-motorized use over the winter (Table 13). On December 26, 2022, a diaper and dog poop were reported on the first thirty yards of trail. We recommend better signage about Leave no Trace and look forward to a functional bathroom once repairs are completed. A volunteer also reported motorized use on a non-motorized trail by one snowmobile on January 24, 2023.

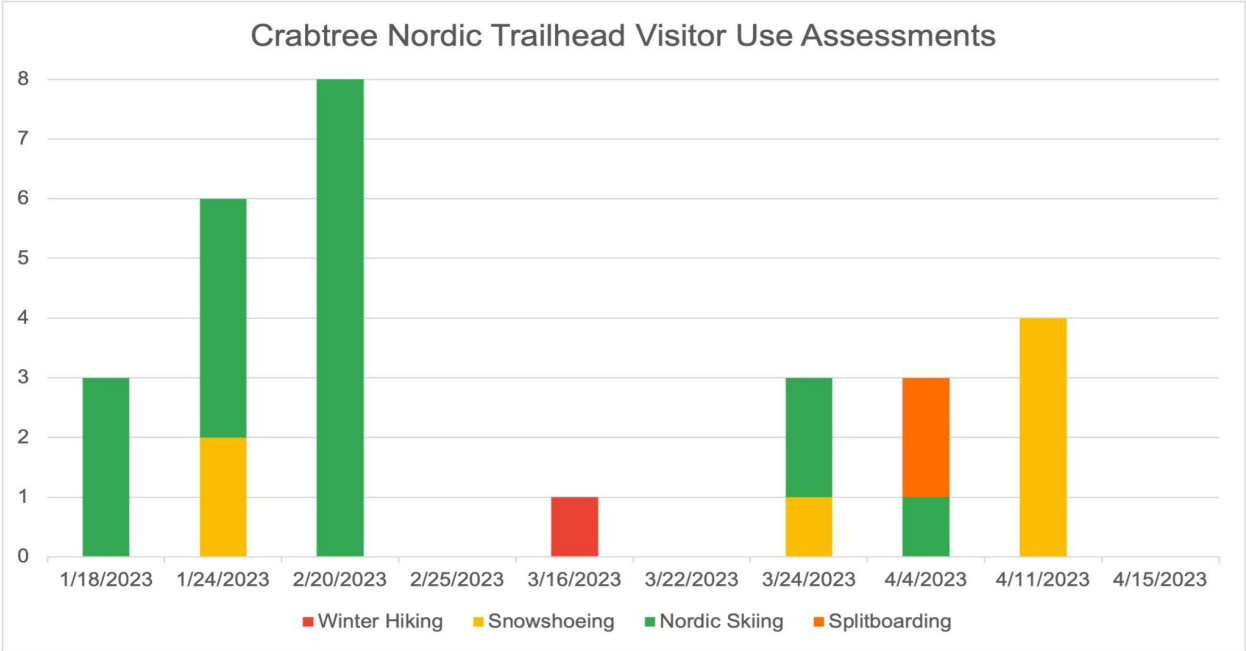


Table 13. Crabtree Nordic Trailhead was mostly used for Nordic skiing over the winter season. The entrance road and parking lot were not plowed on February 25, 2023. Four cars without trailers were reported on April 15, 2023, but there were no cars in the parking lot on March 22, 2023.

Gooseberry Road Trailhead primarily provides Nordic skiing access and is heavily affected by Dodge Ridge Ski Area parking. On February 25, 2023, approximately thirty vehicles were parked illegally in a No Parking Zone along a one lane road. These vehicles appeared to be parked for the ski resort as nobody was recorded recreating near the trailhead. We recommend better signage and enforcement as necessary to discourage illegal parking when the ski area is busy.

Herring Creek Road mainly offers snowmobile access and opportunity for snowplay because of the long distance to skiable terrain. An OSV violation was reported north of Herring Creek Road on January 25, 2023 (Image 10). Multiple snowmobile tracks were reported in an area closed to OSVs north of the road. We recommend better signage at the trailhead including an OSVUM.

Image 10. Snowmobile tracks were reported in an area closed to OSVs (38.22563, -119.972) north of Herring Creek Road on January 25, 2023.

