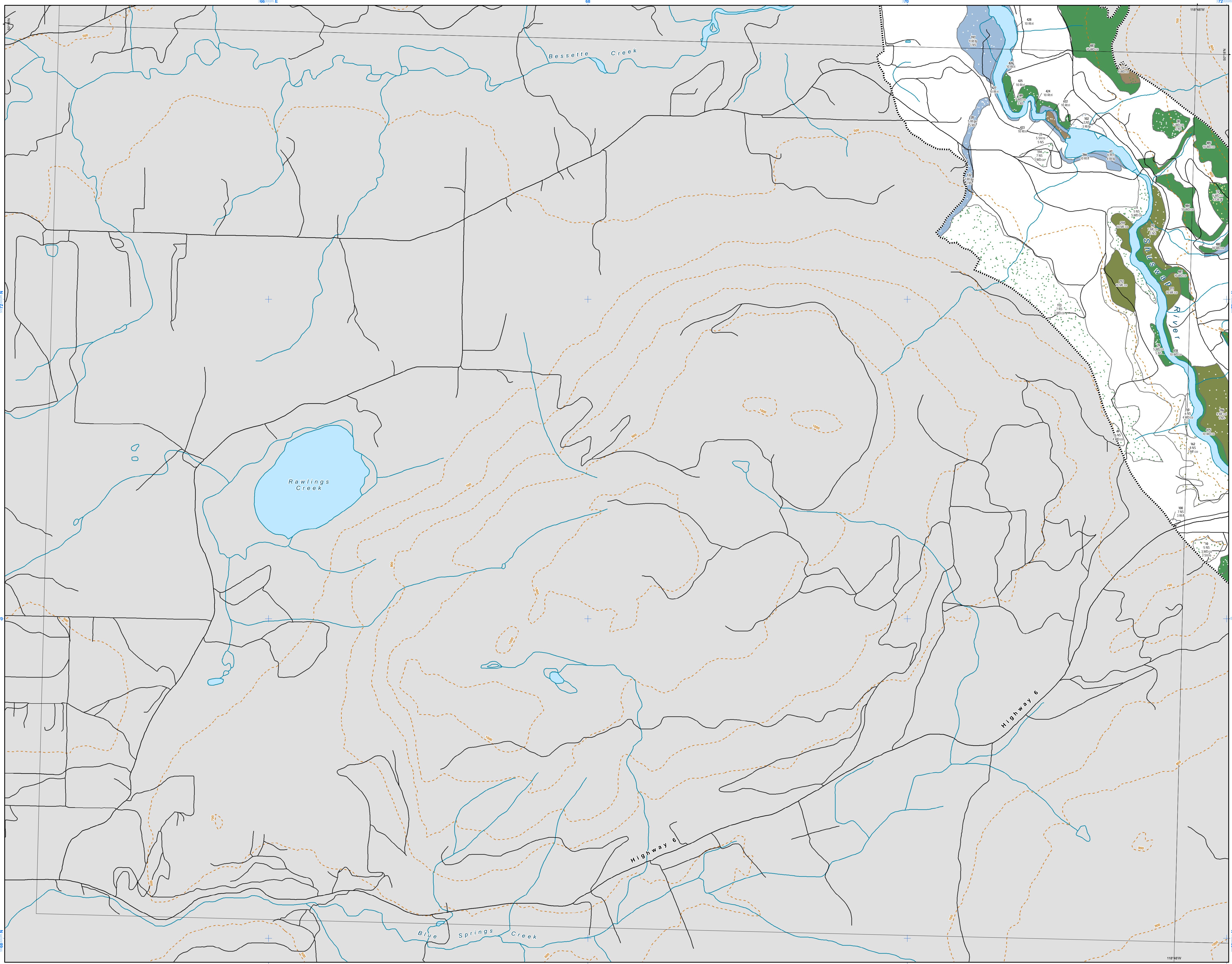




Sensitive Ecosystems Inventory: Middle Shuswap River - 2011



82L.026.4

WHAT IS A SENSITIVE ECOSYSTEM?

