The Regional Natural Infrastructure Network Opportunity Map Methodology and User Guide

Metro Vancouver has worked collaboratively with staff from member jurisdictions, First Nations, and other agencies to create the Regional Natural Infrastructure Network (RNIN) Opportunity Map. Metro Vancouver has prepared this user guide to answer common questions and support consistent interpretation of the map.

What is the RNIN Opportunity Map?

The map includes several spatial layers that support collective efforts to protect, connect, and restore natural green spaces across the region. For example, planners, developers, and decision makers may use the map as a tool to inform land use and conservation decisions.

The RNIN patches and corridors layers are not regulatory nor land use designations, and they include some lands that are planned for development. However, even as our region continues to grow, there may be opportunities to protect, connect, and restore some of these natural areas. Refer to "What are the RNIN patches?" and "What are the RNIN corridors?" for more information below.

How was the RNIN identified?

The mapping process was guided by a consultant with ecological and spatial analysis expertise and an advisory group of experts from local First Nations, conservation organizations, academic institutions, and member jurisdictions. Drafts of the map were also reviewed by local and regional planners, environmental managers, stormwater engineers, and parks staff at key stages between February 2023 and September 2025.

What is in the RNIN?

The RNIN highlights an existing network of natural habitat patches and corridors that spans across the region's land base.

What are the RNIN patches?

The patches include:

- Sensitive ecosystems, modified ecosystems, and small young forests from the 2020 Sensitive Ecosystem Inventory (SEI)[1]

[1] Metro Vancouver's Sensitive Ecosystem Inventory includes ecologically significant and relatively unmodified sensitive ecosystems such as wetlands, old forests (>250 years old), mature forests (80 – 250 years old), woodlands, riparian areas, estuaries, intertidal areas, and woodlands), as well as some human-modified ecosystems with high ecological value such as old fields and young forests (30 – 80 years old). Small young forests (0.5 ha to 5 ha) were also included as RNIN Patches. View open data

- Forest classes from the 2020 Land Cover Classification[2] larger than 0.5 ha and within 30 m from SEI polygons; and
- Golf courses with over 25 per cent tree canopy cover[3].

Ecosystem connectivity importance[4] was also considered in the identification of patches. Patches were classified as major (over 10 ha and over 0.25 ha refuge area[5]) or minor (0.5 to 10 ha). Major patches are the most important, while minor patches often provide crucial habitat connectivity between major patches, particularly within the more developed parts of the region.

What are the RNIN corridors?

The corridors represent the most effective paths for wildlife species to move between major habitat patches. Corridors were identified using modelling that considered the difficulty of movement and barriers to movement through areas (such as dense neighbourhoods, airports, and industrial lands), as well as professional judgement. Roads were not included as barriers, due to the feasibility of installing passage improvements, such subsurface culverts and diversions. Corridors have been classified as either "habitat" or "foreshore" corridors based on location.

What is not in the RNIN?

The RNIN is intended to capture regionally significant natural habitat areas and corridors, so it does not include all "green" areas. For example, at present the following are **not included**:

- Sports fields
- Golf courses with less than 25 per cent tree canopy cover
- Actively farmed land
- Green infrastructure smaller than 0.5 ha (e.g., rain gardens, green roofs, bioswales, and tree-lined streets)

How often will the map be updated?

The RNIN Opportunity Map shows a snapshot in time. It identifies opportunities for protection, but some losses are also expected due to planned greenfield development. The map layers will need updating periodically and Metro Vancouver's plan is to review the layers after the foundational datasets[1,2] have been updated in 2028.

If you encounter errors in the RNIN Opportunity Map, please email RNIN@metrovancouver.org.

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[2] Metro Vancouver's Land Cover Classification dataset is a contiguous raster layer of broad biophysical classes based on 5 m resolution multi-spectral satellite imagery and full feature LiDAR (where available). Classes include coniferous forest, deciduous forest, natural grass/herb/shrub, modified grass/herb, buildings, and paved areas. View open data

[3] Regional Tree Canopy Cover and Impervious Surface dataset. View open data

[4] See Regional Ecosystem Connectivity Evaluation.

[5] Habitat over 100 m from urban edges.

RNIN Opportunity Map User Guide

In addition to the patches and corridors layers, the RNIN Opportunity Map has several supplementary layers to help users identify and prioritize areas for protection and/or restoration. All layers are current as of July 2025, with exceptions noted. The layers can be switched on or off and the order can be changed.

RNIN Opportunity Map Layers

Layer	Description
Metro Vancouver Member Jurisdiction Boundaries	This layer shows the administrative boundaries of the 23 Metro Vancouver member jurisdictions: Village of Anmore, Village of Belcarra, Bowen Island Municipality, City of Burnaby, City of Coquitlam, City of Delta, Electoral Area A, City of Langley, Township of Langley, Village of Lions Bay, City of Maple Ridge, City of New Westminster, City of North Vancouver, District of North Vancouver, City of Pitt Meadows, City of Port Coquitlam, City of Port Moody, City of Richmond, City of Surrey, scəwaθən məsteyəxʷ (Tsawwassen First Nation), City of Vancouver, District of West Vancouver, and City of White Rock.
Non-Treaty First Nations Reserve Boundaries	Metro Vancouver recognizes the shared territories of many Indigenous Peoples, including 10 local First Nations: q̓iċəy̓ (Katzie), q̓ʷɑːn̓ƛ̓əṅ (Kwantlen), kʷikʷəƛ̓əm (Kwikwetlem), máthxwi (Matsqui), xʷməθkʷəy̓əm (Musqueam), qiqéyt (Qayqayt), Semiahmoo, Sḵwx̱wú7mesh Úxwumixw (Squamish), scəẇaθən məsteyəxʷ (Tsawwassen), and səlilwətaɬ (Tsleil-Waututh). Generated by the federal government, this layer shows the boundaries of non-treaty First Nations reserves within the Metro Vancouver region.
Protected RNIN Patches	This layer displays patches that are legally protected (e.g., dedicated park, park reserve, wildlife management area, ecological conservancy area, or land with a conservation covenant) at present. Protected areas datasets were provided by member jurisdictions and merged with protected areas layers generated by regional, provincial, federal governments, and conservation groups[6]. However, it is important to recognize that some municipalities may have plans to develop sports fields or other recreation facilities on land dedicated as a park. In these cases, protection may not mean permanent protection in the current natural state.
RNIN Patches	This layer displays and classifies patches as ‘major’ and ‘minor’. Refer to the “What are the RNIN patches?” section above for more information.

