



Mapping Sensitive Ecosystems in the Sunshine Coast

Sunshine Coast Regional District Board of Directors, June 26th, 2025.

www.actionforadaptation.ca

Thank you to our funders: Environment and Climate Change Canada
A donor to the UBC Botanical Garden



Action for Adaptation



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UBC Botanical Garden



COASTAL DOUGLAS-FIR
& ASSOCIATED ECOSYSTEMS
CONSERVATION PARTNERSHIP

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Action for Adaptation

Purpose of Action for Adaptation website:

To support actions for climate adaptation and biodiversity conservation by developing decision-making and policy support tools for local governments and First Nations on BC's southwest coast.

Deliverables:

- **Biodiversity Atlas:** Peer-reviewed online platform developed by researchers.
- **Policy Tools:** Help planners apply the Atlas to climate and biodiversity goals.

Purpose of our delegation today: Introduce data-driven biodiversity mapping layers that support policy tools relevant to the OCP renewal.

TWO PILLARS OF OCP RENEWAL



OCP Renewal

Action for Adaptation ecosystem mapping can support SCRD planning:

- Improve existing mapping using best available data
- Develop relevant data and science to support the OCP renewal process
- Provide mapping that contributes to SCRD Natural Assets Inventory

Also supports:

- Sunshine Coast Regional Growth Strategy and the Community Climate Action Plan
- Green By-laws Report
- Shishalh land use planning

Ecosystems at Risk: why it matters



- **Vital Services:** water, urban cooling, flood control, air purification, carbon storage, and human wellness.
- **Growing Pressures:** of urban development and timber demand.
- **Climate Change Impact:** compounds stress reducing ecosystem ability to support communities.
- **Threats to Communities:** risk of wildfires, drought, floods, landslides, sea level rise, and extreme events like heat domes.

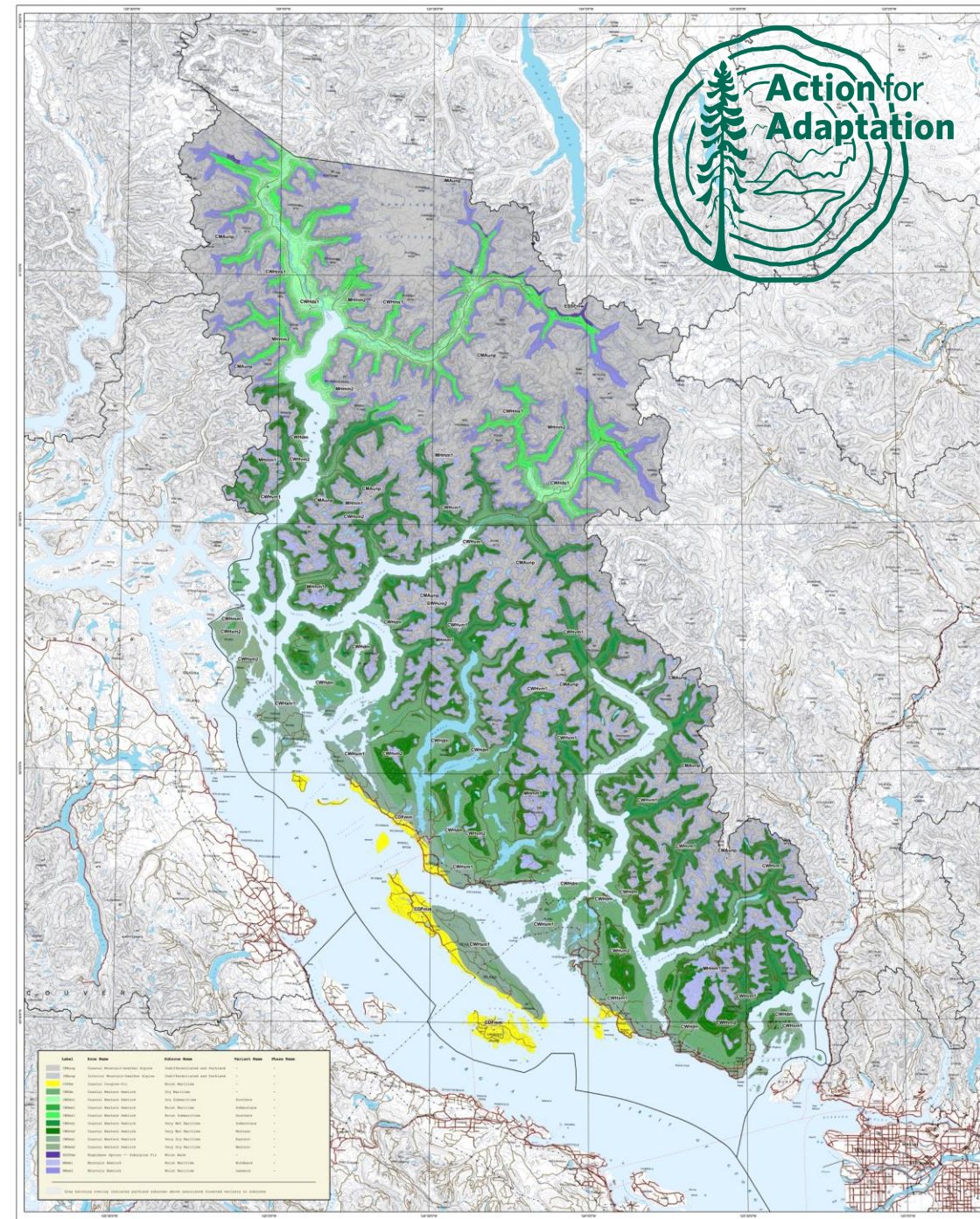
Coastal Douglas-fir Moist Maritime Biogeoclimatic subzone (CDFmm):

