



Low-Carbon Energy Project Siting Improvement Study: Mapping Tool Prototype

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Goals

Ecology data viewer applications

- Provide overview of existing Ecology data viewer applications
- Discuss functionality for the siting mapping tool prototype
- Discuss how people might use a siting mapping tool

Discuss geographic information system (GIS) spatial data layers

- Provide examples of existing layers
- Provide examples of layers with data challenges
- Discuss potential other layers for a siting mapping tool

Ecology Data Viewers

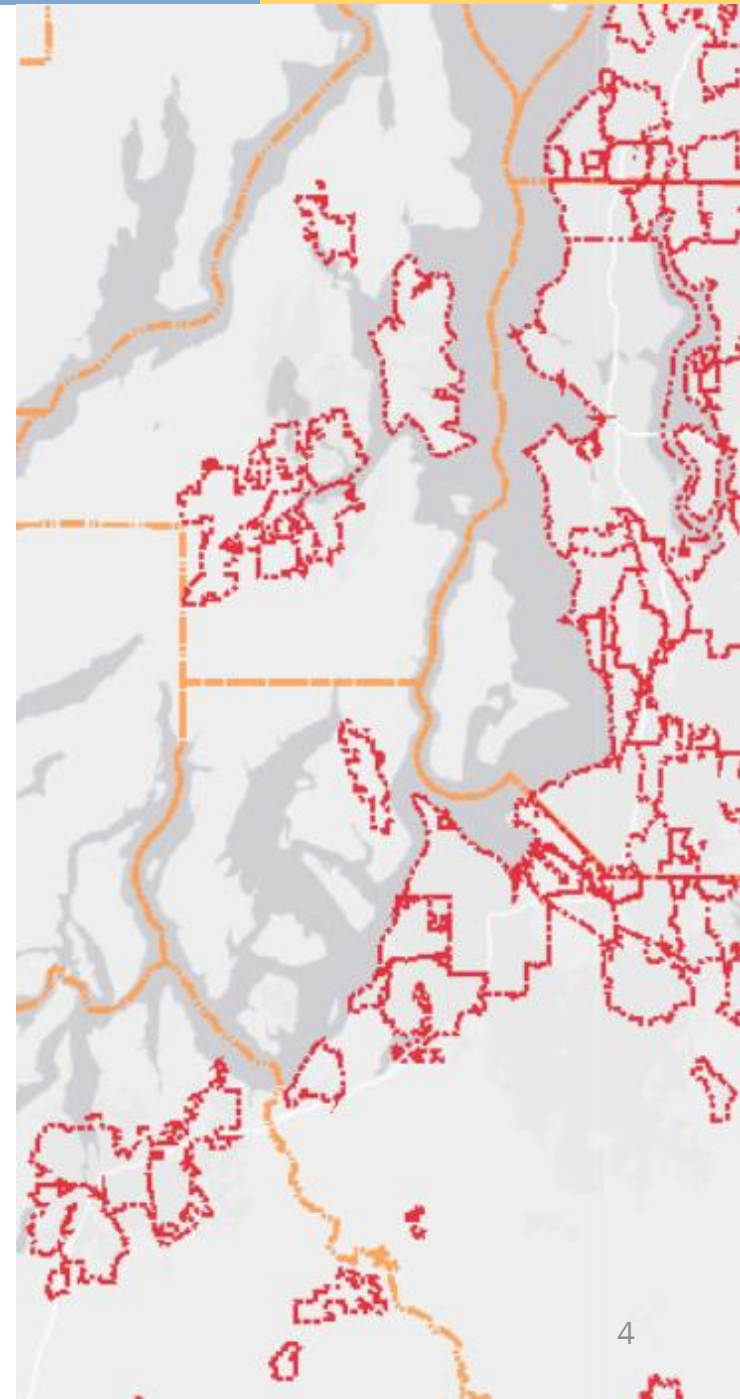
An overview and demonstration of existing similar applications

- [Coastal Atlas](#)
- [Water Quality Atlas](#)

