Oregon Renewable
Energy Siting Assessment
(ORESA)

# **Project Overview**

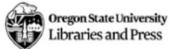




**OREGON** 

Department of Land Conservation & Development









# **ORESA: PROJECT TEAM & COORDINATION**

- The ORESA project is funded through a \$1.1 million grant through U.S.
  Department of Defense Office of Local Defense Community Cooperation (DOD-OLDCC). Closes June 30, 2022.
- The grant team includes Oregon Department of Energy, working with the Department of Land Conservation & Development and Oregon State University's Institute for Natural Resources.
- The project incorporated the expertise of state, local, and tribal governments through interagency agreements, along with input from industry and technical advisors, and cross-sectoral stakeholder and community engagement.

# **ORESA: GOALS AND OBJECTIVES**

DOD Goals Support military compatibility through coordination with local, regional, and state agencies and raise awareness about the military.

Project Goals Create **relevant educational tools** for stakeholders, agencies, local governments, and policy makers about renewable energy development, military training and operational areas, economic/community benefits, land use considerations, natural, cultural, and environmental resources, and other regulatory requirements. Users can explore these resources to inform discussions related to renewable energy in a way that **minimizes conflict and supports development opportunities**.

Project Objectives Baseline data, information, and perspectives to create a transparent, consistent collection of trusted, accurate information in Oregon, without recommendations or endorsements, and note where information may be imprecise or uncertain.

# Renewable Energy Market & Industry Assessment (ODOE / E3)

- Model future opportunities and potential for renewable energy development
- Gather perspectives on challenges and opportunities from development community July 2020 - April 2021

# **Natural Resources, Environment,** & Development: Opportunities & Constraints Assessment (DLCD / CBI)

- Gather data and information on land use, military, natural resources, and communities
- Identify opportunities and constraints for RE development August 2020 - September 2021

# **Final Outreach** & Engagement (ORESA Project Team)

- Release near-final deliverables for review and corrections
- Publish final ORESA Report and Tool
- Provide presentations, Tool demos, and Q&A discussions **April 2022 – June 2022**

# **Final Report** (ORESA Project Team)

- Synthesize assessments and procedures report, along highlighting stakeholder perspectives and feedback.
- Provide key findings and lessons learned during development of the Report, Tool, and other project processes

March 2022 - June 2022

Jan 2020

1 2 3

**Mapping & Reporting Tool** (INR leading)

# **Siting Procedures Review** (ODOE / DLCD)

 Collection and analysis of siting regulations, permitting, and project review processes November 2020 with renewable energy December 2022

- Develop Mapping and Reporting Tool
- Engage with stakeholders and participants to inform and test
- functionality and reporting features Convene focus groups and crosssector user groups; conduct Beta testing

**April 2021 – June 2022** 

June 2022

# Military Needs & **Interests Assessment** (ODOE / DLCD / ESS)

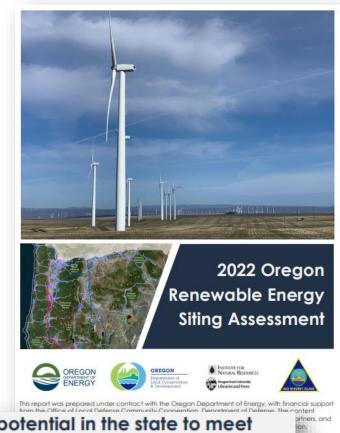
 Assess data and interaction of military operations and areas development July 2020 - August 2021

# **ORESA REPORT**

- **Explore** Summary of core activities and research methodologies. Includes findings and best practices for data collection. Includes context on the Explore function and data in the Tool.
- **Report** Key findings from the assessments critical for discussions and planning of renewable energy development in Oregon. Includes context on the Reporting function and data in the Tool.
- Learn Lessons learned from the project, including important conversations, perspectives, and issues from stakeholders and project participants. Includes context on the Learn section of the Tool.
- Conclusion and Appendices: Includes links to supporting materials including the assessment reports, procedures report, military

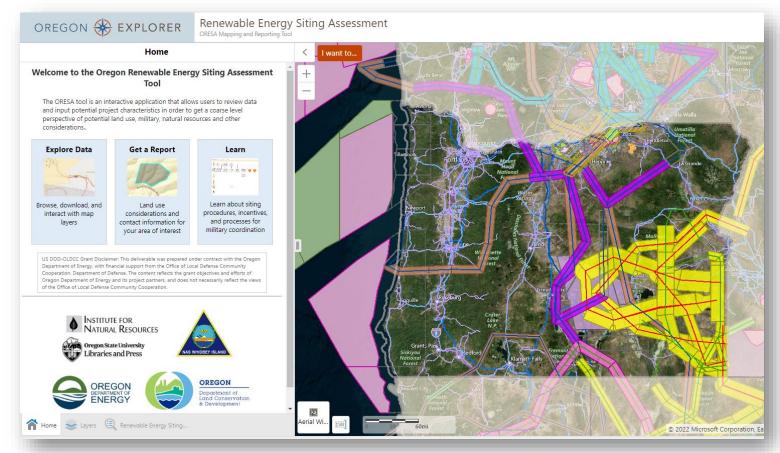
brochure, Tool process summary and feedback, and Tool index of data layers.

