

Project Purpose & Partners



1.

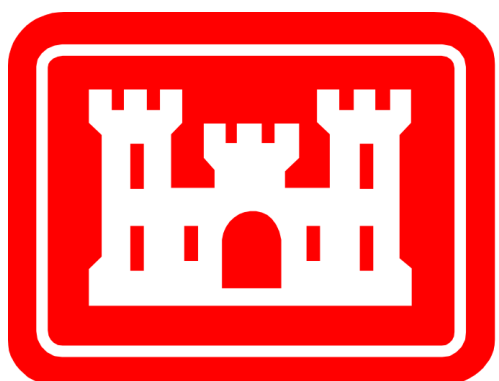
Develop long-term shoreline erosion protection design to protect the highway, drainage district, maximize protection of private lands

2.

Demonstrate shoreline protection concept is successful

3.

Develop masterplan and guidance for implementation of the next phase of shoreline erosion protection



US Army Corps of Engineers®



Washington Department of **FISH and WILDLIFE**

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North Cove Vicinity Projects

Existing Protection and On-Going Projects

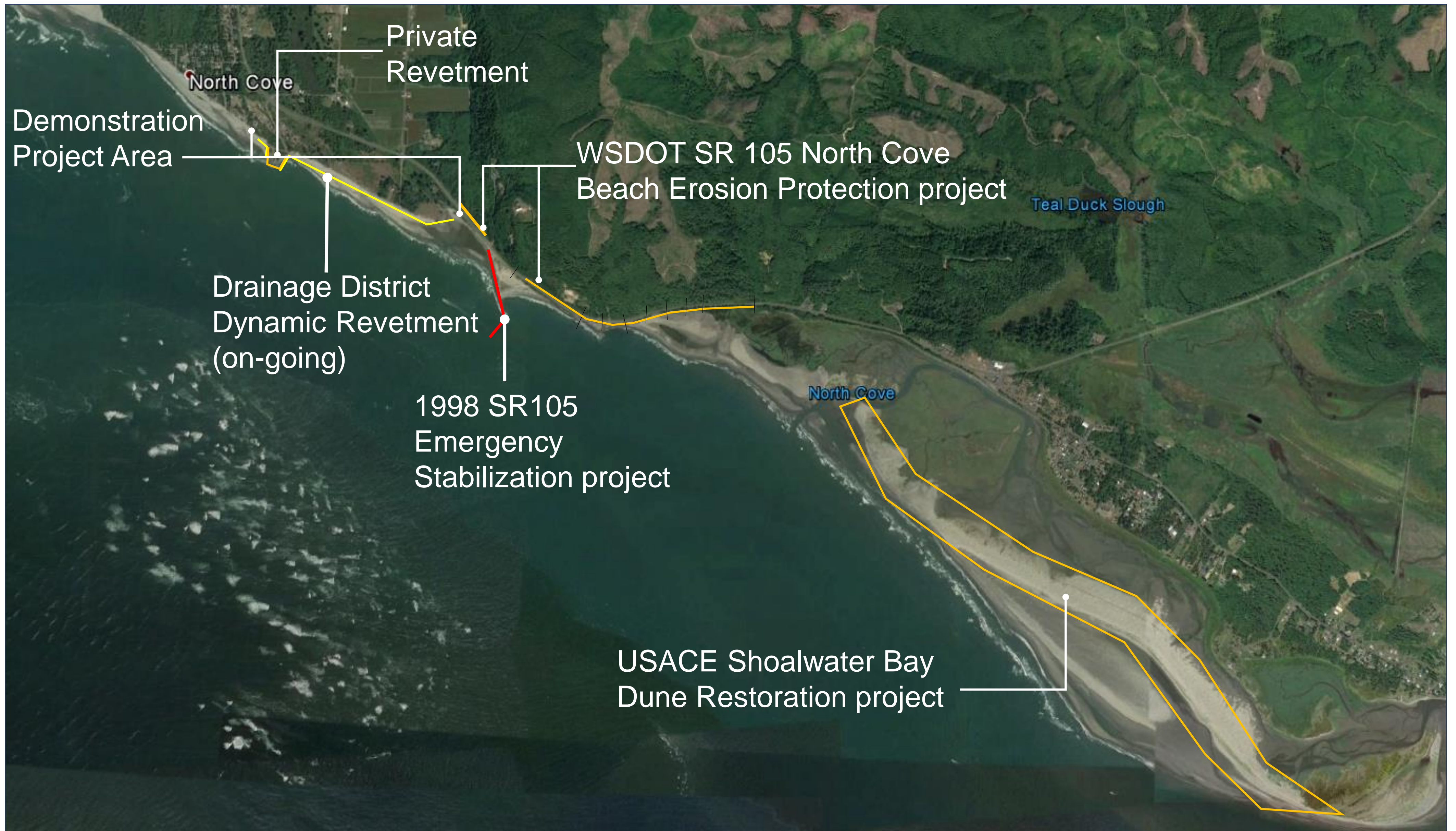


Photo Courtesy of David Cottrell



Photo Courtesy of WSDOT, October 2018

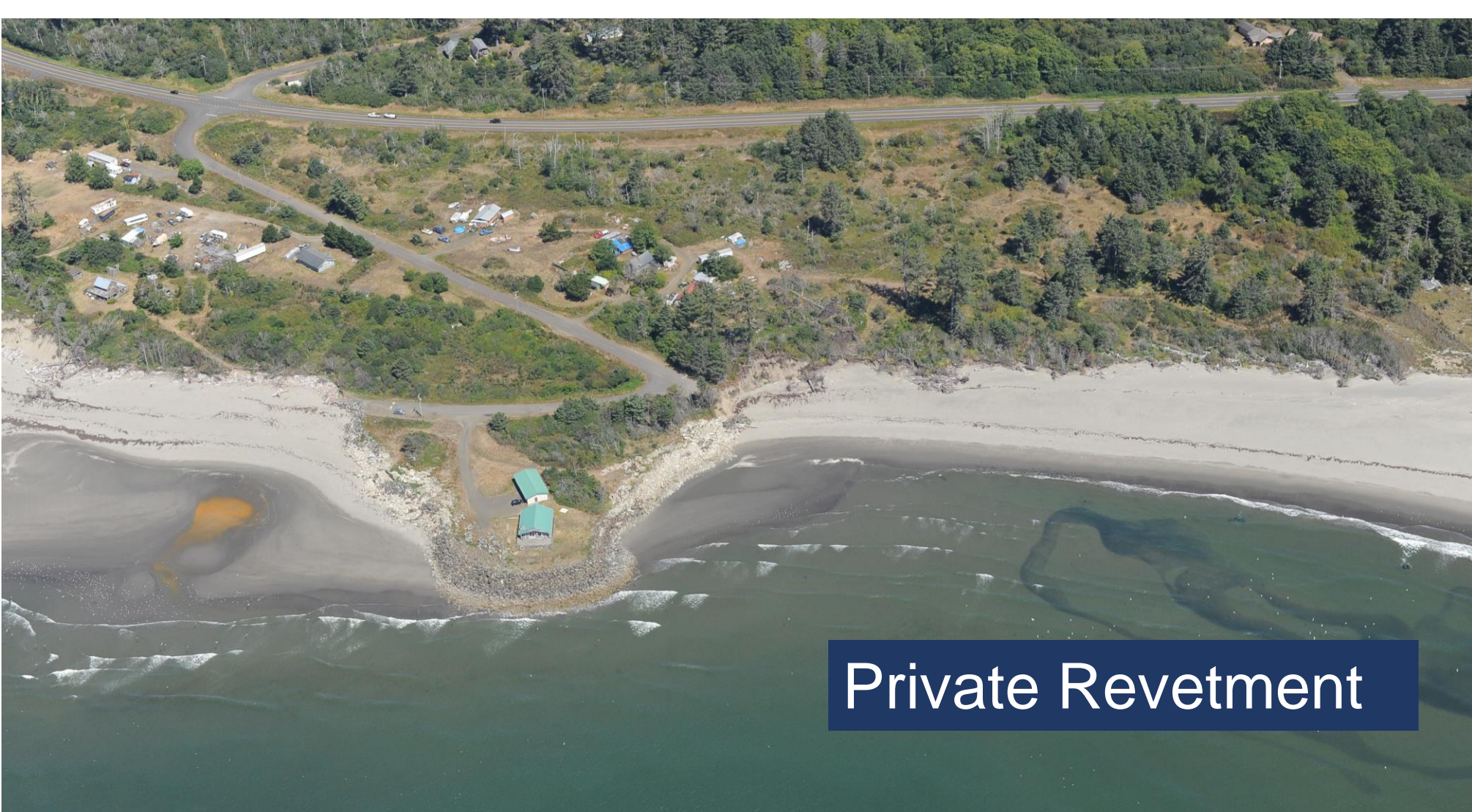


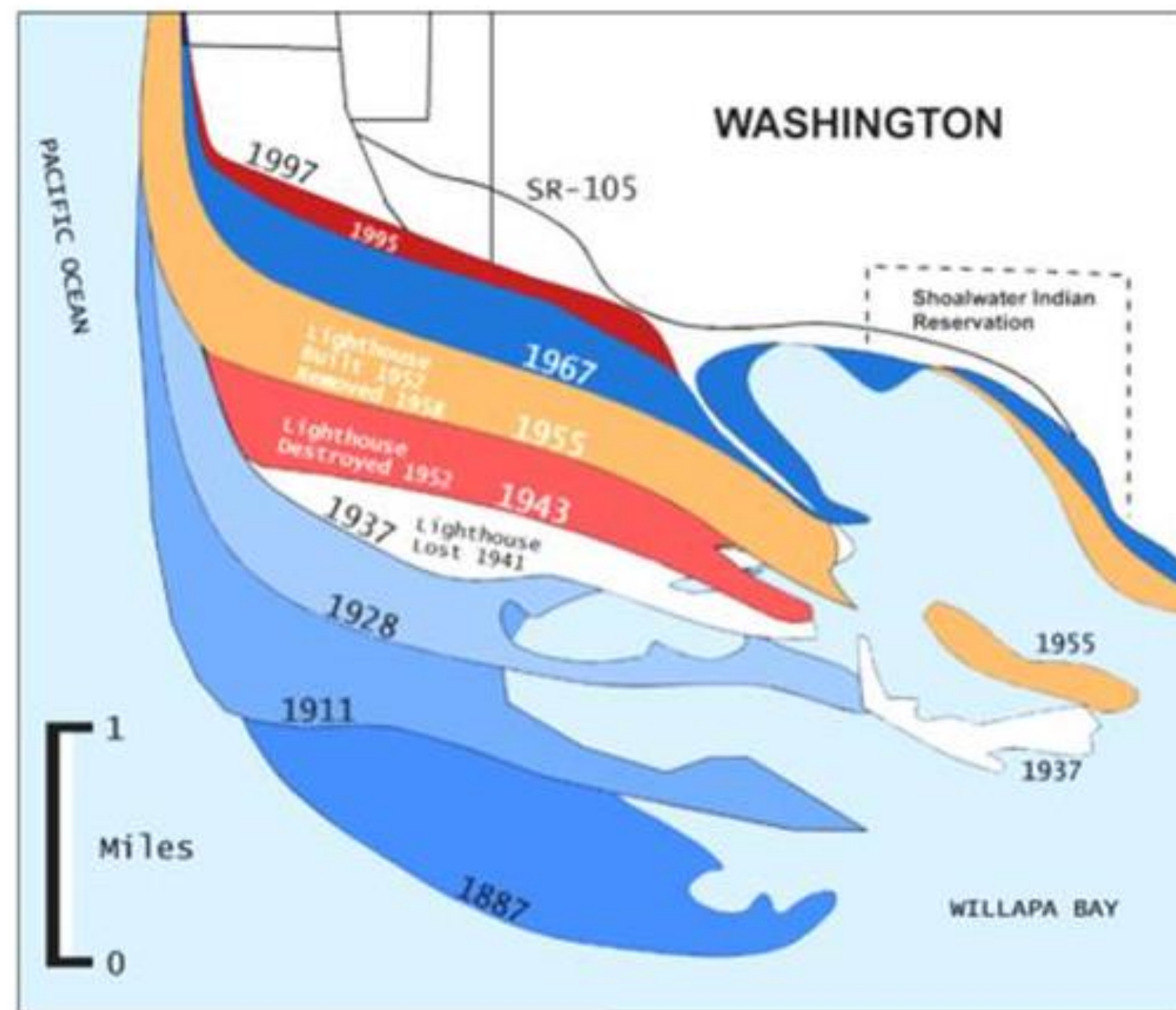
Photo Courtesy of Washington Coastal Atlas, WA Ecology, August, 2016