The Highway 108 SNO-Park primarily offers snowmobile access and opportunity for snowplay due to its low elevation and distance to quality backcountry ski terrain. This SNO-Park provides great examples of helpful signage. Although some signs are fading and should be updated, there is a sign with the OSVUM for the immediate area and signs showing how to park correctly (Image 11 and Image 12).

Image 11. This helpful sign at the Highway 108 SNO-Park shows a zoomed-in OSVUM of the area.

Image 12. This is a great example of a helpful parking sign at the Highway 108 SNO-Park.

The final trailhead to discuss on the Stanislaus National Forest is Leland Meadows Road. The county plows this road to provide access to private condos and privately owned Leland High Sierra Snowplay. There is a small piece of USFS land next to the road. This is one of the highest elevation places that one can drive to in the winter on Highway 108, second only to Dodge Ridge Ski Area where a pass is required. However, there is no parking allowed along the road and the private residences block most reasonable access for human-powered recreation, while snowmobiles can access the area by Herring Creek Road. We are interested in working with the USFS and Leland Meadows Snow Park to establish a few public parking spots for access to this important area for human-powered backcountry access.

Inyo National Forest

Backcountry Ambassadors on the Inyo National Forest collected the majority of data at Rock Creek Road and SNO-Park (12 days), Obsidian Dome Road (18 days), and Sherwins Trailhead (18 days). Backcountry Ambassadors also collected data at the Mammoth Scenic Loop (7 days), Sherwins Mill City Access Trailhead (5 days), the Lake Mary Road winter closure (3 days), the Highway 203 Corridor near Mammoth Mountain (3 days), Cinder Shed (also known as USFS 3S89) (2 days), Inyo Craters Winter Trailhead (2 days), Shady Rest Park (2 days), Mammoth Pass (2 days), Minaret Vista (2 days), Crowley Lake Drive by Red Mountain (2 days), the intersection of Highway 395 and Highway 203 (1 day), the Sherwins Motocross Track (1 day), McGee Creek (1 day), Reds Meadow Hot Spring (1 day), USFS 210 (1 day), and Dry

Creek Nordic Trail (1 day). We did not monitor at Shady Rest in order to not duplicate monitoring efforts by the Town of Mammoth Lakes.

Rock Creek SNO-Park provides mostly non-motorized winter recreation access as the majority of Rock Creek Canyon is closed to OSVs. This winter, Rock Creek Road was often in poor condition or not plowed to the SNO-Park. The Backcountry Ambassador recorded consistent non-motorized use despite this (Table 14).

