Compatible Energy Siting Assessment (CESA)

Prototype map tool for compatible energy siting

GIS-based consultation-support application

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Compatible Energy Siting Assessment
Grant deliverables and status

GRANT PURPOSE: Promote early and ongoing civilian-military consultation for compatible energy siting in Washington State.

FEDERAL FUNDING: Department of Defense (DOD), Office of Local Defense Community Cooperation (OLDCC)

STATE LEAD: Washington State Department of Commerce (Commerce)

STATE PARTNER: Utilities and Transportation Commission (UTC) and Washington State Energy Facility Site Evaluation Council (EFSEC)
Compatible Energy Siting Assessment (CESA)
2021 CESA prototype map tool

Purpose

Align interests in project siting:

• Promote civilian-military compatibility through “early and ongoing consultation.”

• Provide developers with multiple non-military layers and consultation guidance to help streamline permitting.
Compatible Energy Siting Assessment (CESA) 2021 CESA prototype map tool

Purpose

Align interests in project siting:

• Promote civilian-military compatibility through “early and ongoing consultation.”

• Provide developers with multiple non-military layers and consultation guidance to help streamline permitting.
Civilian-military compatibility needs resemble other issues in siting. Best practice: Consultation tools address multi-disciplinary needs.

Sensitive to cumulative loss
Need: long-term protection of critical habitat and resources.

Sensitive to cumulative loss
Need: Long-term protection of military’s ability to operate and safely test/train personnel.

Image source: https://www.esri.com/arcgis-blog/wp-content/uploads/2018/02/05-fig-5-4-v2.png
Compatible Energy Siting Assessment Program findings

What we heard and our lessons learned for the CESA prototype map tool.
Snapshot: Project engagement

Energy developers
A&R Solar
Avangrid
Renewable NW
Enel Green Power
Invenergy

Non-profit organizations
Audubon Society
American Farmland Trust
Clean Energy Institute at UW
Clean Energy Transition Institute
Clean Tech Alliance
Climate Solutions
Coalition of Eastside Neighborhoods for Sensible Energy
Conservation Biology Institute
NW Energy Coalition
Puget Sound Regional Council
Sierra Club
Trust for Public Lands
Washington Environmental Council
WECC/NW Energy Coalition

Utilities
Avista Utilities
Bonneville Power Administration
Clark Public Utilities
PacifiCorp
Pend Oreille County PUD
Puget Sound Energy
WA PUD Association

Federal agencies
Federal Aviation Administration
United States Forest Services
U.S. Bureau of Land Management
Bureau of Ocean Energy Management

Military
Department of Defense | Air Force, Army, Homeland Security | Coast Guard
Office of the Secretary of Defense

Other states
Arizona, California, New Mexico, Texas, Utah

Washington counties
Benton, Community Development Department
Columbia, Planning and Building Department
Garfield, Public Works Department
Grant, Development Services Department
Kittitas, Community Development Department
Klickitat, Planning Department
Pacific, Community Development Department
Thurston, Community Planning & Economic Development Department
Walla Walla, Community Development Department
Yakima, Community Development Department

Washington state agencies
Archaeology and Historic Preservation
Office of the Chief Information Officer
Department of Agriculture
Department of Commerce
Department of Transportation Aviation
Department of Ecology
Department of Fish and Wildlife
Department of Natural Resources
DNR | Geological Survey

People from these organizations joined one or more focus groups.
The list omits 400+ whom we reached by emails, surveys, conferences, user testing, and interviews.
Findings

Consultation support is best practice.

“Early enough” consultation is a persistent gap.

Data analytics would not replace consultation.

Consultation versus screening.

Tools defining site (un)suitability seem ideal, but concerns abound.

Tools that report on environmental quality or resource value also seem ideal, but:

More sophisticated tools need more scoping, outreach, and research to do well.

Each added function makes the tool harder to define, build, verify, update, and afford.

Data analytics would not replace consultation.
Recommendation: Focus on consultation support.

Even a highly dynamic tool would not replace consultation.

So CESA’s siting tool should help users reach contacts and navigate consultation.
The 2021 CESA Prototype is...

- A map-based tool to give developers and permit-review agencies site-specific consultation guidance.
- An automated report tool with contact information for the military and other governmental entities involved in permitting.
- A resource to help streamline clean energy siting by reducing late-stage surprises.
Compatible Energy Siting Assessment

✓ **Opportunity**—to materially address a growing need for energy solutions.

✓ **Prototype map application**—a functional GIS-based consultation support tool.

✓ **Clear lessons to share**—data on similar tools and stakeholder input.

✓ **Implementation report**—recommendations and baseline cost estimates.

✓ **A strong start**—initial reception is positive.
DEMO:

2021 CESA Prototype Map Tool
A GIS-based consultation-support application

Direct link to launch the prototype:
https://500agemrv.timmons.com/CESAMappingTool/
Compatible Energy Siting Assessment (CESA) Site Consultation Map Tool Prototype

Promoting early and ongoing civilian and military coordination

How to get started in 4 easy steps!

1. Learn
   Learn about the Prototype.

2. Launch the Tool
   Launch the tool to start exploring or to screen a specific site to see potential Consultation Areas that may impact your next project.

