

A low-angle photograph of a forest with sunlight filtering through the trees. The sun is visible in the lower center, creating a bright lens flare. The tree trunks are dark and textured, and the leaves are a vibrant green. The overall scene is bright and natural.

# Biodiversity Conservation Strategy

## Online Open House #2

District of Saanich

May 16, 2024

Diamond Head Consulting: Alison Kwan

# What is Biodiversity?



The variety and variability of life on Earth.

- Encompasses every living thing on the planet
- Microorganisms to plants, animals, fungi, and even entire ecosystems
- Interpreted as the number of species that inhabit an area and their abundance
- Includes genetic diversity
- Indicator of ecosystem health and integrity





# Project Context



# Project Scope



	Task	Key deliverables
State of Biodiversity	Ecological Inventory and Habitat Mapping	<ul style="list-style-type: none"> <li>• Collect and combine existing GIS layers</li> <li>• Complete LiDAR analysis for tree canopy &amp; watercourses</li> <li>• Field assessment of natural areas</li> </ul>
	Biodiversity Assessment & Reporting	<ul style="list-style-type: none"> <li>• Ecological inventory summary, maps</li> <li>• Biodiversity ranking</li> <li>• Threats to biodiversity</li> <li>• State of Biodiversity Report</li> <li>• State of Biodiversity Summary Report</li> </ul>
Biodiversity Conservation Strategy	Engaging the Community and Stakeholders	<ul style="list-style-type: none"> <li>• Online mapping tool (StoryMap)</li> <li>• Consult with the RSTC at regular intervals (ongoing)</li> <li>• WSÁNEĆ workshops (ongoing)</li> <li>• Public survey</li> <li>• Open houses/workshops (public, staff, &amp; stakeholders)</li> <li>• Council/Committee presentations</li> </ul>
	Develop a Biodiversity Conservation Strategy	<ul style="list-style-type: none"> <li>• Review existing policy and legislation, gap analysis, municipal context</li> <li>• Identify hubs and corridors for a habitat network</li> <li>• Develop recommendations for policy, monitoring, education, and stewardship</li> <li>• Draft Biodiversity Conservation Strategy</li> <li>• Finalized Strategy</li> </ul>

# Work Completed To Date



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State of Biodiversity	Ecological Inventory and Habitat Mapping	<ul style="list-style-type: none"> <li>✓ Collect and combine existing GIS layers</li> <li>✓ Complete LiDAR analysis for tree canopy &amp; watercourses</li> <li>✓ Field assessment of natural areas</li> </ul>
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# State of Biodiversity