Spatial Data: Geographic Layers

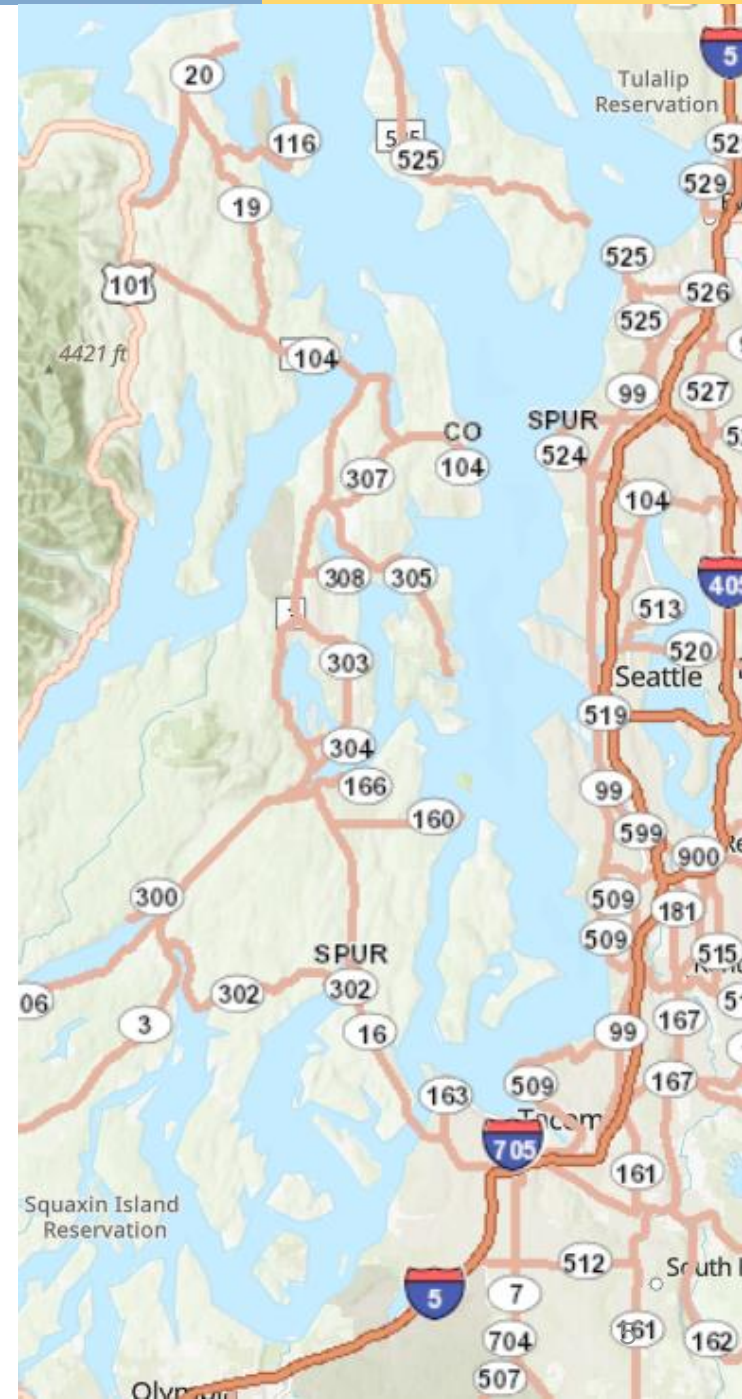
- City and county boundaries, urban growth areas*
- Tribal reservation lands*
- Public lands, including state and federal forests, parks, aquatic parcels and other managed lands*
- Township/Range/Section
- Land elevation and bathymetry (water depth)

