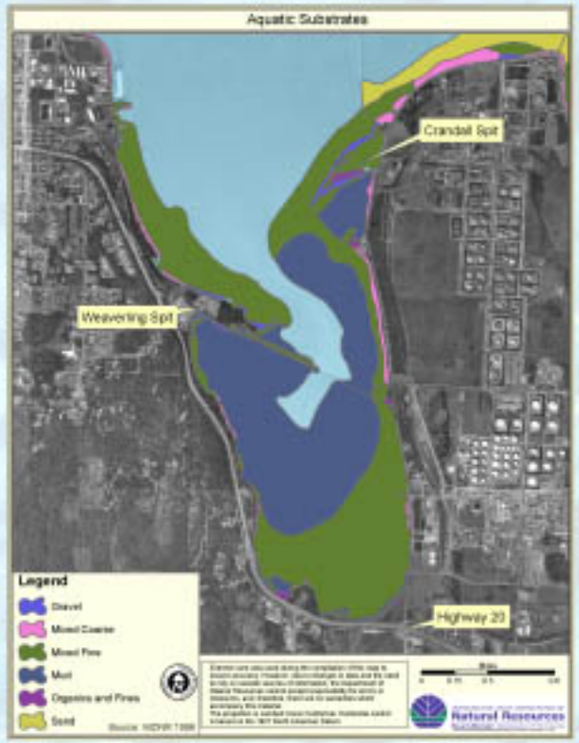
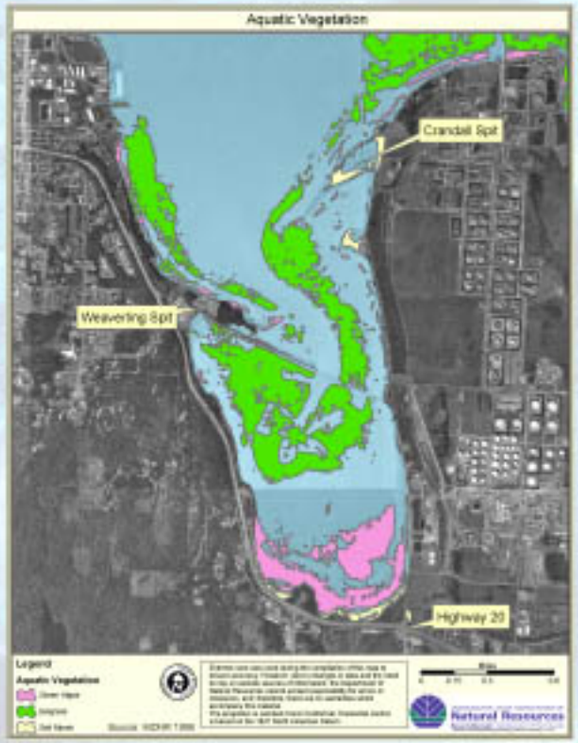
Biological Resources and Ecosystem Processes



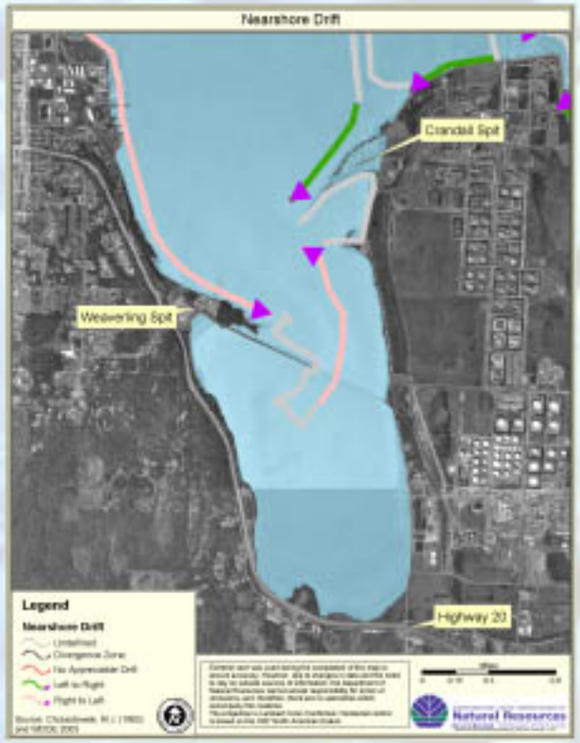
Physical habitat characteristics strongly affect which plants, animals and algae reside at a site. In Fidalgo Bay, there is a gradient in intertidal habitats – from coarse substrates at the mouth of the bay to fine substrates at the protected southern end of the bay. Different species assemblages are found along this gradient, living both on and within the substrate.



Eelgrass meadows provide habitat and feeding grounds for several important species including juvenile salmonids, Pacific herring, and great blue heron.

Salt marshes found at the southern end of Fidalgo Bay are important nurseries for birds and fish.

Washington State has adopted a policy of no net loss of eelgrass habitat due to its considerable importance as a habitat.



Nearshore drift cells describe the movement of sediment along the beach. This process is primarily in response to the oblique approach of wind-generated waves. The movement of sediment along the nearshore is vital to replenishing small sediment washed out to sea by wave energy, streams and rivers. Beaches with small sediment are often productive environments that are used by many species as spawning or nesting habitat.

Spits are naturally dynamic parts of the shoreline. Development has damaged most natural spits, and unarmored spits, such as Crandall Spit and parts of Weaverling spit are rare and important habitats for many species. Spits are natural areas of sediment deposition where sand and other sediment collects over time. These areas continue to grow, move and change as a result of sediment movement and nearshore drift.