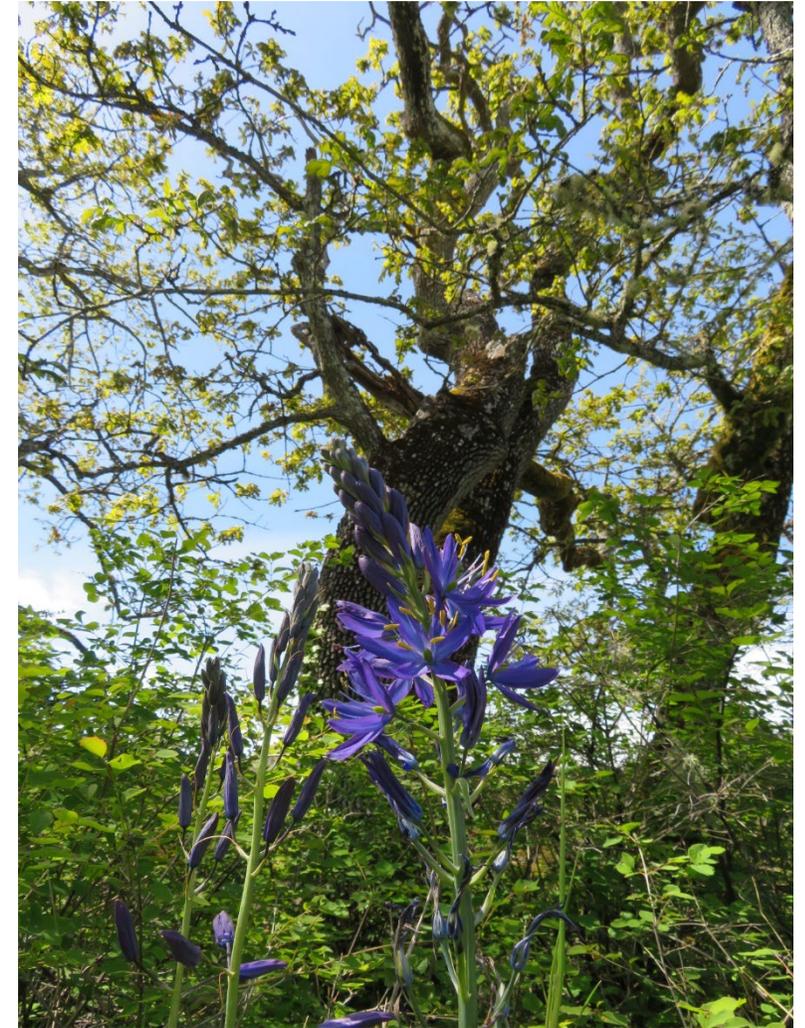


# State of Biodiversity Report



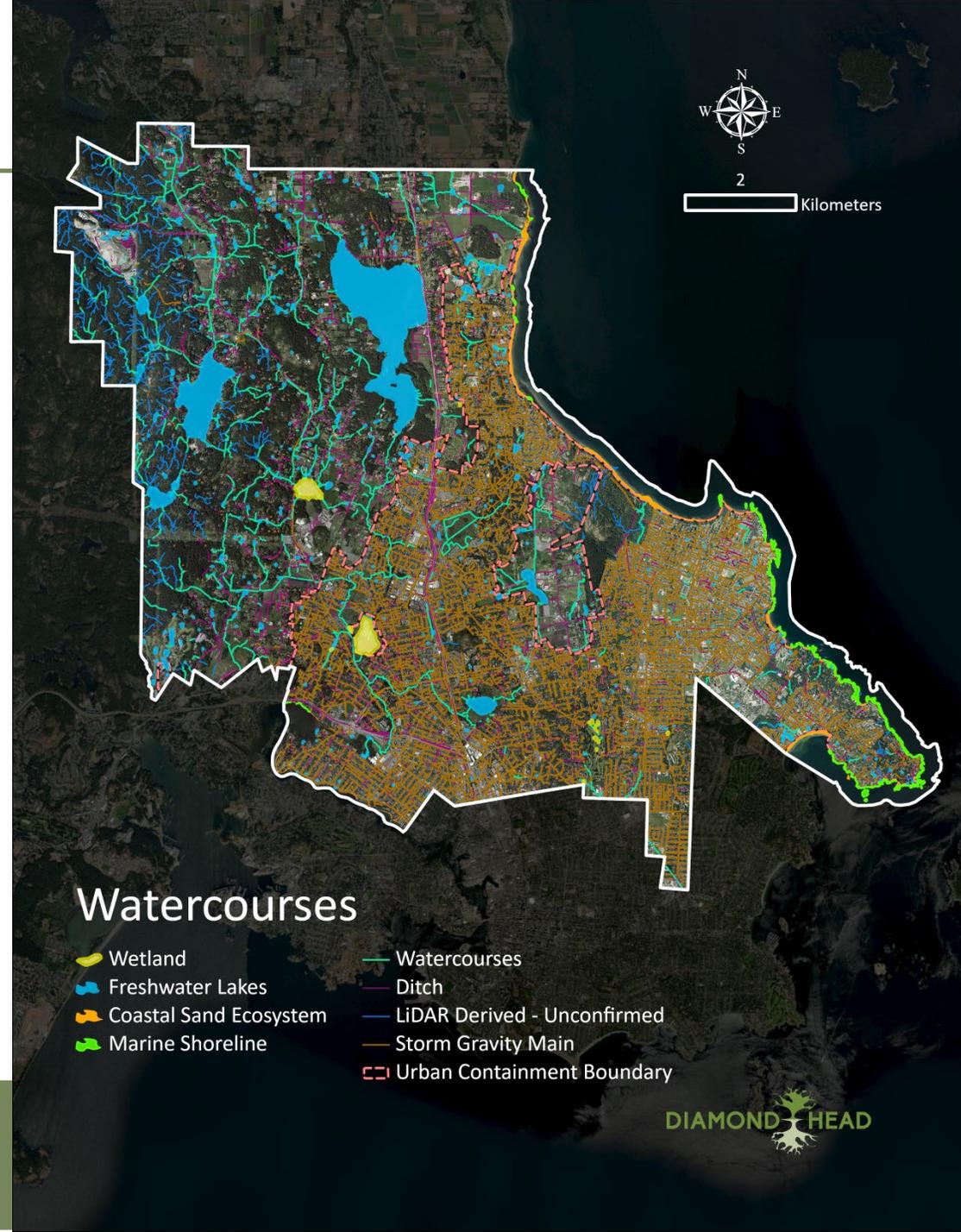
The purpose of the State of Biodiversity report was to:

- Develop a baseline inventory of biodiversity in the District
  - Collect and combine existing district wide spatial layers
  - Ground truth a select proportion of sites

