



Washington State Chapter

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June 12, 2026

Erin Uloth, Forest Supervisor
Mt. Baker-Snoqualmie National Forest
1000 SE Everett Mall Way, Suite 410
Everett WA, 98208

Submitted electronically to <https://cara.fs2c.usda.gov/Public/CommentInput?project=284163>.

RE: 2025 Draft Environmental Assessment Project 284163

Dear Forest Supervisor Uloth,

On behalf of the Washington State Chapter of the Sierra Club, we appreciate the opportunity to submit comments to Mt Baker-Snoqualmie National Forest (the "MBS") regarding the 2025 Mt. Baker Geothermal Consent to Lease Project 284163 Environmental Assessment.

Please note that these comments are in addition to other comments which we have joined, as submitted to the Forest Service by WA Wild and other environmental groups. We support WA Wild's letter, which the Washington State Chapter of the Sierra Club co-signed, but wish to raise additional concerns which we believe should be addressed.

The Washington State Chapter of the Sierra Club includes over 100,000 members and supporters, working to protect communities and the planet. With over 3.5 million members nationally, the Sierra Club has the largest membership of all environmental public advocacy groups in the United States. We are the oldest engaged and enduring grassroots environmental organization in the United States.

Members of the Washington Chapter have had a long history of working to protect federal lands within the Mt Baker-Snoqualmie National Forest (the MBS) dating back to the North Cascades Study of 1965, the North Cascades Act of 1968, The Alpine Lakes Wilderness Study and Land Area Management Act of the 1972 and 1976, the Mt Baker Land Use Study of the 1970's, and the RARE (Roadless Area Review and Evaluation) I and II studies during the 1970's.

We commented on the Mt Baker-Snoqualmie Land and Resource Management Plan Draft EIS and Final EIS of 1990. More recently, we participated in the development of the Northwest Forest Plan (NWFP) of 1994 and its subsequent implementation, including several timber sales prepared pursuant to its direction on this Forest.

For context, and to demonstrate the Sierra Club, WA Chapter's familiarity with MBS projects initiated by the US Forest Service (the FS), here is a list of submitted Public Comments, as well as a list of areas of significant interest to the Sierra Club:

- List of Sierra Club, WA Chapter, comment letters on previous MBS projects:
 - 2017 Darrington/South Fork Stilly.
 - 2021 - 2022 North Fork Nooksack, Glacier Creek and Canyon Creek.
 - 2022 Middle Fork Snoqualmie/ Pratt River
 - 2022-2023 The Finney Block/North Fork Stilly.
 - 2023-2025 Carbon River area and east.
 - 2026 Forestwide Thinning Treatments Project
 - Other MBS comment letters: Tenas Creek; Dead Horse Creek
- MBS Areas with substantial participation and interest from Sierra Club, WA Chapter:
 - The Greater Alpine Lakes Area. Particularly the South Fork Snoqualmie/I-90 Corridor; the US2 Corridor, and the Beckler
 - Played a lead role in the development of the Wild Sky Wilderness designation.
 - Also helped lead the Alpine Lakes Wilderness Addition and Middle Fork Snoqualmie and Pratt Wild and Scenic River legislation of 2014
 - Provided comments on the Comprehensive River Management Plan for the Middle Fork Snoqualmie and Pratt River
 - Hansen Creek Vegetation Management EA, 2015
 - Snoquera Landscape Analysis Project EA, 2017
 - the Lower Taylor and Quartz Creek.
 - The Cascade River.
 - Baker River.

We have reviewed the 2025 Mt. Baker Geothermal Consent to Lease Draft Environmental Assessment, dated May 2026 (the "Draft EA"), and supporting documentation, and offer comments on the issues described below.

As an overview, we believe additional Stipulations should be added to the Draft EA to be required of lessees from BLM.

Further, we request additional information be provided to the public so that we can more accurately assess the impacts of granting the Consent to Lease.

Please add the following Additional Stipulations and Revisions to the Draft EA:

1. Add as a new Stipulation the following regarding the need to include **Mature Trees and Stands** in the protections and Stipulation for the Late Successional Reserves.