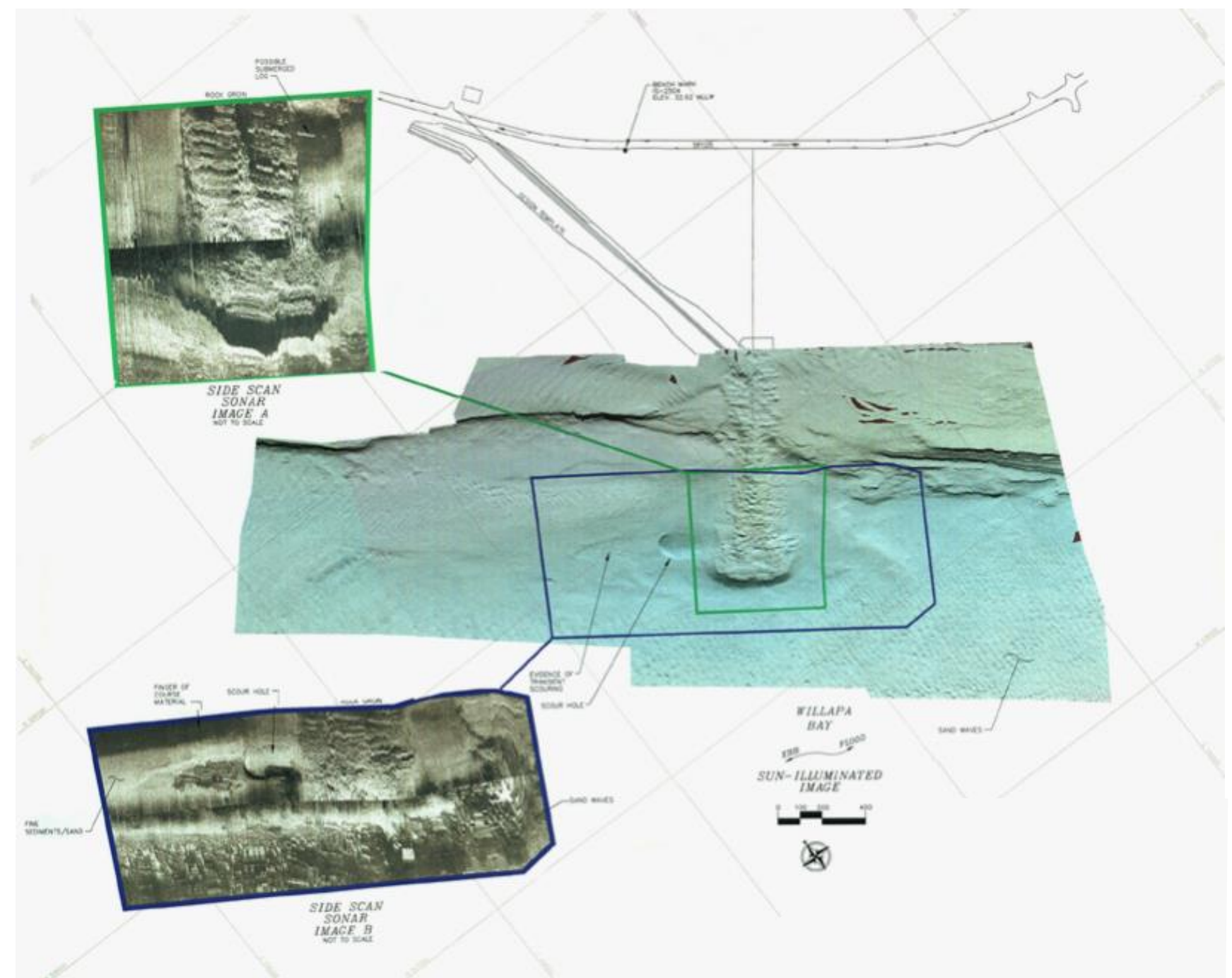
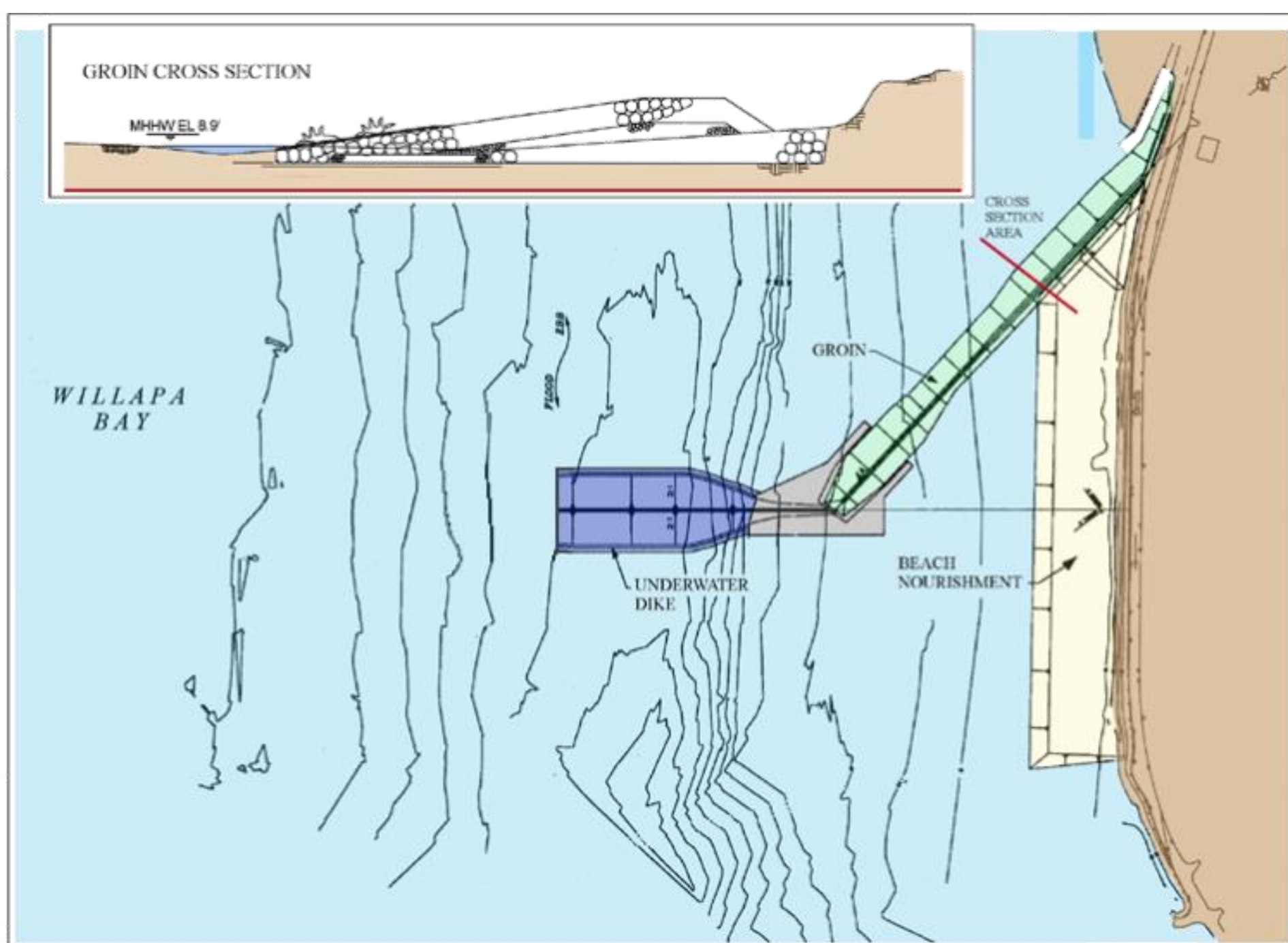
Photo Courtesy of Ross Island Sand and Gravel

