



# ShoreZone

# 2011 YEAR IN REVIEW

## 2011 Alaska Marine Science Symposium -

The ShoreZone partners conducted a workshop on using ShoreZone. The workshop covered the data collection procedures, the use of the on-line dataset and the use of the data in a full GIS mode. We are pretty sure it was the intrigue of the ShoreZone data that drew the 30 plus participants to the workshop and not the complementary wine and beer. Attendees were especially interested in the hard-drive version of the high definition videography that the Cook Inlet Regional Citizens Advisory Council (CIRCAC) has been developing for Cook Inlet. David Janka from Cordova asked “When can we get that for Prince William Sound?”

Presenters included Mandy Lindeberg and Steve Lewis from NOAA, John Harper from CORI, Mary Morris from Archipelago and Susan Saupe from CIRCAC.

## 2011 ShoreZone Annual Partner Meeting-

On October 25-26, ShoreZone enthusiasts met in Anchorage, Alaska. The meeting was hosted by the National Park Service, with a great thanks to Joel Cusick. The meeting was well attended, both in person and through a webinar.

Presentations are accessible on the Shorezone.org web site. What struck most attendees is the number of applications that ShoreZone is being put to by a variety of users, from habitat modeling for sea urchins to oil spill response and planning.



Flying over a very exposed shoreline on the south side of Ukolnoi Island, in the Pavlof Islands group, western Alaska Peninsula. Photo taken by Mandy Lindeberg.

## Alaska Peninsula Imaging Survey -

During the low tide window in May (16th-21st), two ShoreZone teams surveyed 4,153km (2,581 miles) of coastline in the wild region of the Aleutians and Alaska

Peninsula. Team Sand Point surveyed Gulf of Alaska areas including Unga Island, Nagai Island, Big Koniuji Island and part of the peninsula. Team Cold Bay took advantage of the tide switch at the Unimak Pass to fly two tides. “We had two days with seven hours surveys, because just as the tide ended on the south side of the peninsula, it would open up on the

north side in the Bering Sea” explains Kalen Morrow. Nearly 30,000 still photos were collected. The imagery reveals a stunning volcanic landscape with a rugged shoreline shaped by the harsh North Pacific and Bering Sea. [surveys funded by NOAA/NMFS].

### [ShoreZone.org](http://ShoreZone.org)

This site provides click-click-easy access for ShoreZone - Tutorials; Flying the Coastline; Outreach and Meetings; Supporting Documentation and our very own ShoreZone blog.

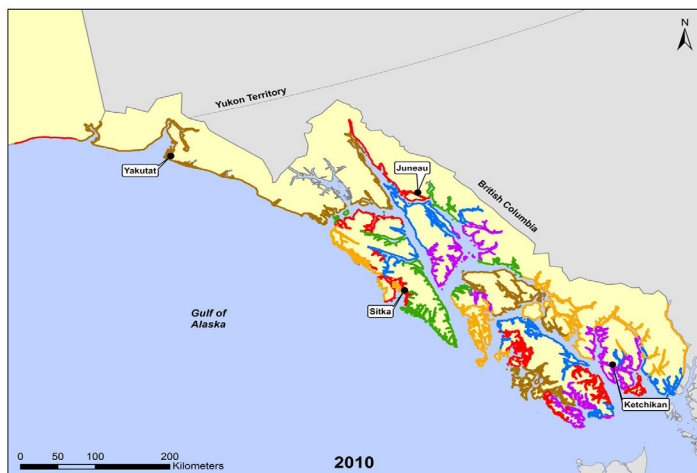
## Oregon Imaging Survey-

During the first week of June (1st-5th), the whole state shoreline was flown and imaged! “It is a straight line pretty much!” says Mary Morris. “The coast is extremely dynamic with very high energy, lots of sandy beaches and large estuaries.” Logistics were as challenging as southeast Alaska, but in quite a different way. Rather than a survey design based in a central location with daily radial transits to shoreline targets, the linearity of the Oregon coast required the development of a series of flexible plans that could be modified or interchanged based on weather conditions and previous day’s videography coverage. “We were blessed by the weather gods, and the optimal sequence was realized,” Sheri Ward explains, “enabling the survey to be completed within minutes of the original plan, and encompassing the survey target of the entire Oregon Coast!” Overall 1,783 km (1,108 miles) of coastline was imaged including more than 15,000 high-resolution photographs. [funded by Oregon Department of Fish and Wildlife].



The whole Oregon state was imaged in a single 5-day survey during June 2011. This photo was taken by Mary Morris near the mouth of Nehalem Bay, off Manzanita.

**Mapping in progress: North Slope and Bristol Bay** - Working in partnership with NUKA Research & Planning (Seldovia, AK), CORI has started ShoreZone mapping on the North Slope with previously-collected imagery (NOAA, USGS) to develop a comprehensive coastal habitat inventory. There is more than 4,000 km (2,800 mi) of shoreline. The unique periglacial nature of the North Slope required the Alaska ShoreZone to be updated to include permafrost-features such as inundated tundra and ground ice slump. A ground verification program will be conducted during the summer of 2012 to provide additional information of coastal species, sediment textures and storm surge elevations. A special protocol has been developed that will allow the ground observations to validate aerial mapping interpretations. [Nuka Research & Planning is contracted by the Bureau of Ocean Energy Management – BOEM and CORI and Archipelago are subcontractors]



ShoreZone Surveys in SE Alaska: 7 years, 20 surveys, Nearly 30,000km (19,000 miles) of shoreline mapped.

**SE Alaska Mapping Program** –In 2011, Coastal & Oceans (CORI) has completed mapping SE Alaska! Nearly 30,000 km (19,000 miles) of shoreline is mapped (there are about 1,100km [680 miles] of unmapped shoreline in Glacier Bay. Twenty surveys from 2004-2010 tell us that salt marsh occurs along 46% of the shoreline, a surprisingly high percentage of the coast. Eelgrass, a designated essential fish habitat (EFH), is mapped along 20% of the coast to date. Canopy kelps are mapped along 34% of the coast. Most of the coastline is low energy with Semi-Protected (38%) and Protected (44%) wave exposures. Only 5% is characterized as Exposed. [funded by NOAA/NMFS & DNR/TNC].