

SUPPLEMENTAL COMMENT

Alternative 3 Wilderness Recommendations, Critical Minerals, and Geologic Carbon Storage

This supplemental comment should be considered together with and incorporated into my previously submitted comment concerning the Alternative 3 wilderness recommendations and the apparent lack of an adequate critical-mineral evaluation.

Geologic Carbon-Storage Potential

The Oregon Department of Geology and Mineral Industries (DOGAMI) has identified thick and deeply buried sections of the Columbia River Basalt Group as possible settings for geologic carbon-dioxide storage and mineralization. DOGAMI's public materials specifically discuss the potential for injected carbon dioxide to react with basalt and become mineralized, and identify the porous Grande Ronde Basalt as a formation of interest in eastern Oregon and Washington.

This is not merely a theoretical subject. Oregon is actively developing a carbon-sequestration assessment program. DOGAMI Governing Board minutes for June 24, 2025, authorized expenditures of up to \$10 million and four positions for the program. The immediate objective described in the board materials was to identify a suitable area and drill a test well to determine whether adequate porosity exists for carbon storage. Earlier board minutes also describe the agency's developing work on geologic carbon sequestration.

Several Alternative 3 recommended-wilderness polygons contain Columbia River Basalt Group rocks or volcanic cover. Polygons 4007 and 4012 appear especially relevant to this question. Surface basalt alone does not establish that a site is suitable for geologic carbon storage. Suitability depends on subsurface matters such as basalt thickness, depth, porosity, permeability, confining layers, groundwater, faults and fractures, induced-seismicity risk, and practical access for drilling and long-term monitoring. Those are precisely the kinds of matters that a test-well program is intended to investigate.

The Draft Environmental Impact Statement discusses carbon sequestration mainly as biological carbon held in vegetation and soils, while distinguishing subsurface injection as geologic carbon storage. I have not found a comparable analysis of geologic carbon storage, Columbia River Basalt Group storage potential, test wells, injection wells, pipelines, monitoring wells, or related access and infrastructure in connection with the Alternative 3 wilderness recommendations.

That omission matters. A recommended-wilderness management direction or later congressional wilderness designation could conflict with the drill pads, wells, pipelines, roads, maintenance access, monitoring equipment, and other surface uses that a geologic carbon-storage project may require. Before making a final recommendation, the Forest Service should determine whether any of the seven polygons overlap areas the State of Oregon, DOGAMI, the U.S. Department of Energy, the U.S. Environmental Protection Agency, universities, or private partners consider potentially suitable for geologic carbon storage.

Consistent Treatment of Geologic Exploration

This issue also raises a consistency question. Mineral exploration and geologic carbon-storage exploration are governed by different laws and regulatory programs, but the initial physical activities can be similar: geologic mapping, geophysical surveys, sampling, road access, drill pads, core drilling, test wells, groundwater evaluation, and long-term monitoring. Both activities can create surface disturbance and both depend on site-specific subsurface information.

Oregon is using public funds to investigate whether basalt formations are suitable for carbon storage, while mineral exploration is often treated as presumptively incompatible with wilderness-oriented management before the mineral potential is adequately inventoried. A governmental or “green” label does not eliminate the physical effects of drilling and infrastructure. Likewise, the label “mining” does not establish that geologic investigation is unacceptable before its actual location, scale, methods, and effects are evaluated. The Forest Service should apply a consistent, impact-based analysis rather than treating similar geologic investigation differently because of the identity of the proponent or the policy label attached to the project.

Critical-Mineral Due Diligence

The geologic carbon-storage issue strengthens, rather than replaces, my earlier critical-mineral concern. Federal policy now places increased emphasis on identifying and securing domestic critical-mineral resources. The relevant regional geology includes the Canyon Mountain Complex, Miller Mountain melange, the broader Baker terrane, and volcanic cover that may conceal older mineralized rocks. Existing regional studies do not necessarily provide a complete, polygon-specific assessment of hydrothermal mineralization, undiscovered resources, or critical-mineral potential.

The timing is particularly important. The public was previously told that the wilderness proposal had been eliminated, yet the seven areas later reappeared in Alternative 3. Their late restoration raises a reasonable question whether the mineral-resource and other geologic analyses were updated before the areas were returned to the proposal. The Forest Service should disclose when the seven polygons were restored, what mineral and geologic review was completed after that decision, and whether that review occurred before or after the areas were selected.

Requested Review and Disclosure

Before issuing the Final Environmental Impact Statement and final wilderness recommendations, I request that the Forest Service:

1. Identify each of the seven Alternative 3 recommended-wilderness polygons that contains, adjoins, or overlies Columbia River Basalt Group rocks.
2. Consult DOGAMI, the U.S. Geological Survey, the U.S. Environmental Protection Agency, the U.S. Department of Energy, and other appropriate technical agencies concerning available geologic, geochemical, geophysical, drilling, and carbon-storage information relevant to the seven polygons.
3. Determine whether any polygon overlaps thick or deeply buried Grande Ronde Basalt or another formation that has been identified as potentially suitable for geologic carbon storage, and disclose the information and limitations supporting that determination.
4. Explain whether geologic carbon storage was considered during the Alternative 3 wilderness analysis. If it was not considered, explain why a state-supported and publicly funded geologic use was omitted.
5. Evaluate how recommended-wilderness management or later wilderness designation could affect test drilling, injection wells, monitoring wells, pipelines, roads, maintenance access, emergency response, and long-term monitoring associated with geologic carbon storage.
6. Compare government-supported geologic carbon-storage exploration and private mineral exploration consistently, based on their actual methods, locations, footprints, risks, mitigation, and environmental effects rather than the identity of the proponent or the label applied to the activity.

7. Complete and disclose a polygon-specific review of critical minerals, conventional mineral resources, undiscovered mineral potential, geologic carbon-storage potential, and other reasonably foreseeable geologic uses before selecting the final wilderness recommendations. The review should identify the USGS, DOGAMI, geochemical, geophysical, assay, mapping, and other information considered; disclose important gaps; and state whether the analysis was completed before or after the seven polygons were restored to Alternative 3.

Conclusion

The absence of a current commercial proposal does not resolve these issues. The State has identified basalt formations as a potential public resource and is funding work intended to locate a suitable site and test the subsurface. Forest planning should consider reasonably foreseeable conditions and uses, especially where the management recommendation may foreclose or substantially constrain future site investigation.

The late restoration of the seven polygons makes the omission more concerning because the administrative record should show that the underlying analysis was updated when the proposal changed. If neither critical-mineral potential nor geologic carbon-storage potential was evaluated at a meaningful, polygon-specific level, the Final Environmental Impact Statement should correct those omissions before the Forest Service makes a final wilderness recommendation.

References

[Oregon Department of Geology and Mineral Industries — Carbon Sequestration](#)

[DOGAMI Governing Board Minutes — June 24, 2025](#)

[DOGAMI Governing Board Minutes — December 12, 2024](#)

[U.S. Forest Service — Blue Mountains Forest Plan Revision Draft Environmental Impact Statement \(July 2026\)](#)