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Alaska Regional Office

NMFS Nearshore and Coastal Habitat Work in Alaska

Alaska Coastal Mapping Summit
December 9, 2020

Ellen Ward, Ph.D.
Alaska Regional Office
Habitat Conservation Division

Outline

Updates from 2018-today

1) ShoreZone (SZ)
2) Nearshore Fish Atlas
3) Essential Fish Habitat (EFH)

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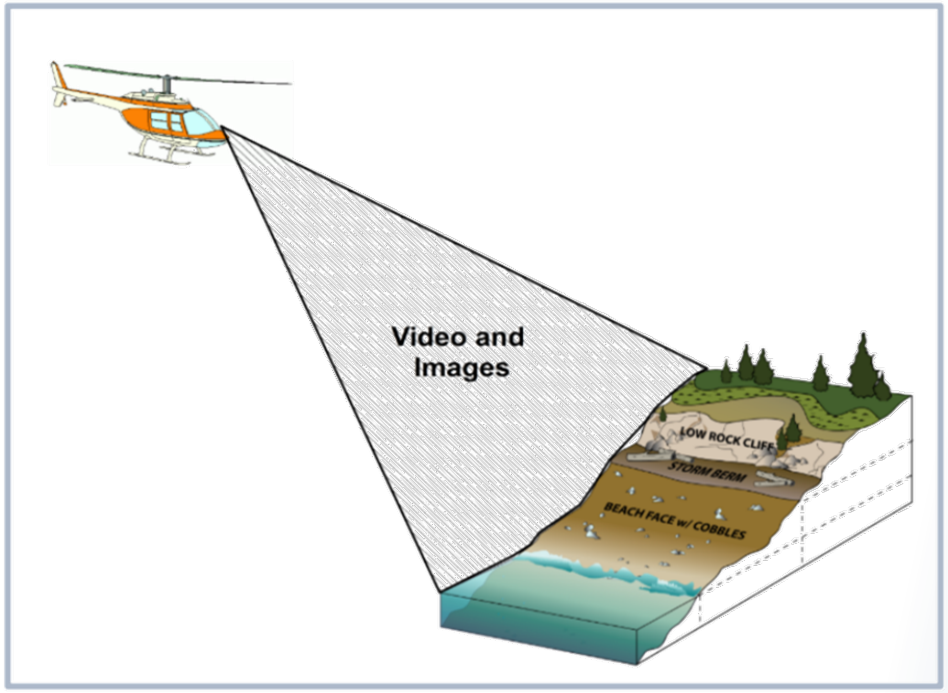
1) ShoreZone imagery and mapping

- Over 50 partners have contributed to this coastal mapping effort since the early 2000's
- 94% of Alaska's coastline has been imaged
- 98% of that imaged coastline has been mapped
- Data available online: https://alaskafisheries.noaa.gov/mapping/sz_js/

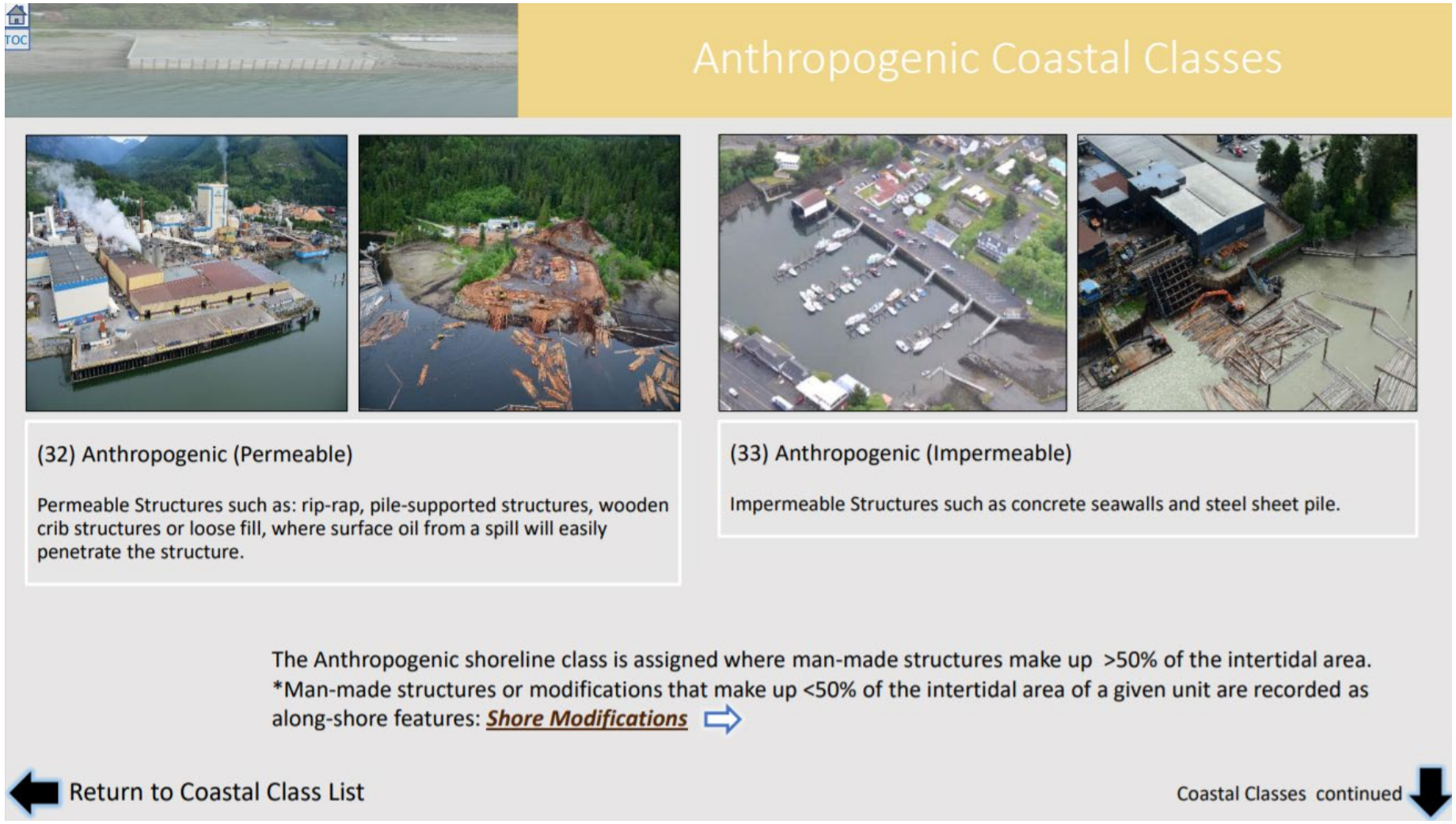
- Low-tide, oblique aerial digital photography and video record of the coastline