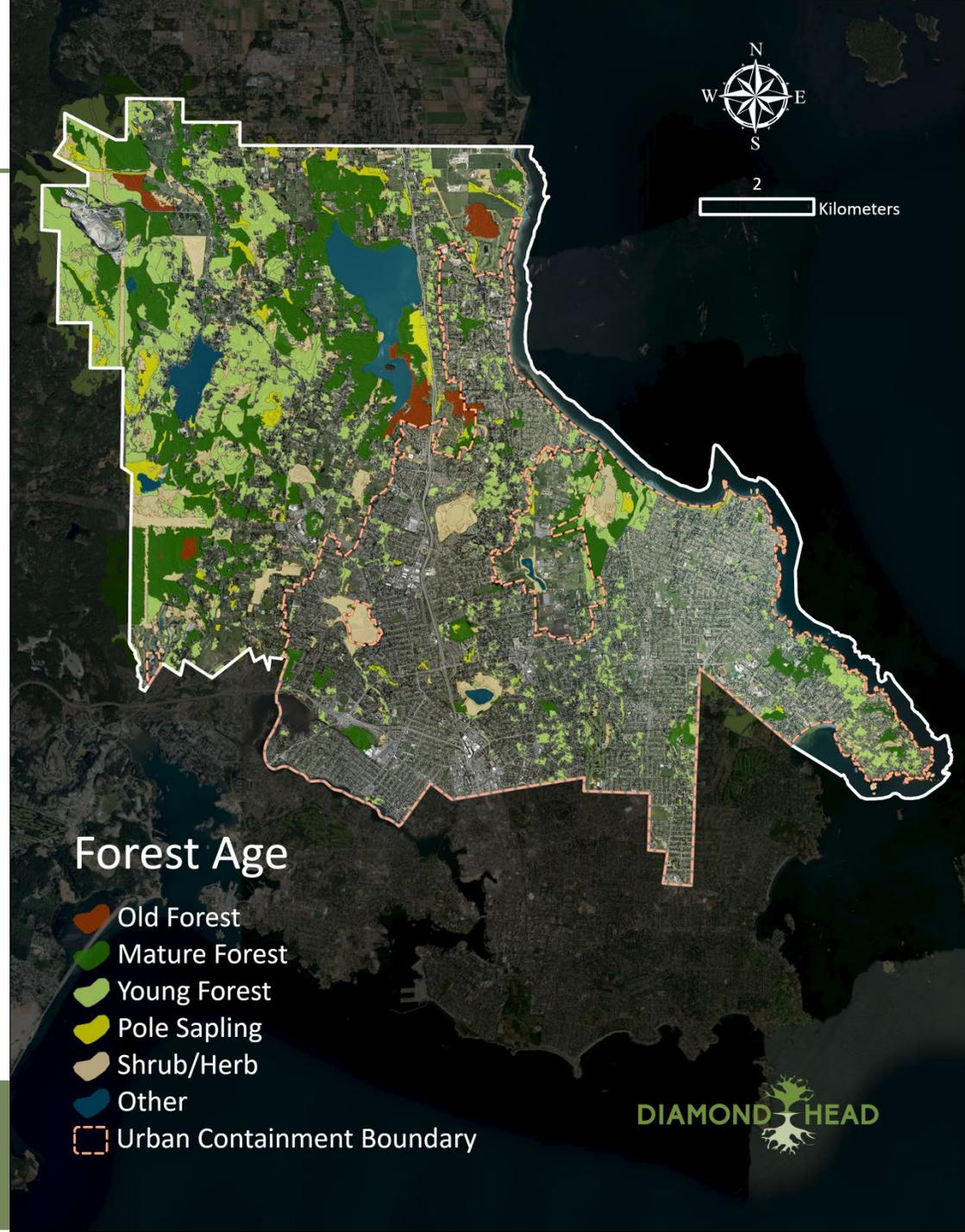
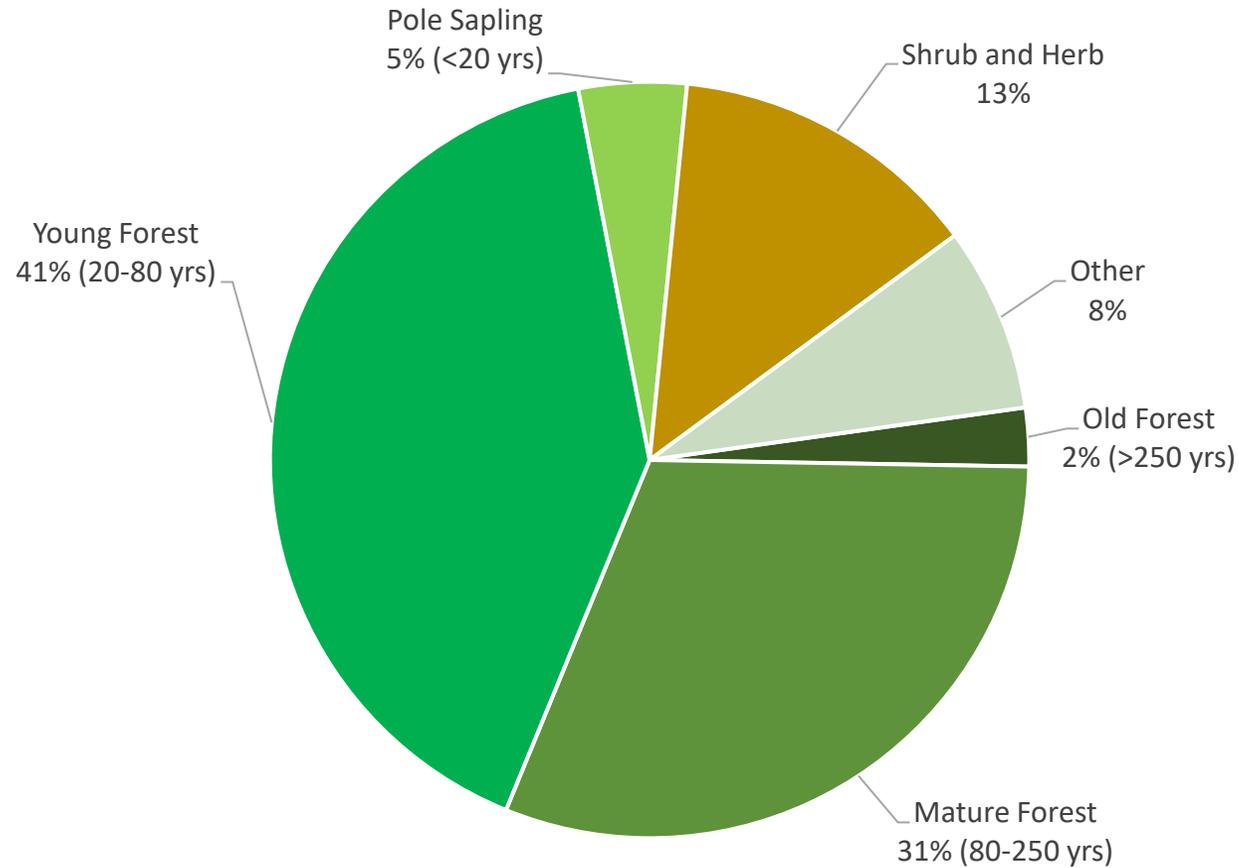


# Aquatic Systems

- Lakes, ponds, reservoirs (350 ha)
- Wetlands (31 ha)
- Watercourses (>310 km verified, 93 km unverified)
- Marine shoreline (47 km)

