



REACH WW01

Deception Pass State Park (West Side), Moran Beach and Naval Air Station Whidbey Island

SHORELINE LENGTH:

6.55 Miles

REACH AREA:

155 Acres

PSNERP PROCESS UNITS:

8057

REACH SUMMARY

Deception Pass State Park (West Side), Moran Beach and Naval Air Station Whidbey Island (NASWI) (Reach WW01) extends from Deception Pass at the northern tip of Whidbey Island along the Strait of Juan de Fuca shoreline fronting Cranberry Lake and the Naval Air Station Whidbey Island. Geomorphic shoreline processes are significantly influenced by a single north-trending drift cell terminating at Deception Pass. Feeder bluff and transport zone shoretypes are located in the southern portion of the reach and supply sediment to a long accretion area (barrier beach) comprising more than two-thirds of the shoreline length.

There are no mapped wetlands associated with the shoreline in the reach area; however Cranberry Lake (a separate freshwater lake shoreline) adjoins the northern half of the reach. There are extensive wetlands associated with the lake, including areas designated as coastal lagoon extending to the south. Historic tidal influence on the Cranberry Lake system has been modified. Two stream mouths are mapped along the shoreline, both from the Cranberry Lake system; these streams are short and do not support salmonids. Habitat is mapped within marine aquatic areas, supporting Red Sea Urchin habitat at the northern end of the reach (extending to Deception Island) and kelp is mapped intermittently along the shoreline.

Land use within the shoreline area is associated with the Naval Air Station at the southern end of the reach, rural residential shoreline development through the central portion and Deception Pass State Park at the north end. The Naval Air Station and State Park include limited facilities within the shoreline area; significant undeveloped open space is associated with the Naval Air Station as well as park and residential uses. The marine shoreline is minimally modified. Significant public access is provided through the State Park.

GEOMORPHIC KEY INFORMATION

Geomorphic Shoretype (Map 9)

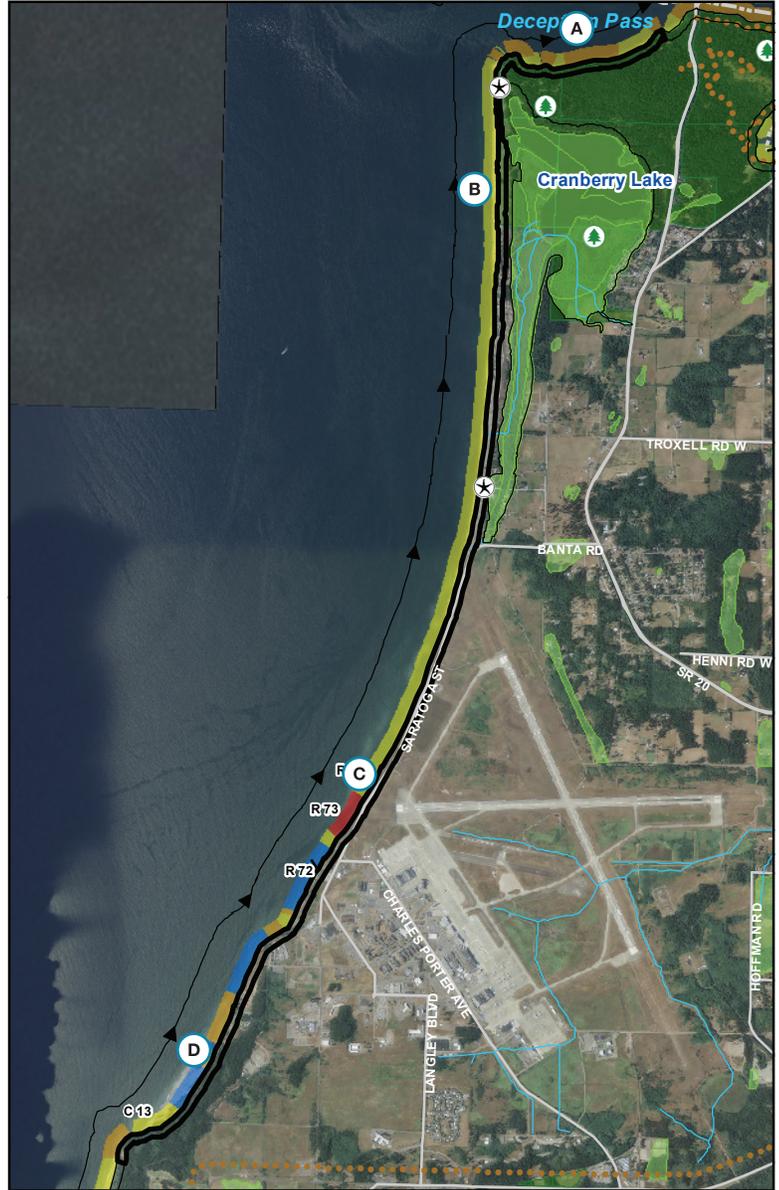
Primarily Accretion Shoreform (67%), only (4%) Modified

Net Shore Drift (Map 8)

A long drift cell extends northward from West Beach to just west of Deception Pass.

