



October 28, 2024

Clean Energy Coordination
Department of Ecology
PO Box 47790
Olympia, WA 98504-7709

**Re: Programmatic Environmental Impact Statement on Utility-Scale Solar Energy Facilities
in Washington State**

Clean Energy Coordination, Washington State Department of Ecology:

On behalf of our more than 100,000 members and supporters in Washington State, the Sierra Club submits these comments on the Programmatic Environmental Impact Statement (“PEIS”) on Utility-Scale Solar Energy Facilities in Washington State that the Washington State Department of Ecology (“Ecology”) released in September 2024.

Sierra Club understands the urgent need to transition away from fossil fuel technology to renewable energy as outlined in the Washington Clean Energy Transformation Act (“CETA”, RCW 19.405). When developed in an environmentally responsible manner with early and continuing Tribal consultation as well as in a manner consistent with our climate, conservation, and biodiversity goals, utility-scale solar offers substantial opportunities for Washington State. Solar installations will provide benefits for communities impacted by the air and water pollution from burning fossil fuels. The U.S. electric grid has disproportionately harmed people of color and low-income neighborhoods with the negative health impacts that come from living near or downwind from gas- and coal-fired power plants. As more renewable energy technology is brought online to serve electric customers, it will become easier to reduce the use of and retire gas power plants that contaminate air and water while also contributing heavily to poor public health, climate change, and extreme weather.

At the same time, Sierra Club stresses the need to adequately assess the impacts of new energy developments, implement appropriate guardrails, and site renewable energy generation in appropriate areas that both promote national and state goals and protect important and culturally sensitive landscapes and sensitive species. Sierra Club has a keen interest in ensuring the PEIS for



Utility-Scale Solar Energy Facilities in Washington State provides the full scope of information upon which project developers can draw in their efforts to determine where to site their facilities. To that end, Sierra Club believes that Ecology should make several improvements to the PEIS, as outlined below.

1. Ecology and other agencies should proactively consult with all appropriate tribes for any proposed renewable energy project and require project developers to offer similar consultation.

While the focus of an EIS is, by its very nature, a review of the potential environmental impacts of a proposed project, Sierra Club urges Ecology to identify that the first step for any proposed renewable energy project be true, transparent consultation between all state agencies and appropriate representatives of all appropriate federally recognized and unrecognized tribes, on a government-to-government basis.

In the spirit of the Centennial Accord signed in 1989 and RCWs 43.376.020, 70A.02.100, 70A.65.305, and other state laws, state agencies must offer tribes early, meaningful, and individual consultation for all projects and funding decisions that “may impact tribal resources, including tribal cultural resources, archaeological sites, sacred sites, fisheries, or other rights and interests in tribal lands and lands within which a tribe or tribes possess rights reserved or protected by federal treaty, statute, or executive order.”¹ Executive Order 13175 -- Consultation and Coordination With Indian Tribal Governments, of November 9, 2000, outlined similar responsibilities for federal agencies working with tribes.²

Furthermore, “[c]onsultation requires that information obtained from Tribes be given meaningful consideration.” Tribes have rights enshrined in treaties that predate settlement in these lands and those rights must be respected (rights affirmed in *United States v. Winans* in 1923, *Sohappy v.*

¹ RCW 70A.65.305, <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.65.305>

² Executive Order 13175 -- Consultation and Coordination With Indian Tribal Governments, 65 Fed. Reg. 218, 67249-67252 (November 9, 2000).



Smith and United States v. Oregon in 1969, *United States v. Washington* in 1974). Tribes have the right to gather, hunt, and fish at all usual and accustomed grounds and stations, and, as Judge Boldt reminded us all, they know best the location of those grounds and stations as well as that of sacred sites across the landscape.³

Sierra Club recommends that Ecology incorporate a commitment of all state agencies to engage in similar proactive tribal engagement for every proposed renewable energy project that develops after the PEIS. In addition, Ecology should require renewable energy project developers to also offer early, meaningful, and individual consultation for all projects and funding decisions that may impact tribal resources. Requiring developer engagement will ensure early coordination with tribes and prevent avoidable conflicts.

