WILDERNESS WATCH
Keeping Wilderness Wild

February 28, 2022

Regional Forester (Reviewing Officer)
Pacific Northwest Regional Office
Attn: Objections
PO Box 3623
Portland, OR 97208-3623

Sent Via Email to: objections-pnw-regional-office@fs.fed.us

RE: OBJECTION to the Draft Decision Notice (DDN) USGS Glacier Peak Seismic Monitoring

Pursuant to 36 CFR Part 218, Wilderness Watch (WW) and North Cascades Conservation Council (NCCC) object to the Draft Decision Notice for the **USGS Glacier Peak Seismic Monitoring Environmental Assessment.**

Pursuant to Part 218, Wilderness Watch is the lead objector. Contact Person: Gary Macfarlane (ph) 208-882-9755. The full objection and attachments are included in the email. Please note that North Cascades Conservation Council has also submitted a separate objection letter.

Wilderness Watch and North Cascades Conservation Council submitted comments on the project as stated in the DDN. If your schedule permits, we would like to discuss the issues raised in our objection with you.

Sincerely,

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Introduction: The Purpose and Need

The Wilderness Watch (WW) comments stated, "The EA and MRA [do] not make the case that any of the prohibited actions in Section 4(c) meet the narrow qualifications for exception. How do the prohibited actions preserve wilderness character or even protect visitors in the area?" In other words, what is the wilderness purpose for this violation of Wilderness? The purpose and need for the project, as expressed in the draft Decision Notice (DDN) on pages 2 and 3, is mainly about USGS's desire for more data, and that does not fall into the narrow qualification for an exception. Indeed, the primary purpose of the project is to fill gaps in the monitoring network at Glacier Peak." DDN at 2. It isn't until the end of the third paragraph under purpose and need that any 4(c) exception is even alluded to—safety of wilderness visitors--and that is an aside.

It is cynical to try and shoehorn this proposal into the exception of visitor safety in an emergency when the Forest Service knows full well that it will not be able to do anything for visitors in the Wilderness in the event an eruption occurs. In fact, there is nothing in the EA or DDN that indicates how wilderness visitors might be contacted in such a situation or even what might be done with advance warning for visitors not yet in the area.

Further evidence for the agency's cynicism regarding the use of wilderness visitor safety lies in whether there would be much warning before an eruption. In apparent response to our comments pointing out evidence from government sources--including the draft MRA, which suggested that warning signs are usually evident well in advance of an eruption--the part of the draft MRA that indicated it was likely changes would be evident well in advance of an eruption was removed and the narrative is now different[1]:

> Recent eruptions in Alaska (Okmok, 2008; Larsen et al., 2009), Chile (Calbuco volcano, 2015; Van Eaton et al., 2016), and Japan (Ontake volcano, 2014; Kato et al., 2015) have demonstrated that volcanoes can transition rapidly from a state of quiescence to eruption with as little as a few hours, or in rare cases even a few minutes, of warning. If adequate systems are not in place and Glacier Peak were to wake up quickly, it is possible that warning signs of an impending eruption could be missed, putting the lives of wilderness users and others in danger. The most common precursors to volcanic activity are surface deformation, increases in volcanic gasses emitted from a volcano, and increases in earthquakes.

MRA at 1 and 2. The effort by the Forest Service to lead a reader to believe that time is more of the essence than previously thought for the safety of wilderness visitors makes it even more unlikely the Forest Service could locate or even warn visitors within a few hours or a few minutes, especially those close to Glacier Peak. As WW noted in our comments, "In any case, the practicality of contacting visitors in Wilderness if there is an imminent threat of eruption--one that does not exhibit any early warning signs--is not addressed in the EA, regardless of whether the structures are installed or not (see also the section about alternatives)." The absence of a plan in the EA or DDN to contact visitors in the Wilderness in case of an eruption, regardless of how much time there may between the first detection of seismic activity and any eruption, is glaring and demonstrates this is not the real reason for the project. Later sections of this objection address this topic in more detail.

