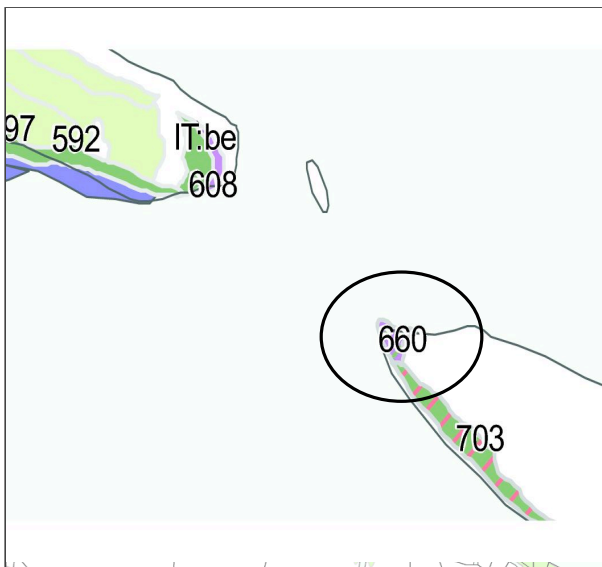


How to Read a Sensitive Ecosystem Map

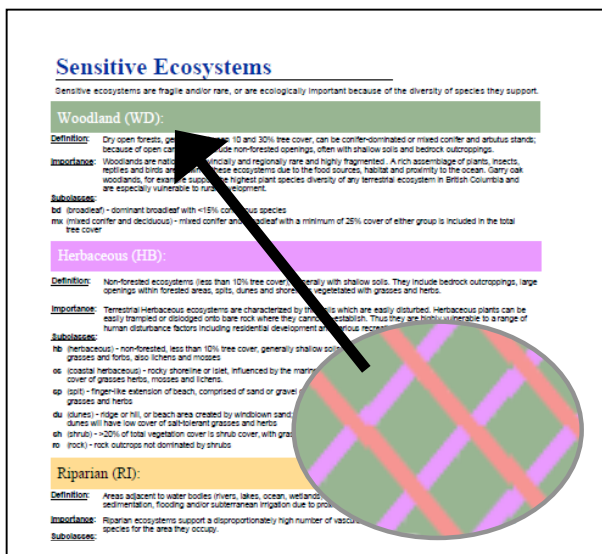
A Sensitive Ecosystem Map allows you to determine the types and ecological characteristics of the sensitive ecosystems that exist on your property. In short, the coded information in the polygon label moves from a general indication of the sensitive ecosystem(s) present to highly detailed information regarding vegetation type and form.

It can be difficult to learn how to interpret the condensed ecological information provided by a Sensitive Ecosystem Map. What follows is a step-by-step explanation of how to read and understand a Sensitive Ecosystem Map.



STEP 1: Locate your property on the map. Identify the sensitive ecosystem polygons that exist within your property boundaries.

A polygon is an area of contiguous sensitive ecosystem represented by an irregularly shaped “splotch” of colour.

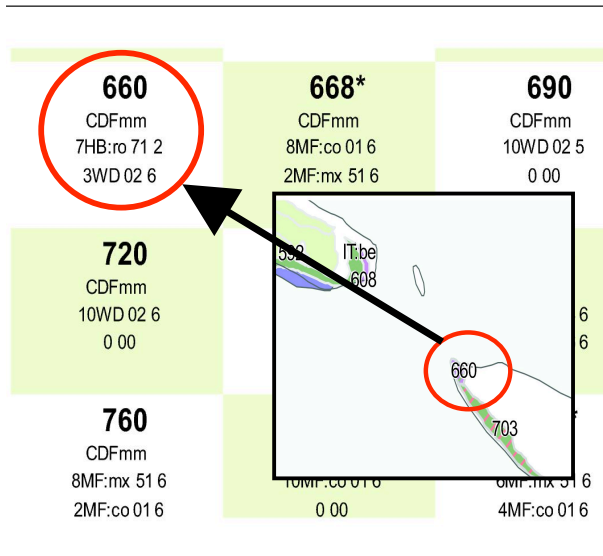


STEP 2: Note the colour of the background and cross-hatching. Cross-reference with the Sensitive Ecosystem list on the right-hand side of the map to determine the ecosystems that are present.

The background colour indicates the dominant ecosystem.

The ‘forward’ (///) cross-hatching indicates a secondary ecosystem.

The ‘backwards’ (\\) cross-hatching indicates a tertiary ecosystem.



STEP 3: Identify the Polygon Number, and locate it in the Ecosystems Label table on the left-hand side of the map.

The next steps explain how to cross-reference the coded information in the polygon's Label to determine the characteristics of each ecosystem present.

Note: If a * appear after the Polygon Number, an on-the-ground field sampling was conducted in this polygon area.

660
CDFmm
7HB:ro 71 2
3WD 02 6

STEP 4: Interpret the first line of the Polygon Label.

This indicates the biogeoclimatic zone, subzone, and variant in which the sensitive ecosystem is located.

CDFmm indicates **Coastal Douglas-fir (moist maritime)**. Virtually all of the Islands Trust Area is within this biogeoclimatic zone. A biogeoclimatic zone is a geographic area having similar patterns of energy flow, vegetation and soils based on a relatively homogenous macro-climate.