2. Ecology should broaden the range of solar projects defined as utility-scale installations.

Sierra Club urges Ecology to include smaller sized installations as meeting the definition of utility-scale installations as part of the portfolio in the PEIS. Project developers will look to the PEIS as a template, a model to follow. As such, presenting utility-scale solar options only in the range of 20 – 1,200 MW may preclude from consideration smaller options that can provide meaningful contributions to Washington’s clean energy future. Lawrence Berkeley National Laboratory uses 5 MW as the lower bound for ground-mounted utility scale solar.⁴ The Department of Energy defines utility-scale as 10 MW or larger.⁵ Smaller scale installations will have less of an impact on the immediate environment and may be able to take advantage of localized conditions that may not be suitable for a larger scale project. Ecology should define utility-scale installations to include solar projects with a capacity slightly smaller than 20 MW.

³ John C. Hughes. (2024) *Lightning Boldt: Judge George H. Boldt and a defining moment in tribal sovereignty*. Legacy Washington, Washington Secretary of State, Olympia, Washington; Charles Wilkinson. (2024). *Treaty Justice: The Northwest Tribes, the Boldt Decision, and the Recognition of Fishing Rights*. Seattle: University of Washington Press.

⁴ Utility Scale Solar 2024. Energy Markets and Policy. Lawrence Berkeley National Laboratory. <https://emp.lbl.gov/utility-scale-solar>

⁵ U.S. Department of Energy, State and Community Energy Programs, Renewable Energy: Utility-Scale Policies and Programs. (n.d.) <https://www.energy.gov/scep/spsc/renewable-energy-utility-scale-policies-and-programs>



3. Ecology should broaden the areas eligible for utility-scale solar to include degraded lands to ensure an equitable distribution of projects.

Sierra Club asks Ecology to expand consideration of suitable locations for utility-scale solar to include locations in Western Washington, in urban and growth management areas, and existing rooftops and already degraded lands throughout the state.

The Washington Clean Energy Transformation Act (CETA) calls for an equitable distribution of benefits and a reduction of burdens to vulnerable populations and highly impacted communities.⁶ As written, the PEIS does not present an equitable distribution of utility-scale solar installations and misses important opportunities to deploy utility scale solar by unnecessarily limiting the geographic coverage of the PEIS. Because of the specifics set out by Ecology for the mapping of sites for utility scale solar, most of western Washington has been excluded from consideration. We should look at opportunities to expand utility scale solar statewide. Expanding the geographic locations can reduce the need for expanded transmission and other infrastructure, assure we have generating sites in less fire prone areas, while generating more power closer to major load centers.

Despite having somewhat lower Global Horizontal Irradiance (GHI) than eastern Washington, the values for the west side of the Cascades are on a par with those of Germany, a country that in May of 2024 generated 60% of its electricity using solar.⁷ The contribution from western Washington should not be discounted.

In addition, Western Washington is home to at least 44 brownfield sites that could serve as locations for solar arrays.⁸ These already-degraded sites often sit vacant, fenced off, awaiting remediation. Repurposing them for solar installations could bring additional funding and impetus to that work. While the number of solar panels on any one site may not generate 10 MW, the total output of smaller arrays on all of those sites could be considerable.

⁶ Washington Clean Energy Transformation Act. RCW 19.405.010.

⁷ Gavin Maguire. (15 May 2024). Germany solar power output jumps to record highs. Reuters. <https://www.reuters.com/business/energy/germany-solar-power-output-jumps-record-highs-maguire-2024-05-14/>

⁸ Department of Ecology. State of Washington. Brownfield Sites. (n.d.) <https://apps.ecology.wa.gov/cleanupsearch/reports/brownfields>

Adding solar panels to existing structures, like parking garages, warehouses, government buildings, shopping malls, and the like, also can feed electrons to the grid without taking valuable farm or ranch land out of production. Additionally, installing solar near the high demand areas of western Washington will reduce the need for costly upgrades to and energy losses associated with transmission lines across the Cascade Mountains. Indeed, in “Planning to Build Faster: A Solar Energy Case Study,” researchers from the Climate and Community Institute of the Roosevelt Institute recommend siting solar on abandoned agricultural lands, existing rights-of-way, parking lots, superfund sites, and the like, as shown in the figure below.⁹