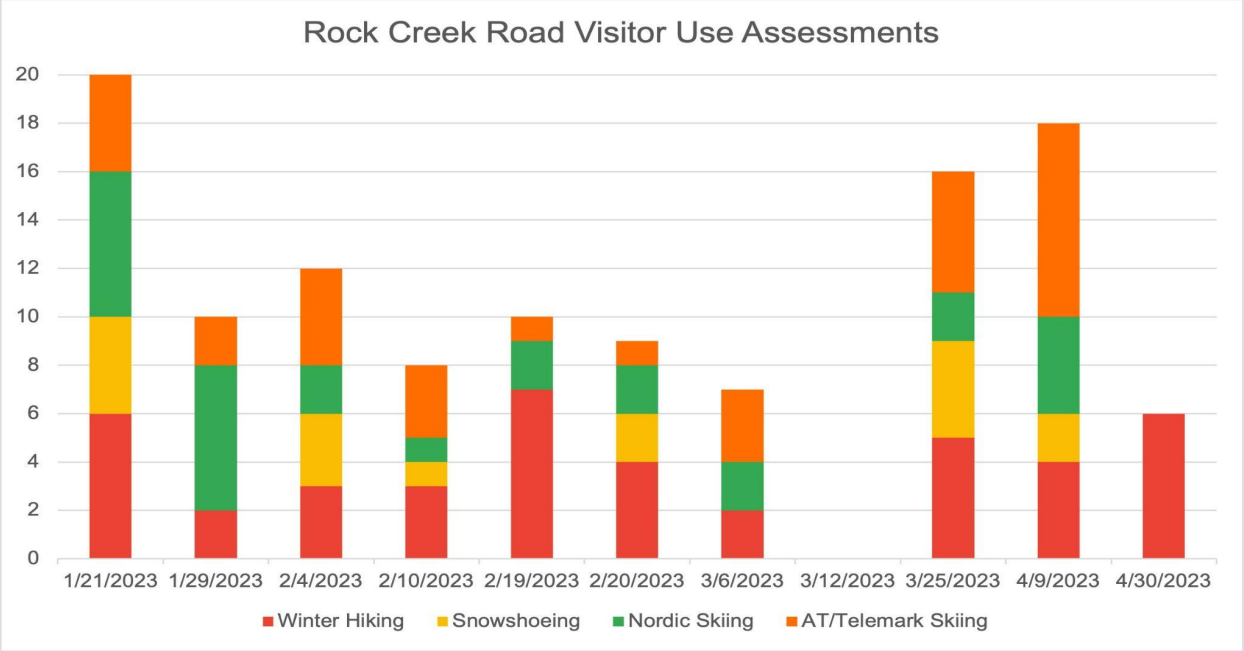


Table 14. Consistent non-motorized use was reported on weekends near Rock Creek Road and SNO-Park. The road was in bad condition on March 12, 2023, but the Backcountry Ambassador reported that twelve cars were parked at the Toms Place Store.

Obsidian Dome Road is another trailhead that primarily provides non-motorized access, although there is a groomed OSV trail that runs along the highway and connects to a network of OSV trails in the area. Most of the area to the west of the groomed OSV trail is designated for non-motorized use, but the area across Highway 395 is open to OSVs (Table 15. Although volunteers did not collect RIMS data at the trailhead across the highway, Backcountry Ambassadors often saw vehicles with trailers and snowmobiles being unloaded at that Snowmobile Trailhead. Consistent non-motorized use was recorded throughout the winter at the Obsidian Dome Road trailhead (Table 16).

Winter motorized use on a non-motorized trail was reported two times, winter motorized use outside of the designated zone was reported two times (Image 13, and a wheeled vehicle was reported on the groomed trail once (Image 14). Obsidian Dome has multiple regulatory signs and informational maps that these recreationists ignored (Image 13 and Image 14). On January 7, 2023, a Backcountry Ambassador reported several snowmobilers who came across the highway to look at the map and learn what was open to OSVs. These snowmobilers did not drive past the “No Snowmobiling” sign.

The Backcountry Ambassador reported that there was no USFS presence at this trailhead. We are interested in helping to educate the public at Obsidian Dome Road by maintaining a Backcountry Ambassador presence, which will hopefully decrease the number of OSV violations.

Image 13. OSV tracks were reported by Obsidian Dome Road on December 19, 2023 (37.77917792, -119.0246873). The tracks went by a sign indicating that the area is closed to OSVs.


Image 14. This photo documents an attempt to drive a wheeled vehicle onto groomed Obsidian Dome Road on December 22, 2023 (37.77382512, -119.0152022). A sign that reads “No Wheeled Vehicles” is visible to the right. The ruts from this vehicle made the entrance ramp onto the groomed trail more difficult to use.