**Layers also in the Compatible Energy Siting Assessment (CESA) prototype tool*



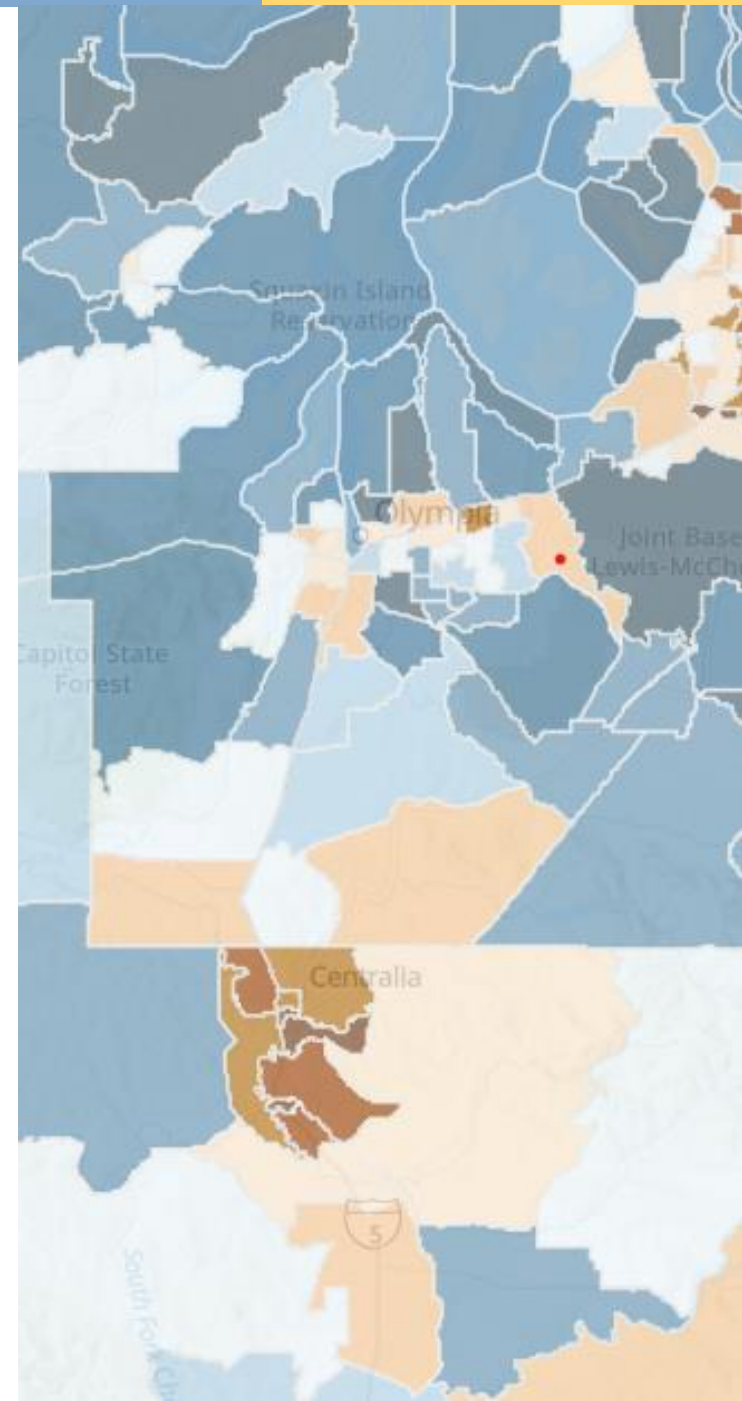
Spatial Data: Transportation Layers

- Highways and railways*
- Non-military airports*, ports (point data, not property boundaries)
- Marine vessel routes



