



# REACH WW03

## Fort Ebey State Park and Perego's Lagoon

### SHORELINE LENGTH:

3.78 Miles

### REACH AREA:

143 Acres

### PSNERP PROCESS UNITS:

8057, 8058

### REACH SUMMARY

Fort Ebey State Park and Perego's Lagoon (Reach CAM03) extends along the Strait of Juan de Fuca / Admiralty Inlet shoreline fronting Ebey's Landing and Perego's Lagoon (Oblique Photo D). The unique lagoon feature is an enclosed barrier (coastal) lagoon sitting between coastal bluffs to the east and a barrier beach to the west. Geomorphic shoreline processes are significantly influenced by a south-trending drift cell starting from a divergence zone at Point Partridge and continuing south into Reach WW03. Feeder bluff and feeder bluff exceptional shoretypes are located north of Perego's Lagoon — these shorelines supply sediment to the barrier beach (accretion area) fronting the lagoon, as well as areas further south. Feeder bluffs within the reach are substantial and have no slope vegetation (Oblique Photos A, B, C).

Perego's Lagoon comprises 25 percent of the reach area. The lagoon has no tidal opening through the barrier beach hydrologic connection with the marine shoreline is subsurface except potentially during coastal flooding / storm events. No coastal streams drain to the reach shoreline. Other shoreland habitats include WDFW-mapped Bald Eagle territory, coastal cliffs and 52 acres of native oak and grass lands. Mapped aquatic habitats include pandalid shrimp and hardshell clam areas, a seabird colony and continuous kelp off-shore of coastal bluff areas.

Land use within the reach is limited to public park areas, as the entire shoreline is part of Fort Ebey State Park and the adjoining Ebey's Landing National Historical Reserve. Outside of hiking trails, the shoreline is unaltered. Public access is extensive, provided through developed access points to the north and south.

### GEOMORPHIC KEY INFORMATION

#### Geomorphic Shoretype (Map 9)

Feeder Bluff (15%) and Feeder Bluff Exceptional (31%), Accretion Shoreform (20%) fronting Perego's Lagoon

#### Net Shore Drift (Map 8)

Southward drift from a divergence zone at Partridge Point extends around Admiralty Head and converges with northward drift inside Admiralty Bay.

#### Shoreform Current (Map 10)

Barrier Beach (20%); Bluff-backed Beach (48%); Coastal Lagoon and Marsh (32%)

#### Overall Rating of Degradation

Least (17%); Less (83%)

#### Coastal Floodplain:

32%

#### Coastal Landslides & Toe Erosion:

Almost continuous landslide mapped to the northwest of Perego's lagoon (along Feeder Bluff; Feeder Bluff Exceptional).

#### Steep Slopes

44%



Shoreline Oblique Photos (2006)

**HABITATS & SPECIES**

**Significant & Unique Features (Maps 5-7)**

Mapped Seabird Colony (Alcids); Perego's Lagoon (34 acres).

**Shoreland Priority Habitats & Species (Map 5)**

Bald Eagle buffer; Cliffs; 52 acres of mapped Native Oaks and Grassland

**Marine Priority Habitats & Species (Map 5)**

None mapped

**Salmonid Fish Use (Map 5)**

None mapped within coastal streams. Nearshore areas are designated ESA critical habitat for Chinook (Puget Sound ESU) excluding naval restricted areas.

**Coastal Lagoons** 36 acres (25%)    **Coastal Stream Mouths** 1    **Wetlands (Map 4)** 19%

**Forage Fish**

**Sandlance** None mapped

**Smelt** None mapped

**Herring** None mapped

**LAND & SHORELINE USE**

**Shoreline Modifications (Map 13)**

Limited modification within Libbey Beach Park (bulkhead and riprap); no other shoreline modifications.

**Public Access (Map 16)**

Significant access provided by Fort Ebey State Park and adjoining Ebey's Landing National Historical Reserve.

**Armoring (% of shoreline) (Map 13)** 2%

**Overwater Structures (Map 14)**

No overwater structures

**Zoning (Map 11)**

Rural (61%); Parks (39%)

**Current Land Use (Map 12)**

**Number of Parcels** 23    **Average Parcel Size** 30.58 Acres  
Primarily public park lands; significant open space associated with uses throughout reach.

**Shellfish & Aquaculture (Map 15)**

Unclassified shellfish growing area; no mapped or classified shellfish beaches.

**KEY MANAGEMENT ISSUES**

- Preservation of publicly owned open space areas to maximize shoreline habitat — coordination with State Park and Reserve administrators.
- Control of invasive species.
- Potential implications of sea level rise (SLR) on Perego's Lagoon and barrier beaches (loss of habitat), as well as implications for bluff toe erosion and stability.

**RESTORATION OPPORTUNITIES**

Restoration sites were identified in 2004 by Coastal Geologic Services (Appendix H).

No apparent restoration opportunities were identified along the WW03 shoreline. Shorelines within the reach are primarily characterized by high bluffs and coastal wetlands that are largely unaltered; no derelict structures identified.