This project confirms that there is enough renewable energy potential in the state to meet Oregon's energy and climate goals, while acknowledging that there are tradeoffs related to impacts and benefits with development that need to be evaluated through sustainable and responsible processes. There are also notable challenges to renewable energy resource development associated with transmission infrastructure and with siting and permitting criteria that weigh policy and legal priorities.



# MAPPING AND REPORTING TOOL

- Housed on Oregon Explorer with data related to renewable energy; military; economic development; land use; natural resources; and other regulatory or process considerations.
- Development involved stakeholders to help define use cases, data exploration needs and reporting functionality.
- Tool supports a more comprehensive understanding of renewable energy and supports early notification and coordination in the state.



# **Tool Review**



## Welcome to the Oregon Renewable Energy Siting Assessment Tool

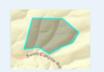
The ORESA tool is an interactive application that allows prospective developers to input project data in order to get a coarse level perspective of potential land use and military considerations.

## **Explore Data**



Browse, download, and interact with map layers

## Get a Report



Land use considerations and contact information for your area of interest

### Learn



Learn about siting procedures, incentives, and processes for military coordination

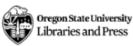
DISCLAIMER: This product is for informational purposes, and may not be suitable for legal, engineering, or surveying purposes. This information or data is provided with the understanding that conclusions drawn from such information are the responsibility of the user. The sponsors of the tool make no claims, representations or warranties as to the accuracy or completeness of these data layers.





