

Process for developing
Oregon Renewable Energy
Siting Assessment (ORESAs)
Mapping and Reporting Tool &
Renewable Energy Landing Page
on Oregon Explorer

<https://oregonexplorer.info/topics/renewable-energy>



Legend:

- ORESA Project Team
- Tool Development Team
- User Engagement
- Milestone

User Engagement: To develop, refine, and test the Oregon Renewable Energy Siting Assessment (ORESAs) Mapping and Reporting Tool, the ORESA project team lead by OSU-INR hosted the following sessions with engaged users.

A series of nine stakeholder-specific **focus groups** with a total of 90 participants (subtotals listed by focus group) representing the following organizations:

- **Local Government (5):** Crook County, Lake County, Morrow County, Umatilla County
- **State Agencies (18):** Business Oregon, Oregon Department of Agriculture, Oregon Department of Aviation, Oregon Department of Energy, Oregon Department of Land Conservation and Development, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Water Resources, Oregon Military Department, Public Utilities Commission, Oregon Solutions, State Historic Preservation Office
- **Federal Governments and National Labs (9):** Argonne National Lab, Bureau of Ocean Energy Management (BOEM), Bonneville Power Administration, National Oceanic and Atmospheric Administration, National Renewable Energy Laboratory, Pacific Northwest National Laboratory, US Department of Energy, US Fish and Wildlife Service
- **Renewable Energy Developers and Utilities (22):** Avangrid Renewables, Energy Trust, New Sun Energy, Northwest Energy Coalition, Obsidian Renewables, Oregon Coast Energy Alliance Network (OCEAN), OneEnergy Renewables, Oregon Solar+Storage Industries Association (OSSIA), Pacific Ocean Energy Trust (POET), Portland Gas and Electric, Renewable Northwest, Umatilla Electric, Verde
- **Non-governmental Organizations (17):** 1000 Friends, Audubon, Columbia Riverkeeper, Farmers Conservation Alliance, Lake County Resource Initiative (LCRI), Oregon Winegrowers Association, Oregon Environmental Council, Oregon Natural Desert Association, Oregon Hunters Association, Soil and Water Conservation District, Rogue Climate, Sustainable Northwest, The Nature Conservancy, Wallowa Resources
- **Military and Federal Aviation Agency (13):** NW DoD Regional Coordination Team (including US Navy, Coast Guard, Army, and Air Force), Federal Aviation Administration (FAA)
- **Tribes (6)*:** Confederated Tribes of the Grand Ronde, Columbia River Intertribal Fish Commission, LCIS, Yakama Nation (note: *Feedback included individual meetings and/or part of other focus group meetings)

Two **cross-sector user group** meetings (15 participants) representing the following organizations:

- **Tribes:** Confederated Tribes of the Grand Ronde, Coquille Tribe
- **Local Government:** Gilliam County Planning, Wasco County Planning
- **State Government:** Oregon Department of Agriculture
- **Federal Government:** US Fish & Wildlife Service, BOEM
- **Renewable Energy Developers:** OCEAN, OSSIA, Avangrid, Northwest Energy Coalition, Renewable Northwest, Verde
- **Utilities:** PacifiCorp, Umatilla Electric
- **Military:** NW DoD Regional Coordination Team representatives

Five **beta testing** sessions with the following organizations:

- US Navy
- Grid United
- Lake County Resource Initiative
- Avangrid Renewables
- Community Renewable Energy Association (CREA)

During this iterative process, the ORESA project team gathered additional input and suggestions from almost 100 participants through a public comment period, and demonstrations and presentations with OSSIA, Tribal Natural Resources Working Group, WECC Environmental Data Task Force, and others.

ORESA Project: Additional Stakeholder Feedback

The objective of the ORESA project was to baseline data, information, and perspectives to create a transparent, consistent collection of trusted, accurate information in a way that minimizes conflict and supports development. To achieve this objective the project team and consultants engaged in extensive research and stakeholder outreach. **Overall, a majority of the feedback and recommendations from stakeholders were incorporated in the Tool.** However, there are still data gaps and interests for functionality that the project did not or could not collect or address due to project scope, timing, budget, or other constraints.

The project team has summarized this feedback and provided simple groupings and highlights of these conversations and topics below.