For the purpose of this study, an ecosystem considered to be a portion of the landscape with relatively uniform dominant vegetation that are ecologically sensitive and/or at risk in the landscape.

The soils that support plant communities within the study area vary in thickness... The Middle Shuswap River valley is both ecologically and biologically diverse and is home to many at-risk species and ecological communities.

Many of the sites identified by the SEI are at high risk of conversion to other land uses or further degradation... The Middle Shuswap River SEI project covers a swath varying from about 200 m to over two kilometers on either side of the Shuswap River.

It is important to remember that a polygon may contain a complex or mosaic of ecosystems, and sensitive ecosystems may only occupy a portion of that polygon... The Toolkit contains practical examples of bylaw provisions currently in use in B.C.

Base Terrestrial Ecosystem Mapping Poly Units, P. Cox (Pinar Geosystems Ltd.) and Kristi Vernon, R.P. Bio, Overton & MacKenzie Biological Consulting Ltd., with draft ecosystem mapping by John Grods (Makins Consulting Ltd.)

Species at Risk The large variety of ecosystems in the Middle Shuswap River valley provides for diverse habitat needs of many wildlife and plant species...

Climate Change Environmental Guidelines for Urban and Rural Land Development in British Columbia, B.C. Ministry of Environment

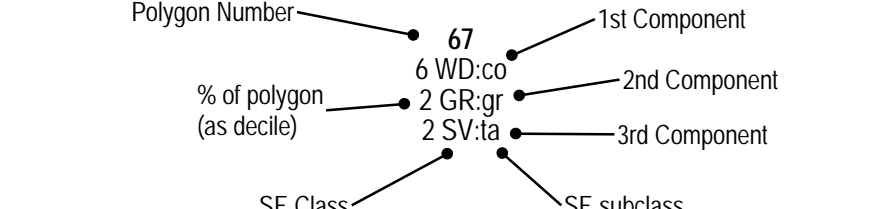
Develop with Care Environmental Guidelines for Urban and Rural Land Development in British Columbia, B.C. Ministry of Environment

Project partners include: The Okanagan Collaborative Conservation Program, BC Hydro Fish and Wildlife Compensation Program Coastal (on behalf of its program partners BC Hydro, the Province of B.C., and Fisheries and Oceans Canada)

Financial or in-kind support for the projects was provided by: The Okanagan Collaborative Conservation Program, BC Hydro Fish and Wildlife Compensation Program Coastal, Regional District of the North Okanagan, Village of Lumby, Splatsin First Nation, Alan Brooks Nature Centre Society, SEI Environmental Consulting, and the Ministry of Forests, Lands and Natural Resources Operations.

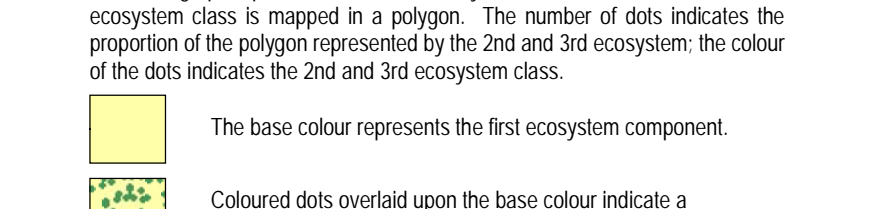
- Map Symbols: Polygon Boundary, Study Area Boundary, Lakes/Major Rivers, Roads, 100m contours, Areas Outside the Study Area

Sensitive Ecosystems (SE) Label



The example label above indicates: The SEI attributes mapped for polygon 64, 50% of the polygons WD.co - Coniferous Woodland, 20% of the polygons SV.ta - Sparsely Vegetated talus slope.

