

CENTRAL PUGET SOUND REGION OPEN SPACE ASSESSMENT TOOL

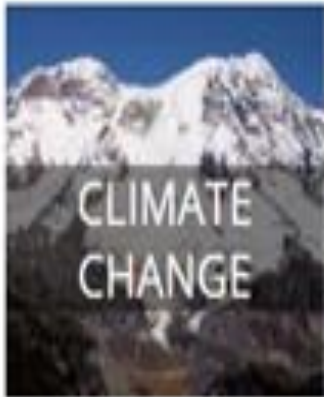
Developing A Multi-Criteria Ecosystem Services
Based Decision-Support Tool

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Prioritizing Investment in Open Space Protection at a Regional Scale

Regions Biggest Challenges



Interconnected System

Open Space is more than just parkland and forests. It's the systems that supports a treasured way of life in the Puget Sound Region.



AIR



WATER



WORK



PLAY



ENERGY



MATERIALS



CULTURAL



AESTHETIC



FOOD



SHELTER



HEALTH



TRANSPORT



WASTE



DISASTER
MITIGATION



EDUCATION



COMMUNITY

Snapshot of TPL Prototype Portal

ROSS
REGIONAL OPEN SPACE STRATEGY

Central Puget Sound
Regional Open Space Strategy (ROSS) - Beta Site

THE TRUST FOR PUBLIC LAND
LAND FOR PEOPLE

Zoom In Zoom Out Pan Full Extent Previous Extent Measure Length Measure Area Identify Reset Map

CLOSE

ABOUT

Central Puget Sound Regional Open Space Strategy (ROSS)

The ROSS is a collaborative effort to integrate and elevate the many activities underway to conserve and enhance the ecological, economic, recreational, and aesthetic vitality of the Central Puget Sound region. Tap [here](#) to learn more.

This prototype data portal is an effort to baseline the region's vast array of critical open space services and benefits to inform conservation, enhancement and protection priorities in the region. Driven by an ecosystem services approach and with a lens to fully account for the full spectrum of open space benefits, the ROSS is working to baseline [16 key open space services](#). Many of these services can be quantitatively mapped and are to be part of this GIS baselining effort.

The ROSS is also working to understand key regional challenges and their intersection with open space planning: Climate Change, Biodiversity, Human Health, Social Equity and Economic Development. The intention is to aggregate the region's most strategic data available to date to understand opportunities and tradeoffs in regional decision-making across these challenges, communities and the landscape.

This prototype portal currently only represents a small portion of these services and regional challenges (a portion of Air, Water, Land Cover conditions and Demographics, and a first attempt at aggregating Climate Change data). Other services and regional challenges are marked as placeholders. This prototype was designed to better identify best metrics to support ROSS.

esri

Snapshot of TPL Prototype Portal

The screenshot displays the 'Central Puget Sound Regional Open Space Strategy' (ROSS) portal. The interface includes a top navigation bar with the Trust for Public Land logo, the title 'Central Puget Sound Regional Open Space Strategy', and a prominent 'ROSS' label in a green box. Below the title is a toolbar with interactive tools: Zoom In, Zoom Out, Pan, Full Extent, Previous Extent, Measure Length, Measure Area, Identify, and Reset Map. A 'CLOSE' button is located near the top left of the main content area.

The left sidebar contains a 'DATA' section with a 'Select Map Background' dropdown menu (options: Street Map, Terrain Map, Aerial Imagery) and two expandable sections: 'Open Space Services' and 'Regional Challenges'. Both sections include a list of categories with expandable icons and a 'Metadata' link. The 'Open Space Services' list includes AIR, FOOD, WATER, MATERIALS, PLAY, WORK, CULTURAL, ENERGY, Demographics, and Reference Overlays. The 'Regional Challenges' list includes Biodiversity, Climate Change, Human Health, Social Equity, and Economic Development. Each section also features a 'Data Transparency' slider.

The main map area shows a satellite-style map of the Central Puget Sound region, overlaid with a color-coded data layer. A vertical navigation menu on the left side of the map includes buttons for DATA, LEGEND, OVERVIEW, MAPVIEW, PRINT, and ABOUT. A scale bar is positioned above the map. The bottom right corner of the map area features the 'POWERED BY esri' logo.

The footer contains a 'HELP' icon and text, copyright information for 2014 The Trust for Public Land, and links for 'Questions About This Site' and 'ROSS'.