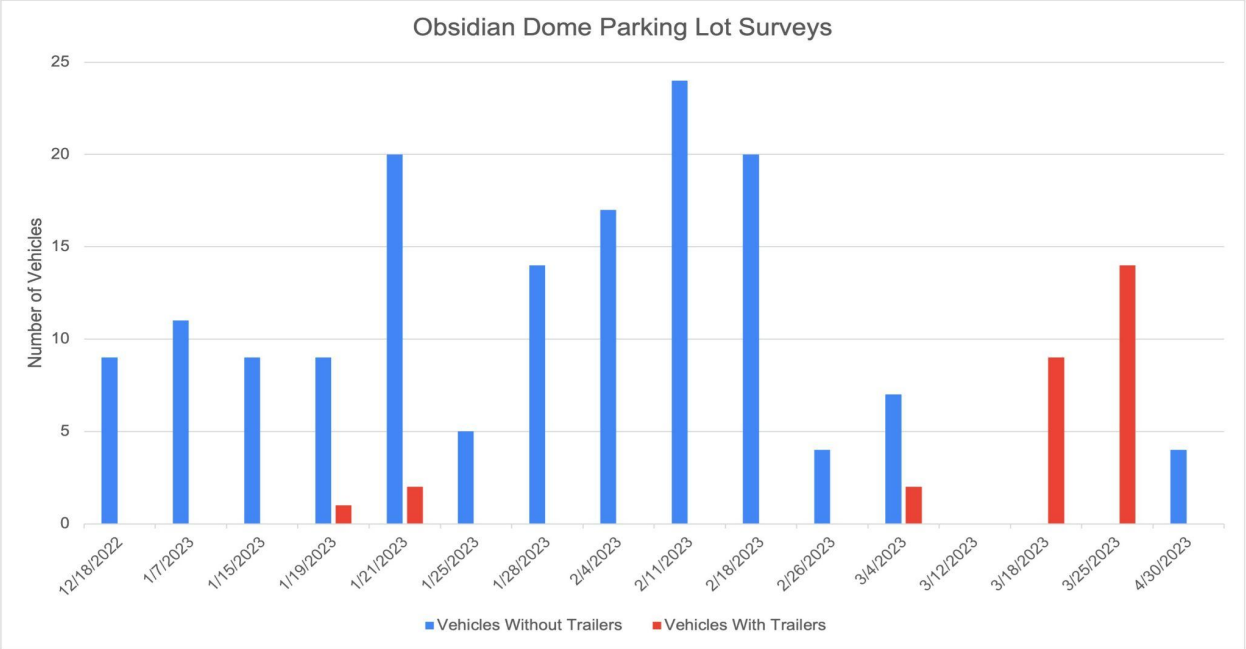


Table 15. The majority of vehicles counted at Obsidian Dome Road were without trailers. However, some recreationists may be using this trailhead to access the groomed OSV trail system.

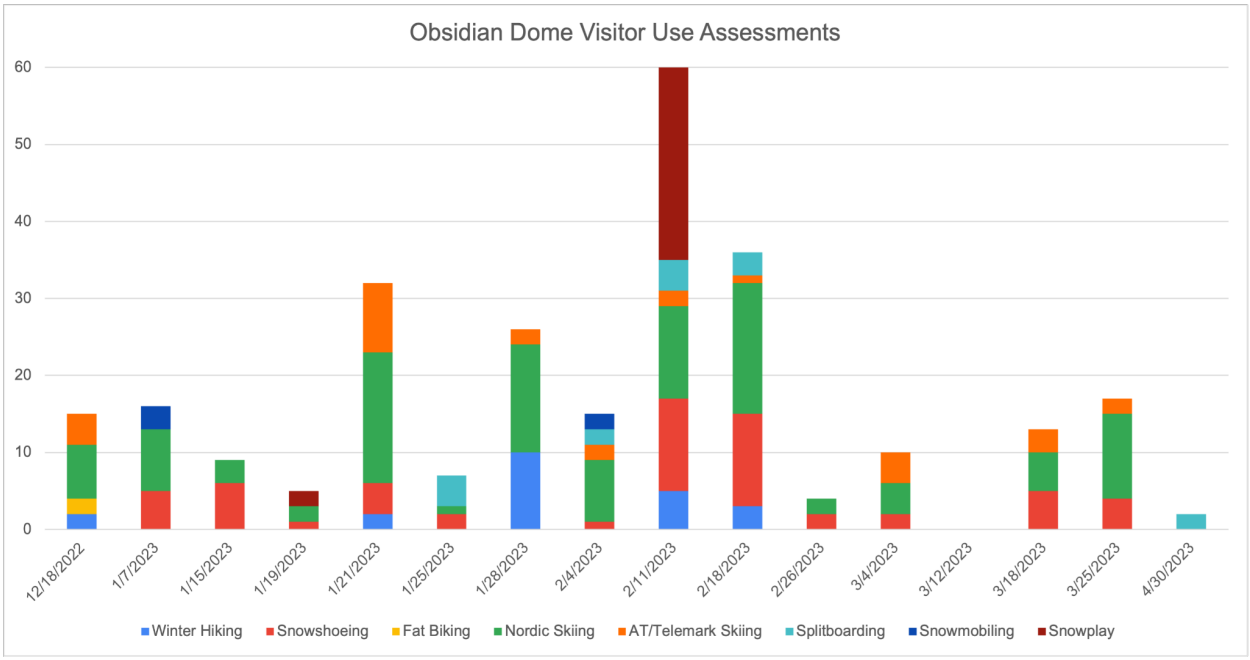


Table 16. Volunteers recorded consistent use by non-motorized winter recreationists at Obsidian Dome Road. March 12, 2023, the parking lot was not plowed and the trail was not groomed.

