



Finding Refuge

SES WILDLIFE CONNECTIVITY PROJECT

Contributions toward a regional biodiversity conservation strategy

Fall 2023





OUR MISSION

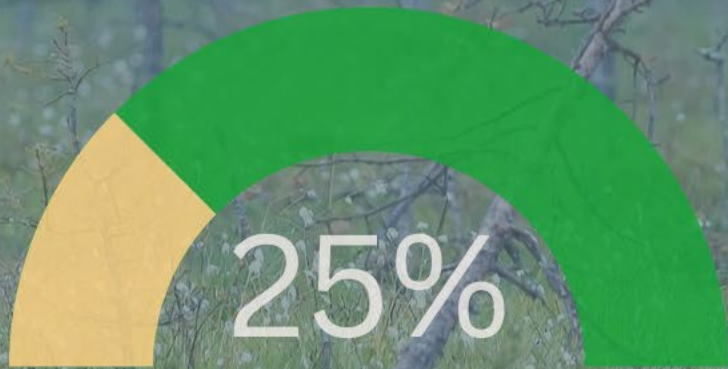
ENHANCE ECOSYSTEM RESILIENCE

Support land managers in safeguarding and restoring vulnerable terrestrial habitat and pathways of wildlife connectivity that are needed to increase the prospects of ecosystem resilience in the Átl'ka7tsem/Howe Sound UNESCO Biosphere & surrounding Sea-to-Sky regions of southwest British Columbia.



CONTEXT & MOTIVATION

ENHANCING THE RESILIENCE OF VULNERABLE HABITAT & PATHWAYS OF WILDLIFE CONNECTIVITY



Proportion of wildlife habitat affected by human disturbance
BC Cumulative Effects (2021)



Think Global. Act Local.

Our work is focused on leveraging available knowledge and emerging new methods of dynamic landscape modelling to support adaptive land management and the development of regional conservation strategies that align with broader goals and targets established by Canada's 2030 Biodiversity Conservation Strategy.



Finding Solutions Across Geographic Scales

Biodiversity Assessment
Sea-to-Sky Region of Cascadia

Biodiversity Conservation Planning
Átl'ka7tsem/Howe Sound UNESCO Biosphere Region



Toward a Regional Biodiversity Collaborative



Goals & Objectives



Promote Shared Understanding

Increase awareness and understanding about the causes of biodiversity loss in our region - and the actions needed to safeguard both vulnerable habitat and pathways of wildlife connectivity into the future.



Enhance Wildlife Connectivity

Identify the best available routes to maintain movement for wildlife and ecological processes through an integrated network of connectivity pathways that increase the prospects of habitat resilience for the broadest possible range of native species.



Empower Conservation Planning

Develop a framework of indicators that identify both the opportunities and benefits of implementing measures that protect, enhance and/or restore sensitive ecosystems and vulnerable wildlife habitat across local and regional scales of land governance.





BIODIVERSITY ASSESSMENT FRAMEWORK

ALIGNED WITH IUCN TECHNICAL GUIDELINES



An Introduction to the IUCN Red List of Ecosystems:

The Categories and Criteria for Assessing Risks to Ecosystems

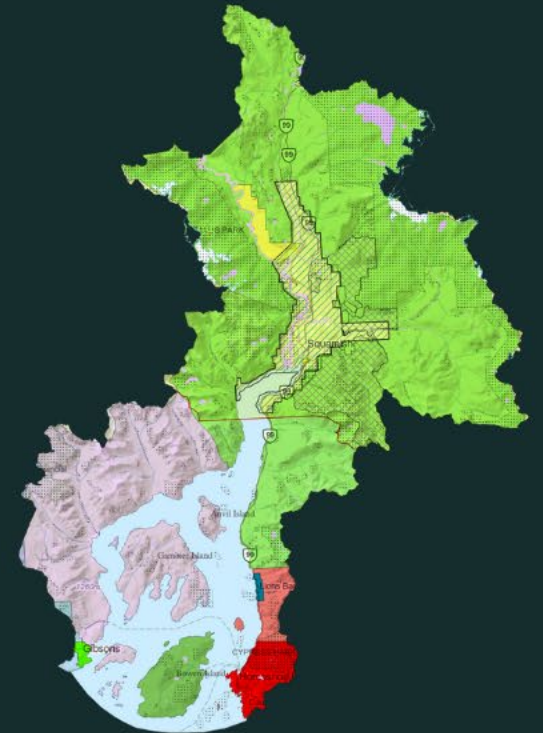


Proposed Assessment Framework



performance measures (indicators) that track progress toward conservation goals & targets