Department of Land Conservation & Development

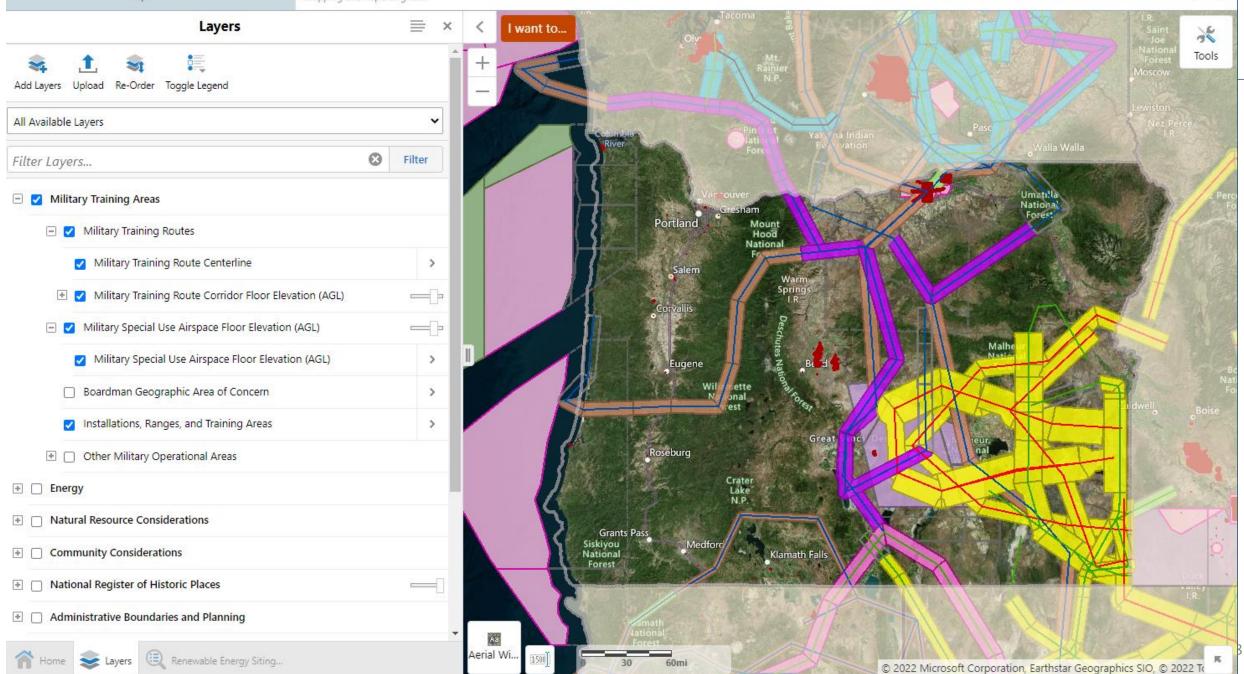






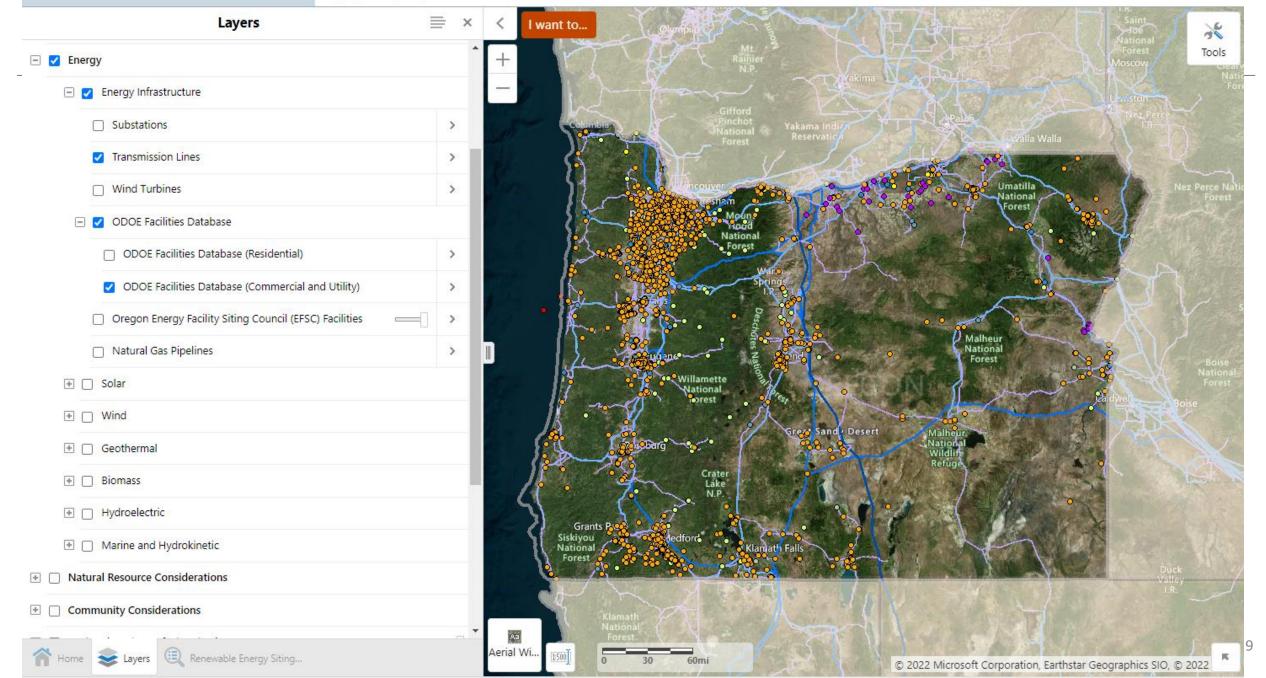










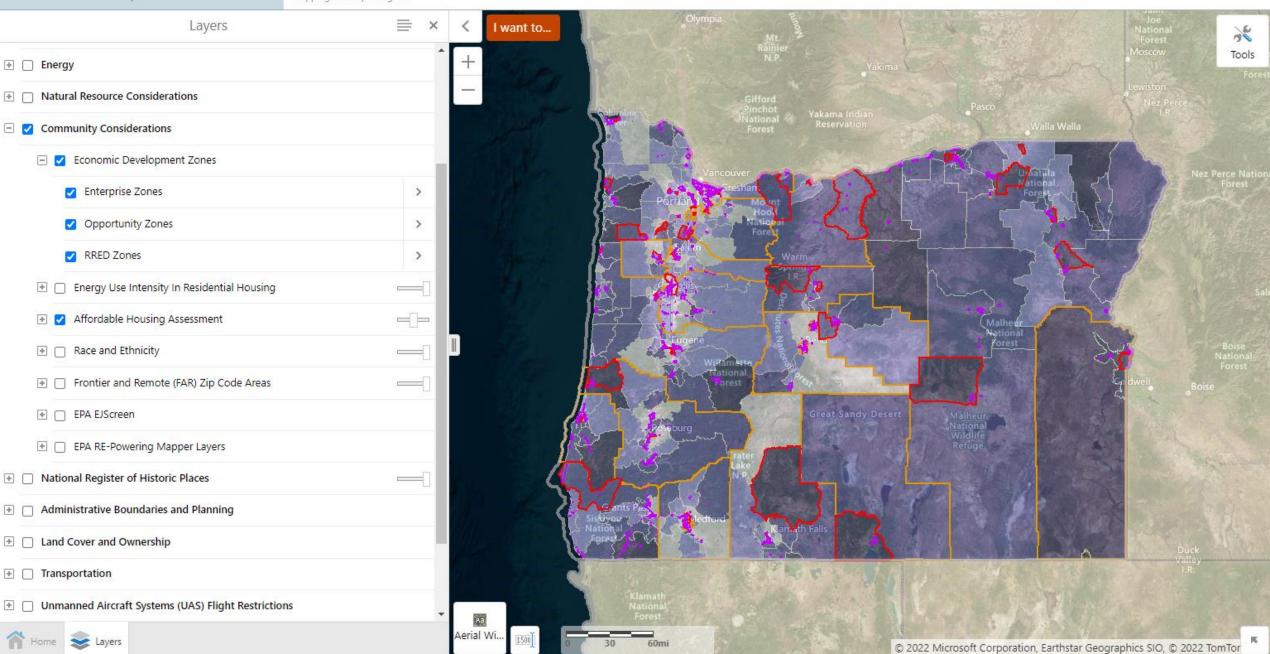












Mapping and Reporting Tool





Home

## Welcome to the Oregon Renewable Energy Siting Assessment Tool

The ORESA tool is an interactive application that allows prospective developers to input project data in order to get a coarse level perspective of potential land use and military considerations.

### **Explore Data**



Browse, download, and interact with map layers

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Land use considerations and contact information for your area of interest

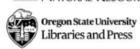
### Learn



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I want to..

Mapping and Reporting Tool

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# Renewable Energy Siting Assessment Project Information

Information generated by this report will only be available to you and not shared unless you choose to initiate contact to coordinate further exploration and development.

### **Site Name**

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## Select Development Type(s)

Select if your project is planned to be onshore or offshore

- Onshore development
- O Offshore development

On-shore development options

- ✓ Wind (onshore)
- ✓ Solar Photovoltaic
- ☐ Geothermal
- ☐ Other/hybrid (onshore)

## Maximum Height (ft)

Anticipated max height of tallest structure in feet.

