

NOAA
FISHERIES



Alaska ShoreZone: **A Coastal Habitat Mapping** **Program**

Auke Bay Laboratories
Alaska Fisheries Science Center

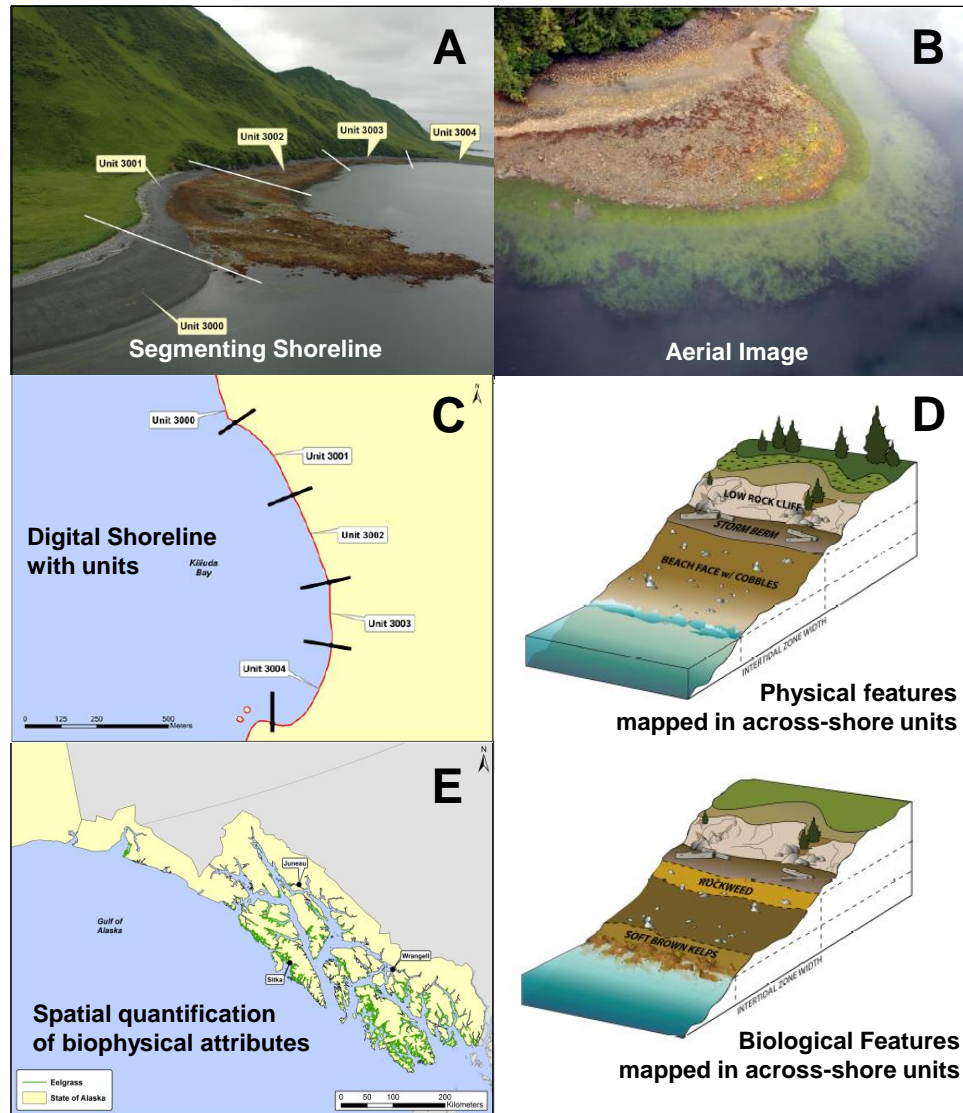
Mandy Lindeberg



Coastal Habitat Mapping:



Digitizing



Imagery as Data

Spacially Explicit

Geomorphology

Regional Quantification

Biobands

Why ShoreZone?

Human Activity

Originally developed for oil spill planning and response



Why Alaska? A History of Human Impacts to Coastal Areas

- *Exxon Valdez* oil spill 1989
- *Selendang Ayu* break up 2004
- Drill Rig *Kulluk* 2013
- USCG: July – Sept. 2015 =
16 F/V groundings



F/V Savannah-Ray, Kodiak March 2015



Why Alaska Now?

