



## Coastal Habitat Mapping Program *Fact Sheet*

**ShoreZone** is a mapping and classification system that specializes in the collection and interpretation of low-altitude aerial imagery of the coastal environment. Its objective is to produce an integrated, searchable inventory of geomorphic and biological features of the intertidal and nearshore zones which can be used as a tool for science, education, management, and environmental hazard planning. The ShoreZone mapping system provides a spatial framework for coastal habitat assessment on local and regional scales. Imagery now exists for nearly 100,000 km of coastline from Alaska, British Columbia, Washington and Oregon (Fig. 1). The North Slope and Kotzebue Sound mapping is in progress. The Alaska ShoreZone coastal mapping program is a partnership of scientists, GIS specialists, web specialists, nonprofit organizations, and governmental agencies. A full protocol of ShoreZone is available at [www.shorezone.org](http://www.shorezone.org) as well as on the Coastal & Ocean Resources website ([www.coastalandoceans.com](http://www.coastalandoceans.com)). Imagery and data in mapped regions of Alaska can be viewed, queried, and downloaded at the NOAA ShoreZone website ([www.alaskafisheries.noaa.gov/shorezone/](http://www.alaskafisheries.noaa.gov/shorezone/)).

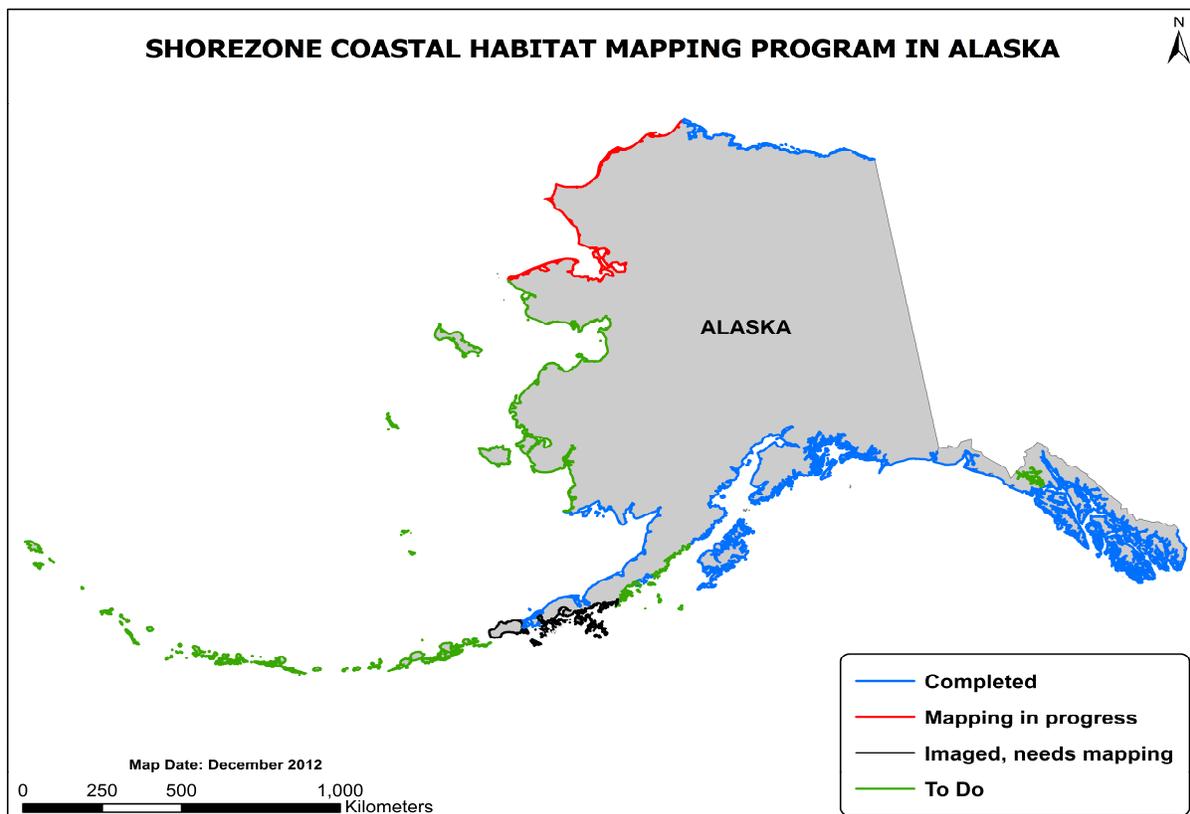


Figure 1. Extent of ShoreZone imagery in Alaska. Imagery and mapped data can be viewed and downloaded at [www.alaskafisheries.noaa.gov/shorezone/](http://www.alaskafisheries.noaa.gov/shorezone/)

