



# REACH Smith and Minor Islands

## Smith and Minor Islands

### SHORELINE LENGTH:

1.56 Miles

### REACH AREA:

24 Acres

### PSNERP PROCESS UNITS:

NA

### REACH SUMMARY

Smith Island is an island located in the eastern Strait of Juan de Fuca, about mid-way between Admiralty Inlet and Lopez Island. It is connected to the smaller Minor Island, to its east, by a low spit that is covered at high tide. The western shoreline of Smith Island is a significant feeder bluff, with all other areas of both islands' shorelines mapped as accretion beach areas.

The shorelines of both islands are generally undeveloped, although remnants of historical modification do occur (primarily on Smith). Both islands are generally low with open meadow and shrub habitat with few trees. The islands are important habitat for seabirds and the shorelines are a haulout site for sea lions and harbor seals. The islands are part of the San Juan Islands National Wildlife Refuge and are generally closed to the public. The islands and surrounding waters are additionally designated a WDNR aquatic reserve. Documented aquatic habitat includes red sea urchin and extensive pandalid shrimp areas extending to the south.

The islands' location at the east end of the Strait of Juan de Fuca makes them a significant feature for marine navigational aid. A lighthouse was first constructed on Smith Island in the late 1850s and was occupied and operated for approximately 100 years. The lighthouse / keeper residence structure was built at the west end of the island; over the years, bluff erosion crept closer to the structure, requiring the lighthouse to be abandoned in the 1950s with complete destruction occurring in 1998. Remnant out-structures of the lighthouse remain; the site is listed on the national and state registers of historic places. The lighthouse was replaced with an automated navigation light (97 feet high). Minor Island also has a light and a weather station operated by the National Oceanic and Atmospheric Administration is also located on the islands.

### GEOMORPHIC KEY INFORMATION

#### Geomorphic Shoretype (Map 9)

Feeder Bluff (5%) and Feeder Bluff Exceptional (28%) on west shoreline of Smith Island feeding Accretion Shoreform (60%) along west Smith shoreline and all of Minor Island shoreline

#### Net Shore Drift (Map 8)

A divergence zone on the west side of Smith Island transitions to eastward drift on both the north and south shores of Smith Island. These drift cells converge on the east side of Minor Island.