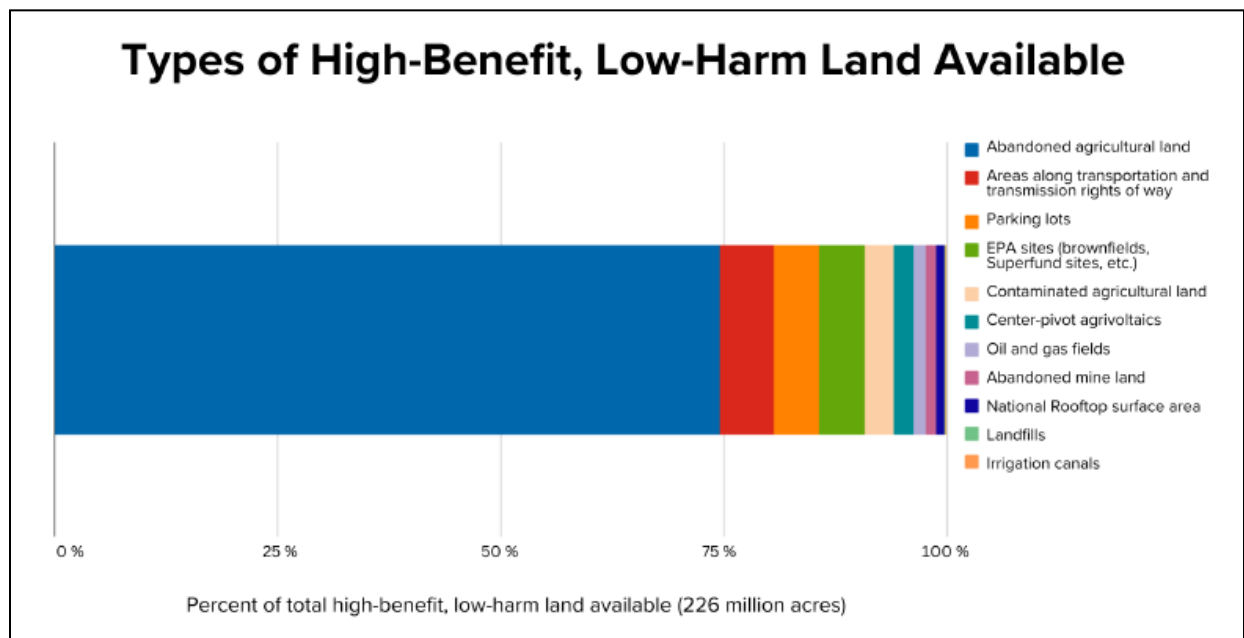


Figure 1: High Benefit, Low Harm Land Available for Siting Solar Systems (Bozuwa, Mulvaney, Estevez, Karlsson, and Malhotra, 2024)

Accordingly, Sierra Club urges Ecology to expand the consideration of suitable spaces for utility-scale solar to include degraded lands for renewable energy development.

4. Ecology should expand its habitat analysis and incorporate the Least Conflict Solar Siting Report into its PEIS analysis to identify low-conflict areas for utility-scale solar development.

⁹ Johanna Bozuwa, Dustin Mulvaney, Isabel Estevez, Kristina Karlsson, and Sunny Malhotra. (2024). “Planning to Build Faster: A Solar Energy Case Study.” The Climate and Community Institute, The Roosevelt Institute, p. 7.



Sierra Club urges Ecology to expand its analysis of critical and priority habitats, species of concern, and endangered species to include habitat maps and territories rather than just mentioning of them in the Utility-Scale Solar PEIS.

Ecology should incorporate the results of the June 2023 Report to the Washington Legislature authored by the Washington State University Energy Program titled “Least-Conflict Solar Siting on the Columbia Plateau.”¹⁰ The report outlines the creation of a gateway mapping tool that allows the user to identify areas of important connectivity value for large species or contain areas with important oak, shrub-steppe, or sagebrush habitat. The tool identifies locations critical to focal species such as the Columbian Spotted Frog, Northern Leopard Frog, Greater Sage Grouse, Columbian Sharptailed Grouse, Sandhill Crane, Golden Eagle, Pygmy Rabbit, Black-tailed Jackrabbit, and Townsend’s Ground Squirrel. These values feed into a score for Relative Environmental Conservation value of a particular cell on the map as shown below.¹¹

¹⁰ As per RCW 43.21C.535 Clean energy projects—Nonproject environmental impact statements; *See also* Washington State University Energy Program. (June 2023). *Least Conflict Solar Siting on the Columbia Plateau*. p. 52. Available at https://www.energy.wsu.edu/documents/Least-Conflict_Solar_Siting_Report-WSUEP23-04--6-29.pdf.