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### MegaWatts

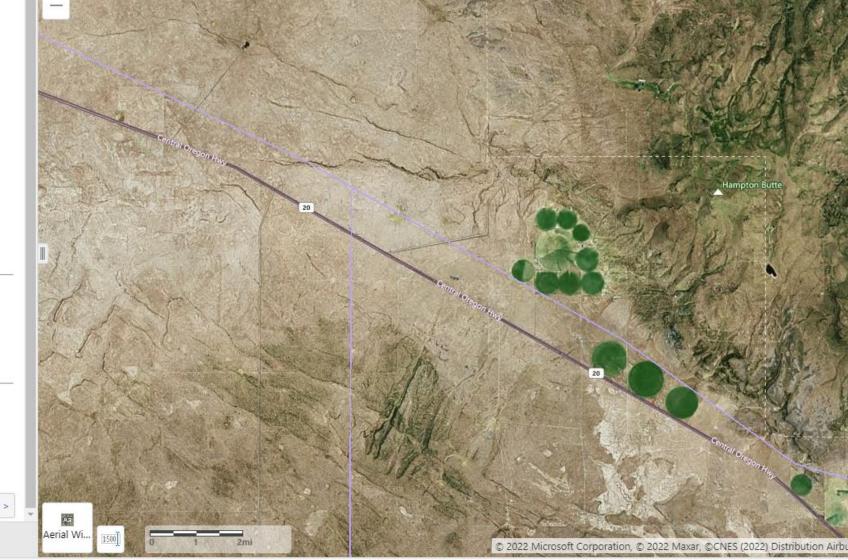
Anticipated production of energy in MegaWatts.

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Mapping and Reporting Tool



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# Report Options

# Default Report Sections

- Site Information
- Military Training Areas
- Contacts

# **Optional Report Sections**

Check which sections to include in your report.

All None

- Energy Considerations
- Natural Resource Considerations
- Community Considerations