Data Gaps

The project team worked with stakeholders through a series of focus groups to identify data for the ORESA mapping and reporting tool. The following is a list of data gaps identified through this process by stakeholders as being potentially useful to support discussion about potential renewable energy projects that should be considered for future phases or other projects:

- Transmission and distribution system capacity
- Distribution lines (voltages 12kv-115kv or 12kv-69kv)
- Coop, municipal, PUD data on existing transmission and substation location/availability
- Substation level reliability metrics
- Safety shut off / wildfire management tools
- Locations of energy storage
- Interconnections
- Culture resources
 - *Note: While not included as spatial information, several resources and descriptors are included in the Tool, along with a statement that notification and coordination is required to facilities will not damage cultural resources*
- Tribal lands (ceded lands, not just areas managed by Oregon's nine federally recognized tribes) and First Foods gathering areas
- Equity and Environmental Justice
 - *Note: Some spatial information is included in the Explore section of the Tool, such as EPA EJScreen, but is limited in the Reporting section. Several resources and descriptors are included in the Tool, along recognition of ongoing efforts in Oregon from HB 4077 and national tools in beta form.*
- Local ordinance restrictions (e.g. wind turbine height restrictions, setbacks)
- Good locations for agri-voltaics
- Irrigation districts
- Renewable Energy developments in progress
- Climate Change vulnerabilities, risks, and impacts
- Utility hosting capacity analysis via the PUC for Distribution System Planning
- Radar (e.g., CARSR, NORAD) and restrictions (note: data exist, but are not publicly available)
- Military offshore operations data

Tool Functionality

Tool functions that were of interest or highlighted by focus group members but are not included in the tool at this time due to project scope, timing, budget, or other constraints but could be considered for future phases or other projects.

- Notify specific county and State contacts about potential renewable energy projects
- List whether it's an EFSC project vs. local-jurisdiction project based on size and type of project; prompt so user knows that there may be other, long processes required
- Include a section about permitting
 - *Note: The Siting Procedures Review report includes a review and analysis of siting regulations, permitting, and project review processes. While not embedding in the tool functionality, it is included in the Learn section.*
- Allow applicants for renewable energy projects to upload specific coordinate points that identify proposed structures within a project site boundary
- Include a pre-application form so that tribes, local, state, federal agencies could get an initial look at a potential renewable energy project
- As the Investor Owned Utilities increase accessibility and resolution of GIS based infrastructure management tools, include these data/analysis in the Tool
- Evaluate user entered parameters and renewable energy targets (e.g., max MW for areas of interest)
- Land Use Planning Goal 5 evaluations
- Filter contact list based on Areas of Interest
- Ability to evaluate multiple project sites at a time (e.g., 15 projects)
- Enable a report that would provide a report back for a project that occurs both offshore and onshore (e.g., likely this would be a wind energy project that connects a facility with a lease offshore, but has onshore components) to provide information on both in-water and onshore project considerations.
- Support renewable energy reporting functionality for larger areas (e.g., regions or statewide) to show areas where constraints are minimal and renewable energy opportunities are relatively high

Resources/Considerations

Additional resources and considerations that were of interest or highlighted by focus group members but are not included due to limitations on project scope, feasibility, timeline:

- Support biomass, transmission, pumped storage, hydropower, renewable hydrogen renewable energy projects
- Be able to click and see already available renewable energy guidelines (encourage review before contacting state agency representative). Add specific county renewable energy ordinances and guidelines
 - *Note: The Siting Procedures Review report includes a review and analysis of siting regulations, permitting, and project review processes. While not embedding in the tool functionality, it is included in the Learn section.*
- Determination of no hazard letters for submittal in permitting
- Address information needs from community members, especially those adjacent to proposed sites – with particular focus on equity and environmental justice issues and underrepresented communities.
 - *Note: Efforts to develop a statewide equity mapping tool are underway and should be monitored for further inclusion in the Tool.*
- Integration of data and information from other Tools that are in development, including statewide equity mapping tool, wildfire risk mapping, and enhancements to OROWindMap.
- Identify an overall renewable energy state agency point of contact for all the state agencies to help developers with proposed project developments
- Explore conversations with military liaisons related to military installations where renewables are desired in the future
- Use tool to determine if Oregon can meet state and local clean energy goals under existing and restricted local and state siting scenarios
- Have consolidated and holistic tools for use at community level. Advocate for data/info on distributed system planning (DSP) to be combined. Identify where siting can benefit communities. In rural areas, where system interconnection is “squishy” this can be even more important. Better tool to explain why projects in certain place/in certain communities
- Provide help for folks to use it when its operational (training and outreach)
 - *Note: The ORESA project team provided a series of presentations and workshop when releasing the Tool. Additionally, a recorded webinar with a demonstration of the Tool will be provided as a resource.*
- Do a sample project siting for resilience-based community scale microgrid locating
- Support local renewable energy community planning (e.g., clean energy planning)
- Could be useful for communities exploring green tariffs under HB2021