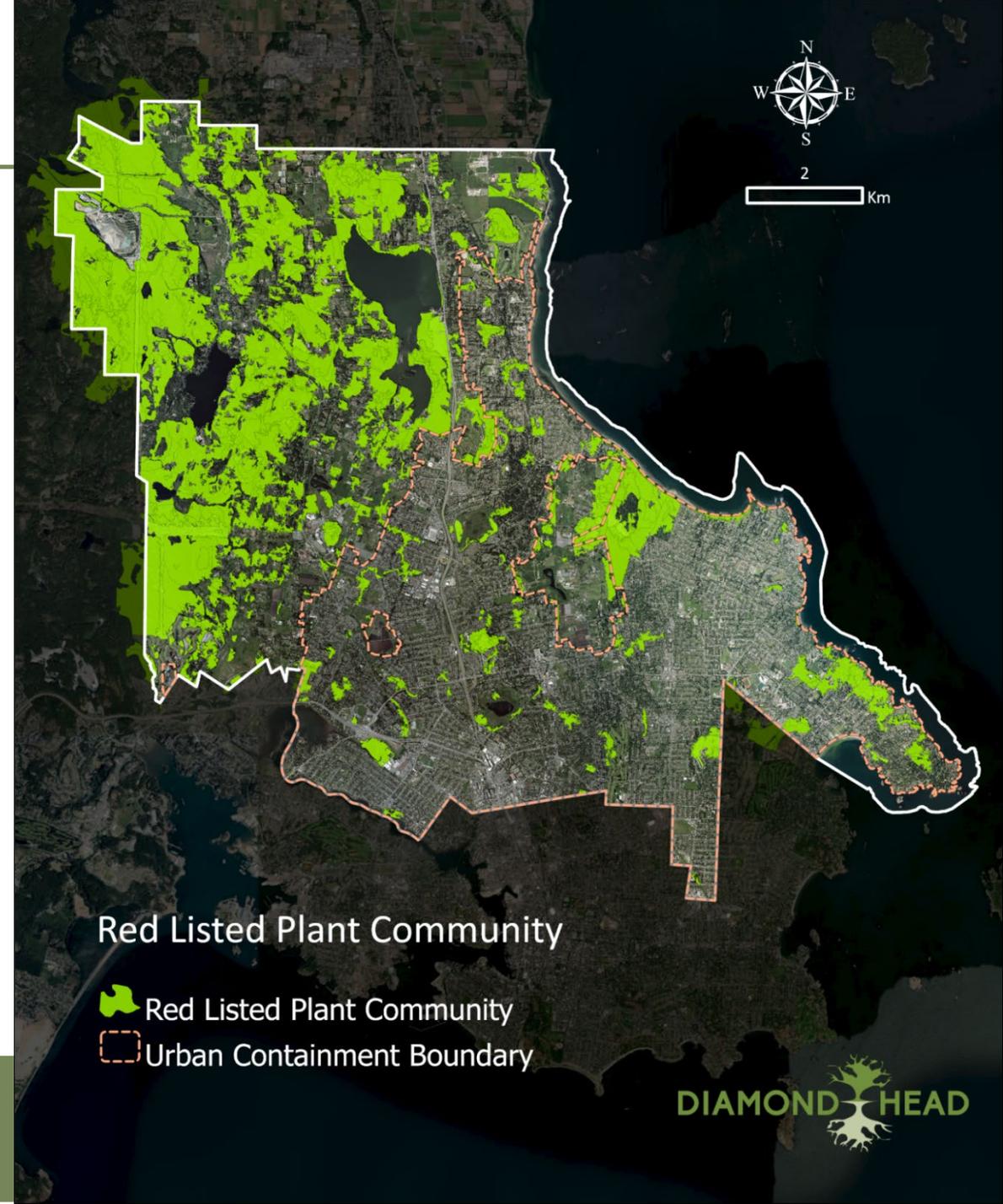


# Terrestrial Systems



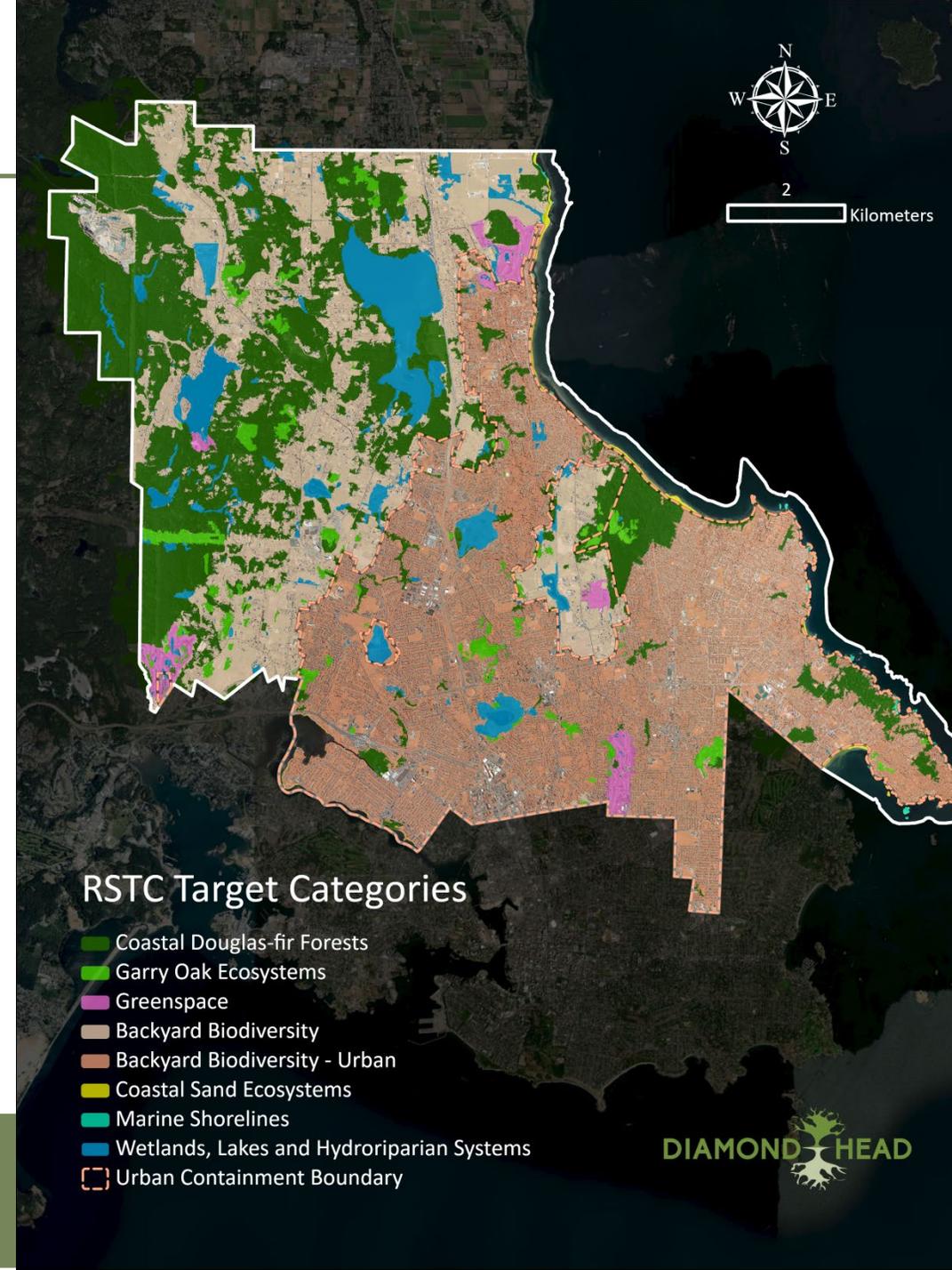
# Species & Ecosystems at Risk

- Coastal Douglas-Fir Forests
- Garry Oak ecosystems
- Species at risk (SAR)
- Migratory Birds



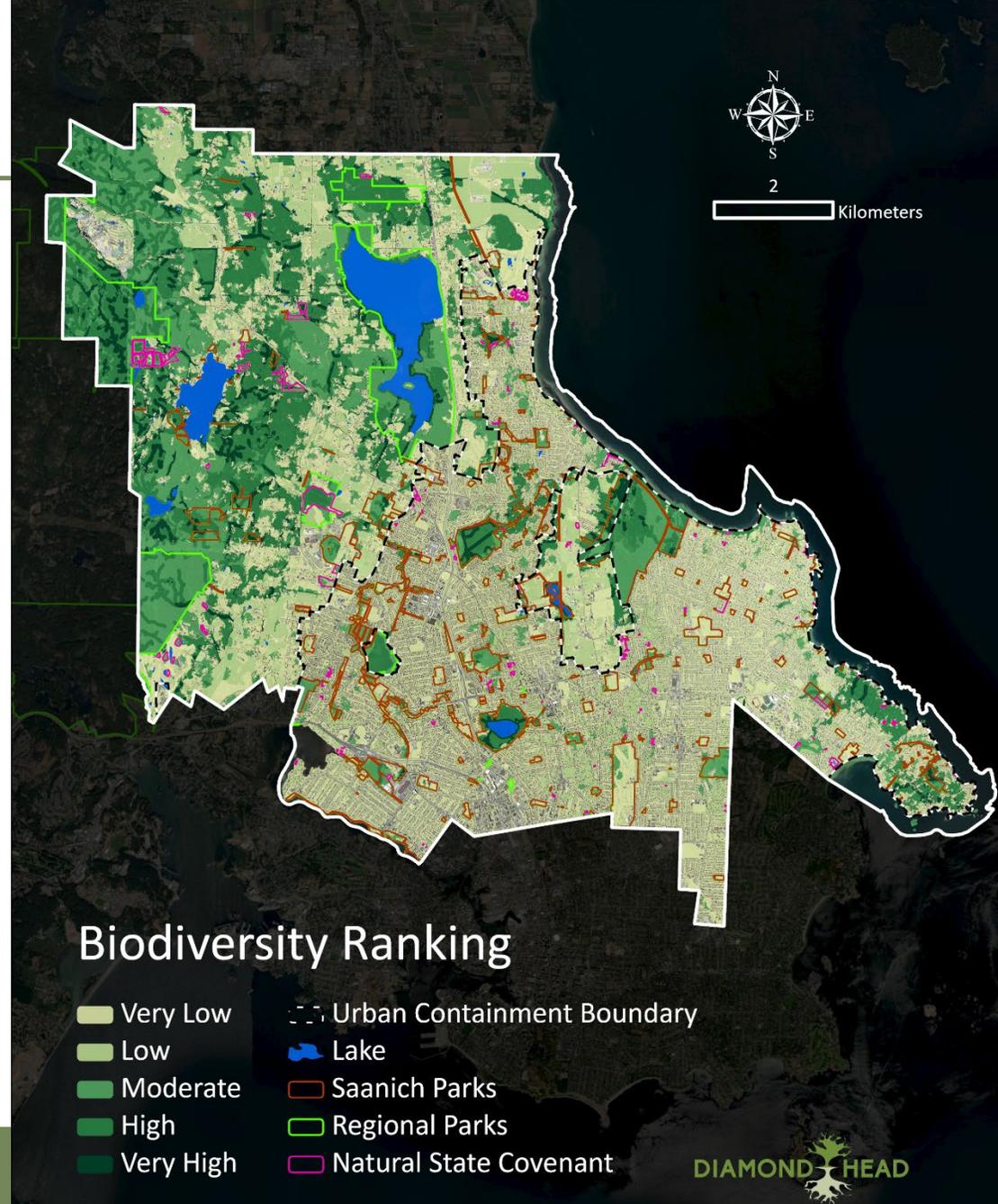
# Biodiversity Target Categories

- Coastal Douglas-Fir
- Garry Oak
- Greenspace
- Backyard Biodiversity – Rural + Urban
- Coastal Sand
- Marine Shorelines
- Wetlands, Lakes and Streams



# Biodiversity Ranking

- Urban Containment Boundary's effect on biodiversity
- Large, intact connected CDF forests
- Riparian areas
- Garry Oak ecosystems
- Protected areas includes:
  - Municipal parks
  - Regional Parks
  - Private-land covenants
- Protected from development



An aerial photograph showing a dense forest of green trees in the foreground. In the middle ground, a town with various buildings and houses is visible. Beyond the town, there is a large body of water, possibly a lake or bay, and distant mountains under a bright blue sky with scattered white clouds. The text "Draft Biodiversity Conservation Strategy" is overlaid in white on the lower part of the image.