Coastal Douglas-fir Partnership's (CDFCP) focus:

- Dry coastal forest around the Salish sea (also meadows, wetlands, estuaries etc.)
- Part of BC's smallest, most at risk ecological zone (CDFmm).

Why CDFmm Matters:

- **Biodiversity Hotspot:** Highest number of species & ecosystems at risk in BC
- **Carbon Rich:** CDF forests store large amounts of carbon.
- **High Pressure:** ~75% of BC's population lives here; top threat is land conversion
- **Underprotected:** Only ~11% protected; 98% of 45 ecosystems in CDFmm at risk of being lost
- **Mostly Private Land:** ~65% privately owned (2025)
- **Old Growth Loss:** <1% of forests over 250 years remain



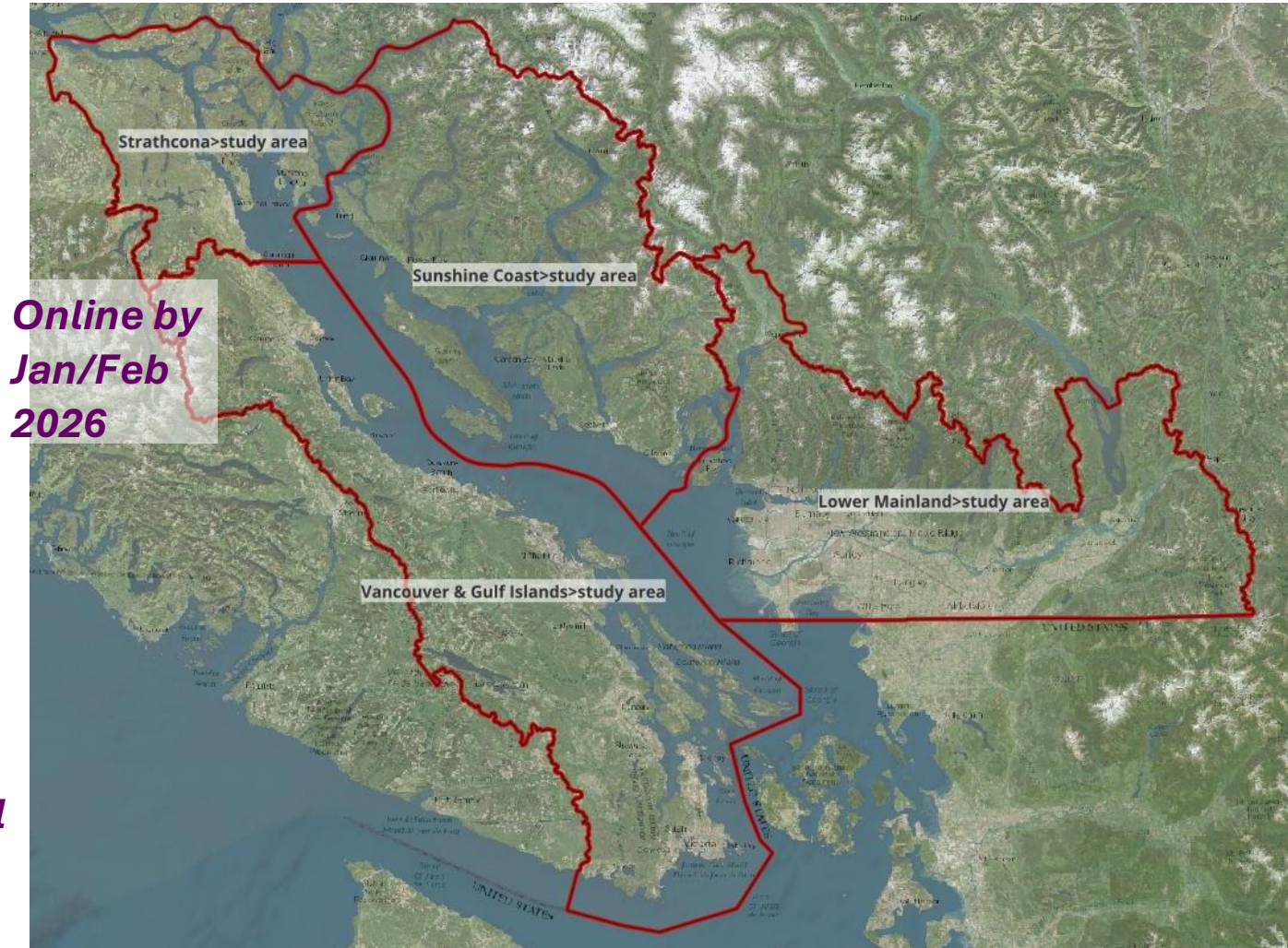
South Coast Biodiversity Atlas

• Under Construction:

- Land Cover (LiDAR & satellite; 3m)
- Forest Carbon (LiDAR & satellite; 15m)
- Tree Canopy (LiDAR & satellite; 15m)
- Sensitive Ecosystems
- Potential Ecosystems at Risk
- Climate Microrefugia
- Hydrologically Sensitive Areas