Coastal Issues & Increased Risk

- **Climate change**
- **Loss of sea ice**
- **Coastal erosion**
- **Increased vessel traffic**
- **Subsistence needs**
- **Resource development**
- **Coastal development**



Alaska ShoreZone Program:



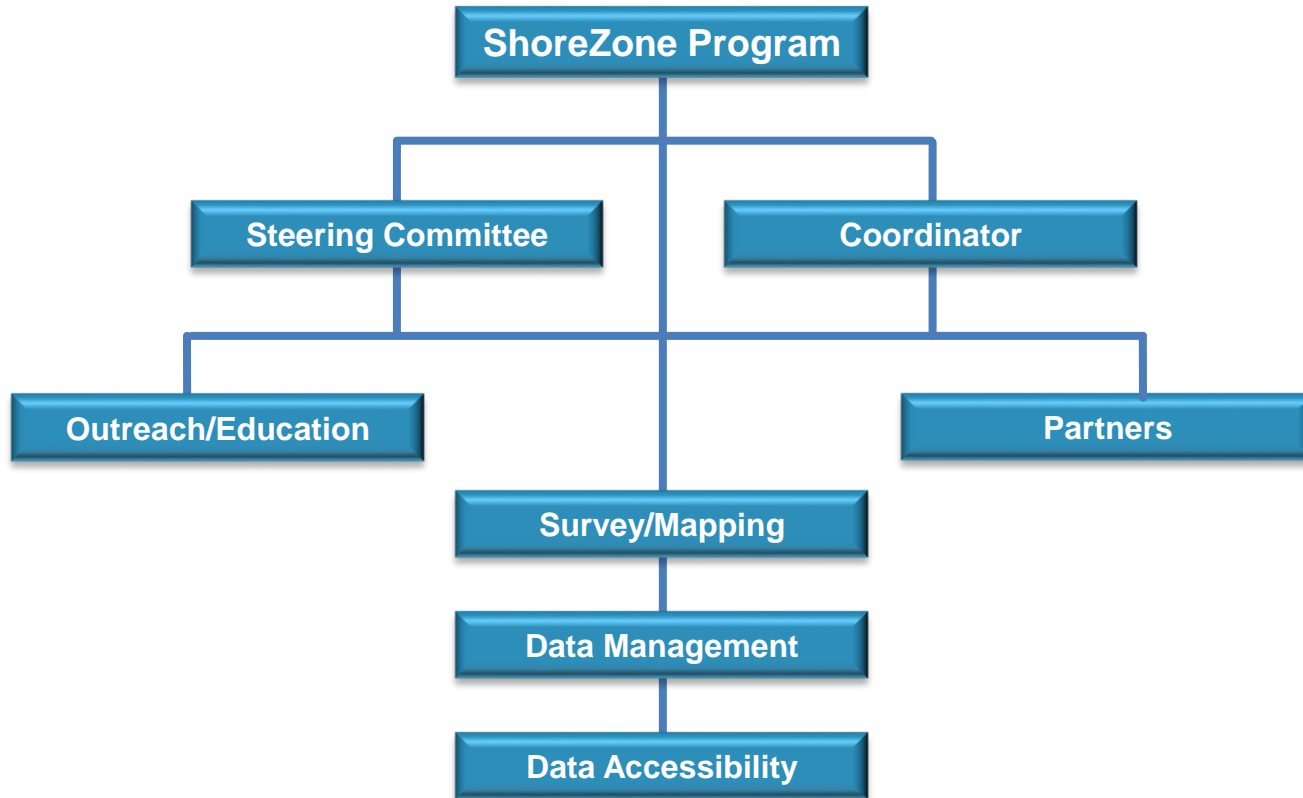
*A partnership of many agencies
and NGOs collaborating on various
phases of ShoreZone:*



**In kind
We Trust**

A thought bubble with a scalloped border and three small circles leading to it from the bottom left. Inside the bubble, the text "In kind We Trust" is written in a bold, black, sans-serif font.

AK ShoreZone Org Chart



Alaska ShoreZone Coordinator:



- **ShoreZone Partnership Coordinator**

- **Facilitates steering committee, partners**
- **Proposals, funding, contracts, surveys**
- **Communication, education**
- **Special projects**



**Thank You
Kelly
Ingram!**



ShoreZone Steering Committee



- **Prioritize activities of program**
- **Search for funding and partners**
- **Develop new products**
- **Communicate program activities**

STEERING COMMITTEE MEMBERS (ad hoc, not formalized)

Kelly Ingram	TNC – SZ coordinator
Catherine Coon	BOEM
John Harper	MER (on retainer)
Tahzay Jones	NPS
Cindy Hartmann-Moore	NMFS, AK Regional Office
Amy Holman	NOAA
Steve Lewis	NMFS, AK Regional Office
Mandy Lindeberg	NMFS, Auke Bay Labs
Mary Morris	Archipelago Marine Research
Susan Saupe	Cook Inlet RCAC
Tim Robertson	Nuka Research
Carl Schoch	Coastal & Oceans Resources



ShoreZone Partners



- NMFS AK Region
 - NMFS Auke Bay Labs
 - NOAA NOS
 - NOAA AK Region Collaboration Team
 - US DOI FWS Yukon Delta
 - US DOI FWS NWR
 - US FWS ALCC
 - US FWS WALCC
 - US DOI NPS
 - US DOI BOEM
 - US DOI BSEE
 - PWS RCAC
 - CI RCAC
 - TNC
 - UAF GINA
- and many more!



