



2015 Annual ShoreZone Partner Meeting

13-14 October 2015
Captain Cook Hotel, Anchorage



Tuesday, 13 October 2015
ShoreZone Partner Meeting

1:00 – 1:15 pm	Welcome and Introduction (<i>Susan Saupe, CIRCAC</i>)
1:15 – 1:35	ShoreZone Partnerships, coordination and outreach (<i>Mandy Lindeberg, NOAA</i>)
1:35 – 1:50	ShoreZone progress report: ShoreZone updates and a look ahead (<i>Carl Schoch, CORI</i>)
1:50 – 2:00	Q&A
2:00 – 2:15	Break



2:15 – 3:15

What's new in ShoreZone: a deeper look

- 2:15 ShoreZone offline viewer (*Andy Lanier, Oregon Coastal Management Program*)
- 2:30 Norton Sound imaging summary (*Kalen Morrow, CORI*)
- 2:40 New ShoreZone modules and mapping protocols (*Kalen Morrow, CORI*)
- 2:50 New bioband mapping protocols (*Sarah Cook, CORI*)
- 3:00 Alaska Peninsula and YK Delta mapping summary (*Sarah Cook, CORI*)

3:15 – 3:30

Planning for and funding future ShoreZone work (*Cindy Hartmann Moore, NMFS*)

3:30 – 5:00

ShoreZone applications, integration and uses

- 3:30 Structure from motion (*Nicole Kinsman, NOAA*)
- 3:45 Mapping blue carbon (*Sarah Cook, CORI*)
- 4:00 Integration of ShoreZone into the AOOS Alaska portal (*Stacey Buckelew, Axiom*)
- 4:15 Geomorphology and sustainable traditional gathering patterns (*Adelaide Johnson, USFS*)
- 4:30 Coastal and Marine Ecological Classification Standard, CMECS (*Mark Finkbeiner, NOAA*)
- 4:45 Lower Cook Inlet nearshore habitat assessment, an NPS-led study (*NPS*)
- 4:55 The utility of Lidar for ShoreZone mapping (*Carl Schoch, CORI*)

Stick Around !



"The mission of the Council is to represent the citizens of Cook Inlet in promoting environmentally safe marine transportation and oil facility operations in Cook Inlet."

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Members

Alaska State Chamber of Commerce

Alaska Native Groups

Environmental Groups

Recreational Groups

Aquaculture Associations

Fishing Organizations

City of Kodiak

City of Kenai

City of Seldovia

City of Homer

Kodiak Island Borough

Kenai Peninsula Borough

Municipality of Anchorage

May 7, 2001

Governor Tony Knowles
Office of the Governor, Juneau Office
P. O. Box 110001
Juneau, Alaska 99811-0001

Dear Governor Knowles,

The Cook Inlet Regional Citizens Advisory Council (CIRCAC) is requesting support in its efforts to develop a comprehensive database on Cook Inlet's shoreline habitats. Specifically, we are interested in federal money that was allocated through "CARA-Lite," which incorporated several of the priorities of the original CARA bill (H.R. 701), into the Interior and the Commerce, Justice, and State Appropriations bills.

"...lack of data on Cook Inlet's shoreline and nearshore areas..."

"...the focus of our proposed program is to develop a geographically referenced database that includes detailed information on habitats – including geological, biological and physical features..."

"...expand our efforts..."

"...all of the data and imagery...accessible and searchable database that would be made available to any user through internet access..."

environmentally safe mandates under the Oil and Gas Leasehold Reformation Act, as well as by Cook Inlet Regional Citizens Advisory Council (CIRCAC).

nearshore areas that have been identified as important habitats. CIRCAC previously lacked the funds to conduct a comprehensive study.

database that includes detailed information on habitats – including geological, biological and physical features--for the entire shoreline of Cook Inlet, including the many environmentally sensitive areas. In addition, we would like to identify and develop protection strategies for these shorelines in order to minimize potential impacts in the event of an oil spill. These strategies would be integrated into the overall

for the entire coastline of the Kenai Peninsula Coast, portions of which would also collect the remaining habitat types. The background data would also be collected through the Geographic Information System (GIS).

incorporated into an accessible and searchable database that would be made available to any user through internet access

"As has been shown for the Washington and British Columbia databases...integral to numerous state and federal agency needs..."

