## What Are They?

Intertidal ecosystems are areas that provide a vital link between marine and terrestrial environment.

They include tidal flats, bays, coves, estuaries, mudflats and beaches, and may have significant areas exposed at low tide. These areas are valued for the important habitats they provide for marine and estuarine dependent organisms such as fish, clams, waterbirds, herons, eagles and osprey.

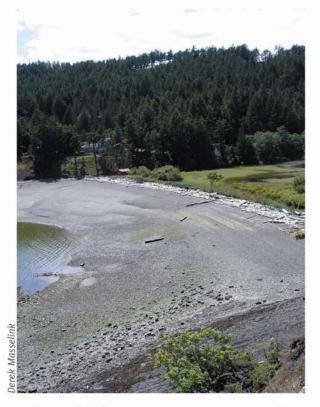
Intertidal ecosystems encompass habitats such as salt marshes, eelgrass or kelp beds which are home to sensitive or juvenile stages of marine invertebrates and fish.

These ecosystems have been recognized as an important regional resource, supporting economically important activities such as fisheries (salmon, clam, kelp), tourism and recreation.



## Why They Are Important

Intertidal ecosystems are one of the most biologically diverse marine communities. Shoreline areas provide terrestrial, marine and aquatic species with food, den and burrowing sites, flyways and travel corridors, perching and sunning sites, protection from weather and predators, and nursery sites for young. The shallow nature of intertidal areas make them particularly susceptible to developments such as docks, piers, boat launch ramps, stairs and walkways.



Intertidal ecosystems cover only 56 hectares of North Pender Island's shoreline area.

## **Their Purpose**

The purpose of the Intertidal Ecosystems Development Permit Area (DPA) is to offer protection to the sensitive marine ecosystems located along North Pender Island by guiding any new development that might occur within them. The areas covered by this DPA are indicated in Schedule N of the North Pender Island Official Community Plan (OCP).

## What Does This Mean?

If you have a property that is partially located within a Intertidal 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 Intertidal Ecosystems DPA Areas on North Pender Island



## **How to Protect this Ecosystem**

#### Establish a Surrounding Buffer or Barrier

A protective vegetated buffer or fence upland from an intertidal area will help protect it from potentially harmful outside disturbance and access. Fences can also be used to control access to these areas.

### **Control Invasive Species**

The open nature of shoreline areas and their shallow or exposed soils make them vulnerable to the establishment of non-native species.

#### **Limit Access**

Excessive access by human and domestic animals over time can have a negative impact on these sensitive intertidal ecosystems and the species that they contain.

### **Limit Harvesting of Intertidal Organisms**

Make efforts to limit the amount of shellfish, seaweed and fish harvested from these areas.

### Maintain the Existing Hydrologic Regime

Freshwater drainage sources, which are an important and influencing factor on intertidal ecosystems, can be easily and detrimentally altered by upland activities. Changes to upland freshwater sources that drain into intertidal areas can effect the health of these marine ecosystems. Make efforts to maintain the nature of these sources.



## **Associated Species**

#### **Animals**

Harbour seal, river otter, mink, osprey, eagle, waterbirds, fish, shellfish, seastars, crabs

#### **Plants**

Eelgrass, kelp, green algae

Ecosystem DPAs guide development in identified ecologically sensitive areas

## For More Information

To determine if your land has a Intertidal 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

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.

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