

Marine ShoreZone Mapping

Coastal Habitat Inventory- Southwest Alaska Network



Home | Washington & BC ShoreZone | About Coastal Alaska | Contact Us | Site Map

Coastal Alaska

[Fly the Alaska Coastline](#) | [View Thematic Maps](#) | [Field Inventory System](#) | [Downloads](#) | [Purchase Videotapes](#)

The Coastal Alaska Website integrates the various levels and types of mapping data that have been collected for the Gulf of Alaska Region to date.

Your comments and suggestions are welcome...

Study Area

Fly the Alaska Coastline
Shows video imagery of all mapped areas of the coastline.

View Thematic Maps
Access geological and biological data, descriptions of the mapping, and downloadable data dictionaries.

Field Inventory System
Biological descriptions and pictures of invertebrate and algal assemblages found in Coastal Alaska.

Download Mapping Data
All data used to create the thematic maps is available here including all MSAccess files and ArcView shape files.

Purchase Videotapes
All videotapes from the aerial video mapping will soon be available for purchase.

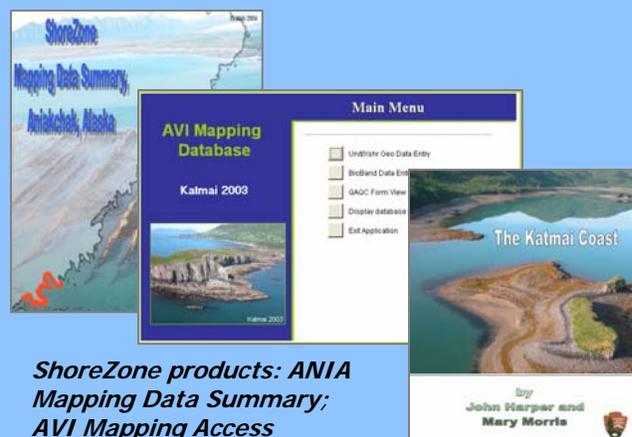
Importance / Issues

On March 24, 1989 the tanker Exxon Valdez grounded on Bligh Reef and discharged approximately 11 million gallons of Prudhoe Bay crude oil into Prince William Sound. Coastal winds and currents transported the oil slick southwest along the north shore of the Gulf of Alaska. The storm tossed crude oil degraded and weathered into an oil-and-water emulsion called mousse that stranded in various concentrations along the entire length of 3 SWAN parks. This event highlighted the risk of anthropogenic disturbance on pristine coastal ecosystems even hundreds of miles from the origin. It also demonstrated the need for baseline information and how crucial it is to protecting and restoring coastal resources. Biophysical habitat inventory and mapping was identified as the highest priority for the SWAN at its marine coastal monitoring scoping workshop in 2002.

Objectives and Sampling Design

ShoreZone is a coastal habitat mapping procedure that has been widely used in the Pacific Northwest to map coastal geomorphology and coastal biota along the entire coast of Washington and British Columbia. In Alaska, Cook Inlet Regional Citizens Advisory Council (CIRCAC) and the Exxon Valdez Oil Spill Trustee Council (EVOS) have conducted ShoreZone mapping

of Cook Inlet and the Kenai Peninsula, including the coastlines of Lake Clark and Kenai Fjords. In 2002-2004, SWAN contracted with Coastal and Oceans, Inc to conduct ShoreZone mapping of Katmai and Aniakchak. ShoreZone uses aerial video imagery to produce a high resolution picture of the coastline and associated biota. Geologists and biologists then view and classify the imagery to create a habitat inventory of coastal morphology, coastal substrate types and biota that are visible from the air. In addition, ground-based sampling is conducted to provide more detail about the assemblages of intertidal species and their habitat.



ShoreZone products: ANIA Mapping Data Summary; AVI Mapping Access Database; and KATM Coast Educational Guidebook

Current and Future Monitoring

During 2006, CIRCAC and SWAN visited the coastline of Aniakchak National Monument and Preserve to ground-truth and verify habitat types, biobands, and areas with unique geomorphology or biology. This completes ShoreZone mapping of the SWAN. Final products include the video imagery and an ArcIMS mapping engine that is web-posted (CoastalAlaska.org) and allows the user to "Fly the SWAN Coastline" and view thematic maps of specific types of physical and biological information. Other products include data summary reports, access database that contains photographs and data from ground stations, and an educational guidebook to the Katmai Coast.

Contacts:

Alan Bennett, SWAN alan_bennett@nps.gov

Susan Saupe, CIRCAC saupe@circac.org