The Sherwins Trailhead is known for backcountry skiing and splitboarding access on Sherwin Ridge in close proximity to town. Many people also come to the Sherwins Trailhead to sled, play in the snow, and walk their dogs. Non-motorized recreation was reported more often than motorized recreation at this trailhead (Table 17). When snowmobiling did occur at this trailhead,

the California Data Manager was concerned about the excessive impacts to the non-motorized experience of the majority of users in that location, and that blind hills might block a non-motorized recreationist from view and potentially lead to an accident. Resource damage was also noted on the south-facing aspects of the knolls between the propane tanks and the motocross track, where even in a heavy snow year machines were noted to have traversed bare manzanita chaparral in order to directly access the area beyond the motocross track (rather than simply traveling around the knolls to the east over snow). To improve the experience for non-motorized users, and to minimize resource damage, we recommend closing the Sherwins Meadow and the knolls directly south and east of the parking area to OSVs while keeping the Sherwin Creek Road corridor and the less-crowded area beyond the Mammoth Motocross track open for access to snowmobiling farther out from where the majority of non-motorized activities occur. Improvements could be made for OSV staging on the east side of the parking area near the propane tanks.

The California Data Manager and Backcountry Ambassadors did not report any parking violations or conflicts during the winter season and noted that visitors parked efficiently, even on busy days (Table 18). However, dog poop and trash left on the snow were constant problems throughout the winter (Image 15, 16, 17). We recommend maintaining a Backcountry Ambassador presence at this trailhead to provide increased education about use etiquette and Leave No Trace messaging, as well as requiring owners to leash their dogs. This busy trailhead would also benefit from more frequent trash service, especially on busy weekends (Image 16).

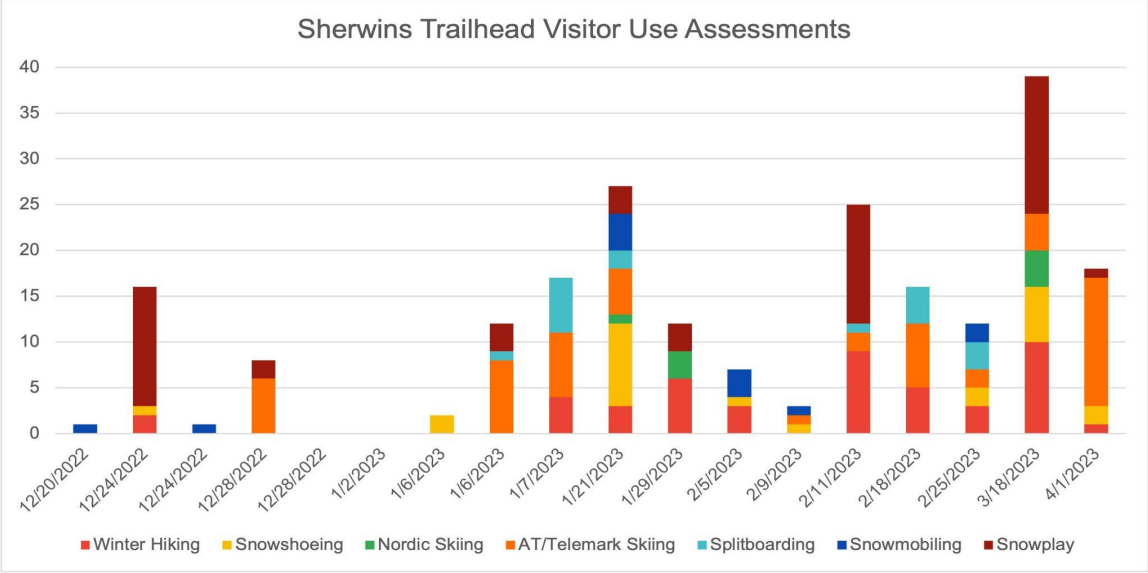


Table 17. The most-recorded winter activities were snowplay, backcountry skiing and splitboarding, winter hiking, and snowshoeing at the Sherwins Trailhead.