Shoreform Current (Map 10)

Barrier Beach (80%); Bluff Backed Beach (4%); Pocket Beach (10%); Rocky Platform Beach (7%)



Overall Rating of Degradation

Least (100%)

Coastal Floodplain:

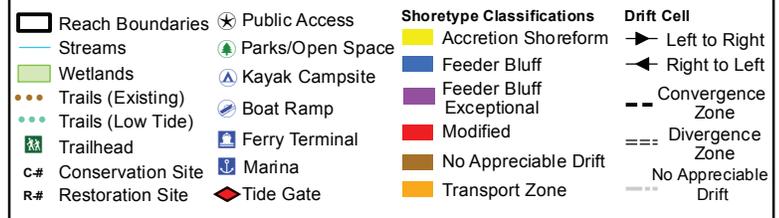
31%

Coastal Landslides & Toe Erosion:

Limited mapping in southern end of reach, as well as some toe erosion just south of Cranberry Lake.

Steep Slopes

9%



Shoreline Oblique Photos (2006)

HABITATS & SPECIES

Significant & Unique Features (Maps 5-7)

Red Sea Urchin habitat at northern end of reach (extending to Deception Island) / patchy kelp mapped intermittently. Marine areas designated ESA critical habitat for Green Sturgeon (excluding naval restricted areas). Deception Pass area is designated as an Audubon Important Bird Area. Pigeon Guillemot nesting colony at cliffside. Dune vegetation south of Cranberry Lake along Surfcrest Drive.

| | | |
|---------------------------------------|-----------------------------------|--|
| Coastal Lagoons None mapped | Coastal Stream Mouths 2 | Wetlands (Map 4) None mapped |
|---------------------------------------|-----------------------------------|--|

Forage Fish

Sandlance 3% **Smelt** None mapped
Herring None mapped

LAND & SHORELINE USE

Shoreline Modifications (Map 13)

Limited modification, outside of areas associated with overwater structures; armoring mapped fronting N Moran Beach Ln.

Armoring (% of shoreline) (Map 13) 1%

Zoning (Map 11)

Federal (Naval Air Station - 54%); Rural (25%); Parks (State Park - 21%)

Current Land Use (Map 12)

Number of Parcels 87 **Average Parcel Size** 18.64 Acres

Significant vacant land, limited uses associated with Naval Air Station (southern extent) / Rural residential development along shoreline (central portion) / State Park with limited facilities in shoreline area (northern extent); significant undeveloped open space for all existing uses in shoreline area.

Shoreland Priority Habitats & Species (Map 5)

Bald Eagle (habitat buffer areas identified)

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) and bull trout excluding naval restricted areas.

Public Access (Map 16)

Significant access through Deception Pass State Park (public lands); parking lot in State Park located within shoreline area, provides direct access to extensive public beach as well as Cranberry Lake.

Overwater Structures (Map 14)

No overwater structures

Shellfish & Aquaculture (Map 15)

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

KEY MANAGEMENT ISSUES

- Water quality issues associated with additional development in residential areas (subdivision / intensified use)—including implications of septic systems and road runoff.
- Management of open space areas to maximize shoreline habitat and protect unique dune area - coordination with State Park and Naval Air Station administrators.
- Potential implications of sea level rise (SLR) on barrier beaches (northern two-thirds of reach) (loss of habitat) and increased rates of bluff erosion (south end of reach only) (implications for slope stability and sediment supplies).
- Potential implications of SLR and coastal flooding on development within or near coastal floodplain areas (shoreline residential development).
- Maintenance of groin and drainage outfall for Cranberry Lake.
- Control erosion along the shoreline north of Naval Air Station.

RESTORATION OPPORTUNITIES

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

R72: Remove concrete rubble from intertidal and bank toe.

R73: Remove concrete rubble revetment.

R74: Remove very long outfall structure; redevelop outfall to have less impact on intertidal areas.

CONSERVATION OPPORTUNITIES

C13: Undeveloped berm and lagoon complex. Extends 2000+ ft and into Feeder Bluff with intertidal bars.