3. Explore the Data
   Explore our authoritative database of identified datasets supplied by participating organizations.

4. Important Contacts
   Know who to contact across the State at various agencies. Contact us with any questions.

https://cesa-timmons-group.hub.arcgis.com/
Launch CESA Prototype v3.0
Welcome to the Washington State CESA Mapping Tool

IMPORTANT NOTICE: This CESA Site Consultation Report is under development and should NOT be used for planning or decision-making purposes. This report may not contain the most current information for features displayed, including military training, testing and operating areas where military operations are suggested. This is only a sample tool and is NOT authorized for official use.

By continuing, I acknowledge that data in this sample uses unofficial data that is NOT authorized for official use.

☐ I agree to the above terms and conditions

OK
RANDOM SAMPLE AREA
Users select a site by drawing an area or retrieving an address. Users can include a buffer area around their selected site. Capability to upload project site data is desirable (TBD).
OPTIONAL FEATURES

Users can indicate project-specific features for inclusion in the automated report.

- Name the area of interest (AOI)
- Or specify project name
- Include form of energy technology
- Click “Report” to access consultation guidance that is site-specific.
The State of Washington is committed to increasing the supply of renewable energy. We seek to support developers in identifying suitable sites for energy development which present the least conflict with other resource needs. Consultation early in a project is important for well-informed planning. This mapping tool is designed to promote early and ongoing communication between renewable-energy developers and governmental entities (civilian, military, and tribal) in support of successful site selection for new facilities. This tool is designed to support recommended coordination on siting needs and for help navigating state and federal regulations including the State Environmental Policy Act (SEPA) (RCW 43.21C; WAC 197-11). In particular, we urge developers to consult with the military as early as possible in the initial site-identification process, well before the application phase. Early consultation reduces risk of project delays or impacts to military testing, training, and operating areas. Explore the following statutes for additional information:

- **RCW 36.01.320:** Application for a permit to site an energy plant or alternative energy resource – Written notice to the United States Department of Defense.
- **RCW 36.70A.530/WAC 365-196-475:** Land use compatibility with military installations.

**Selected Area of Interest**

- **Project Name:** No Project Name Provided
- **Project Type:** No Project Types Selected
- **Local Government Jurisdiction(s):** Whitman County
- **Project Description or Comments:**
  
  Enter comments here

**Area:** 846.66 acres

Users can print to PDF
Page 2
Full-page site map.
**Military Training Route Floor Elevation (AGL)**

<table>
<thead>
<tr>
<th>Features</th>
<th>Count</th>
<th>Area (Acres)</th>
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<tbody>
<tr>
<td>Military Training Route Floor Elevation (AGL)</td>
<td>3</td>
<td>2,418</td>
</tr>
</tbody>
</table>

**Military areas within Area of Interest and Associated Points of Contact:**

- **U.S. Navy**
  - Kim Peacher
  - (360) 930-4085
  - kimberly.n.peacher.cn@us.navy.mil
- **U.S. Air Force**
  - Leroy Alvarez
  - (253) 982-4057
  - leroy.alvarez.1@us.af.mil

**Definitions:**

- **Military Training Route (MTR)** – is a joint-designation by the FAA and the US Department of Defense (DOD). MTRs are mutually developed for use by the military for the purpose of conducting low-altitude, high-speed training. Airspace of defined vertical and lateral dimensions established for the conduct of military training at airspeeds in excess of 250 knots indicated airspeed.

- **Special Use Airspace (SUA)** – a designation for airspace in which certain activities must be confined, or where limitations may be imposed on aircraft operations that are not part of those activities. Certain special use airspace areas can create limitations on the mixed use of airspace. SUA or SAO consists of prohibited, restricted, warning, military operations, and alert areas.

- **National Security Area (NSA)** – consists of airspace of defined vertical and lateral dimensions established at locations where there is a requirement for increased security of ground facilities. Pilots are requested to voluntarily avoid flying through an NSA. When it is necessary to provide a greater level of security, flight in an NSA may be temporarily prohibited.

**DoD-Approved Boardman Geographical Areas of Concern** maps show specific mission areas where wind development would present an adverse impact to military operations. The Boardman G4OC is identified due to possible effects upon two main DoD military missions. The Naval Weapons Systems Training Facility at Boardman and its associated airspace are the U.S. Navy's primary resource for all airborne electronic attack aircraft air combat maneuver training. This training includes low level aircraft operations. Tall structures, such as wind turbines and electrical transmission lines, constructed under Restricted Airspace (R-5701) and Military Training Routes will prevent the U.S. Navy from fulfilling the training mission.

**Tribal Consultation**

Based on information provided by the Washington State Department of Transportation regarding Tribal Reservation and Trust Lands in Washington State, your area of interest may coincide with areas of interest for the tribal nations listed below. Please note: Other tribal communities may have interests in your selected area and you are responsible for consulting with all relevant tribal nations. Please use this list as an initial guide to tribal consultation:

Tribal-related data for the area you selected may be limited or unavailable within this application. We urge you to reach out to all tribes currently or historically inhabiting your area of interest since GIS data regarding tribal lands are known to be incomplete.
Thank you!

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