Please note that the WA Wild Coalition comment letter on this Project covered merely the Old Growth protections, but the Sierra Club vigorously demands the inclusion of Mature Trees and Stands to be protected by a No Surface Occupancy Lease Stipulation as provided below:

Late Successional Reserves and Mature and Old Growth Forests Should Receive a No Surface Occupancy Lease Stipulation

We were disappointed that the Draft EA did not apply an NSO stipulation to Late Successional Reserves in the project area, particularly for stands over 80 years old and older. The Allowed Surface Occupancy maps (maps 1-4) overlay only the LSR LUA per the Northwest Forest Plan. These LSRs typically include mature and old growth forests that are 80 years and older, and are dominated by stands that are over 80 years old, with the great majority containing stands over 427 years old.

All of the nominated lands fall within the Late Successional Reserves Land Use Allocation which have been mapped on the forest subsequent to the Northwest Forest Plan. The nominated lands are almost entirely covered by stands that are 80 to 726 years old and older.

See attached **Appendix 1 to this Comment Letter, which is a** data table (that uses FS data) that identifies areas of old growth by stand age, by township, and by section that are within the “Allowed Occupancy” areas. This data clearly shows that these LSR stands are dominated by trees 427-726 years old. These areas have been specifically identified as providing necessary old growth habitat for endangered northern spotted owls and marbled murrelets.

We know from MBS Forest stand age data that the stand age for most of the “Allowed Surface Occupancy” sites are in the range of 427-726 years old.

The great majority of these LSR stands are clearly past any threshold for establishing old growth characteristics. There are also many stands in the age range of 127 to 427 years old. We believe and strongly urge that all LSRs, including trees and stands in age range from 80 to 726 years of age and older, should be given a No Surface Occupancy stipulation, and that should be added as a New Stipulation to the DraftEA.

In addition, the Draft EA page 32 re MBS BOT 01, as written, should be revised to reflect the protections for *mature and the old growth forests and their dependent species*, including but not limited to threatened and endangered species, as well as survey and manage species, and all other dependent species. We request that the MBS BOT 01 Stipulation be revised to read as follows:

*“MBS-BOT-01: No Surface Occupancy: to protect the character and biological diversity of **mature and old-growth forests**, including **all LSR areas and their dependent species**, including but not limited to threatened and endangered*

species, as well as survey and manage species, and all other dependent species, there shall be no surface occupancy in LSRs ” (Draft EA, Pg. 32)

2. Add as new Stipulations all of the stipulations included in the comment letter on this Project, submitted to the Forest Service dated 5-14-26 from Lider Engineering, PLLC, (William Lider) specifically and without limitation paragraphs #1-23, including the requirement of a Performance Bond, including for demolition and remediation on termination of lease, for the benefit of the US Forest Service and the State of WA

3. Add a provision to Draft EA that the BLM *cannot* lease the entire 60,097 acres, but instead must be limited to the following:

- Similar to the ForestWide Thin proposal, although the FS is offering to BLM to *choose from among* 60,097 acres, the FS must limit the total acreage that BLM can offer for lease to a lower acreage, i.e. to a subset of the 60,097 acres. The FS’ Consent must clearly stipulate this limitation. The BLM *cannot* offer for lease the entire 60,097 acres whether by individual acreage packages or by multiple leases collectively. We suggest the limitation as described in the following subparagraph.
- The total acreage of chosen BLM Leases at any time and cumulatively in the future, must not exceed the then “current standard acreage” for drilling platforms and other specifically defined infrastructure for **a single geothermal heating plant which is sized to serve the eastern part of Whatcom County.**

4. Revise the Stipulation for **Critical Habitat for ESA Listed Species - MBS-WLD-01:**

- Please delete from the Stipulation the words ‘adversely’ and ‘adverse’ re modifying habitat. The use of those two words is *subjective* and have no parameters that can be used to determine if harm to ecosystem has occurred. Different circumstances, different habitat and ecosystems, and different observers could reach different conclusions as to what ‘adverse’ or ‘adversely’ means. At a minimum, such determination should be made by an independent licensed biologist who specializes in Endangered Species and their Critical Habitat.

