

Abstract

ShoreZone: An Inventory and Photographic Record of Coastal Habitats in Alaska and the Pacific Northwest

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ShoreZone is an imaging and coastal classification project that, with contributions from over 60 partners, has been gradually cataloging information about Pacific Northwest coastlines since 1979 and Alaskan coastline since 2001. The goal of the ShoreZone program is to collect aerial



ShoreZone imagery of *Eularia fistulosa*, dragon kelp in Southeast Alaska

imagery and habitat classification characteristics for all of California, Oregon, Washington, British Columbia and Alaska's coastline, and to make the imagery and the data both "physically and intellectually" accessible to everyone. Thus far, coastlines in all of Oregon, Washington, British Columbia, and over 90% of Alaska have been characterized using ShoreZone.

People use ShoreZone coastal imagery and the companion database to manage the coast for the benefit of the many animals and plants, people and industries who depend on it. The standardized system at the heart of ShoreZone's dataset provides a close-up inventory of both geomorphic and biological resources, and this attribute-rich content can be used to extrapolate site data over broad spatial ranges. Low tide, oblique aerial imagery sets this system apart from other complimentary mapping efforts, which we will outline in our presentation. Anyone working, living or interacting with the coast can use ShoreZone to "fly the coastline" (aerial video), view still photos, and access biophysical data using the interactive website.

This session showcases a tool that is available in most of the Pacific Northwest and Alaska, and that has been developed for rapid preliminary site assessments within the coastal zone. ShoreZone allows users to quickly query a wide range of specific coastal habitat attributes without extensive GIS experience and exposes users to a collection of open-license coastal imagery.

This presentation will include a basic overview of the ShoreZone program's history, what it is, where ShoreZone is in the Pacific Northwest and Alaska, and how ShoreZone has been applied in diverse ways to improve our understanding of coastal ecosystems and inform coastal management. Attendees will have an opportunity to see how the ShoreZone interface can be used to access ShoreZone data, and how ShoreZone data may also be viewed on other interactive data portals, such as the Alaska Ocean Observing System. This is a focused lecture with educational elements that have been successfully employed in other settings to train people in how to use and explore the ShoreZone video, imagery, and data resources. The ShoreZone

project is a not-for-profit program that is only made possible by through the partnership of over diverse 40 entities. See partners here: <http://www.shorezone.org/about-us/our-partners>

ShoreZone is designed to be used across a broad range of applications and has been used to inform oil spill planning and response, nearshore biodiversity research, marine debris location studies, coastal restoration prioritization, climatic changes to subsistence, archeological studies, and art among others. From the experience GIS professional to the coastal recreationist, this session will show how ShoreZone can be integrated to better improve our understanding of nearshore geomorphic and biological resources regardless of your knowledge or skill level. Participants will come away with the following skills:

1. Query ShoreZone video, imagery and database;
2. Find coastal data tools and resources from multiple sources;
3. Understand how ShoreZone data could be used in a variety of applications; and
4. Have a greater appreciation for the challenges associated with mapping our coasts.

The presentation will be given using PowerPoint or similar with live demonstrations to show how to access the ShoreZone imagery and data. A projector and computer are needed, as well as high speed wired internet. Participants are encouraged to bring laptops with them to actively follow along during live demonstrations using wireless internet. Additional power outlets would be helpful throughout the room.