ShoreZone Online Services



NOAA website:

- Web enabled GIS
- YouTube streaming video
- Download video clips
- Download shapefiles, xshore
- Fish Atlas and Shore Station overlay

ShoreZone.org

- All things ShoreZone
- West Coast ShoreZone
- Online web enabled GIS for AK, WA, OR, ... BC, CA?



ShoreZone Online Desktop:



The interface includes a main map area with a red square highlighting a specific unit. A callout box points to the map area with the text: **Imagery and Data Extraction:** GIS view extent.

Another callout box points to the map area with the text: **Map Panel:** Dynamic tracking of imagery, shoreline attributes layer.

On the right side, there is a **Layer Legend** panel with a list of layers. A callout box points to this panel with the text: **Expandable Layer Legend Panel:** Map 160+ attribute layers.

Next to the layer legend is a **Unit ID: 04/07/1016/0** panel. A callout box points to this panel with the text: **Single Unit Panel:** Quick shore unit attribute summary.

At the bottom left, there are two video panels. The first is labeled **Full Motion Video Panel** and the second is labeled **High resolution still images**.

At the bottom right, there is a **Unit Description Table** showing a list of units with their attributes. A callout box points to this table with the text: **Unit Attributes Panel:** Complete listing of unit attributes.

Unit ID	Length	Habitat Class	Biological Wave Exposure	Oil Residency Index (ORI)	Coastal Class	Environmental Sensitivity...	Full ESI
04/07/1007/0	386	21	E	2	13	5	
04/07/1008/0	319	21	E	2	13	5	
04/07/1009/0	225	22	E	2	13	5	
04/07/1010/0	279	20	E	2	12	5	
04/07/1011/0	209	22	E	2	28	7	
04/07/1012/0	206	22	E	2	28	7	
04/07/1013/0	329	22	E	2	25	5	
04/07/1014/0	193	21	E	2		5	
04/07/1015/0	379	20	E	2			
04/07/1016/0	486	22	E	2			
04/07/1017/0	1,061	21	E	2			
04/07/1018/0	280	20	E	2			