The only logical conclusion is the real purpose and need is because USGS wants more permanent monitoring stations in the Glacier Peak Wilderness. Rather than working with USGS in trying to come up with something that would not violate Wilderness, the Forest Service tortured the Wilderness Act in an effort to

[1] See also Ewert, et al 2005. USGS Open File Report 2002-1164, *An Assessment of Volcanic Threat and Monitoring Capabilities in the United States: Framework for a **N**ational **V**olcano **E**arly **W**arning **S**ystem* at 3 that explains about forewarning time.

make the proposed action appear legal and dismissed other options without full analysis (see DDN at 14).

THE PROPOSAL VIOLATES THE WILDERNESS ACT

Our scoping comments of June 19, 2015 and our comments on the draft Environmental Assessment (DEA) of August 20, 2018 address our concerns. Specifically, in our comments, we raised the following points:

1. The Wilderness Act prohibits permanent structures and installations, and the landings of helicopters and other aircraft. The proposal is not the minimum necessary.
2. The one, singular purpose of the 1964 Wilderness Act is to preserve wilderness character.
3. The so-called "public purposes" in the Wilderness Act can only be done in Wilderness if they are compatible with the preservation of wilderness character.
4. The EA admits that the project will damage wilderness character.
5. The Forest Service refused to fully analyze other alternatives, so it can't claim that this proposal is the minimum necessary.

Failure to show it is the Minimum Necessary

The EA and newest minimum requirements analysis/Minim requirements decision guide (MRA) do not make the case that any of the prohibited actions in Section 4(c) meet the narrow qualifications for exception. The prohibited actions do not preserve wilderness character or even protect visitors in the area. These questions are explored in more detail in the following paragraphs and sub-sections.

Background

The Wilderness Act contains a narrow exception to allow otherwise-prohibited activities—such as helicopter use, motorized equipment or placement/maintenance of installations—only where such activities are necessary to meet the minimum requirements for administration of an area for the purpose (singular) of the Wilderness Act. 16 U.S.C. § 1133(c). In other words, the exception applies only where the otherwise-prohibited activity will affirmatively advance the "'preservation and protection' of wilderness lands … in their natural, untrammeled state." Wilderness Soc'y v. U.S. Fish & Wildlife Serv., 353 F.3d 1051, 1061 (9th Cir. 2003) (en banc) (quoting 16 U.S.C. § 1131(a)). The Wilderness Act charges "each agency administering any area designated as wilderness [with the responsibility of] preserving the wilderness character of the area." 16 U.S.C. § 1133(b).

The Wilderness Act requires the administering agency to demonstrate that the project as proposed is necessary to preserve the wilderness character of the area. Unless the Forest Service can make and support this demonstration in its analysis of the project, the project cannot proceed. Wilderness Watch v. U.S. Fish & Wildlife Serv., 629 F.3d 1024, 1040 (9th Cir. 2010) (setting aside the agency's authorization of new structures built by motorized means in wilderness where the agency failed rationally to demonstrate that structures would advance wilderness preservation and a no less intrusive approach could achieve that goal).

Even USGS recognizes that there may be constraints in operating in Wilderness:

> Technological constraints (e.g., telemetry infrastructure in remote locations) may limit monitoring options or require considerable advance planning. Permits for access to Wilderness Areas and National Parks must be obtained in advance from land managers. Physical terrain and weather (e.g., on high, glacier-clad stratovolcanoes) can alter scheduled instrument installation and maintenance.

Moran et al. 2015 at 28.

Wilderness Visitor Safety[2]

The Wilderness Act's emergency exception does not allow otherwise prohibited uses as preventative measures. The parenthetical phrase in Section 4(c) "(including measures required in emergencies involving the health and safety of persons within the area)" is premised upon an emergency, such as an injury requiring motorized rescue. A federal court in Washington rejected agency arguments that trailside shelters should be rebuilt and maintained for visitor safety in the Olympic Wilderness due to the notoriously harsh and oftentimes unpredictable weather there. It noted that the emergency exception in Section 4(c) "most logically applies to matters of urgent necessity rather than to conveniences for use in an emergency." *Olympic Park Associated v. Mainella.* It also quoted the Park Service's own policy recognizing this distinction:

> The Wilderness Act and current NPS management policies encourage wilderness users to prepare for, and encounter the wilderness on its own terms, striving to provide "primitive and unconfined" recreation opportunities, complete with the risks that arise from wildlife, weather conditions, etc. NPS wilderness management policies do not support the provision of facilities in wilderness specifically to eliminate these risks.

