

## SEI Update

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### A publication of the Sensitive Ecosystems Inventory Project November 1997

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#### Mapping complete

Do you know which are the fragile and rare ecosystems in your neighbourhood?

Thanks to the Sensitive Ecosystems Inventory (SEI), sensitive ecosystems throughout the east coast of Vancouver Island and adjacent Gulf Islands have now been identified and mapped.

This area is a unique ecological region, but is one of two areas in B.C. experiencing rapid fragmentation and loss of natural ecosystems. In 1993, a joint project of Environment Canada (Canadian Wildlife Service) and the B.C. Ministry of Environment, Lands and Parks (Conservation Data Centre and Vancouver Island Regional Office) began to inventory the remaining sensitive ecosystems.

**TIP: Check the number of the polygon on the yellow chart on the right-hand side of the map sheet. If the polygon number has a \* beside it, additional information from field checks is available. Contact the Conservation Data Centre for further information (see page 4).**



*A "sensitive" ecosystem is one which is fragile and/or rare*

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Seven key "sensitive ecosystem" types were identified (see next page). Second growth forests and seasonally flooded fields were also mapped, as they provide significant wildlife habitat. Using aerial photography and selective field checks, researchers systematically identified and mapped 7,388 sites, shown as coloured areas on the SEI maps. Sixty-six map sheets have been produced at a 1:20,000 scale.

By flagging areas of ecological significance, the maps identify areas where more information will be needed for decision-making. For example, if a development proposal includes an identified SEI site, the developer could be asked to provide additional ecological information on that site. The Ministry of Environment, Lands and Parks can provide a list of consultants who could perform this type of field check.

Copies of the maps are being distributed free of charge to all local governments within the study area. (To purchase copies, see page 4).

## Sensitive Ecosystems Classification

### CB

#### ***Coastal bluff***

Vegetated rocky islet, rocky shoreline/grassland, rocky shoreline/moss or coastal cliff (*cl*)

### HT

#### ***Terrestrial herbaceous***

Natural grassland or bryophyte-dominated vegetation, including rock outcrop/grassland and rock outcrop/moss types (*ro*); >20% shrub cover (*sh*).

### OF

#### ***Older forest***

Forested ecosystem with dominant age class >100 years; coniferous (*co*), mixed with broadleaf component >15% (*mx*).

### RI

#### ***Riparian***

All stages of floodplain vegetation including riparian vegetation associated with lakes or gullies (*g*). Structural stages: *1, 1a, 1b* non-vegetated/sparse; *2* herb; *3* shrub/herb; *3a* low shrub; *3b* tall shrub; *4* pole/sapling; *5* young forest; *6* mature forest; *7* old forest.

### SV

#### ***Sparsely vegetated***

Ecosystem with sparse vegetation; cliff (*cl*), sand dune (*sd*), spit (*sp*).

### WN

#### ***Wetland***

Ecosystem with wet soil and moisture-dependent plants: bog (*bg*), fen (*fn*), marsh (*ms*), swamp (*sp*), shallow water (*sw*), wet meadow (*wm*).

### WD

### ***Woodland***

Open woodlands (stands of Garry oak and mixed stands of Garry oak/Arbutus, Garry oak/Douglas-fir, Arbutus/Douglas-fir)

### **Areas with general biodiversity values**

### FS

#### ***Seasonally flooded agricultural field***

### SG

#### ***Older Second growth forest***

Forested ecosystem with dominant age class 60 - 100 years; coniferous (*co*), mixed with broadleaf component >15% (*mx*).

**TIP: To find out the date of the air photos used, check the flight number on the map (shown diagonally), and check this against the information on the bottom right hand corner of the map sheet.**

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## Digital Format Available

The SEI data is also available in digital format. These digital files are designed to conform with a TRIM map base, and TRIM information will be included in the files for authorized TRIM users. Digital SEI files will be distributed upon receipt of a signed Limited Use Agreement, which contains some constraints on the use of the data.

Digital files will be provided free of charge to local governments with GIS capability.

*For information on digital files please contact Peggy Ward, Canadian Wildlife Service (see page 4).*

## SEI data helps identify Green/Blue Spaces

**The Capital Region's "Green/Blue Spaces Strategy" is a regional vision for the protection and maintenance of natural and semi-natural areas of land and water.**

SEI data helped to identify regional green/blue spaces of significance. Analysis of the data showed that 26.2% of the CRD study area (not including the Gulf Islands) is in SEI sites. Of this total, approximately 60% of the SEI sites are on public land (including 39% in parks), while 40% are on private land.

The CRD will also be using the the SEI data for:

- An update of the Official Regional Parks Plan;
- Assessments of new regional parks and land acquisition proposals;
- Regional park plans, natural resource inventories and environmental impact assessments.

*For more information please contact Jeff Ward or Joel Ussery of CRD Parks at 478-3344.*



## For Future Reference. . .

*Supporting materials are being developed for the Sensitive Ecosystem Inventory.*

A **Technical Report** is in preparation. This will include a full description of the methodology used in producing the maps, a summary of the results, and preliminary analysis of the information. This report should be available early in 1998.

A **Conservation Manual** will also be prepared for publication late in 1998. This document will describe the range of options and mechanisms available for the protection and stewardship of sensitive ecosystems. It will include management guidelines for each of the seven ecosystem types (including new guidelines where none exist), and help users to assess the relative importance of a given polygon.

**Speakers** are also available. The SEI project team is providing information sessions to local governments within the study area, and is also available to conduct small group sessions if required.

*If you would like more information on proposed products, or would like to arrange for a speaker, please contact Judith Cullington at (250) 391-8772.*

## New Local Government Powers

Some of the new and enhanced planning, regulatory and development approval powers included in the *Local Government Statutes Amendment Act, 1997* give municipalities, regional districts and the Islands Trust the ability to:

- In official community plans (OCPs), designate: policies relating to the natural environment, its ecosystems and biodiversity; development permit areas and guidelines for this purpose; development information areas/circumstances in OCPs for which development approval information about impacts may be required from developers at developers' cost.
- In new regulatory powers, require: screening or landscaping to protect, restore or enhance the natural environment; limits to impervious surfaces and ongoing management of runoff.
- In development permit areas, require: specified natural features or areas to be preserved, protected restored or enhanced in accordance with the permit; protection measures, including that vegetation be planted or retained in order to preserve, protect, restore or enhance fish habitat.

Local governments were also given power to provide riparian area property tax exemptions to properties covered by a conservation covenant held by the local government.

*For more information please contact Lynn Siddaway, Ministry of Municipal Affairs and Housing, (250) 387-4089.*

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### To order maps, please contact:

Clover Point Cartographics  
Ph.: (250) 384-3537  
Fax: (250) 384-2679

## Changes to the Maps

Can you provide information, from personal knowledge or otherwise, regarding updates and revisions to the SEI data? Let the Conservation Data Centre know (see below)!

Information on these maps will change from time to time. A wetland may be drained or ditched. Development or resource extraction may reduce or eliminate some SEI sites. The Conservation Data Centre is attempting to track these changes, to keep the data base as up-to-date as possible. Please use the change forms provided.

Revisions to the maps will be considered at a later date, depending on available funding.



### For more information:

**- on ground truthing and change forms:**  
**Ministry of Environment, Lands and Parks**  
**Conservation Data Centre**  
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**- on the SEI project and consultants:**  
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**- on the SEI project and digital data:**  
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