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The value placed on understanding the Cook Inlet environment is illustrated by the definitions and special recognition given it through designation of Critical Habitat areas, State and National Parks, State and Federal Wildlife Refuges, including numerous maritime NWRs, and a National Estuarine Research Reserve. For these reasons, we believe there would be strong interest in developing a

"...provisions for funding programs related to Coastal Conservation and Impact Assistance...We anticipate the need for an initial match of \$750,000 with subsequent annual matching contributions..."

conservation and impact assistance...We believe that the effort towards creating a budget of our own is a responsible one. We anticipate the need for an initial match of \$750,000 with subsequent annual matching contributions

We can provide additional details or budgets, if needed. We appreciate your efforts towards making our proposed project a reality.



What Habitat Mapping is Being Done? What Approaches or Ideas Are On the Table?

Presentations were made on the following approaches to habitat mapping used to contribute to the GEM nearshore monitoring program.

- Shoreline Inventory Mapping System
Susan Saupe, CIRCAC

The Cook Inlet Regional Citizens Advisory Council (CIRCAC) has video imaging at low tide, with simultaneous narration about intertidal geomorphology and biology, for portions of Cook Inlet and Kachemak Bay. ShoreZone mapping characterizes the general geomorphology (substrates) and types for the intertidal zone. Information is input into a digital geographic information system (GIS). The project has filmed, interpreted and approximately 1,500 km of coastline, at a cost of approximately \$600,000. The contractor for the CIRCAC project was John Harper, Coastal and Ocean Resources, Inc. In 2002, CIRCAC will continue aerial video imaging in Kamishak of the outer coast of the Kenai peninsula (cost approx. \$58,000).

- Applications of ShoreZone Mapping in BC and Washington – and
A Biophysical Subtidal Mapping and Classification System
John Harper, Coastal and Oceans Resources, Inc.

ShoreZone aerial video imaging (with narration regarding geomorphology and biological features) has been completed for the entire intertidal coastline of Washington State and British Columbia. The mapping data is available on the Internet and is being used regularly by regulators and community groups to answer questions related to shoreline management. The data can be queried to answer questions as: “What is the distribution and abundance of eelgrass?” “Where have shorelines been modified?” “Where are high probability sites for new spawning?”

For subtidal areas, a seabed imaging and mapping system (SIMS) uses the same video imaging principle to photograph, classify and record subtidal features. Video cameras are towed from a marine vessel, while video images about geomorphology and biology are recorded. SIMS data is also input into a digital GIS. SIMS can be tied in with side-scan sonar information to broaden its applicability.