Metrics + Functionality

METRICS:

- Open Space Services Metrics: Rule of Thumb
- Regional Challenges Metrics: Weighted Criteria

FUNCTIONALITY:

- Rank lands by highest/lowest performance
- Report cards by County, WRIA + specific geographies using multiple indicators
- Query multiple metrics + baseline conditions using multiple indicators

Narrative 1: Water + FEMA Flood Hazard

**Highlight Open Space Service Water Metric:
Flood Hazard Zones**

Explore Metrics:

- Under Metrics Tab
- Choose a Metric: select Open Space in known Flood Insurance Risk Zone.
- Show highest/lowest ranking sites
- Select specific site to report on

Result: Metrics Report Card

← CLOSE

METRICS AND REPORTS

Explore Metrics [Data and Methods](#)

- Open Space in Known Flood Insurance Risk

METRIC DESCRIPTION: Flood zones are geographic areas that the Federal Emergency Management Agency (FEMA) has defined according to varying levels of flood risk and type of flooding. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in these zones.

SITE RANKING: Known Flood Insurance Risk Zone areas in open space:

Show 10 Highest Ranking Sites
 Show 10 Lowest Ranking Sites

Ranking Threshold: 10

Regional Report Cards

----Select a Region----

Open Regional Report Card

Site-Specific Report Cards

Click to Select a Site Clear Selection

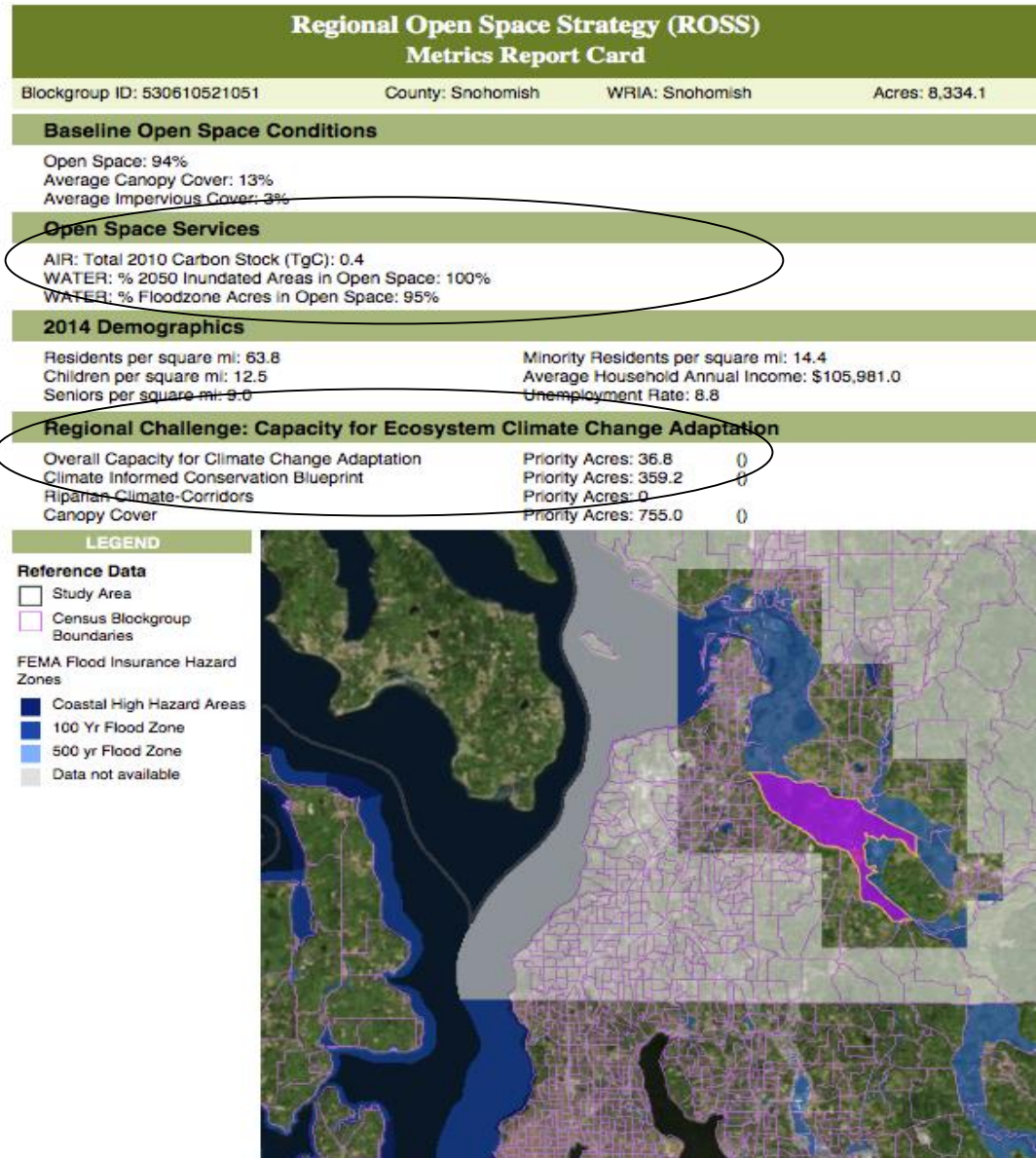
ABOUT DATA LEGEND METRICS MARKUP PRINT

Report Card

Highlights site architecture:

- Baseline Opens Space Conditions
- Open Space Services
- Demographics
- Regional Challenge: Climate Change Adaptation

Illuminates: the results indicate location where open space could be effective in mitigating flood hazard AND risk to existing infrastructure

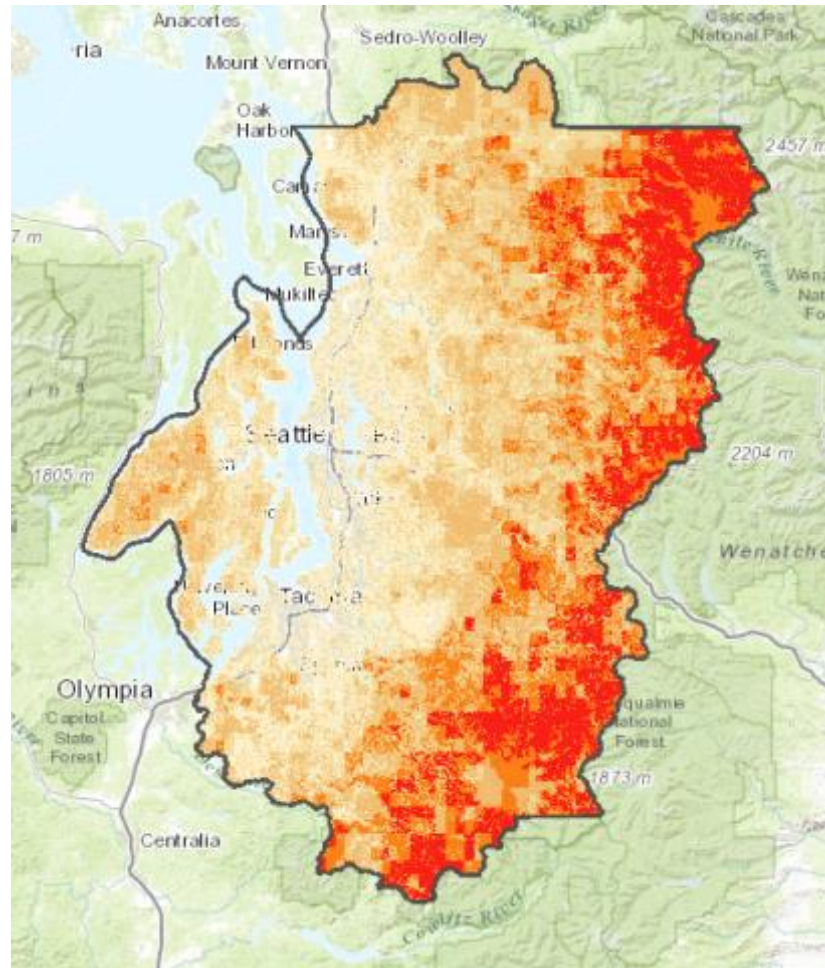


Narrative 2: Climate Change Ecosystem Adaptation

Highlights Regional Challenge approach

Regional Challenges: [Data and Methods](#)

- Turn off Regional Result
- CLIMATE CHANGE: Ecosystem Adaptation
 - Overall Capacity for Ecosystem Adaptation
 - > Climate-Informed Conservation Blueprint
 - > Riparian Climate-Corridor Index
 - > Canopy Cover
- BIODIVERSITY
- HUMAN HEALTH
- SOCIAL EQUITY
- ECONOMIC DEVELOPMENT



Narrative 3: Urban Heat Island Vulnerability

Highlights robust query function

Query:

- High impervious surface
- Low canopy cover
- Percent of sensitive population (seniors)