Ecosystem Components



Rationale: The Middle Shuswap River study area contains extensive riparian floodplain habitats, areas of coniferous woodlands, grasslands, mature forests, and sparsely vegetated ecosystems. The area is under pressure from agricultural and residential development...

Ecological Significance: The Middle Shuswap River valley is characterized by complex terrain including gently rounded uplands and moderately steep to steep valley sides. The Shuswap River has carved a path through a series of terraces and benches that stretch about a kilometre across the valley bottom.

Data Limitations: The SEI information is intended to alert local and regional decision-makers to the presence of sensitive and other important ecosystems and ecological features. The SEI mapping does not replace the need for on-site assessments in areas where land use changes are proposed.

Full report on this SEI project: Iverson, K. E. 2011. Sensitive Ecosystems Inventory: Middle Shuswap River, 2011. Methods, Ecological Descriptions, Results and Conservation Tools. Available at www.gov.bc.ca/cecoloc (type in SEI Shuswap as keyword).

Related Publications and Links: Green Bylaws Toolkit for Conserving Sensitive Ecosystems and Green Infrastructure www.gov.bc.ca/cecoloc

Map by CALSYS CONSULTING

Sensitive Ecosystems Legend

Sensitive ecosystems are fragile and/or rare, or are ecologically important because of the diversity of species they support and the ecosystem services they provide.

Note: Information on Species at Risk is included in the map legend to highlight the species habitat values of the sensitive ecosystems. This map series does not include the actual mapping of species locations. For information on species location mapping see the B.C. Conservation Data Centre reference below.

Grasslands (GR):



Grassland ecosystems occupy areas that are generally too hot and dry for forests to establish, and are dominated by bunchgrasses (GR.gr), low shrubs (shrubland) (GR.sh) and disturbed grasslands dominated by invasive alien plants (GR.in). Given the very limited extent of grasslands, these are important sites for grassland restoration, soil conservation, and maintenance of many other grassland values...

Sparsely Vegetated (SV):



Sparsely vegetated ecosystems are sites where rock (angular rock fragments) limits vegetation establishment, vegetation cover is discontinuous and interspersed with boulders or blocks of rock. Sparsely vegetated ecosystems are subdivided into Talus Slope (SV.ta) and Rock Outcrop (SV.ro) ecosystems.

Coniferous Woodlands (WD):



Coniferous Woodlands are open stands of Douglas fir, sometimes with ponderosa pine (WD.co), often on shallow soils, with grass and shrub-dominated understoreys. They most commonly occur on steep warm slopes and on rocky knolls with very shallow soils.

Riparian (RI):



Riparian ecosystems are rivers, streams, diverse and gully ecosystems or sites with significant seepage: includes ecosystems on floodplains and benches along creeks and rivers (bench, RI.b), ecosystems in gullies, often with creeks (gully, RI.g), and the river bed of large systems (river, RI.r).

Wetlands (WN):



Wetland ecosystems occur on sites where the water table is at, near, or above the soil surface for a sufficient period of time to influence soil and vegetation development. Includes marshes (WN.ms) and shallow open water (WN.w) ecosystems.

Seasonally Flooded Agricultural Fields (FS):



Seasonally Flooded Agricultural Fields (FS) are cultivated fields that flood most years, providing important migration and wintering habitat for birds. They provide important habitat for amphibians, waterfowl and other bird species.

Mature Forest (MF):



Mature Forest ecosystems are dominated by mature trees, including coniferous (BF.co) forests and mixed BF and deciduous and coniferous forests (BF.m) including mature riparian forests, and mature coniferous woodlands. Mature Forests are important buffers to sensitive ecosystems.

Non-sensitive Landscapes (NS): (Areas not mapped as sensitive or other important ecosystems are depicted in white)

Non-sensitive Landscapes are modified areas not occupied by sensitive or other important ecosystems. They include disturbed natural landscapes, agricultural areas and young forests.

Area of Detail