Biodiversity Conservation Strategy



BIODIVERSITY ASSESSMENT FRAMEWORK

ALIGNED WITH IUCN TECHNICAL GUIDELINES

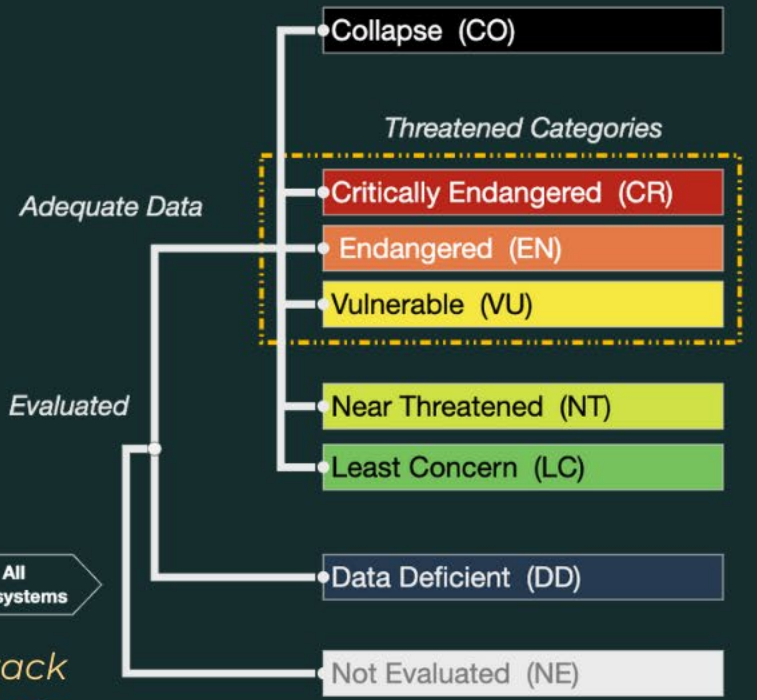


Integrating field-based knowledge with earth observation information



performance measures (indicators) that track progress toward conservation goals & targets