#### Shoreform Current (Map 10)

None mapped

#### Overall Rating of Degradation

None mapped

#### Coastal Floodplain:

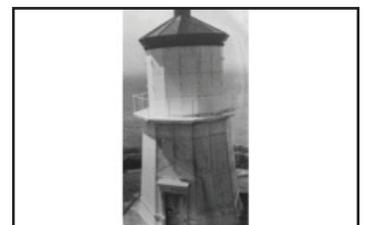
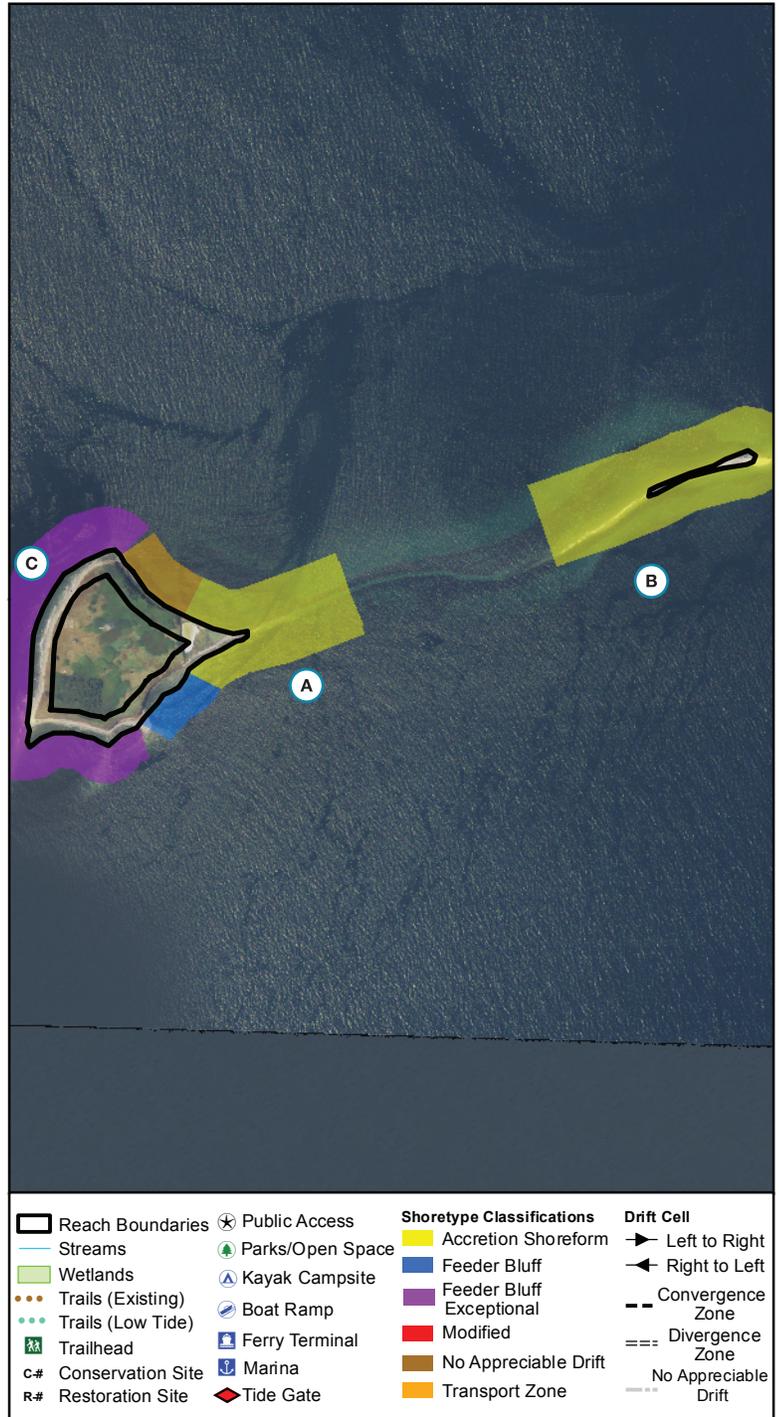
None mapped

#### Coastal Landslides & Toe Erosion:

None mapped

#### Steep Slopes

None mapped



Shoreline Oblique Photos (© Microsoft Bing Maps, 2010)

Historic Photo: Smith Lighthouse

**HABITATS & SPECIES**

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

Red Sea Urchin habitat (Smith Island only); pandalid shrimp habitat offshore to east and southeast.

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

All mapped under aquatic

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

Seabird colonies on both islands; seal haulout sites

**Coastal Lagoons** None mapped    **Coastal Stream Mouths** None mapped    **Wetlands (Map 4)** None mapped

**Forage Fish**  
**Sandlance** None mapped    **Smelt** None mapped  
**Herring** None mapped

**Salmonid Fish Use (Map 5)**

No streams on islands.

**LAND & SHORELINE USE**

**Shoreline Modifications (Map 13)**

Unmodified shorelines.

**Public Access (Map 16)**

Public watercraft access to Smith and Minor Islands is not authorized.

**Armoring (% of shoreline) (Map 13)** None mapped

**Zoning (Map 11)**

No Zoning

**Overwater Structures (Map 14)**

No overwater structures

**Current Land Use (Map 12)**

**Number of Parcels** 0    **Average Parcel Size** 0.00 Acres

Smith Island historically developed with a lighthouse and associated armoring. Lighthouse abandoned and largely destroyed by island erosion. Unmanned navigation lights located on both islands.

**Shellfish & Aquaculture (Map 15)**

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

**KEY MANAGEMENT ISSUES**

- Protection of aquatic and shoreline habitats through any future redevelopment, refurbishment or expansion of navigational and weather monitoring facilitates.
- Restoration and protection of island vegetation community from potential impacts of invasive species.
- Potential implications of sea level rise (SLR) on barrier beach and feeder bluff habitats (potential loss and / or modification of habitat).

**RESTORATION OPPORTUNITIES**

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

Potential restoration sites were not identified; the shoreline is composed of bedrock and has not been developed or otherwise utilized.

Ongoing protection of Smith and Minor Islands, designated a WDNR aquatic reserve, should be prioritized.