The Forest Service itself has a similar policy to that of the NPS. FSM 2320.3 – Policy at point 10 "Inform wilderness visitors that they face inherent risks of adverse weather conditions, isolation, physical hazards, and lack of rapid communications, and that search and rescue may not be as rapid as expected in an urban setting in all publications and personal contacts." FSM 2321.2 Objectives has at point 4, "physical and mental challenge and stimulation," as an important public value to be perpetuated and protected in Wilderness.

If preventive measures were indeed legitimate, the agencies would allow all sorts of structures in Wilderness. Examples demonstrating how untenable this interpretation is include:

- air raid sirens and fully-stocked bomb shelters in the event of nuclear war,
- a collaring program of all grizzly bears, cougars, bison, poisonous snakes, alligators, and other animals deemed "dangerous" with the requirement that visitors carry a device that detects all nearby "dangerous" animals and the installation of fenced and gated backcountry compounds/camping areas—literally mini-fortresses--to avoid danger to visitors from these animals when camping,
- and large walls to mitigate/contain avalanches to protect winter wilderness visitors.

There are inherent dangers that come with recreating in Wilderness, whether it be turning a corner on a trail to find a grizzly with cubs lumbering your direction or finding the volcano you are traversing has suddenly come to life. Violating the Wilderness Act and degrading the Wilderness with structures, installations, and motorized intrusions to make use of Wilderness "safer" undermines everything Wilderness is about.

Setting aside the above problem, there is no indication in the EA that a volcanic warning system will actually increase the safety of persons within the Wilderness. As our comments noted, warning signs of an eruption, which are usually detectable outside of Wilderness, tend to be normal for Cascade Range volcanoes. Even if monitoring equipment could aid in detecting imminent eruptions where the typical warning signs are not present, the EA and DDN do not assess the practicality of contacting visitors in Wilderness when that information is received. The agency has not disclosed a plan to contact wilderness visitors or explained how

[2] It should be noted that the EA largely ignores the danger from helicopter flights in Wilderness.

that might be accomplished.

Frankly, if a major eruption occurs quickly, the Forest Service or USGS would likely have higher priorities than alerting people in the Wilderness at that time, as there would be greater emergency priorities out of the Wilderness. In fact, the MRA at 2 alleges "safety of workers" is compromised by waiting to install equipment once heightened volcanic unrest is detected. If that were true, neither agency would be out trying to contact people in the backcountry if some activity is detected by the proposed devices, even if such contacts were practical. The supposed benefit gained by adding the wilderness-harming new stations to the existing monitoring station—early warning for informing wilderness visitors—is therefore spurious and impractical to implement. Simply put, there is no advantage to visitors in the Wilderness from adding these four stations to the monitoring system.

Similarly, even if the detection system would only be used to inform visitors not yet in the Wilderness, that removes the ostensible reason for adding these new sites--speed in early detection. The current system could be used, once an anomaly is detected, to inform visitors that are coming into the Wilderness. Apparently this is not happening now. The agency appears to be using visitor safety as an attempt to evade the protective requirements in the Wilderness Act. Again, visitor safety won't be improved because there is no concrete plan or intent to disseminate information to those visitors in the Wilderness.

If the agency were truly interested in informing visitors, it could post a sign about the danger of volcanoes at every trailhead in the unlikely event an eruption were to occur.

Rather than dissemble the public and violate the Wilderness Act, the Forest Service should have fully considered alternatives such as the use of packable, temporary equipment for monitoring volcanoes if the agency believes such monitoring is important for reasons other than visitor safety in Wilderness.

The USGS admits in making its proposals about monitoring,

> We largely ignored such issues as cost, permitting requirements, and logistic difficulties, which can vary greatly from volcano to volcano and cannot be addressed by a generic standard. In fact, many U.S. volcanoes are remote, in wilderness areas, and (or) subject to harsh weather conditions. Such factors may limit the type and number of instruments that can be deployed at specific volcanoes.