Oblique low-altitude aerial video and digital still imagery of the coastal zone is collected during summer low tides (zero tide level or lower), usually from a helicopter flying at <100 m altitude. Video and still images are spatially-referenced and time-synchronized. Geomorphic, sedimentary, and biological features within each unit are mapped into across-shore *zones* with respect to relative tidal elevation. Units are digitized as shoreline segments in ArcGIS software, and then integrated with the coastal attribute data in a relational geodatabase. Mapped habitat features include wave exposure, substrate type, geomorphology, sediment texture, and biological assemblages (“biobands”) such as marsh grass, algae, kelps, and eelgrass (Fig. 2).

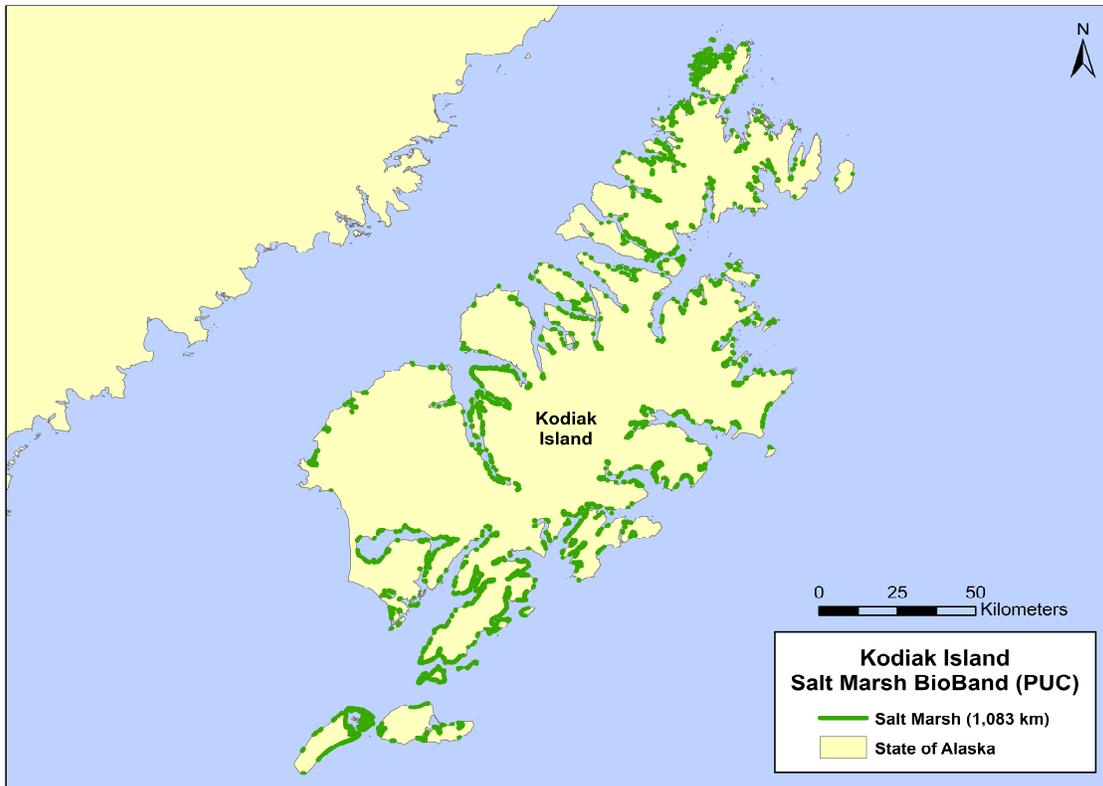


Figure 2. Extent of Salt Marsh (PUC) on Kodiak Island, Alaska.

 <p><b>Coastal &amp; Ocean Resources Inc.</b></p>	 <p><b>ARCHIPELAGO</b> MARINE RESEARCH LTD.</p>
<p>Coastal &amp; Ocean Resources has managed all the ShoreZone programs in Alaska since 2001. CORI is the lead contact with the many ShoreZone partners in Alaska</p>	<p>Archipelago has been a partner in Alaska ShoreZone since 2001 and is responsible for biological components of the program.</p>
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