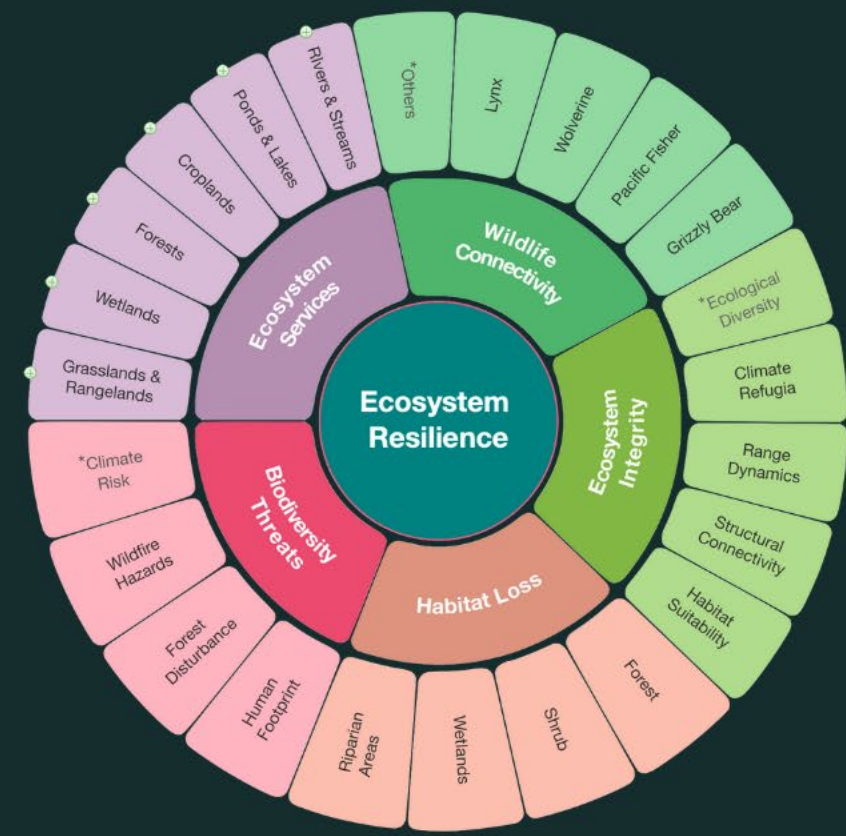
IUCN Red List of Ecosystems





BASELINE ASSESSMENT

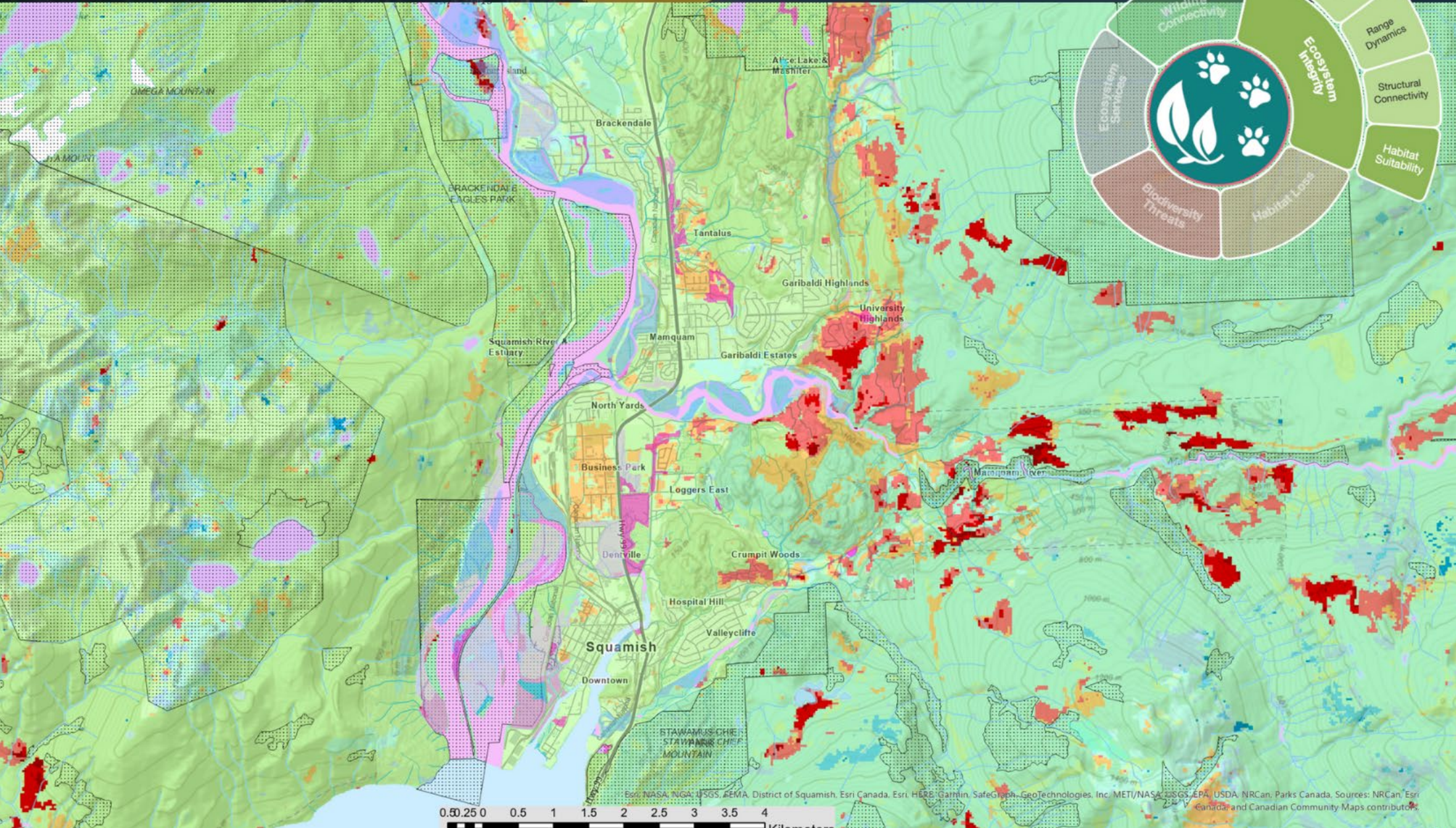
PRELIMINARY RESULTS



Ecosystem Integrity: Habitat Suitability (1990-2020)

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- Legend**
- TerrAdapt Land Cover**
- HabSuit_ave**
- Major Decrease
 - Significant Decrease
 - Moderate Decrease
 - Minor Decrease
 - Relatively Stable
 - Minor Increase
 - Moderate Increase
 - Significant Increase
 - Major Increase
- CPCAD_Protected Areas**



ESRI, NASA, NGA, USGS, FEMA, District of Squamish, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc. METI/NASA, USGS, EPA, USDA, NRCan, Parks Canada. Sources: NRCan, Esri Canada and Canadian Community Maps contributors.



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THANK-YOU

SES WILDLIFE CONNECTIVITY PROJECT TEAM



Squamish
Environment
Society



ÁTL'KA7TSEM
HOWE SOUND
BIOSPHERE REGION