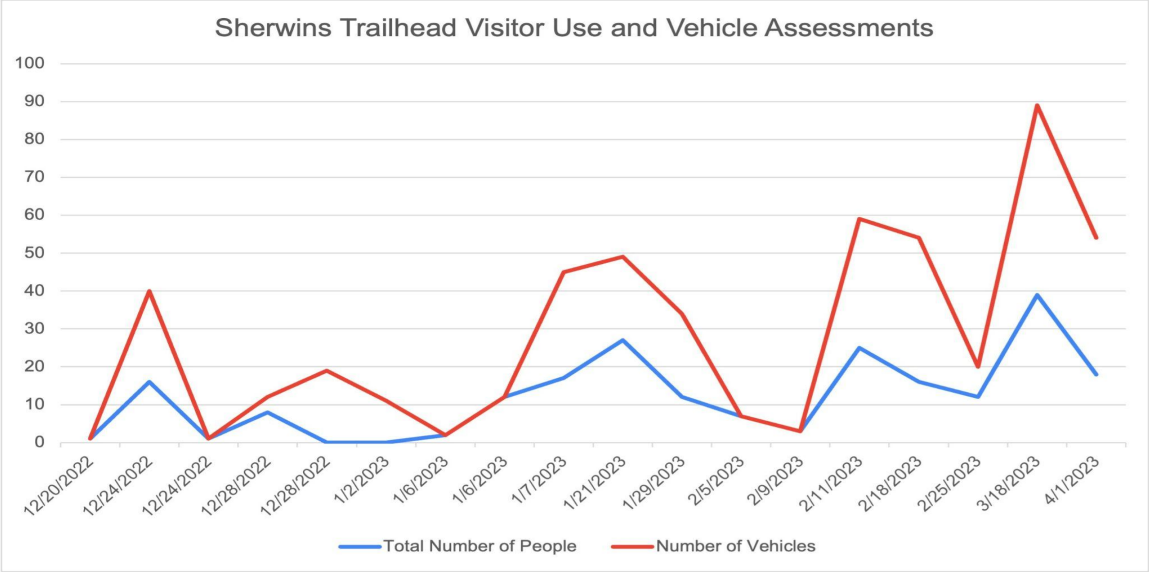


Table 18. Vehicles counted were consistently higher than people counted at the Sherwins Trailhead. Vehicle counts are useful for understanding how many people may be recreating near a trailhead on a given day, since people are often undercounted. People may be hidden from view by ridges, hills, trees, or distance.

Image 15. Despite having access to a pet station stocked with Wag Bags and a pet-waste specific trash receptacle, dog owners consistently neglected to pick up after their dogs. This photo, taken on February 18, 2023 (37.62835, -118.964) is just one example of the minefield of dog waste that the California Data Manager encountered at nearly every visit to the Sherwins Trailhead. The California Data Manager reported between one and five gallons of dog waste on the snow five times this winter. Many dogs were reported off leash at the Sherwins Trailhead, contributing to this problem.

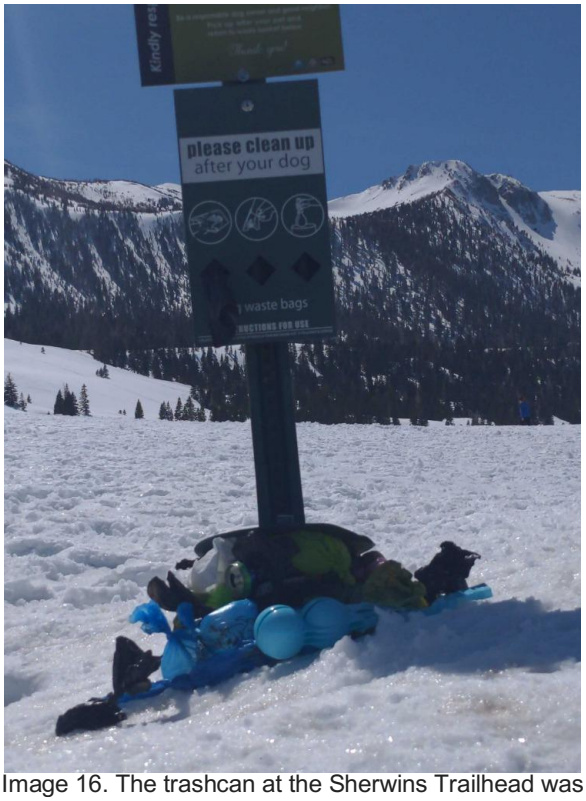


Image 16. The trashcan at the Sherwins Trailhead was open and buried in snow for most of the winter. The California Data Manager reported trash left near the trash can several times.