- Ecosystem Connectivity
- Species at Risk

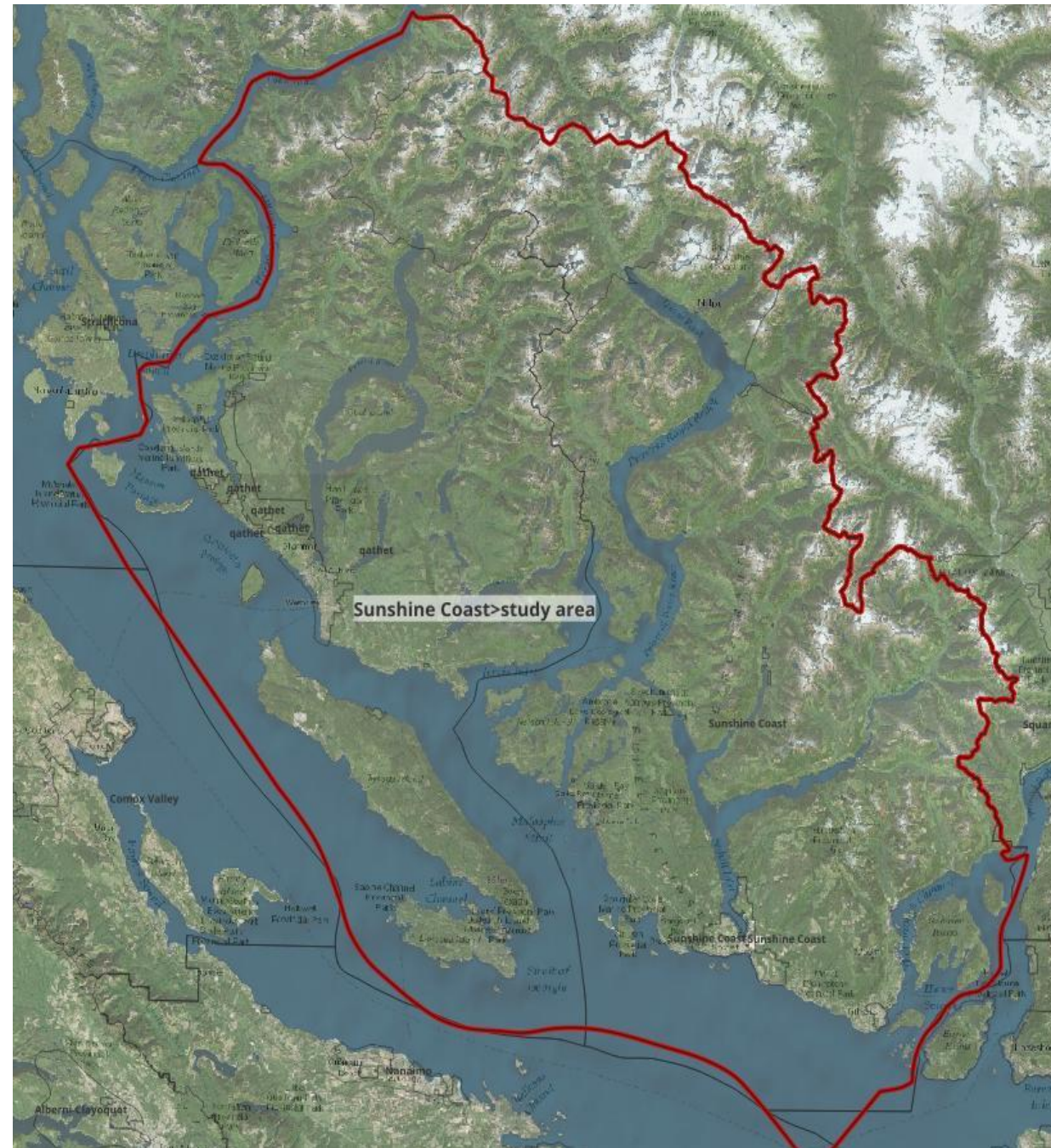