### Results

- All queries/results
- O Include only intersected/relevant results



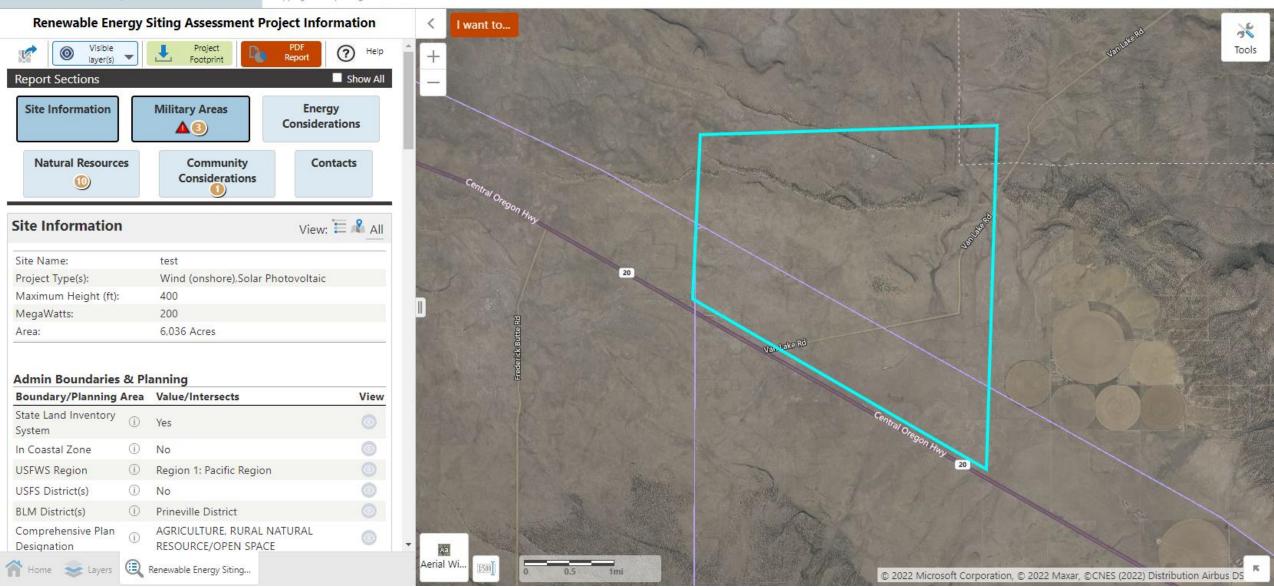








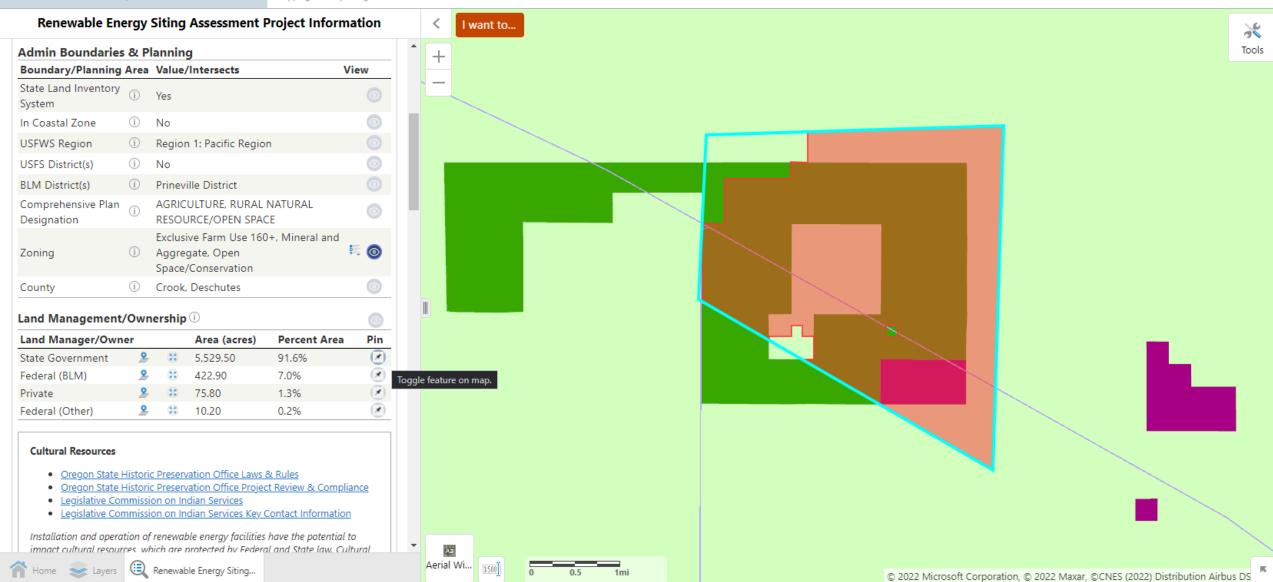






Search..

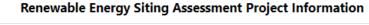














# Cultural Resources

- Oregon State Historic Preservation Office Laws & Rules
- Oregon State Historic Preservation Office Project Review & Compliance

I want to...

- Legislative Commission on Indian Services
- Legislative Commission on Indian Services Key Contact Information

**USFWS** Region

USFS District(s) BLM District(s)

Designation

Zoning

County

Comprehensive Plan

Land Manager/Own State Government Federal (BLM) Private

Federal (Other)

Land Management, Installation and operation of renewable energy facilities have the potential to impact cultural resources, which are protected by Federal and State law. Cultural resources include but are not limited to precontact or historic districts, archaeological sites, buildings, structures, objects, artifacts, records, material remains, and traditional, religious, spiritual, storied, or legendary places. Notification and coordination with the State Historic Preservation Office (SHPO) and Oregon's nine federally recognized tribes is required for most large-scale renewable energy facilities to ensure the installation and operation of the facility will not damage cultural resources.

### Cultural Resources

- Oregon State
- Oregon State

Legislative Cor

Please contact the Oregon SHPO and the Legislative Commission on Indian Services (LCIS) at the links below for assistance in determining the appropriates Tribe(s) to work with based your project location.

Installation and operation of renewable energy facilities have the potential to impact cultural resources, which are protected by Federal and State law, Cultural