Moran et al 2008 at 2. Rather than "limit[ing] the type and number of instruments," the Forest Service has abdicated its responsibility to USGS desires and concluded that, "the primary purpose of the project is to fill gaps in the monitoring network at Glacier Peak. EA at 7. This raises some serious questions about the tail wagging the dog, especially when ones sees that the reason for this project is one mainly of scientific study. In any case, the Glacier Peak Wilderness was designated in 1964, 58 years ago. The fact that the Forest Service did not find these stations necessary for visitor safety until now is highly suspect.

The above indicates that the real reason for the proposal is that USGS wants to do it. Congress passed the Wilderness Act because the federal agencies, especially the US Forest Service, were not protecting wildlands under their jurisdiction.[3] The Act places restrictions on the agencies, and rightly so.[4] This proposal is not

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[3] See Craig Allin, *The Politics of Wilderness Preservation*, Greenwood Press 1982, Contributions in Political Science, Number 64 at pages 102 to 105 and 135. Allin cites James P. Gilligan's 1954 doctoral dissertation, *The Development of Policy and Administration of Forest Service Primitive and Wilderness Areas in the Western Untied States.* Relevant pages are attached.

[4] See Sean Kammer, *Coming to Terms with Wilderness: The Wilderness Act and the Problem of Wildlife Restoration*, 43 ENVTL. L. 83, 100-101 (2013), attached.

supported, based upon visitor safety in Wilderness. It is casuistry in an attempt to evade the plain language of the Wilderness Act.

Scientific Research (and Visitor Safety)

The EA makes the same mistake the draft does and has nearly identical wording regarding research and visitor safety. However, we already showed how that is a misreading of the Act in our comments:

> The EA claims, "This project meets one purpose of the Wilderness Act as a scientific research project; the results would inform what measures are required to protect the safety of the wilderness users." Regarding the first clause in the sentence, the purpose of the Wilderness Act in section 4(c) is singular, not plural. The public purposes or uses of the Wilderness Act in section 4(b) are not its purpose, rather allowable uses so long as wilderness character is maintained. To misinterpret section 4(b) as allowing prohibited uses for the public purposes or uses, in spite of clear language to the contrary, would allow motorized recreation use to enhance visitor recreation use at hard to reach places.
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> Safety of visitors in Wilderness from the parenthetical phrase in Section 4(c) "(including measures required in emergencies involving the health and safety of persons within the area)" is premised upon an emergency, such as an injury requiring motorized rescue. Warning signs of an eruption, which are usually detectable outside of Wilderness, tend to be normal for Cascade Range volcanoes. Such warning signs generally precede any eruption by a significant length of time (see the MRA, page 5). In any case, the practicality of contacting visitors in Wilderness if there is an imminent threat of eruption--one that does not exhibit any early warning signs--is not addressed in the EA, regardless of whether the structures are installed or not (see also the section about alternatives).

The proposal also violates the Agency's own policy on research in the Forest Service Manual at 2324.42 which states:

> 1. Encourage research in wilderness that preserves the wilderness character of the area (FSM 2320.3) (emphasis added).
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> 2. Identify wilderness management or national issues that may require research in forest plans.
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> 3. Review proposals to conduct research in wilderness to ensure that research areas outside wilderness could not provide similar research opportunities. Direct projects that would jeopardize wilderness values to areas outside wilderness.
>
> 4. Review research proposals to conduct research in wilderness to ensure that research methods are compatible with wilderness values. Do not allow the use of motorized equipment or mechanical transport unless the research is essential to meet minimum requirements for administration of the area as wilderness and cannot be done another way (sec. 4(c) the Wilderness Act). Include specific stipulations in the approval document (emphasis added).

None of the above applies here. Helicopter placement of permanent volcanic monitoring devices is not necessary for administration of the area as Wilderness.