Result: Visualization and listing of all properties meeting specified criteria

Find Sites Where ... ← CLOSE

Percent Impervious

> 80%

AND

Percent Canopy

< 10%

AND

Demographics: Seniors Over 65 per Sq Mi

> 1000

Add Query Condition Remove Condition

RUN QUERY

Query Results

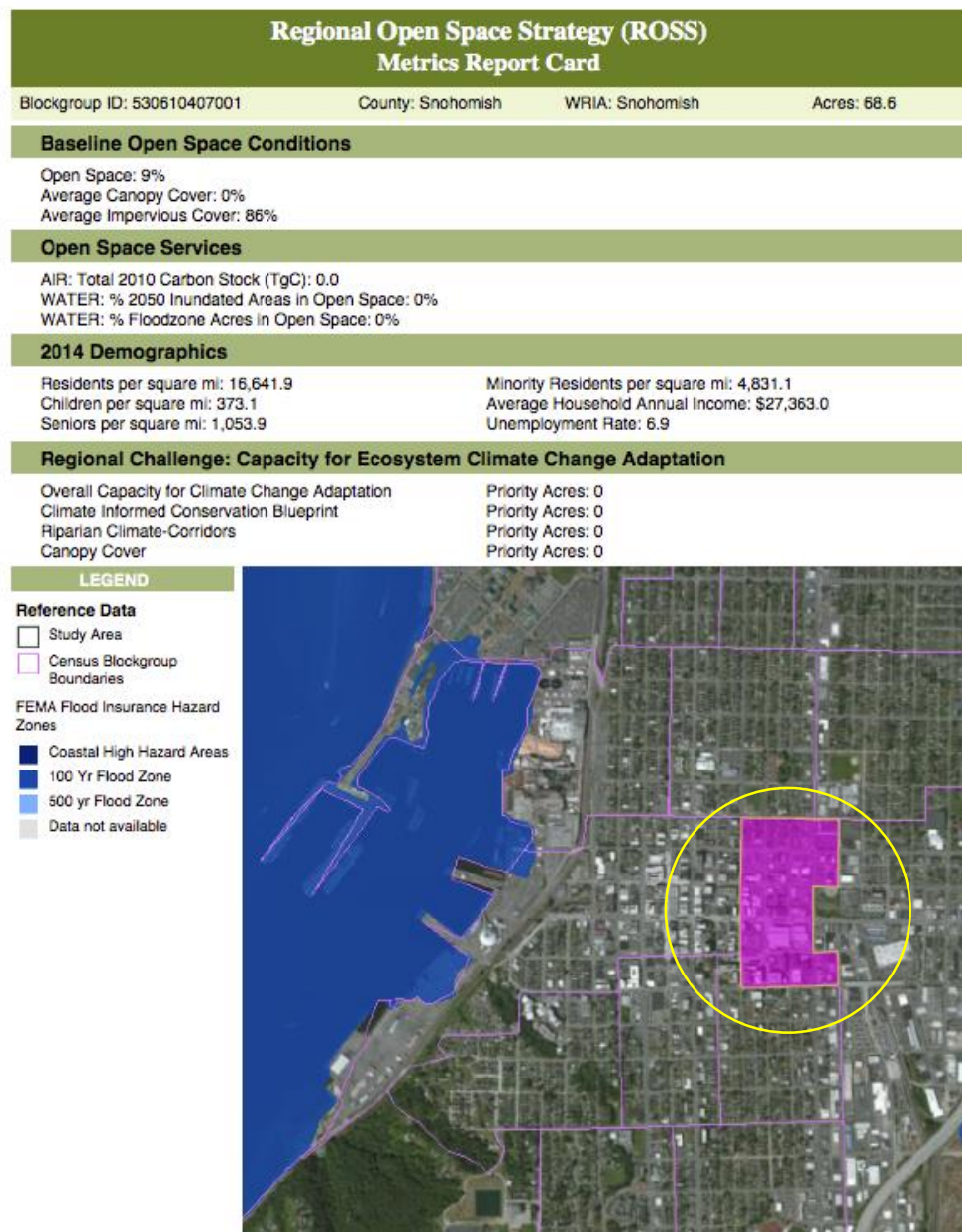
Export to Spreadsheet



Zooming in

Report card on specific vulnerable area

Potential Action: Use data to show vulnerability in the face of climate change factors.



A COLLECTIVE VISION



ROSS

REGIONAL OPEN
SPACE STRATEGY

Credits

- Bullitt Foundation
- Russell Family Foundation
- US Forest Service
- Boeing Corporation
- University of Washington Green Futures Lab
- Trust for Public Land
- Puget Sound Regional Council