Recommendations

1. Begin low resolution aerial video imaging in selected regions in the Gulf of Alaska.

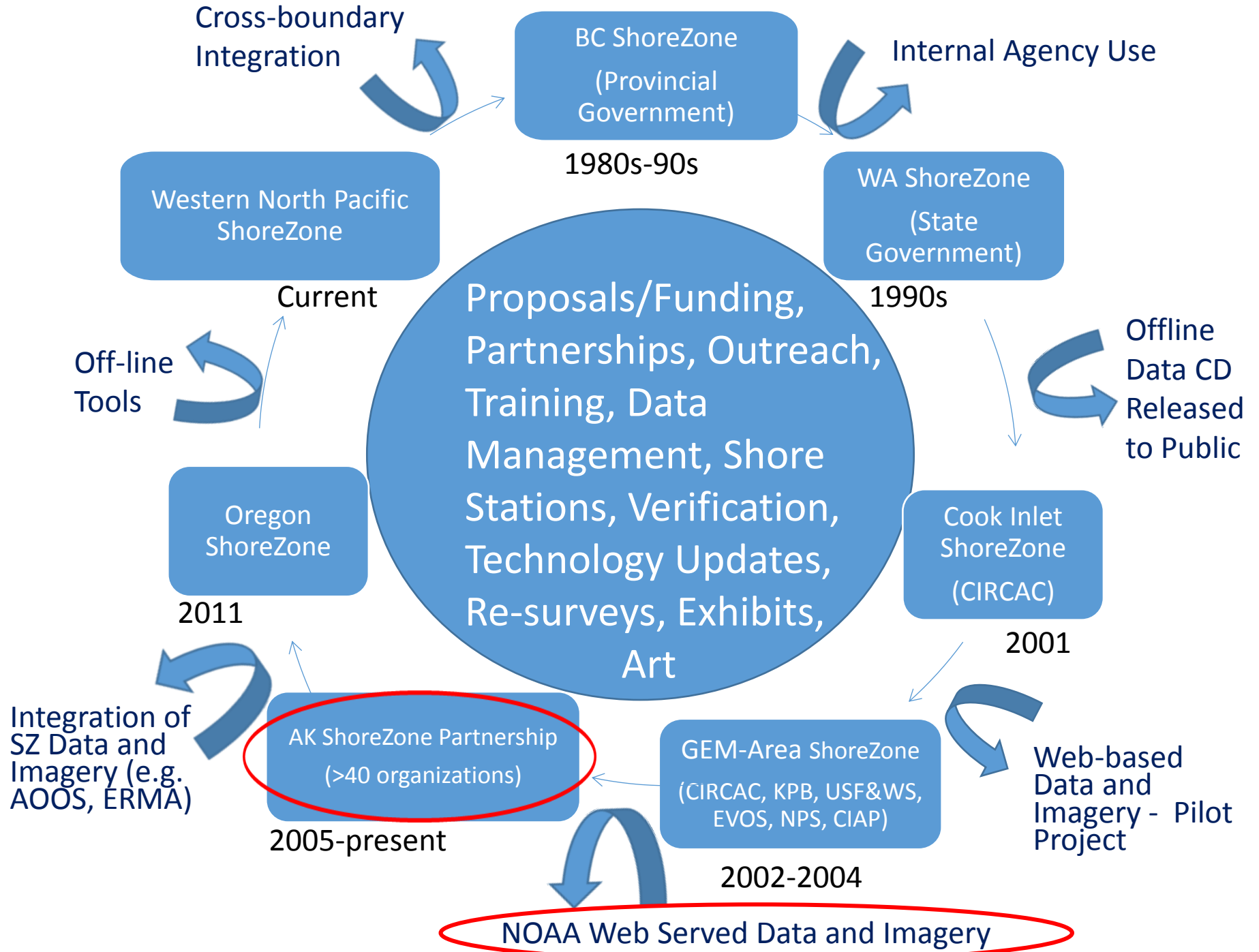
Aerial video imaging is a known technology that has been used successfully in the Gulf of Alaska (CIRCAC mapping in Cook Inlet/Kachemak Bay), and in Washington and British Columbia (ShoreZone). Aerial video is taken of the intertidal zone at low tide from a height of approximately 300-500 feet, with simultaneous narration about geomorphological and biological features. Images and data are stored in a digital GIS, which can be readily accessed and queried.

Priority areas for aerial video imaging in the coming year or two include:

- Prince William Sound – see if existing aerial video imagery taken following oil spill can be found and is useful. If not, need to map this area.
- Kodiak-Shelikof Straits (northeast section)
- Kenai Fjords/Seward

Information documented with aerial video imaging must include:

- Substrate
 - In enough detail to know how mobile and subject to change the substrate is
 - Sediment texture
- Other physical features
 - Exposure/fetch
 - Hydrology – freshwater inputs
- Biological information
 - Kelp and eelgrass distribution
 - Species assemblages in major “biobands”





Wednesday, October 14

ShoreZone working meetings

8:00 – 8:30 am

Data management discussion

8:30 – 9:45

Outreach and education

9:45 – 11:00

ShoreZone coordination and funding

11:00 – 12:00

Planning and funding additional ShoreZone work



