

# WETLAND ECOSYSTEMS

## NORTH PENDER ISLAND DEVELOPMENT PERMIT AREA

### What Are They?

Wetland ecosystems have wet soils and moisture dependent plants. They develop where there is daily, seasonal or year-round water that lies at or above the surface, or within the root zone of plants.

The type of wetland depends on the degree of flooding, the wetness of the soil, the type of substrate on which it develops, and nutrients available. There are six types of wetland found on North Pender Island: bog, fen, marsh, shallow water, swamp, and wet meadow.

**Bogs and Fens** develop on continuously wet peaty soils. Bogs are generally acidic and low in nutrients. Fens are fed by water enriched with minerals from upslope drainage, and support a higher diversity of plants.

**Marshes** include freshwater, brackish and saltwater marshes that are inundated daily, seasonally or permanently, and support a variety of sedges, rushes, grasses and reeds.

**Shallow Water Wetlands** feature submerged and floating plants such as yellow pond-lily.

**Swamps** include flood-tolerant trees such as western redcedar, pacific crab apple and willow as well as hardhack, horsetail and skunk cabbage.

**Wet meadows** are rare, and have a grassy appearance provided by flood-tolerant grasses, low sedges and rushes.

Many wetlands include a mosaic of these different wetland types.

### Why They Are Important

Wetland ecosystems are extremely limited and especially important on this dry island. They are nodes of high biological diversity and support a high number of species and plant communities. They act as very productive breeding and feeding areas for wildlife. They provide critical habitat for salmon and wintering waterbirds.

Wetlands are natural biofilters, effectively removing sediment, nutrient and toxic chemicals from water.



Neil K. Dawe

*Wetland ecosystems make up only 0.4% of North Pender Island*

### Their Purpose

The purpose of the Wetland Ecosystems Development Permit Area (DPA) is to offer protection to the remaining wetland ecosystems on North Pender Island by guiding any new development that might occur within them. The areas covered by this DPA are indicated in Schedule L of the North Pender Island Official Community Plan (OCP).

### What Does This Mean?

If you have a property that is partially located within a Wetland Ecosystems DPA you will need to obtain a development permit from the Islands Trust before undertaking certain new land-altering activities identified in the North Pender Island OCP.

The regular maintenance of existing buildings and landscaping, as well as any development that takes place outside of the DPA does not require a Development Permit.



Islands Trust



# Extent of Wetland Ecosystems DPA Areas on North Pender Island



## How to Protect this Ecosystem

### Establish a Surrounding Buffer

Maintaining a protective vegetated buffer around a wetland area will help protect it from potentially harmful outside disturbance.

### Control Invasive Species

The fertile and moist characteristics of wetlands and the increased presence of non-native plants makes them particularly vulnerable to colonization by invasive non-native species such as purple loosestrife, reed canary grass, and yellow-flag iris.

### Limit Access

Human and domestic animal access can severely impact sensitive aquatic vegetation. It can also disrupt breeding and nesting birds, especially during the spring and summer months.

### Maintain Natural Processes

Protect existing water levels. Surface or groundwater drainage patterns can be easily and detrimentally altered by the construction of ditches, roads, trails, houses and gardens, and by removing beaver dams. Changes to these patterns can affect the health of these moist ecosystems which rely on these water sources.

### Consider Establishing a Protective Covenant

Properties with wetland ecosystems may qualify for the Natural Area Protection Tax Exemption Program. This program provides landowners who permanently protect natural features of their land with the opportunity to receive a 65% exemption in property taxes on the protected portion of their land. [www.islandstrustfund.bc.ca/naptep.cfm](http://www.islandstrustfund.bc.ca/naptep.cfm)

Trudy Chatwin



## Associated Species

### Animals

*Frogs, rough-skinned newt, dragonflies and damselflies, marsh wrens, yellow warblers, red-winged blackbirds, ducks*

### Plants

*Common sedge, sphagnum moss, hardhack, salmon berry, skunk cabbage, common cattail*

### Rare Species

*Red-tailed frog*

***Ecosystem DPAs guide  
development in identified  
ecologically sensitive areas***

## For More Information

To determine if your land has a Wetland Ecosystems DPA on it consult the North Pender Island Official Community Plan (OCP). Copies of the OCP are available from Islands Trust offices in Victoria and Pender Island, and on-line at:

[www.islandstrust.bc.ca/ltc/np](http://www.islandstrust.bc.ca/ltc/np)

If you have any questions about DPAs please contact Islands Trust staff by phone by dialing 1.800.663.7867 and requesting 250.405.5151 or by email at [npi@islandstrust.bc.ca](mailto:npi@islandstrust.bc.ca).