Project History

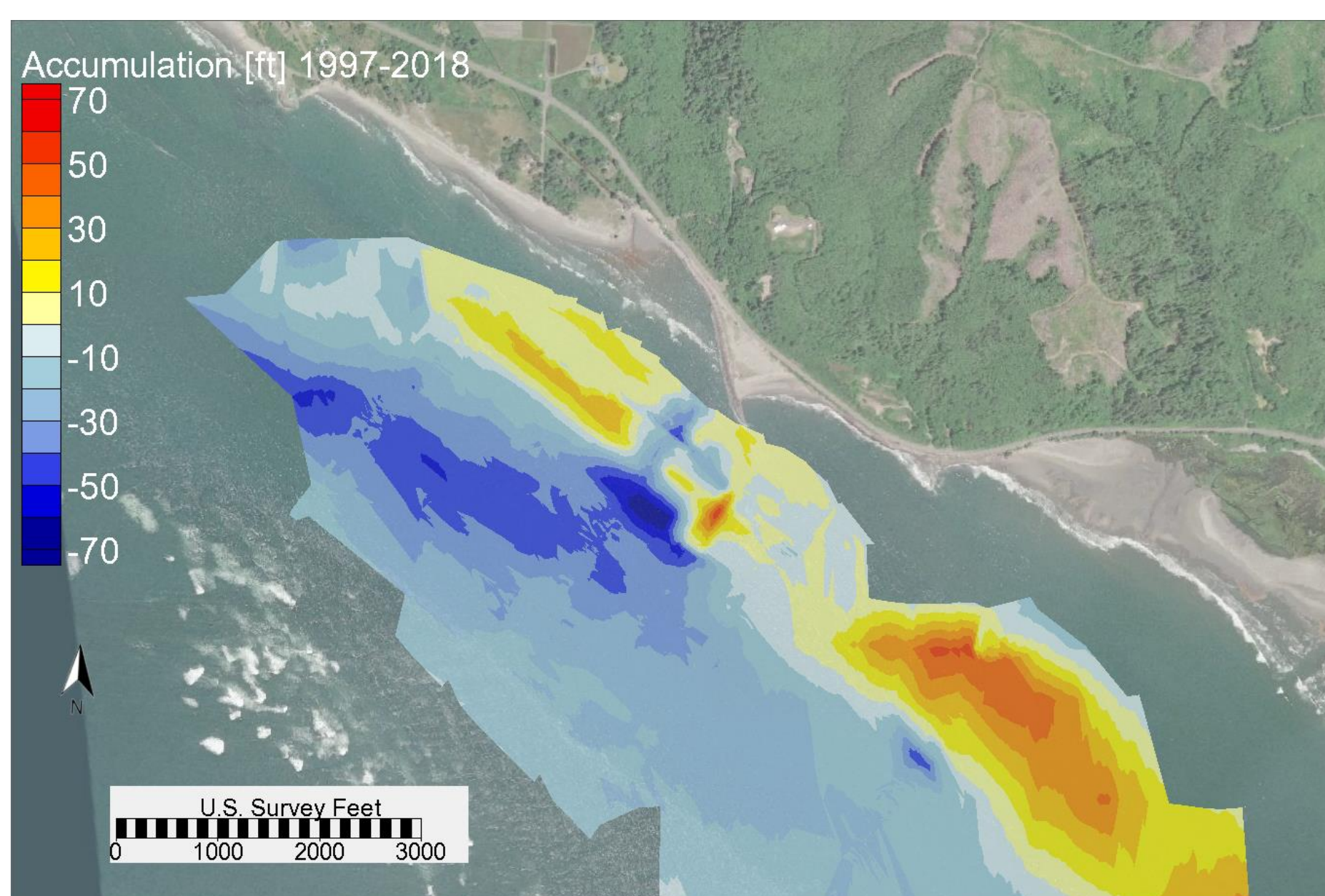
Historical Erosion



1998 Construction



Bathymetry: 1997-2018

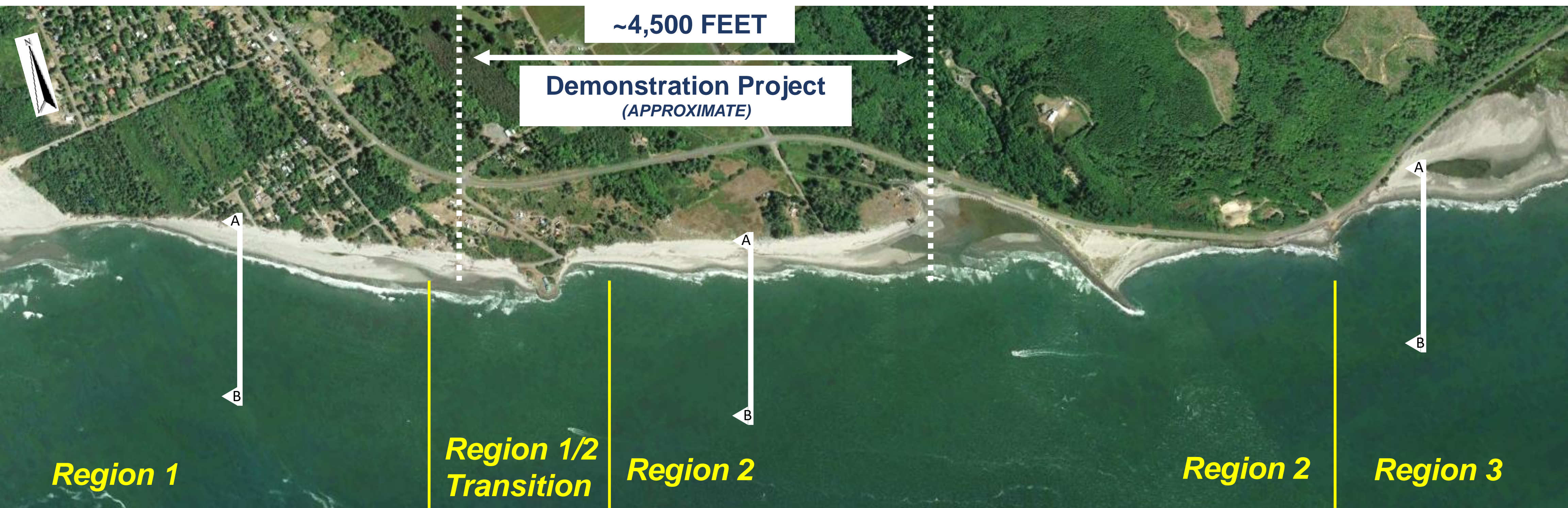


2018 Status

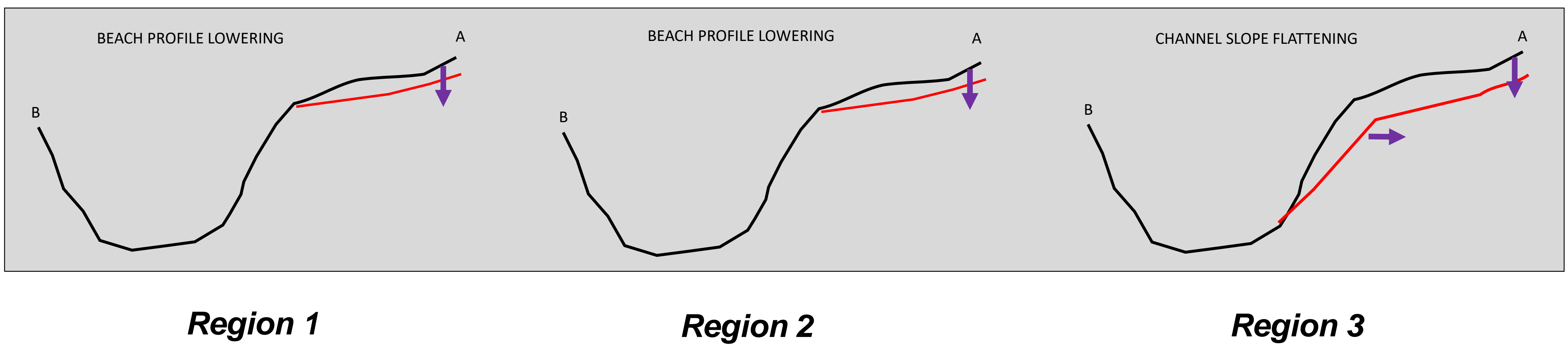


Photo Courtesy of WSDOT, October 2018