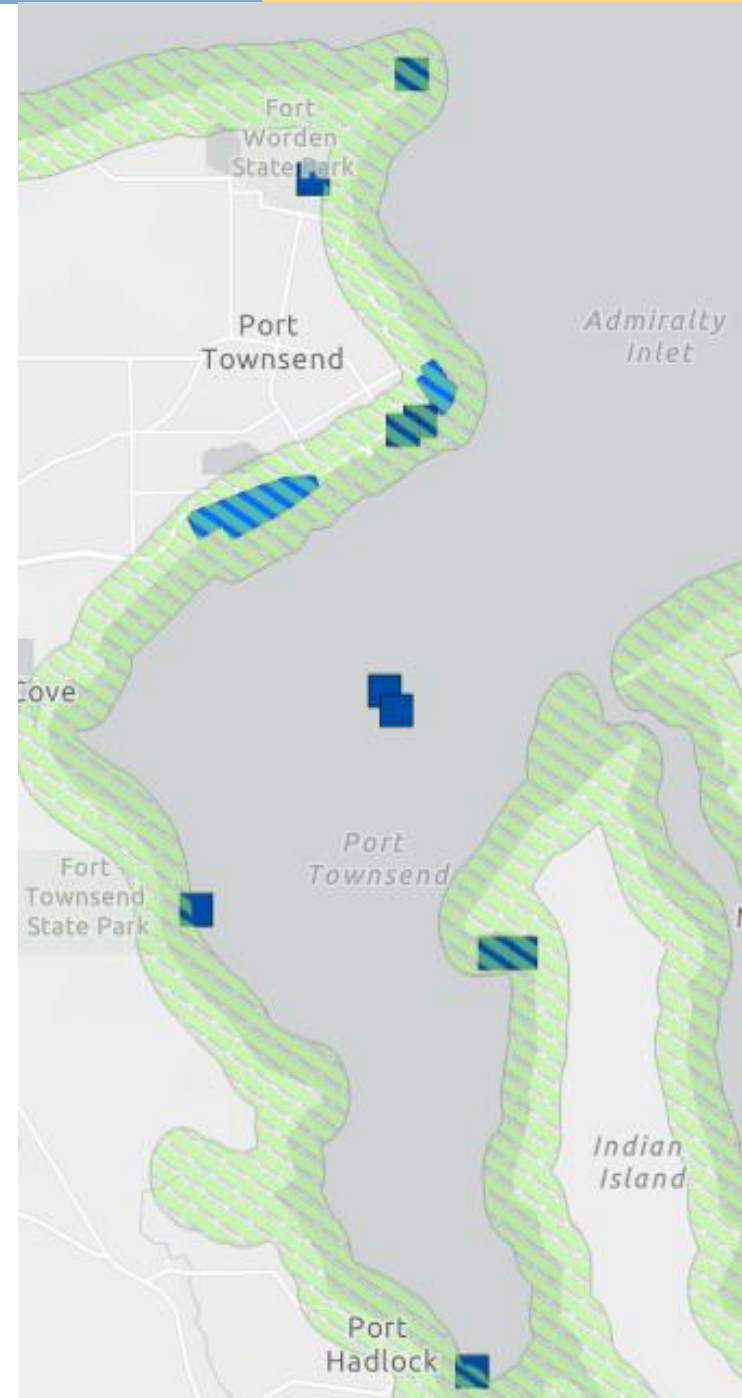
Spatial Data: Equity & Environmental Justice Layers

- Department of Health Environmental Health Disparities (EHD) data
- Census data
- Nonattainment areas for air quality



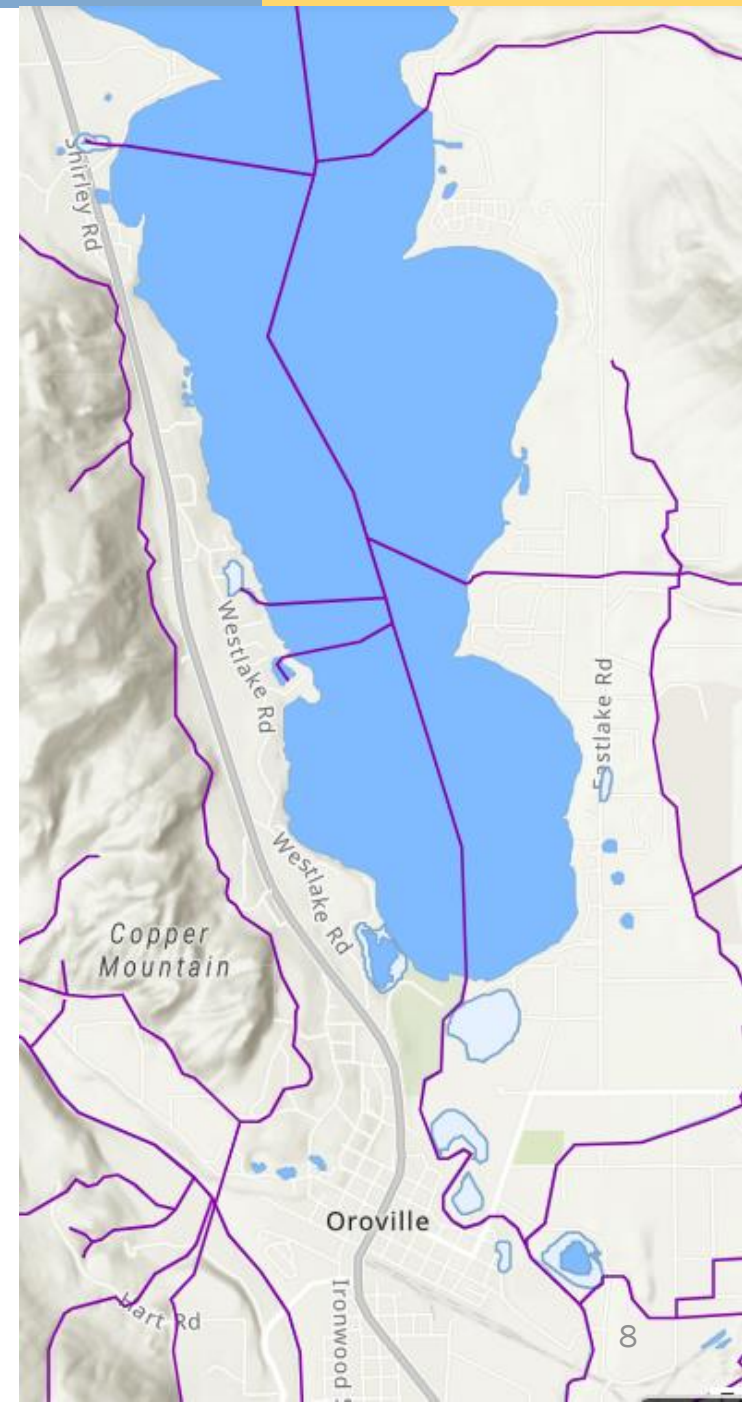
Spatial Data: Publically Viewable Cultural & Historic Layers