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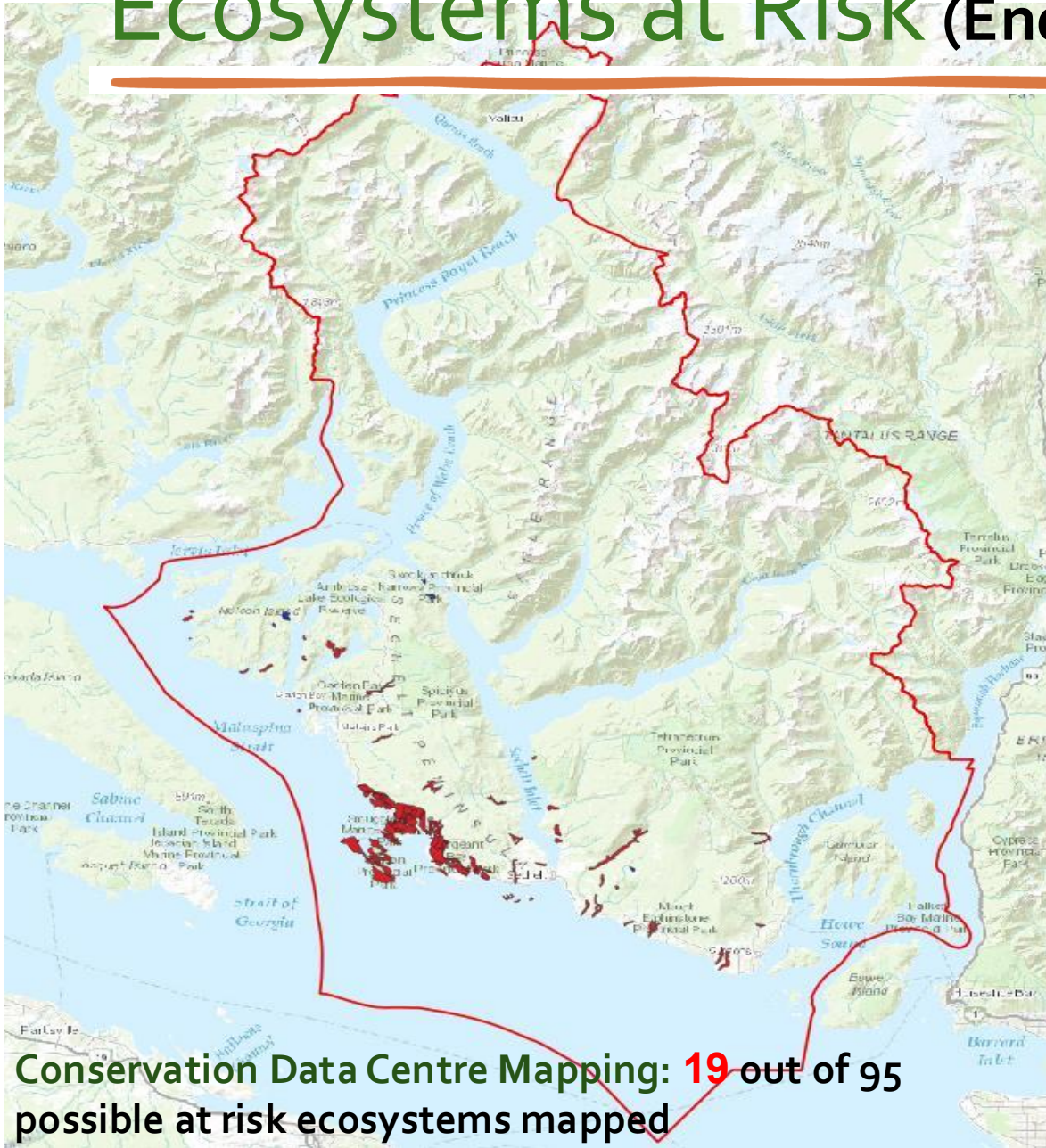