¹¹ *Id.* at 52.

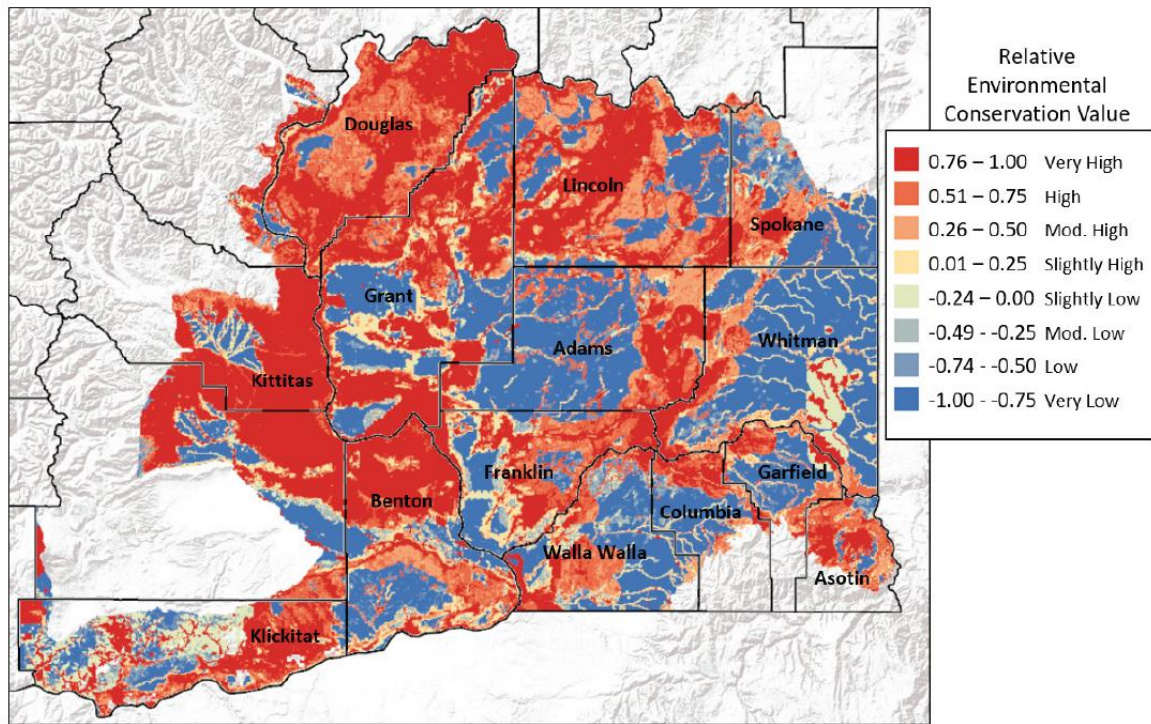


Figure 2: Relative Environmental Conservation Value of Lands on the Columbia Plateau (Washington State University Energy Program, 2023)

The Least Conflict Solar Siting Report and associated gateway provide similar maps for values of ranch and farmland, and a composite map that combines solar insolation information with data from the other maps. The gateway tool can also identify areas not used by wildlife, of low conservation value, not considered prime farm or ranchland, and thus more amenable to development for utility-scale solar. The information contained in the Report and gateway tool provide a more nuanced picture of the potential impact of utility-scale solar on the natural resources of Washington than the current PEIS and should be incorporated into the final PEIS.

Sierra Club applauds the Washington State Department of Ecology’s efforts to produce a programmatic Environmental Impact Statement for Utility-Scale Solar Development. Sierra Club supports the just, equitable, and environmentally responsible expansion of solar, which has the potential to move the state away from its current dependence on fossil fuels, reduce emissions associated with electrical generation, and create a cleaner future for Washingtonians.

Sincerely,



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