# Draft Biodiversity Conservation Strategy

# Biodiversity Conservation Strategy



The draft Strategy provides a strategic framework to help protect and enhance biodiversity:

- Current and Historical Context
- Future Context
- Biodiversity Habitat Network
- Actions to Enhance and Protect Biodiversity in Saanich
- Strategy Implementation
- Assessing and Monitoring Progress

# Proposed Vision

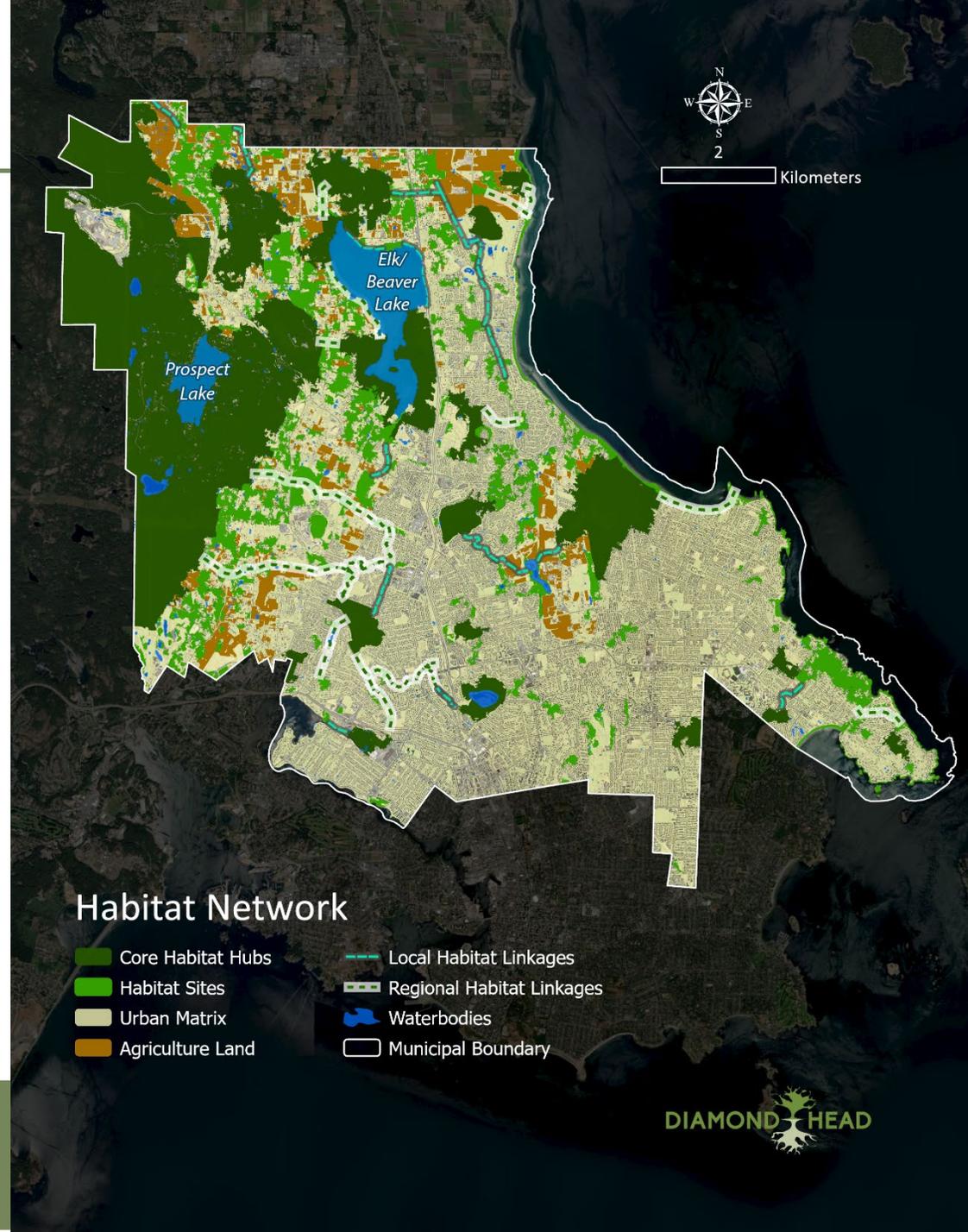
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*“Saanich is a resilient community that values, protects, connects, and restores sensitive ecosystems, natural habitats, and biodiversity”*