Sunshine Coast Pilot Mapping (2023-24)

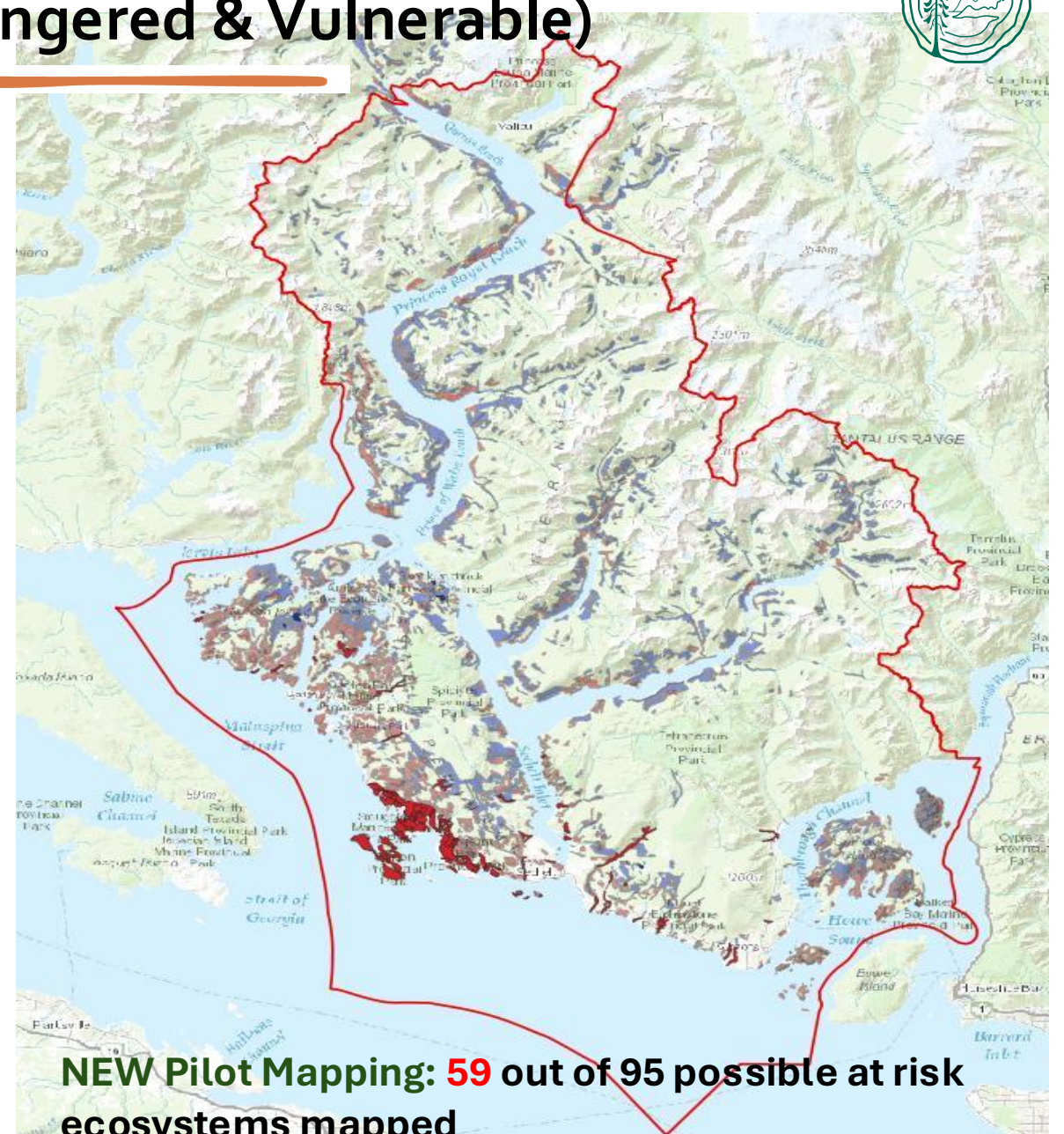
- *Pilot for Biodiversity Atlas*
- Used by Tla'amin First Nation for **forest resource planning.**
- Incorporated into SCRD **Natural Assets Inventory.**
- Collaborating with **BC Government** mapping teams.
- **Updated** version on Biodiversity Atlas by Jan/Feb 2026



Ecosystems at Risk (Endangered & Vulnerable)