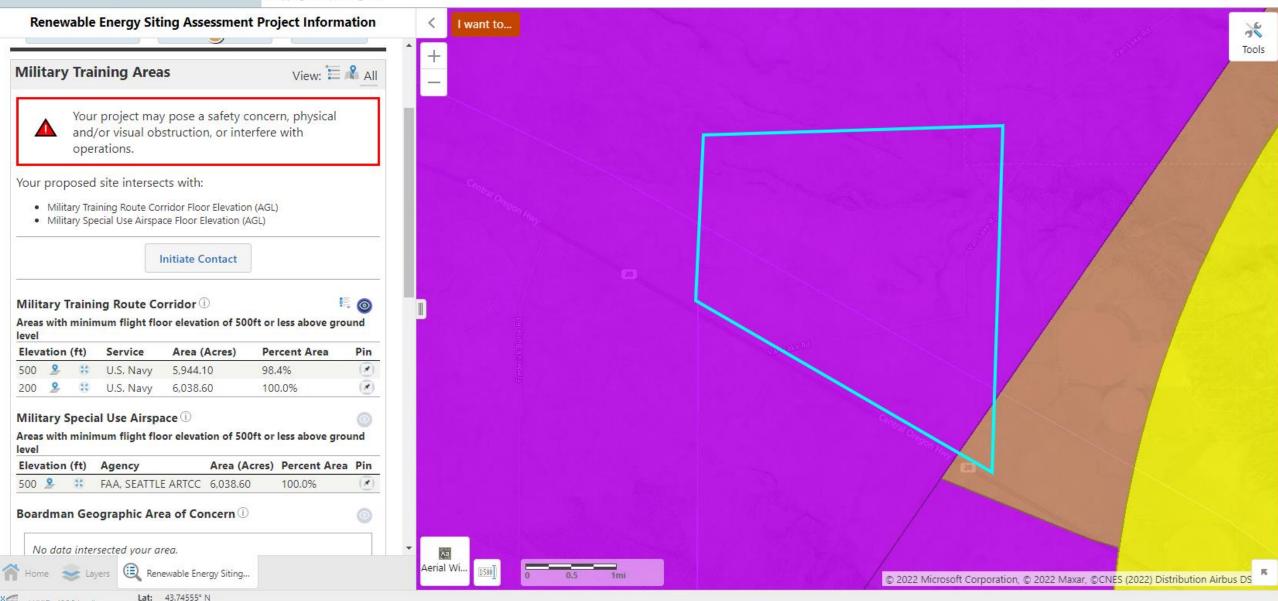




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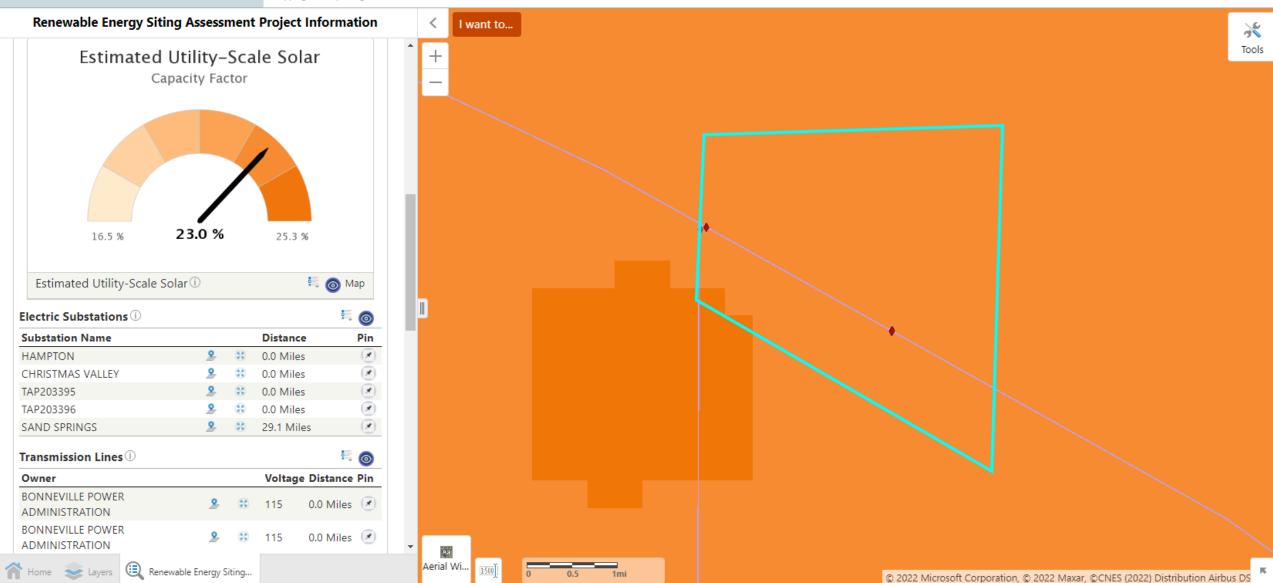
Mapping and Reporting Tool

Search...



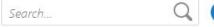


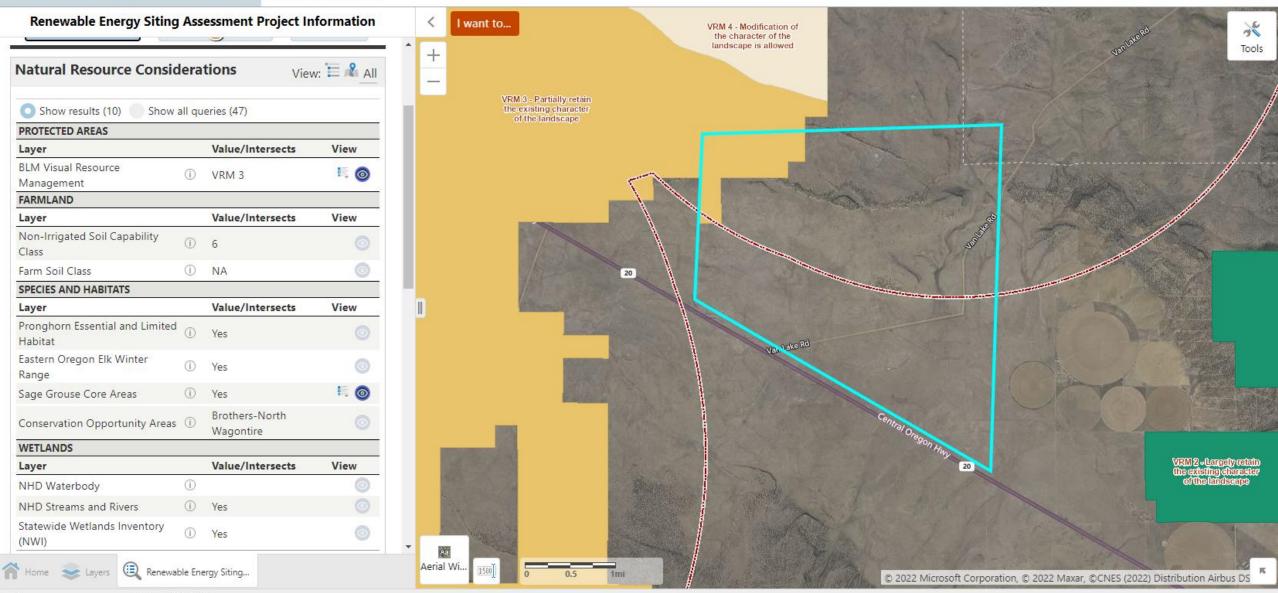
Search...





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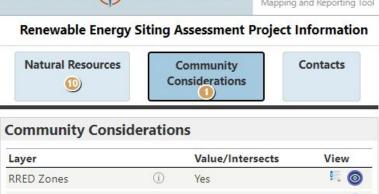




Mapping and Reporting Tool

Search..