Image 17. Visitors left trash out on the snow at the Sherwins Trailhead when the trash receptacles were not usable. This photo was taken on March 18, 2023.

To access Minaret Vista in the winter, recreationists currently park near Mammoth Mountain's Main Lodge and travel on closed and groomed Minaret Road. Parking is often full by 10:00 AM on a busy weekend at Main Lodge. Non-motorized recreationists must walk on the snow at the base of the resort to access Minaret Road, which becomes a maze of ski school closures on busy weekends. There are no signs about Minaret Vista or the groomed road until the junction where the road leaves the Lower Roadrunner ski trail. Getting to Minaret Road from the resort is a hassle: from parking on a busy day to finding the trail, it is not straightforward. However, this trail accesses backcountry terrain near Reds Meadow and provides the opportunity for a scenic hike or tour to Minaret Vista (Image 18). We recommend—especially as plans move forward for further commercial development in the Main Lodge area—designating public-access parking near the Main Lodge for people who want to use the groomed road to Minaret Vista and also recommend additional signage. The California Data Manager noted lots of snowmobile use on the groomed road as well as off-trail when collecting data at this trailhead.

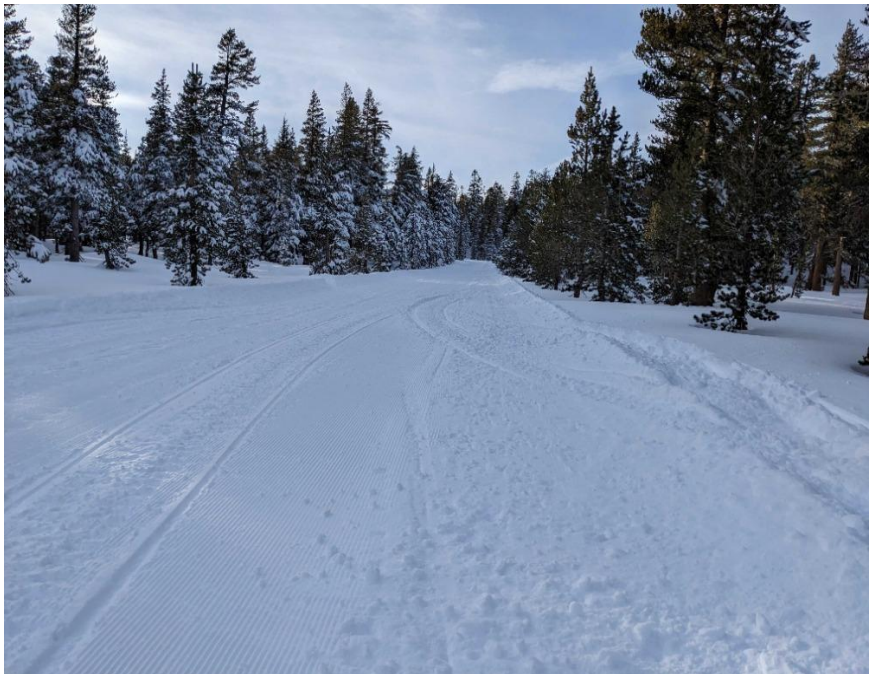


Image 18. Minaret Road provides an opportunity for a world-class scenic hike or tour as well as backcountry access, but parking is difficult and finding the road is not obvious.

The Mammoth Scenic Loop provides access for a variety of winter activities including backcountry skiing and splitboarding, Nordic skiing, and snowplay. Many visitors also park on the side of Highway 203, also known as Minaret Road, to play in the snow and sled down the small hills. There is a clear need for a designated snowplay area with a bathroom and trash cans near the parking area along Mammoth Scenic Loop above Highway 203. Most of these recreationists are families with young children that would benefit from more infrastructure. The snow pack would also benefit, as that is currently the only place to use the restroom. A designated snowplay area would also improve safety. The California Data Manager reported eight vehicles parked on the shoulder of Highway 203 and people playing in the snow on the side of the road on Presidents' Day weekend. A group of children ran across the road, just seconds before fast-moving traffic came around the blind curve just above them. It was also difficult to pull out onto the highway from the shoulder, due to the blind curve and fast-moving traffic.