[6] Regional Parks Boundaries | Metro Vancouver Open Data Portal
BC Parks, Ecological Reserves, and Protected Areas - Datasets - Data Catalogue
Canadian Protected and Conserved Areas Database - Canada.ca

RNIN Corridors	This layer displays the most effective paths for species movement between major RNIN patches and classifies these corridors as 'habitat' and 'foreshore'. Refer to the "What are the RNIN Corridors?" section above for more information.
Local Networks[i] • Hubs/Sites/Corridors • Corridors	These layers display the local ecological / green infrastructure / natural habitat networks adopted by member jurisdictions by year: • Surrey (2014) • Richmond (2015) • New Westminster (2022) • Pitt Meadows (2022) • North Vancouver City (2023) – page 33 of the Biodiversity and Natural Areas Report
Local Networks and the RNIN – Overlapping Areas	Areas of overlap between local networks and the RNIN are shown in this layer. In locations where the RNIN and local networks do not overlap, the RNIN may provide member jurisdictions with flexibility to retain ecosystem connectivity.
Metro 2050 Regional Land Use Designations	This layer displays *Metro 2050* Regional Land Use Designations (Agricultural, Conservation and Recreation, Employment, General Urban, Industrial, and Rural), which may be amended from time to time by Metro Vancouver Regional District Board resolution. This layer reflects land use designations as of July 2025. View information about regional land use designations in *Metro 2050*.
Regional Parks Boundaries	This layer displays, labels, and classifies boundaries of all Metro Vancouver Regional Parks, Ecological Conservancy Areas, and Regional Park Reserves.
Regional Greenway (Trail) Network	The Regional Greenway Network is a network of recreational multi-use pathways for cycling and walking that connects human residents to large parks, protected natural areas, and communities to support regional livability. The Regional Greenway Network layer is included in the RNIN Opportunity Map for users who may be seeking to "green the greenways".
Agricultural Land Reserve[i]	Maintained by the provincial government, the Agricultural Land Reserve (ALR) layer shows parcels of land that are deemed necessary to be maintained for agricultural use. Some RNIN patches fall within ALR lands, which are governed by additional legislation that prioritizes agricultural use and secures the right to farm. Old field RNIN patches within the ALR will likely be in flux (e.g., in and out of production), compared to RNIN areas outside the ALR.
Species and Ecosystems at Risk – Masked Secured –	Maintained by the BC Conservation Data Centre, this layer displays a generalized area that masks the precise locations of secured occurrences of species and ecosystems at risk. The occurrences may be secured due to

Publicly Available Occurrences[i]	the species or ecosystems being susceptible to persecution or harm, or for proprietary reasons. For more information, visit Species and Ecosystems at Risk - (Masked Secured Proprietary) Occurrences – CDC – Open Govenrnment Portal or email cdcdata@gov.bc.ca.
Species and Ecosystems at Risk – Publicly Available Occurrences[i]	Maintained by the BC Conservation Data Centre, this layer depicts publicly available, known locations of species and ecological communities at risk. 'Publicly Available Occurrences' and '(Extirpated and Historical) Publicly Available Occurrences' are both included. For more information, visit Species and Ecosystems at Risk - Publicly Available Occurrences - CDC - Open Government Portal or email cdcdata@gov.bc.ca.
Critical Habitat for Species at Risk[i]	Generated by the federal government, this regulatory layer displays the critical habitat areas for terrestrial species listed on Schedule 1 of the federal *Species at Risk Act*. This dataset includes only critical habitat for terrestrial species and species on which Environment and Climate Change Canada and Parks Canada Agency have taken the lead. For more information, visit the Critical Habitat for Species at Risk Dataset – Canada or email ec.planificationduretablissement-recoveryplanning.ec@canada.ca.
Ecosystem Connectivity Importance	Based on the results of the Regional Ecosystem Connectivity Evaluation, this layer rates ecosystems by their habitat connectivity importance from high to low for 11 groups of species (represented by the dark-eyed junco, savannah sparrow, pileated woodpecker, rufous hummingbird, blue heron, brown creeper, red-backed salamander, muskrat, long-toed salamander, Townsend's vole, and southern red-backed vole). This information can be helpful to prioritize protection efforts. Note that: • Protected areas were artificially assigned a low importance rating to ensure the unprotected areas would stand out. • This dataset was created in 2023, before updating the 'Protected RNIN Patches' layers.
Area Plans (points)[i]	This layer identifies locations within RNIN patches with future development plans, as approved by member jurisdiction councils. In these locations, RNIN patch and corridor loss may occur, although protection opportunities may also exist. Links to each area plan are provided for more information. This layer was compiled by Metro Vancouver using information from member jurisdiction websites in July 2025.