### Additional Resources

Opportunity Zones

Enterprise Zones

- · Oregon Department of Energy Incentives information
- Business Oregon Rural Renewable Energy Development (RRED) Zone Program

No

No

- Business Oregon Oregon Investment Advantage
- · Business Oregon, Oregon Prospector Tool
- . U.S. Energy Information Administration Renewable Energy Incentives information

### **Equity and Environmental Justice Resources**

Oregon passed HB 4077 (2022) to develop a statewide equity mapping tool. Until that work is completed below are additional national scale resources to understand equity and environmental justice further.

- EJScreen EPA's Environmental Justice Screening and Mapping Tool
- Energy Justice Dashboard (BETA)
- Climate & Economic Justice Screening Tool
- . Low-Income Energy Affordability Data (LEAD) Tool









# Renewable Energy Siting Assessment Project Information Introduction

The Oregon Renewable Energy Siting Assessment (ORESA) project was funded through a \$1.1 million U.S. Department of Defense Office of Local Defense Community Cooperation grant awarded to the Oregon Department of Energy, working with the Department of Land Conservation & Development and Oregon State University's Institute for Natural Resources.

The project sought to support military compatibility through coordination with local, regional, and state agencies, and raise awareness about the military through the ORESA project. The objective for the Oregon Renewable Energy Siting Assessment Map Viewer and Reporting Tool was to assemble baseline data to create a transparent, consistent collection of trusted, accurate information, without recommendations or endorsements

This tool is for illustrative and administrative purposes only. The map viewer and reports generated by it are not meant to replace the formal permitting process in the state of Oregon. The tool provides the approximate physical, environmental, management, and jurisdictional conditions of a selected area within Oregon. This information or data is provided with the understanding that conclusions drawn from such information are the responsibility of the user. The sponsors of the tool make no claims, representations or warranties as to the accuracy or completeness of these data

### Military Coordination

Tab

Since your specified area of interest for a possible develairspace, or geographic area of concern, it is important t projects with the military to ADDRESS possible issues in

### U.S. Navy

Kimberly Peacher

#### **NW DoD Regional Coordination Team Representitives** Kimberly Peacher

Email: kimberly.n.peacher.civ@us.navy.mil

### **NW DoD Regional Coordination Team Representitives Al**

Email: todd.e.farmer.nfg@mail.mil

Site Information

Military Training Areas

Energy Considerations

Natural Resource Considerations

### Renewable Energy Siting Assessment Project Information

Custom Area

#### Prineville District

3050 N.E. 3rd Street Prineville, OR 97754 541-416-6700 BLM\_OR\_PR\_Mail@blm.gov https://www.blm.gov/office/prineville-district-office

#### U.S. Fish and Wildlife Service (Pacific Region, Oregon Office)

911 NE 11th Ave. Portland, Oregon 97232 (503) 231-6120 https://www.fws.gov/pacific/

### State Contacts

#### Oregon Department of Energy

550 Capitol St. NE, 1st Floor Salem, OR 97301 (503) 378-4040

https://www.oregon.gov/energy/Pages/index.aspx

#### Oregon Department of Land Conservation and Development

635 Capitol Street NE, Suite 150, Salem, OR 97301 (503) 373-0050

dlcd.info@dlcd.oregon.gov https://www.oregon.gov/LCD/pages/index.aspx

### Oregon Military Department

1776 Militia Way SE, Salem, OR 97309-5047 todd.e.farmer.nfg@army.mil

https://www.oregon.gov/OMD/Pages/Home.aspx

#### Oregon Parks and Recreation Department State Historic Preservation Office

725 Summer Street NE, Suite C Salem, OR 97301 (503) 986-0707 oregon.heritage@oregon.gov

https://www.oregon.gov/oprd/OH/Pages/default.aspx

#### Oregon Department of State Lands

775 Summer St. NE, Suite 100 Salem, OR 97301-1279 (503) 986-5200

https://www.oregon.gov/dsl/Pages/index.aspx

#### Oregon Department of Environmental Quality

700 NE Multnomah Street, Suite 600 Portland, OR 97232-4100 503-229-5696

Oregon Department of Forestry

2600 State Street, Salem, Oregon 97310

https://www.oregon.gov/odf/Pages/index.aspx

#### Oregon Department of 4034 Fairview Industrial Dri

(503) 947-6000 odfw.info@odfw.oregon.go https://www.dfw.state.or.us/

### Legislative Commission

900 Court St. NE, Room 167 (503) 986-1067 LCIS@oregonlegislature.go https://www.oregonlegislati

### Oregon Department of

3040 25th Street SE, Salem, (503) 378-4880 mail.aviation@odav.oregon https://www.oregon.gov/av

#### Oregon Water Resource 725 Summer Street NE, Suit

503-986-0900 https://www.oregon.gov/ov

#### **Public Utility Commission** 201 High Street SE, Suite 10

503-373-7394 https://www.oregon.gov/PL

Zoning (1:250,000 -

USFS Ranger Districts

1:1,000,000 scale)

### Renewable Energy Siting Assessment Project Information

Area:: 8,258 Acres

multiple last dictions that are compiled into a statewide standard data model. The laver was constructed to support 1-24000 scale. As of April 25, 2017 this feature class contains posing data from 195 local surjections. DLCD plans to continue adding to and updating this statewide zoning dataset as they receive zoning information from the local Each jurisdiction in Oregon is required to create a comprehensive plan (comp plan) in order to plan for the future prowth and development of their jurisdiction. Each comp plan stands on its own as an individual plan. This dataset is the result of an Oseoon Framework Program ospiect funded to create a statewide dataset of the como plans for recional and statewide planning purposes. The data was collected from local jurisdictions in the state and then assembled into a single dataset. The attributes were generalized to a set of comp plan codes that could be applied to data from all adictions. The list of state comp plan codes and their descriptions can be found in this metadata. Please contact the local jurisdictions for the more detailed (not generalized) data. As of May \$1, 2019 this feature class contains.