5. Add as a new Stipulation that the Leases must follow the requirements of the Northwest Forest Plan as well as the requirements of the **United States Fish and Wildlife Service 2025 Biological Opinion (the 2025 USFWS WWRCZ BioOP) under the Western Washington Restoration and Collaborative Zone (the “WWRCZ”)** regarding the following:

- Riparian Reserve restrictions, including their widths, as well as

- the WWRCZ Riparian buffers, including their widths, which prohibit activity in the buffers, as well as
- the protections for Tier One Watersheds (which include the North Fork Nooksack, Middle Fork Nooksack and others in the MBS NF) under the NWFP.

The existing proposed Stipulations do not mention the Riparian buffers, nor the widths of the Riparian Reserves nor Tier One Watersheds, all of which must be protected as required under **the 2025 USFWS WWRCZ BioOP**.

6. Add a new Stipulation of No Surface Occupancy for trail corridors, to protect and preserve the natural surroundings within 500 feet of trails, on both sides total of 1,000 feet (laterally on either side of the trail).

7. Add a new Stipulation that Lessees must follow the **2025 USFWS WWRCZ Bio Op** protection restrictions and requirements for Northern Spotted Owls and Marbled Murrelets *as well as all other listed species covered*, as well as for their Designated Critical Habitats for each of the listed species, including the timing of lease activities and the distance of lease activities from nest core area radii around spotted owl activity centers and suitable murrelet and owl habitat edges, including but not limited to temporary road construction and activity.

8. The following Stipulations found on page 38 of the Draft EA must be modified to include Fish and Fisheries as well as animals and birds:

MBS-WLD-01: No Surface Occupancy

MBS-WLD-02: Controlled Surface Use:

There should be a cross-reference to Fisheries and Hydraulics on page 34 of the Draft EA, so that it is clear that these two Wildlife Stipulations also apply to Fisheries and Hydraulics.

9. Regarding the use of water in any heat plant, or other infrastructure, for either cooling or heating including but not limited to loss by evaporation,

- add a New Stipulation prohibiting injection with impure or waste water; and
- add a New Stipulation that the Lessee shall not remove water from any rivers or creeks or lakes or ponds. See letter 5-14-26 from Lider Engineering, page 1 paragraph 3.

10. **Add a New Stipulation requiring the Lessee to conduct induced seismicity hazards assessments and seismic monitoring, and to provide copies of such assessments and monitoring to the Forest Service.**

Please provide the following Requested Additional Information as revisions to the Environmental Assessment:

1. We request that the Draft EA be revised to include the following additional information, clarifications and maps, prior to issuing consent to BLM:
 - new GIS map overlay at readable scale of Roadless Areas, LRMP MAs that do not permit road construction, NWFP Tier I and II Watersheds, and Permitted Occupancy Areas; and
 - new GIS map overlay at readable scale of Old Growth (stand ages 127 and older) and Permitted Occupancy Areas; and
 - new GIS map overlay at readable scale showing locations of Class S-8 soils and locations of Steep Slopes shown in the Soils Report; and
 - Revise Maps 1-4 at readable scale, showing at least Sections of Townships and major geographic features.
2. We request that the Draft EA include analysis of research, *prior to issuing consent to BLM*, to identify fault lines and the potential impact of fracking in a ‘quiet volcano area’, which is what Mt Baker is identified as being, particularly since there are reports on record of thermal activity and steam release from parts of Mt. Baker.
 - There is LIDAR research in Whatcom County showing recently discovered fault lines; however, it should be determined if the LIDAR research includes Mt. Baker and areas around Mt. Baker, and what the geologists’ opinion is about the impact of fracking on known fault lines.
 - The analysis should address the impact of fracking associated with induced earthquakes, particularly if fault lines are present.
3. We request that the Draft EA include a section on Directional drilling impacts addressing without limitation the following points and questions:
 - Will directional drilling in any way impact a) the **surface vegetation and forests and b) other resources such as ground water and deep rock water?**
 - Will Drilling in Subsurface rocks, and releasing/leaching of heavy metals caused by drilling cause contaminated water to leach into water systems?