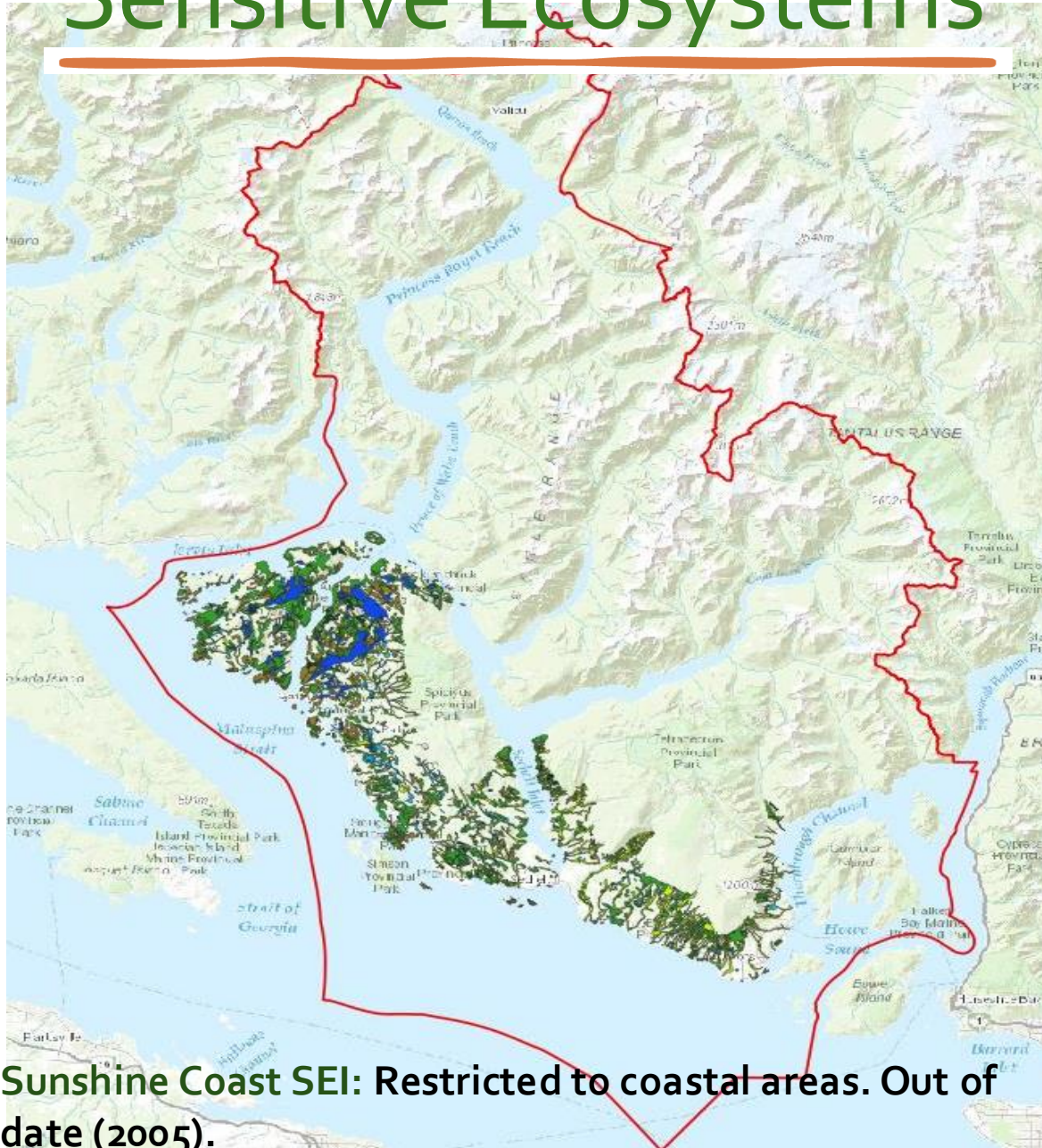


Conservation Data Centre Mapping: **19** out of 95 possible at risk ecosystems mapped