comp plan dataset as they receive information from the local jurisdictions. New releases of this data by DLCD are planned for publication every 2 years. Note: This data layer has gaps in the data and is not complete for the entire stats

This theme shows the polygon representation of Bureau of Land Management Districts for Oregon and Washington up to the coastline and including the off-share islands within the district boundaries.

comprehensive plan data from 189 local jurisdictions. DLCD plans to continue adding to and updating this statewisk-

A depiction of the boundary that encompasses a Ranger District. ADMINISTRATIVE boundaries (e.g. AsiministrativeForest and RangerDistrict feature classes) encompass National Forest System lands managed by an administrative unit. These are dynamic layers that should not be considered Tegal' boundaries as they are simply intended to identify the specific organizational units that administer areas. As lands are acquired and disposed, the administrative boundaries are adjusted to expand or shrink accordingly. Please note that ranger districts are sub units of National Forests. An administrative forest boundary can contain one or more Proclaimed National Forests, National Grasslands, Purchase Units, Research and Experimental Areas, Land Utilization Projects and various 'Other' Areas, If

needed, CWMIRS-EP boundates (e.g. BasicOwnership and SurfaceOwnership feature classes) should be reviewed along with these datasets to determine parcels that are federally managed within the administrative boundaries.

Oregon's coastal zone extends from the Washington border on the north to the California border on the south; seaward

to the extent of state jurisdiction as recognized in federal law, and inland to the crest of the coastal mountain range, expecting: 1. The Umpous River Easin, where the coastal some extends to Scottsburg: 2. The Roque River Easin; where the coastal zone extends to Appear and 1. The Columbia River Basin, where the coastal zone extends to the downstream and of Puget Island or, as defined by CREST, RM SILS, to the "Brackwood Site" on the shorelands.

Land Management derived from BLM Ownenhip poly: This theme portrays information representing fee land title and Land Management land manager of lands located in Dregon (DDF/BLM, 2015)

State Land Inventory

agencies. The clata available in the map is the most current published statewide dataset for State of Oregon land rememblip. The State Land Inventory System tracks land that has been assigned a tax lot by County Assessor's Offices, and also tracks State mineral ownership. The data does not include public rights of way (highways, roads and streets) or waterbodies which have not been assigned a tas lot by a County Assessor. While efforts have been made to ensure the accuracy of the data, the managing agency for any individual parcel should be contacted to sently land ownership and boundaries

The State Land Inventory System is a collaborative effort with participation from all land-owning State of Oregon

Airport defines area on land or water intended to be used either wholly or in part for the arrival departure and surface movement of aircraft/helicopters. This airport data is provided as a vector geospatial-enabled file format. Airport information is published every eight weeks by the U.S. Department of Transportation, Federal Action

Current Effective Date: 0901Z 17 Aur. 2021 to 0901Z 12 Aug. 2021

Administration-Aeronautical Information Services

https://www.oregon.gov/DEQ/Pages/index.aspx 503-945-7200 forestryinformation@oregon.gov Custom Area The Military training routes (MTR) is a joint venture by the Federal Aviation Administration and the Department of Defense, developed for use by military Buffered Area of Interest aircraft to gain and maintain proficiency in tactical "low level" flying. Floor

Renewable Energy Siting Assessment Project Informa

Military Training Route Corridor Floor Elevation (AGL)

Surface (Floor Elevation Above Ground Levell

elevations are the minimal elevation above ground level (AGL) that pilots are authorized to fly. This dataset, cycle 2007, was obtain from NGA's AVDAFIF. This product is for informational purposes and may not accurately depict the most up to date designations. Users of this information should review or consult the authoritative data and information sources to ascertain the usability of the information. Marine Corps and National Guard MTRs have been removed from this dataset. (Last updated: 9/1/2020 ) (ESS, 2020)

100 ft 200 ft

300 ft 500 ft 1000 ft

Greater than 1000 ft

Service

Metadata

Metadata

Service

# **RESOURCES**

# **Key Deliverables**

Oregon Renewable Energy Siting Assessment Report ORESA Mapping & Reporting Tool

# Supporting Materials

Renewable Energy Market and Industry Assessment Report

Military Needs and Interests Assessment Report

Natural Resources, Environment, And Development - Opportunities and

**Constraints Assessment Report** 

ORESA Procedures Report

Brochure: Oregon and Our Nation's Military

ORESA Mapping and Reporting Tool - Process Summary and Highlights of

Stakeholder Feedback

ORESA Index of Data Layers

# **Project websites**

Oregon Renewable Energy Siting Assessment (ORESA) (ODOE)
Renewable Energy Landing Page (Oregon Explorer)



# **STAY IN TOUCH!**

Learn more about the ORESA project:

https://www.oregon.gov/energy/energy-oregon/Pages/ORESA.aspx

Send comments and questions:

https://odoe.powerappsportals.us/en-US/ORESA/

Sign up for email updates:

http://web.energy.oregon.gov/cn/a6n53/subscribe









Department of Land Conservation & Development