We know that use of directional drilling will be an issue for lands and forests subject to any BLM leases as, per page 51 of the *Mt. Baker/Kweq’ Smánit Region Prefeasibility Geothermal Resource Assessment Final Report – prepared for the Nooksack Tribe and Whatcom County PUD:*

“Note, that with close to 75% of the consent to lease area designated NSO. [sic]
[Note: data identifying the consent to lease area in the Report was from the 2015

EA], However, directional drilling would allow most of the lease area to be accessed from the 25% of the land that allows surface occupancy.”

Conclusion:

Due to the significant unknowns of geothermal leasing and of the identity of the potentially leased parcels, we demand that the FS conduct an EIS for the proposed Consent project.

a) The EIS must address the Cumulative Impacts of investigating multiple drilling sites across the entire Mount Baker- Snoqualmie National Forest, with test drilling and construction of drilling pads, and possibility of constructing new roads or reactivating closed roads, as well as impacts on species dependent on mature and old growth forests.

Construction of any new roads as part of the geothermal investigations will be limited pursuant to the NWFP and pursuant to the LRMP; and

b) The USFS and BLM must comply with NEPA requirements for reviewing the environmental impacts of individual leases, and

1) identify and analyze and assess impacts at the individual actual lease parcel level, provide public notice for each lease transaction with public notices to be issued by both the USFS and BLM, so that the public which is commenting on this Consent process, will have an opportunity to comment on each lease parcel; and

2) The USFS public portals and comment protocols, under NEPA, must be utilized and kept up to date for the purposes of obtaining public comments on the leases; and

c) The USFS and BLM both must conduct the environmental analysis of **each** lease, incorporating maps of readable scale, so that each lease location with its associated development will be understandable to the public; and

d) The USFS and BLM must both conduct ESA biological assessments for each lease, as well as cumulatively for all then existing leases.

We appreciate the opportunity to comment on this significant project. The scale of the project, the sensitivity of the lands and waters in the project area, and the duration of the project require a close analysis of any proposed actions, with an abundance of input opportunities from interested parties.

We hope that our comments and concerns will provide an opportunity for discussion and improvement of this project going forward.

Please place us on the mailing list and keep us informed of future developments. Please keep us on the distribution list for all updates on this project as it is reviewed, finalized and implemented.

Sincerely,

***Sierra Club - WA State Chapter
National Forest Committee***

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Appendix 1 to
WA Sierra Club National Forest Committee
Comment Letter 6-12-26

**Geothermal CTL Allowed Occupancies that Overlap
'Mature & Old Growth' Stands over 127 years old
1990 LRMP; updated by 1994 Forest Plan, Old Growth
Stands By Age of Origin; by Township & Section**

7-Jun-26

Draft EA Allowed Occupancy Mapa (red)	Township	Section(s)	General location	Stand Age Range (years)
Map I of 4				
	T39N-R8E	19,20, 21	Bar Crk-notch	427-726
		12,11, 14	west of Deadhorse Crk	427-726
		1, 2, 3	No Fk Nooksack	127-326
		22, 27	east of Glacier Crk	127-326
		10, 11	Thompson Crk	127-326
		31, 32	Lookout Crk	427-726
	T38N-R7E	6, 31, 32	Rocky Crk	427-726
		7, 8, 17, 18	Clearwater Crk	427-726

Map 2 of 4

T39N-R08E	11,12	Anderson Crk-Slate Mtn	427-726 with some 727-1026
T39N-R09E	7	Slate Mtn	427-726 with some 727-1026

Map 3 of 4

T37N-R8E	32	Tuckway Lake	427-726
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Map 4 of 4

T38N-R7E	27, 32, 33	Rankin Crk	89-128 and 427-726
T37N-R7E	4, 5	Green Crk	127-319 and 427-726
	10, 11,12, 13, 14 15, 22, 23, 24,25	Bell Crk-Loomis Mtn	427-726
T37N-R8E	30	Wanlick Crk	some 420-719

Source: Data was developed by comparing stand age maps developed by Jan Henderson (MBS fire history specialist) with Draft EA Allowed Occupancy maps (maps 1-4). Stand age ranges listed by township and section.