Another opportunity to improve winter recreation near the Highway 203 Corridor is the Caltrans cinder-shed trailhead for snowmobile Trail C that leads to the Inyo Craters (Image 19). Recreationists can park along Highway 203 by the entrance to the road. However, there is no parking allowed along the entrance road and no signs on Highway 203 that mark this trail (Images 19 and 20). This trailhead provides an opportunity for snowmobile access away from areas commonly used for snowplay and human-powered recreation, but it is currently unmarked and lacks parking.

Image 19. USFS 3S89 at the Cal Trans Cinder Shed provides access to a groomed trail near Highway 203 but there is no signage or parking.

Image 20. No parking allowed along USFS 3S89 off Highway 203 near the Cal Trans Cinder Shed.

Lake Tahoe Basin Management Unit

Volunteers collected four Visitor Use Assessments on the Lake Tahoe Basin Management Unit (LTBMU) this winter at Bayview Trailhead (1 day), Hidden Peak Trailhead (1 day), Jakes South Emerald Bay Gate Closure (1 day), and Emerald Bay State Park (1 day). One OSV violation was reported at the base Houghton Peak in the Mount Rose Wilderness on January 28, 2023 (Image 21).

Image 21. Snowmobile tracks were reported in the Mount Rose Wilderness on January 28, 2023 (39.32872, -119.927).

Tahoe National Forest

Volunteers collected seven Visitor Use Assessments on the Tahoe National Forest at Deep Creek Trailhead (2 days), Carpenter Valley Road (1 day), Donner Pass SNO-Park (1 day), Donner Pass State Park (1 day), Yuba Pass SNO-Park (1 day), and Johnson Canyon Trailhead (1 day).

Eldorado National Forest

One volunteer collected a Visitor Use Assessment on the Eldorado National Forest at Carson Pass SNO-Park (1 day) .

Humboldt-Toiyabe National Forest

Volunteers collected six Visitor Use Assessments during the winter at Incline Lake (2 days), Forestdale Creek Road (1 day), Tamarack Peak Parking Lot (2 days), and Tahoe Meadows (2 days). OSV violations were reported once in an area closed to OSVs near Tahoe Meadows on February 19, 2023 (Image 21), and once at the base of Houghton Peak in the Mount Rose Wilderness on January 28, 2023.

One OSV violation was reported on and near Forestdale Creek Road on March 24, 2023, when the road was closed to all vehicles. The volunteer reported that he had a friendly encounter with snowmobilers who mistakenly believed that the Forestdale corridor always remains open for OSV access, although not via Red Lake. These snowmobilers had staged at the Hope Valley SNO-Park. The volunteer who encountered this OSV violation suggests that the USFS post better signage at Red Lake, along Blue Lakes Road, and along the eastern margin of the Forestdale Road corridor when there is an OSV closure in place.

Image 22. A volunteer reported snowmobile violations on and near Forestdale Creek Road on March 24, 2023 (38.68855, -119.96075).

Conclusion

This past winter (2022-23) marked WWA's second season of data collection and monitoring in Region 5. Our increased investments yielded a more robust dataset that demonstrates the value of RIMS-facilitated data collection and the valuable role that Backcountry Ambassadors can play in data collection and visitor education. Although even a single data point provides some information, consistently collecting data at specific places reveals visitor use patterns that

can inform winter travel planning and implementation. Assessments of signs and facilities are also useful for ensuring that Forest Service winter facilities are serving the public as intended, and that educational resources are present where needed. Next season we also aspire to better coordination with other entities who are also collecting similar data, such as the Town of Mammoth Lakes. As we continue to grow this program – including with a more fully developed Backcountry Ambassador corps – we hope that it will prove to be a useful resource for National Forests and also enhance on-the-ground capacity for visitor interaction and winter recreation management.

Full data appendices by Forest Service unit available upon request. For more information, contact Hilary Eisen: heisen@winterwildlands.org