- Department of Archaeology and Historic Preservation cultural resource potential*
- Areas of tribal interest



Spatial Data: Water & Wetland Layers

- National Hydrography Data (NHD)*
 - Streams
 - Lakes/Ponds
 - Wetlands
 - Coastline, estuaries
 - Watersheds (hydrologic units)
- FEMA flood maps
- Sea level rise
- Shoreline Management Act jurisdictions
- U.S. maritime limits & boundaries



Spatial Data: Land Use Layers

- Agricultural lands
- Toxic cleanup sites
- City/County zoning data challenges



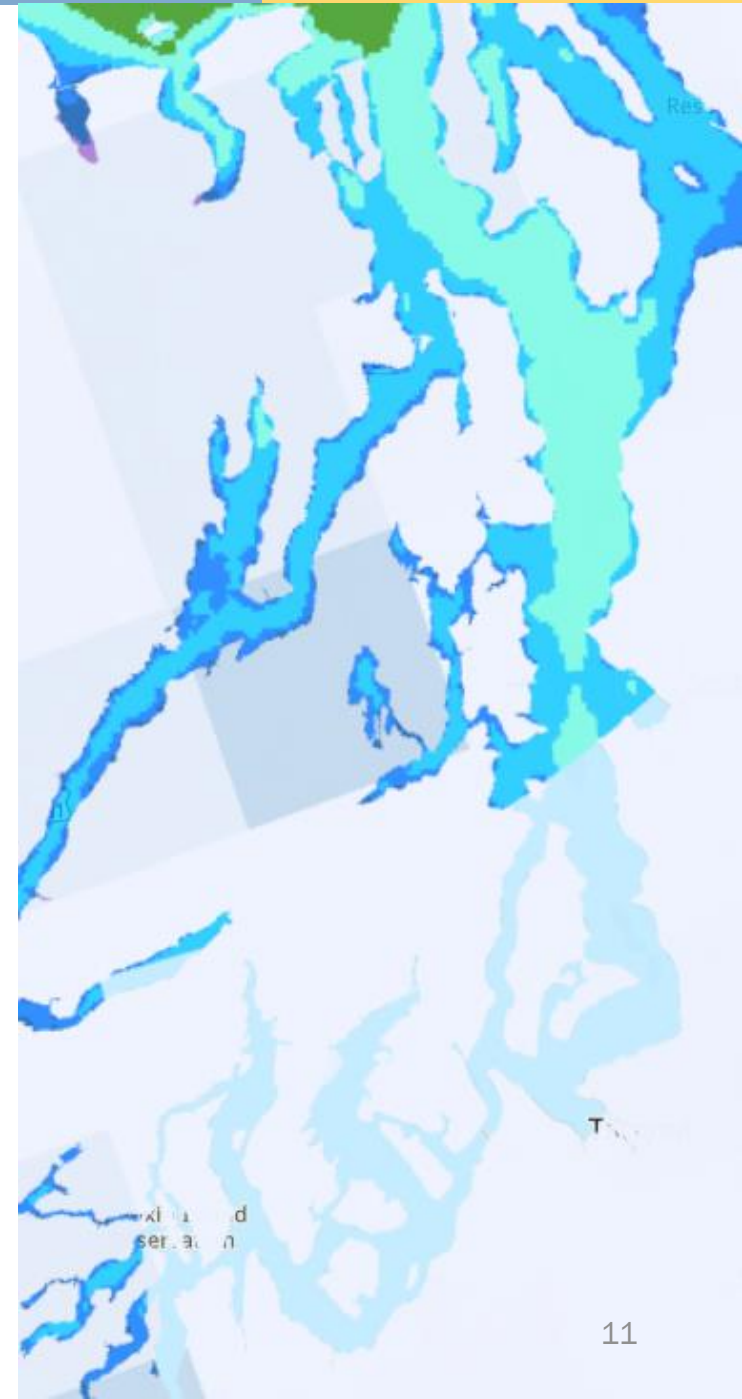
Spatial Data: Publically Available Utility Layers