Absent Fully Analyzed Alternatives, There is no Determination of Necessity

The EA failed to fully analyze any action alternative (see also NEPA section). Our comments addressed this issue in detail:

> Even if the structures and installations were the minimum necessary (and the EA does not support that conclusion), the EA does not present the case that motorized use is the minimum necessary for their installation. Table 3 aggregates the weight of all items. For example, batteries are 70 pounds each, not 700 pounds of batteries. Structures can be assembled on site from component parts. The Forest Service has a long history of constructing by non-motorized means what it considered necessary structures and installations in the wilderness (bridges, for example) that are far larger than what is proposed here.[5]
>
> Are there more accessible sites near Glacier Peak that would work, assuming the proposed sites can't be reached by foot or stock? In any case, agency personnel who walked to the specific sites presumably took the photos of the sites in the EA. Did these personnel walk to take the photos?
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> The EA claims, "To accurately locate the source of seismic activity, a minimum of 4 seismic stations are needed to triangulate the location." That is an odd statement and illogical. Triangulation refers to three, not four, locations. Why are four the minimum necessary and not three?
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> The EA does not address whether Glacier Peak is showing any signs of imminent eruption or any precursor to that activity. There are usually signs that occur long before dangerous activity like an eruption, and those signs are quite evident at a great distance (see MRA page 5). An alternative that would only approve temporary structures when such signs are observed should have been considered. Remote sensing, such as via satellite or LIDAR over flights, was not considered. It may be possible those methods could be used in lieu of motorized equipment and structures in the Wilderness.
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> The EA mischaracterizes the current conditions in the analysis of impacts to Wilderness. It states that the no action "alternative would result in a diminished ability for scientists at the USGS" to monitor volcanic activity. How will USGS be hampered or have "diminished ability" from doing what they already do now unless they have already established the facilities, without proper authorization, and this EA is merely a pro-forma exercise for an action that has already been (illegally) implemented? Further, what does USGS have to do with wilderness administration?[6]

For example, the project was designed with acid lead batteries in mind, which are much heavier than lithium-ion batteries. As Bill Lider pointed out in his recent communication/objection with the Forest Service, a 12.8V, 100Amp-hour, 1,290-Watt battery only weighs 24.2 pounds and doesn't pose the risk of leaking acid into the environment. Had the FS demanded USGS work with them, it is possible that a packable design for a temporary station could have been developed. Our comments addressed the issue of packable designs for bridges in Wilderness that are many times larger than the proposed monitoring sites (see attached).

It seems regardless of the weight of equipment, helicopters are always chosen (see attached).

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[5] Even though the MRA states the Upper Suiattle Trail is no longer accessible to stock due to a slide, the option of fixing the trail was not even discussed as an alternative in the EA. Further, the MRA states local contract packers won't pack batteries to the Miners Ridge Lookout. Even if the Forest Service locally lacks trained packers, the agency has them.

[6] In any case, the statement about diminished the ability of USGS scientists under the no-action alternative, besides being factually wrong, is out of place in the wilderness section of the EA.

Remedy

Choose the No Action Alternative. Alternatively, analyze an alternative that does not require permanent structures or the use of motorized equipment in an EIS.

FAILURE TO COMPLY WITH NEPA

The EA failed to adequately analyze the direct, indirect, and cumulative impacts of the proposal on wilderness character, including impacts from permanent structures and motorized access, and failed to rigorously explore reasonable alternatives that would lessen or eliminate those impacts. The EA does not adequately discuss the enduring impacts of permanent structures on wilderness character, the routine use of helicopters in the Glacier Peak Wilderness, or the cumulative impacts of the proposed structures with other structures and installations already in the Wilderness. Similarly, the EA does not adequately address the impacts of motorized and mechanized intrusions in conjunction with other past and reasonably foreseeable motorized instructions in the Wilderness. All we have is a listing of projects in appendix B without analysis.