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CDFmm
7HB:ro 71 2
3WD 02 6

STEP 5: Interpret the second, third, and fourth lines (if present) in the Polygon Label.

These lines provide information on the dominant, secondary, and tertiary ecosystems that are present.

The next 4 steps will walk through this process using the first line in the sample Polygon Label as an example.

Herbaceous (HB):

Definition: Non-forested ecosystems (less than 10% tree cover), generally with shallow soils, often in coastal areas, spits, dunes and shorelines vegetated with grasses and herbs.

Importance: Terrestrial Herbaceous ecosystems are characterized by thin soils which are easily trampled or dislodged onto bare rock where they cannot re-establish. Human disturbance factors including residential development and various other factors are common.

Subclasses:

- hb (herbaceous) - non-forested, less than 10% tree cover, generally shallow soils, of grasses and forbs, also lichens and mosses
- cs (coastal herbaceous) - rocky shoreline or islet, influenced by cover of grasses herbs, mosses and lichens.
- sp (spit) - finger-like extension of beach, comprised of sand or grasses and herbs
- du (dunes) - ridge or hill, or beach area created by windblown dunes will have low cover of salt-tolerant grasses and herbs
- sh (shrub) - >20% of total vegetation cover is shrub cover, with grasses and herbs
- ro (rock) - rock outcrops not dominated by shrubs

Riparian (RI):

Definition: Areas adjacent to water bodies (rivers, lakes, ocean, wetlands) which are subject to sedimentation, flooding and/or subterranean irrigation due to proximity to water.

Importance: Riparian ecosystems support a disproportionately high number of vascular plant species for the area they occupy.

Subclasses:

STEP 6: These two letters indicate the type of ecosystem (cross-reference to the *Sensitive Ecosystems* table along the right hand side of the map).

The number in front indicates the percent of the polygon that is composed of the ecosystem type (simply add a zero).

For example, **7HB** indicates the polygon is 70% Herbaceous ecosystem.

Herbaceous (HB):

Definition: Non-forested ecosystems (less than 10% tree cover), generally with shallow soils, often in coastal areas, spits, dunes and shorelines vegetated with grasses and herbs.

Importance: Terrestrial Herbaceous ecosystems are characterized by thin soils which are easily trampled or dislodged onto bare rock where they cannot re-establish. Human disturbance factors including residential development and various other factors are common.

Subclasses:

- hb (herbaceous) - non-forested, less than 10% tree cover, generally shallow soils, of grasses and forbs, also lichens and mosses
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- sh (shrub) - >20% of total vegetation cover is shrub cover, with grasses and herbs
- ro (rock) - rock outcrops not dominated by shrubs

STEP 7: These two letters indicate ecosystem sub-class (cross-reference to the *Sensitive Ecosystems* list along the right hand side of the map).

For example, **ro** indicates that the subclass of the Herbaceous ecosystem present in the polygon is **(rock) – rock outcrops not dominated by shrubs**.

Terrestrial Ecosystem Site Series and Site Unit Names

Site Series	Site Unit Name	Description
CDFmm		
2	FdPI - Arbutus	0-1/BC; Rec
50	FdPI - Arbutus	0-1/BC; Rec
51	FdPI - Arbutus	0-1/BC; Rec
1	FdPI - Arbutus	0-1/BC; Rec
Non-Wetland Units		
70	Rock bluffs	Hypersteep r
71	Rock moss-Selaginalla	Moss and pa
72	Dunegrass	Marine; Euro dominated ec
73	Snowberry	Marine; 2-3/L

STEP 8: This number indicates the ecosystem site series (cross-reference to the *Terrestrial Ecosystem Site Series and Site Unit Names Table* on the bottom left-hand side of the map).

A 'site series' indicates sites capable of producing the same stable, long-lasting plant communities. Here, it gives a finer definition of the vegetation present in the polygon area.

For example, **71** indicates that the site series of the Herbaceous ecosystem present in the polygon is **Rock moss-Selaginalla**.

Structural Stage		
1	Sparse/bryoid	Substages 1a Sparse 2b Bryoid
2	Herb	Substages 2a Forb-dominated 2b Graminoid-dominated 2c Aquatic 2d Dwarf shrub
3	Shrub/Herb	Substages 3a Low shrub; less than 2 m 3 Tall shrub; 2-10 m tall
4	Pole/Sapling	Trees > 10 m tall; typically d
5	Young	7HB:ro 71 2
6	Mature	
7	Old Forest	Generally over 250 years sii Coarse woody debris (CWD)

STEP 9: This number indicates the structural stage of development of the ecosystem (cross-reference to the *Structural Stage Table* on the bottom left-hand side of the map).

'Structural stage' indicates a stage of development of a plant community as it moves from bare ground to its final steady state.

For example, 2 indicates that the structural stage of the Herbaceous ecosystem present in the polygon is **Herb**.

660
 CDFmm
 7HB:ro 71 2
3WD 02 6

STEP 10: Complete the same process of cross-referencing with the other lines of information (if present).

The secondary ecosystem in this example is interpreted below:

3WD 02 6: 30% Woodland ecosystem; site series arbutus; structural stage herb.

For further help on reading the map or more information on the Sensitive Ecosystem Mapping project, please visit www.islandstrust.bc.ca or call the Islands Trust office at 1-250-405-5151 or toll-free through Enquiry BC 1-800-663-7867.



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