- Pipelines*
- Electric transmission lines*
- Refineries, power plants, natural gas processing facilities*



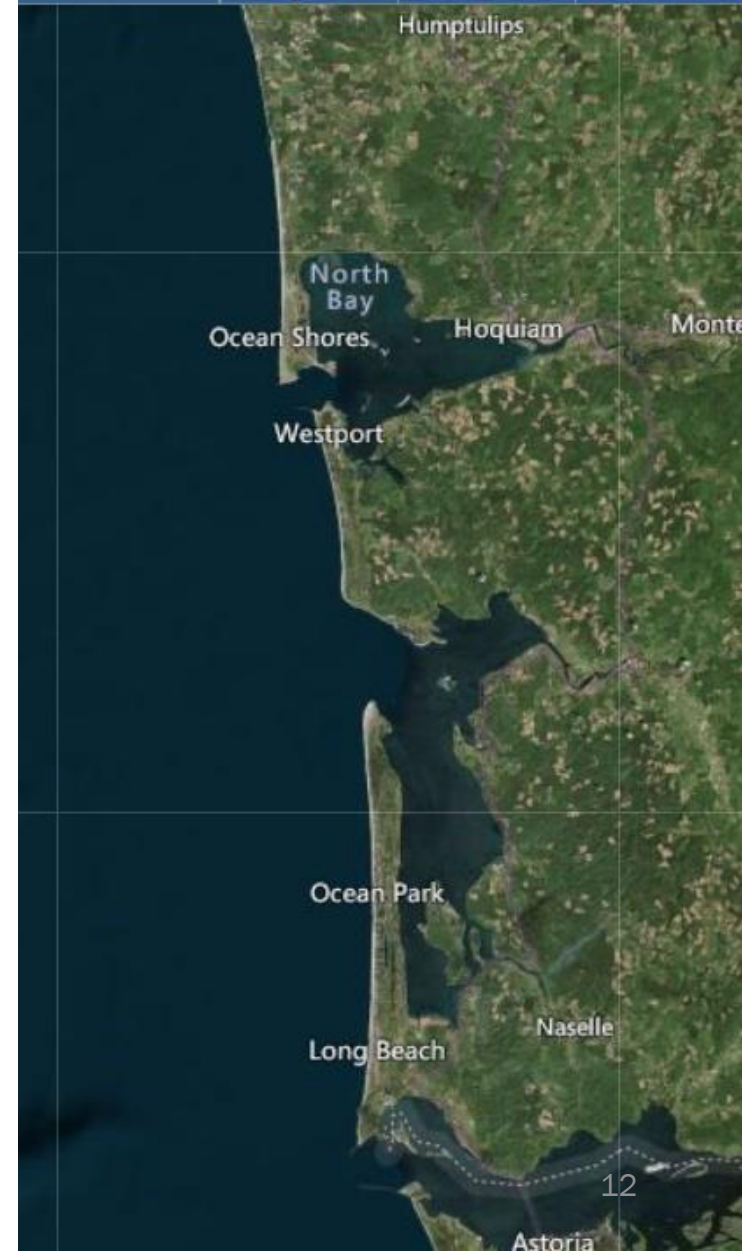
Spatial Data: Clean Energy Layers

- Solar and wind potential*
- Current and future wind and solar project locations*



Spatial Data

What else would you like to see in a siting application?





Thank you

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