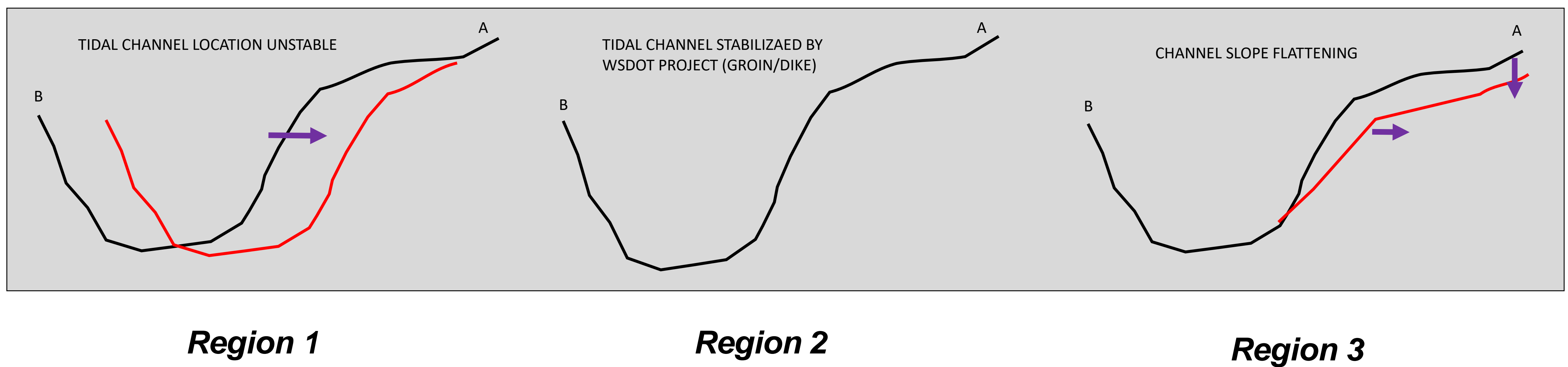
Coastal Processes



NEAR-TERM PROCESSES: Waves



LONG-TERM PROCESSES: Channel



LONG-TERM ASSESSMENT

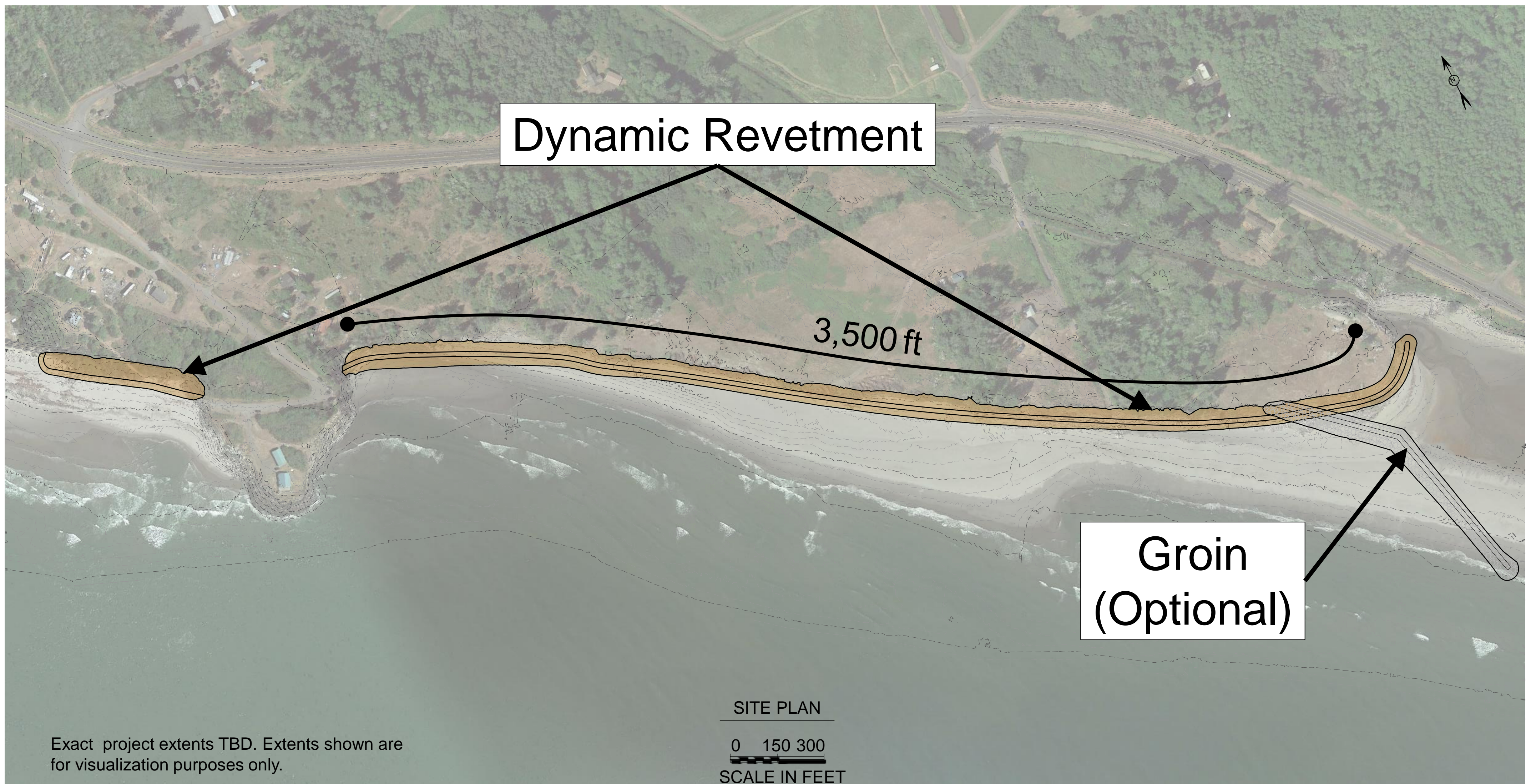
Predominantly controlled by channel tidal northward migration, also susceptible to wave induced erosion

Erosive shoreline subject to impact from waves and localized hydrodynamic effects

Deepening of landward slope provided increased wave energy to shoreline

Preferred Alternative

Demonstration Project Plan View



Dynamic Revetment Cross-Section

