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Comments: Please see my May 14, 2026 comment letter, with attachments.

LETTER PASTED BELOW FROM ATTACHMENT

May 14, 2026

Erin Uloth, Forest Supervisor

Bob James, Forest Geologist

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Subject: Mt. Baker Ranger District Geothermal Consent to Lease (CTL) Draft Environmental Assessment Request for Comments

I am responding to your May 14, 2026 solicitation for citizen input on the draft Geothermal Consent to Lease (CTL) request for exploratory drilling and subsequent development of geothermal resources in Mt. Baker Ranger District, Mount Baker-Snoqualmie National Forest. I am a firm supporter of renewable energy sources that can replace our dependence on carbon based fuels that have been shown to cause adverse global climate change. However, unlike other renewable energy sources such as solar and wind power, geothermal power generation has its own suite of environmental impacts that must be addressed in an EIS. At a minimum a draft EIS should be prepared so that potential lease purchasers know what environmental protections will likely be required before they purchase the lease so that they may decide for themselves if the risks and costs of geothermal exploration are economically justified.

It is requested that an EIS be prepared prior to the execution of any lease for geothermal prospecting.

Approximately 14-years ago, I submitted comments on a similar geothermal exploration on the Skykomish Ranger District, copies attached. Those comments are still applicable today for the currently proposed geothermal prospecting.

Specifically:

1. The USFS must inform any geothermal prospector that it will be required to install a, [ldquo]closed loop system[rdquo] for any geothermal energy extraction plant. This type of system is discussed in detail in my June 18, 2012 comment letter, copy attached.

2. No roads or drilling operation shall be constructed in any wilderness area, inventoried roadless area, or national recreation area.

3. IMPACTS OF WATER WITHDRAWAL FROM STREAMS MUST BE ADDRESSED. Water extraction from local streams will be required for well drilling as well as make up water from steam lost in the condensing process in order to inject the condensed steam-water back into the ground. The EA states that these withdrawals are governed by the Washington State Department of Ecology (Ecology) under the Clean Water Act, yet gas drilling and hydraulic fracturing of rock (Fracking) is specifically exempted from the requirements Clean Water Act by the federal Energy Policy Act of 2005 under a provision commonly known as the [ldquo]Halliburton Loophole[rdquo].

The EA should address the Halliburton Loophole as it relates to geothermal well drilling and exploration.

4. All drilling mud is extremely caustic and must be contained within a lined pond or pit, with a minimum thickness 25-mil HDPE pond liner. All drilling mud must be removed and the site restored to an equal condition upon completion of any drilling.

5. The EA fails to address the impacts of Fracking for both exploratory and production wells and should include a statement from Ecology as to exactly what its regulatory authority is to oversee geothermal wells on federal lands and to what extent, if any, Ecology will be involved with this project.

6. The EA and exploratory leases should specifically state that NO FRACKING will be permitted during the development of exploratory wells.

7. The EA should address exactly how much and at what time of the year water may be withdrawn from local streams without harming the stream environment. Developers spending millions on exploratory wells will put extreme pressure on the USFS and State politicians to approve stream water withdrawals for future geothermal development. This issue must be addressed in the EA.

8. For the EA to be complete, it must include a statement from Ecology as to exactly what its role will be in this project, if any.

9. The EA should be conditioned that no local water withdrawals will be permitted. All exploratory well water must be trucked from municipal water supply sources.

10. Construction of additional roads to access well drilling equipment will have significant environmental impact. Additionally road failures during frequent storm events should be evaluated in the EIS analysis which could prevent vehicular access to the geothermal area for months or years. For the first part of this project, any exploratory wells should only be constructed in the road prism of existing logging or County roads.

11. The EA should be conditioned that no new roads will be constructed as a part of the exploratory well drilling.

12. No exploratory drilling platforms or roads may be constructed on slopes steeper than 30% or S8 soils.

13. Water and steam extracted from geothermal can often contain high amounts of Sulphur compounds including Sulphur Dioxide, Hydrogen Sulfide, as well as a host of heavy metals. The Sulphur compounds combine with water to form extremely corrosive Sulfuric Acid which can corrode not only pipe casings, but the concrete used to seal annulus between the well hole and outside face of the casing pipe. In turn steam under high pressure will cause accelerated failures concrete well seals resulting in the release of naturally occurring toxic materials as well as extremely toxic chemicals used in the Fracking process. Address how an annulus failure will be prevented in the EA.

14. The EA should be conditioned to require all exploratory and production well casing pipe be thermoplastic powder coated with an epoxy material to extend its life. Specifications for this treatment and care in transporting and handling epoxy coated pipe are available online from a number of municipal sources and its specifications included in the EA.

15. All concrete used in the drilling process should be resistant to the effects of sulfides and its mix design specifications included in the EA.

16. No exploratory wells should be drilled within 500-feet of any Class V stream or other ephemeral stream such that if there is a blowout or similar accident, that toxic materials may be contained before they enter the waters of

the State.

17. The EA should contain a detailed description of the well [ldquo]blow-out preventer[rdquo] including actual test data on the blowout preventer[rsquo]s reliability. We are all too familiar with exactly how well blowout preventer worked on British Petroleum[rsquo]s Deep Horizon well in the Gulf of Mexico and we do not want to have a similar accident occurring in Beckler River, or N. Fork Skykomish River.

18. The EA should contain a Spill Control, Containment, and Countermeasures (SPCC) plan detailing how both groundwater and surface water will be protected in the event of a well failure. Spill kits should be required to me on hand for small spills.

19. Approximately 5% to 8% of a well seals will fail immediately upon installation. Furthermore, it can be anticipated that up to 50% of all well seals will fail within 20 years. Address this problem in the EA.

20. The EA should provide a detailed explanation, including remedial cleanup operations as to what actions will be taken in the event of a well seal failure.

21. Each lease holder shall be required to obtain a Ten Million Dollar (\$10,000,000.00) performance bond naming the State of Washington as additionally insured in the event of a well seal failure. In the event of a well accident, the State would be allowed to use the performance bond monies to commence immediate cleanup and remedial actions.

22. Violation of any of conditions set forth in the EA shall result in the immediate termination of any lease agreement and require restoration of the site to condition equal to the site prior to commencement of any drilling operation.

23. Lastly, I did not see any sunset window in the EA for the length of exploratory leases. Leases should not be allowed to continue for an indefinite time. All geothermal leases should revert back to the USFS at the end of five (5) years from the date of issuance, unless the well is proven to be economical and in which case the well must be developed into an energy production well within 10-years from the date of the original leases issuance.

Thank you for your consideration of these comments and I look forward to seeing your response.

Respectfully submitted, LIDER ENGINEERING PLLC May 14, 2026

William Lider, PE, CESCL Principal Engineer