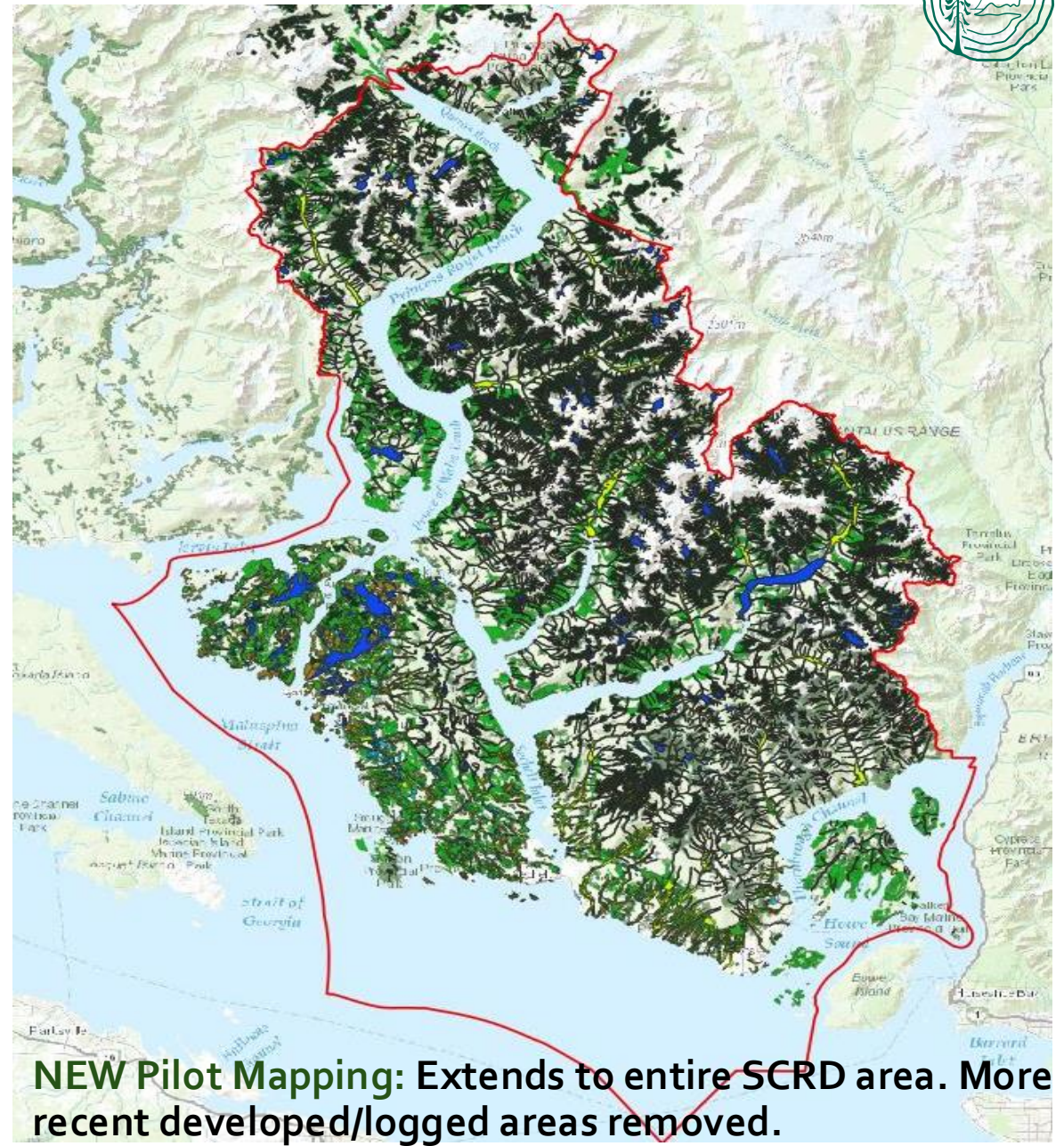


NEW Pilot Mapping: **59** out of 95 possible at risk ecosystems mapped

Sensitive Ecosystems



Sunshine Coast SEI: Restricted to coastal areas. Out of date (2005).



NEW Pilot Mapping: Extends to entire SCRD area. More recent developed/logged areas removed.

New website in development

Online by
Winter 2026



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Adaptation**

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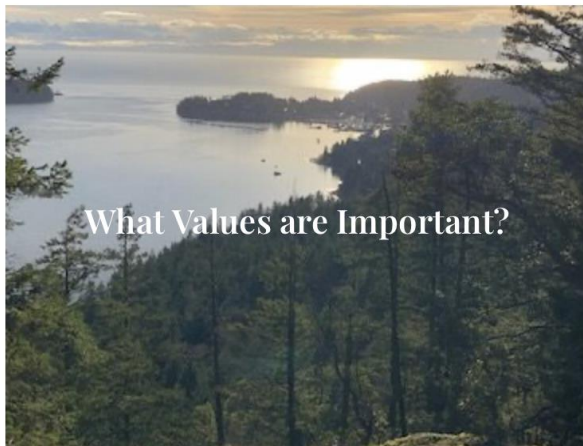
Contact Us

Local Government Policy Toolkit

This Local Government Policy Toolkit is a companion to the atlas, and together they are intended to help plan

- consider and understand how to use information derived from the atlas mapped layers; and
- holistically integrate the values of carbon sequestration, biodiversity, watershed integrity, and habitat, policy, and decision-making to yield nature-based solutions to climate mitigation and adaptation.

Online by Fall
2025



Thank You



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