# Biodiversity Habitat Network

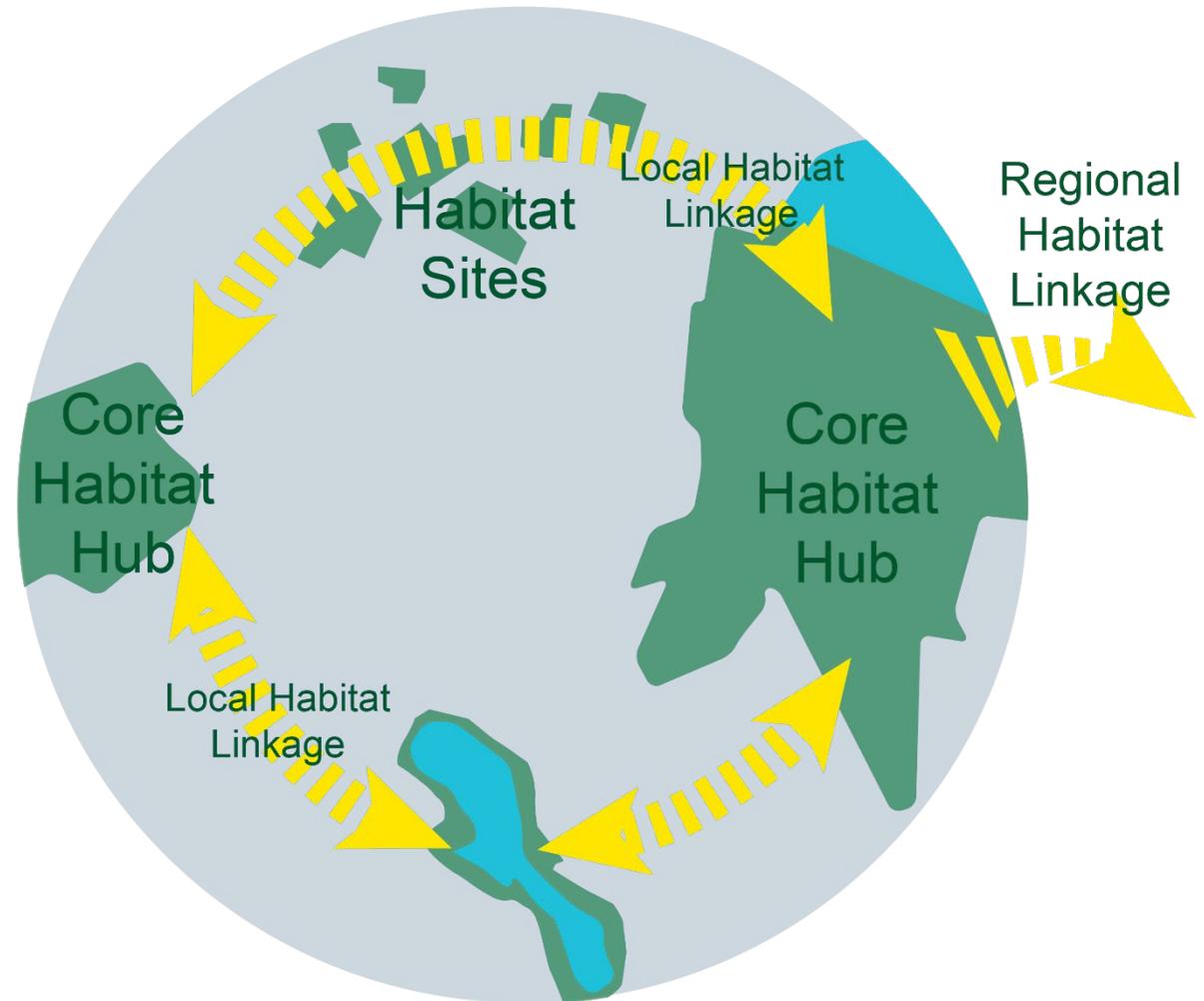
- Identifies areas with high biodiversity conservation value
- Four main components
  - Core Habitat Hubs
  - Habitat Sites
  - Regional Habitat Linkages
  - Local Habitat Linkages
- Two supporting components
  - Urban Matrix/Backyard Biodiversity
  - Agricultural Land (both zoned and ALR)
- Used for informational purposes



# Why Connectivity?

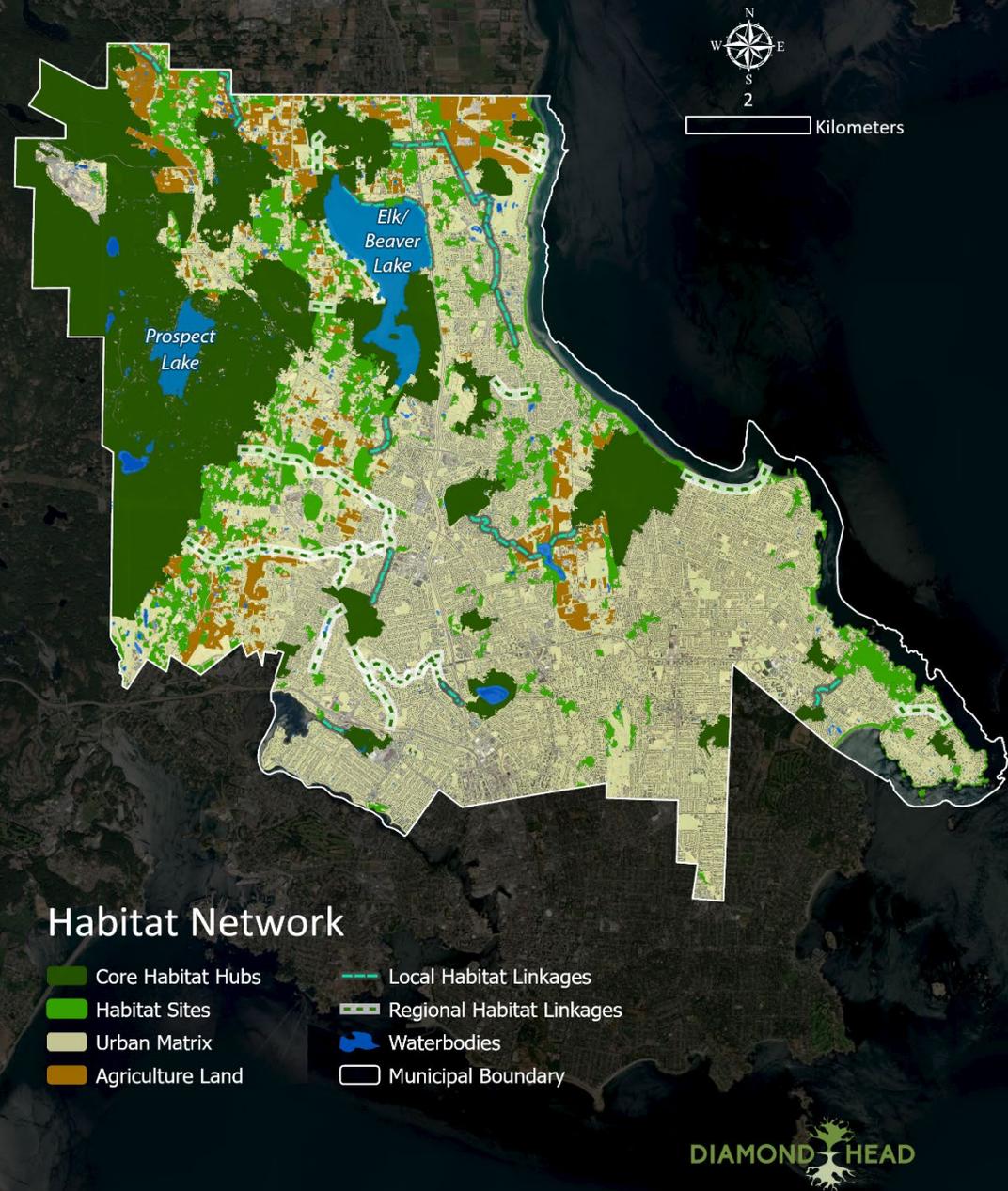


- Core habitat hubs provide interior refuge areas
- Habitat sites to support species more tolerant of human disturbances
- Linkages to facilitate the movement of species between patches