In a similar vein, our comments stated:

> There have been other proposals in the past few years to violate the Glacier Peak Wilderness, including requests from USGS. We have attached earlier comments on some of these proposals, including a scoping letter sent earlier this year. How does this proposal fit into those others? At the very least, there seem to be cumulative impacts and/or connected actions associated with these proposals. All are USGS seismic study of Glacier Peak. As such, they are connected and would have cumulative impacts. The segmentation of these projects is a violation of NEPA. *Alpine Lakes Protection Society v. Schlapfer,* 518 F.2d 1089, 1090 (9th Cir. 1975) (segmentation merits "close scrutiny to prevent the policies of NEPA from being nibbled away").
>
> Further, it appears that segmentation and the failure to consider cumulative impacts will continue. The EA does not adequately consider future proposals to maintain the sites. The only mention is, "A helicopter may be required once every few years when transport of heavy gear over difficult terrain by foot is impractical or unsafe (i.e., replacement of batteries or failing equipment)." The analysis of impacts in the EA entirely misses this issue, though it is mentioned in a little more detail in the MRA.

Perhaps the biggest problem is the failure to look at a reasonable range of alternatives, including a non-motorized access with temporary structures, as has been recommended in other Wildernesses. This was also addressed elsewhere in this objection. The MRA only looked at whether personnel would be helicoptered to the sites. The MRA is not the NEPA document nor can it substitute for the NEPA document. One of the likely reasons that a reasonable range of alternatives was not explored is that the Forest Service allowed the project proponent to define the proposal around a set equipment design, which unreasonably narrowed the range of possible actions to meet the purpose and need. The MRA alleges the non-motorized option could not be considered because of the weight of the fiberglass shelters, 500 pounds. The Forest Service did not consider an alternative for a packable design to assemble on-site for those structures. The agency has packed in bridges that weigh many tons using packable designs as noted in our comments.

Surely, a packable design for a temporary shelter that can withstand snow loads could be done, one that could be carried in smaller loads and assembled on-site.

A project that would install new structures with motorized transport and equipment in Wilderness requires the preparation of an EIS. The EA and MRA clearly show that wilderness character of the area will be harmed by the authorization of multiple prohibited uses within designated wilderness, including the

installation of permanent structures and the associated motorized access to install and maintain them. The structures will remain in the wilderness for decades likely requiring repeated motorized intrusions to install and maintain them over their lifetime, causing significant enduring impacts on wilderness character.

The EA and DDN are so inadequate, we don't even know how many helicopter trips are proposed. The DDN states, "The number of trips with the helicopters would be minimized as much as possible." DDN at 4. Such platitudes don't comply with NEPA. We also don't know if crews would be required to walk to the construction sites. The DDN suggests that is preferred (*Ibid*.) but the EA, which only analyzed one alternative states, "The proposed action would utilize the helicopter to transport crews to the project sites." EA at 45.

The wilderness analysis in the EA, at times, veers into confusion, "The small amount of area disturbed by these sites would not alter the natural character of wilderness." EA at 45. That is like saying roads slicing across wilderness have no impact on the natural character. Regardless, dissecting wilderness into five parts for analysis prior to decision-making is an abuse of the monitoring process. From our communications with Landres, the person mainly responsible for coming up with the five characteristics of Wilderness, stated the main purpose behind this exercise was to be able to objectively monitor changes in wilderness character in the National Wilderness Preservation System. Hence, the updated protocol titled *Keeping it Wild* and *Keeping it Wild 2*. While this process to define wilderness character was undoubtedly a well-intended effort, as time has passed, it is clear it has serious negative unintended consequences for Wilderness. Other wilderness specialists and researchers recognize these failings in their pointed critique (see Cole et al. 2015, attached in our comments).

The failure to provide necessary information also violates NEPA. WW filed a Freedom of Information Act (FOIA) request to obtain the project file on January 31, 2022. We have not yet heard about the status of our FOIA request (attached). Furthermore, the EA is [r]elying on Specialist Reports and the Project Record …" for its analysis. EA at 12.

The above inadequacies constitute a failure to take a hard look at project impacts in violation of NEPA.

Remedy

Withdraw the DDN and EA and prepare an EIS that takes a hard look at direct, indirect, and cumulative impacts and rigorously explores a reasonable range of alternatives.

Concluding Note

The proposal is not consistent with the Wilderness Act because there is no determination that the project is the minimum necessary for preservation of the area as Wilderness, the singular requirement for allowing prohibited means. The Forest Service must be honest with the public. It is clear the agency believes the project is more important than protecting Wilderness and Wilderness and the Wilderness Act must be violated, in spite of the plain language of the law.