ShoreZone Outreach



- Social Media



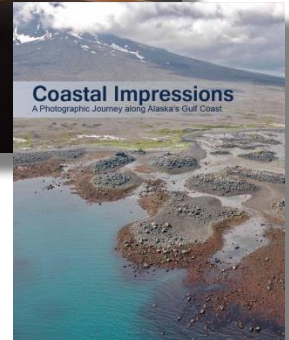
facebook

- ShoreZone.org

- Webinars

- Coastal Impressions

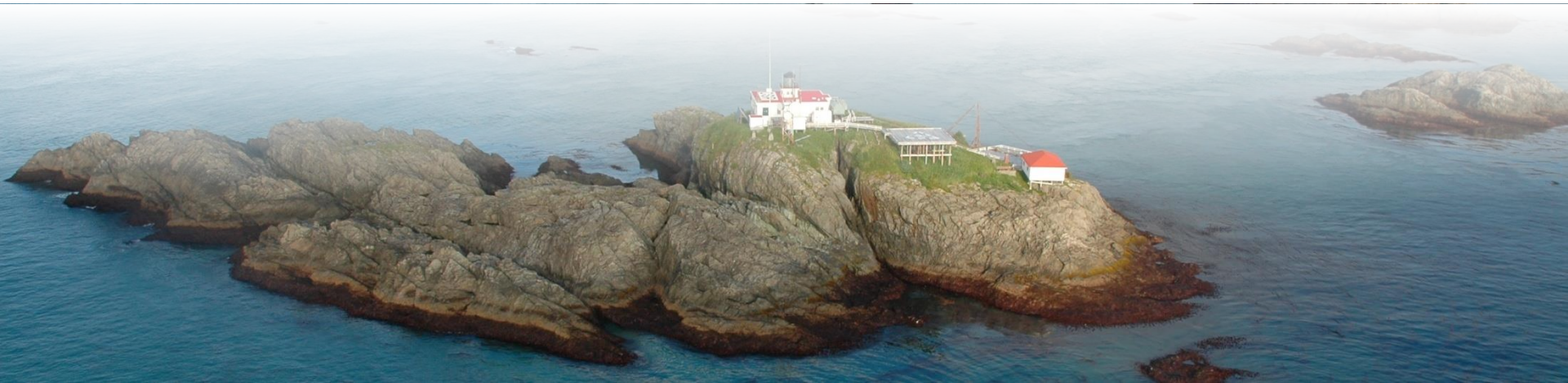
- Community outreach



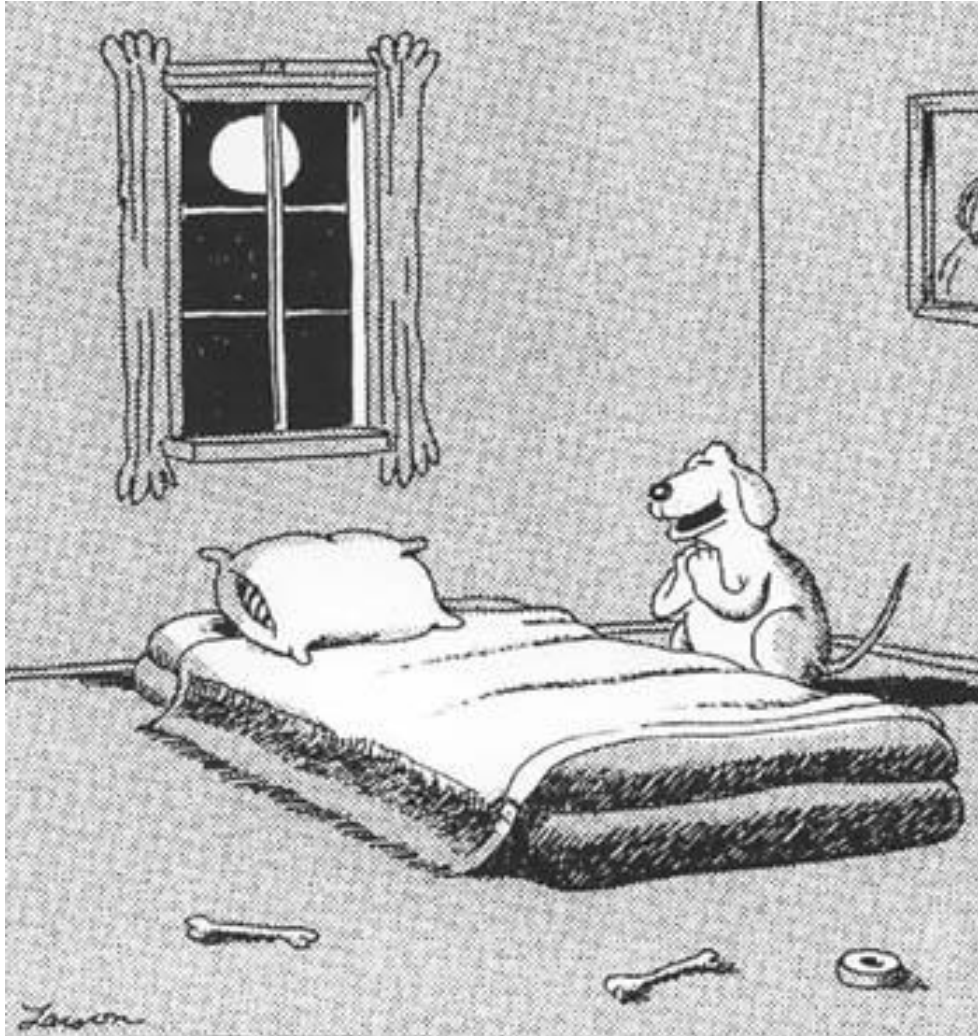
ShoreZone Users – many we didn't anticipate!

Random List that came across my desk in the last year:

- Rome Italy – Iberpress photo news agency
- Univ. Algarve Portugal – Global distribution of Giant Kelp
- Geoduck documentary – Story House Productions, Wash. D.C.
- Rpt to EVOSTC – lingering oil and Restoration Assessment
- NMFS highlight article – Art Meets Science on the AK Coastline
- NOAA Under Secretary – Request for coastal erosion slides
- NOAA Climate Tool Kit – ShoreZone added, press release POTUS



ShoreZone: wish list



- Aleutians, omg!
- More tools
- More Impressions

More of
Everything !