# How to use the Network?

- Some examples of how it can be used:
  - Prioritize areas for implementing conservation actions
  - Establish monitoring programs to track success of implementing the Strategy
  - Inform future land use planning
  - Coordinate with developers within or adjacent to the network to increase density and protect more natural area
  - Develop an EDPA to protect biodiverse and environmentally sensitive areas



# Strategic Themes



Theme 1 – Knowledge and Understanding

Theme 2 – Connecting Ecosystems

Theme 3 – Sustainable Development

Theme 4 – Restoring Ecosystems

Theme 5 – Enhanced Public Stewardship

Theme 6 – Community Engagement

Theme 7 – Sustainable Agriculture



# Biodiversity Attributes



Biodiversity Attribute	RSTC Target Categories	Icon	Description
Terrestrial Ecosystems	Coastal Douglas-fir Forests		Intact natural terrestrial ecosystems including the at-risk Coastal Douglas-fir forests.
Marine Shorelines	Marine Shorelines		Intertidal areas that are influenced by the ocean, ranging from eelgrass communities and mud flats up to brackish wetlands.
Coastal Sand Ecosystems	Coastal Sand Ecosystems		Foreshore beaches and sand dunes.
Freshwater Wetlands, Lakes, and Hydroriparian Systems	Wetlands, Lakes and Hydroriparian Systems		Water quality and habitat to support aquatic species.
Garry Oak Ecosystems	Garry Oak Ecosystems		Plant communities supporting Garry Oak trees and native herbaceous understory communities.
Urban Matrix & Backyard Biodiversity	Greenspace Backyard Biodiversity Backyard Biodiversity - Urban		Naturalized backyards, streetscapes, public rights of way, manicured parks.
Culturally significant areas, plant and/or animal communities	N/A		Relating to Indigenous peoples and culturally significant species.
Wildlife	N/A		Native wildlife including bats, mammals, rodents, reptiles, amphibians, birds, invertebrates (such as pollinators), and species at risk or of conservation concern

# Top Priority Actions



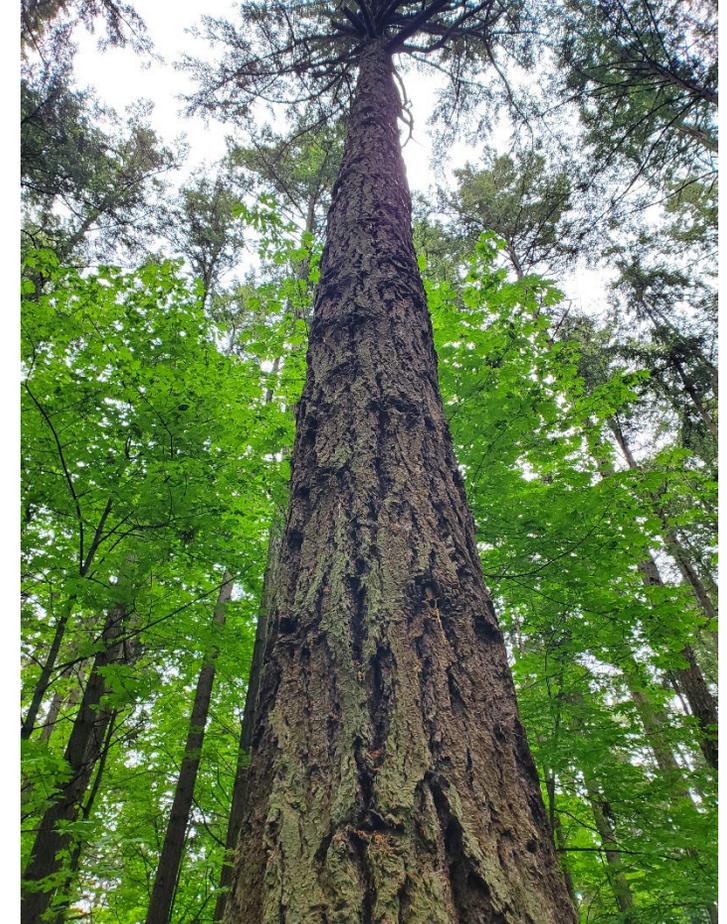
- Update ecosystem data and make it publicly available
- Acquire and protect priority lands within the Biodiversity Habitat Network
- Identify and prioritize areas in the network for restoration and enhancement
- Implement development permit areas, or zones, for the protection of marine environment and natural environment
- Develop park plans to help manage natural area parks in Saanich
- Review and update the Invasive Species Management Strategy



# Top Priority Actions



- Collaborate with Indigenous communities and incorporate their values
- Continue to protect and restore Garry Oak ecosystems on public lands
- Prioritize, protect, and restore freshwater habitats in natural parks.
- Develop incentive programs to support the protection of natural features through development
- Promote and expand biodiversity stewardship and education programs
- Identify and remove barriers to fish migration.
- Complete a review of existing environmental and natural state covenants.



# Assessing and Monitoring



- Performance Objectives and Performance Measures were established for each Theme
  - Metrics to measure the health and resilience of natural ecosystems
  - To inform decision-making and adaptive management as the Strategy is implemented



# Next Steps



- Continue with public engagement
  - Hello Saanich website and questionnaire
- Review and incorporate public feedback
- Finalize the Strategy



A low-angle photograph of a forest with tall trees and sunlight filtering through the canopy. The sun is visible in the lower center, creating a bright lens flare. The trees are tall and thin, with dense green foliage. The sky is visible through the canopy, showing a mix of blue and white. The overall scene is bright and natural.

Thank you!