New ShoreZone Illustrated Data Dictionary

- An interactive document to help users navigate SZ data
- Image examples provided for mapped shoreline attributes
- Available online: https://www.fisheries.noaa.gov/alaska/habitat-conservation/alaska-shorezone

New ShoreZone Illustrated Data Dictionary



New ShoreZone imagery

- Collected in Glacier Bay in 2018
- Complete coverage of imagery in Southeast Alaska

2) Nearshore Fish Atlas

- Distribution, relative abundance, and habitat use of nearshore fishes in Alaska
- Beach seine sampling method
- Data available online: https://alaskafisheries.noaa.gov/mapping/sz_js/

Sampling an eelgrass bed

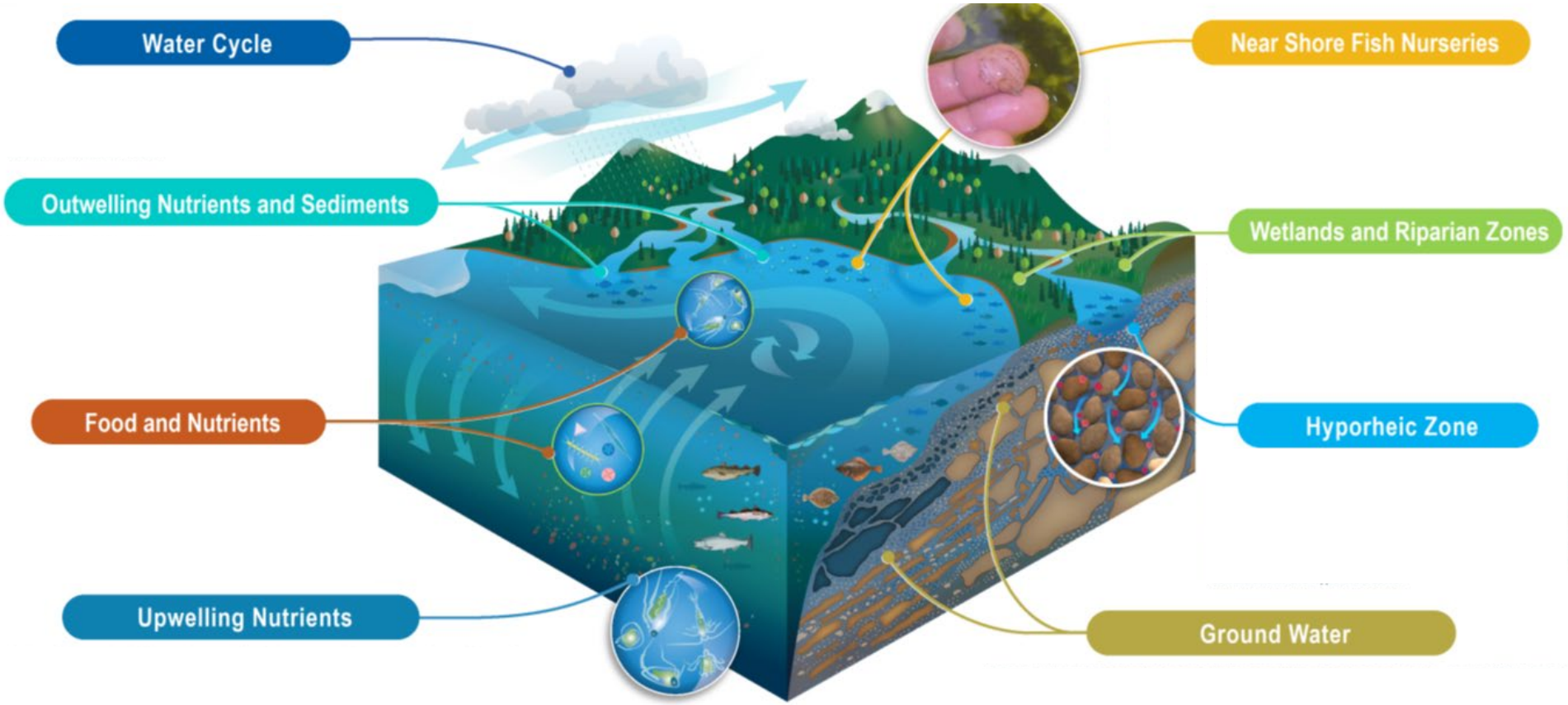
New Nearshore Fish Atlas Data

- New data online soon
- 25 new fish survey datasets
- 7 organizations contributing
- Additional 3,800 beach seine hauls, 768 nearshore trawls, spanning 1995-2018

Sampling an eelgrass bed

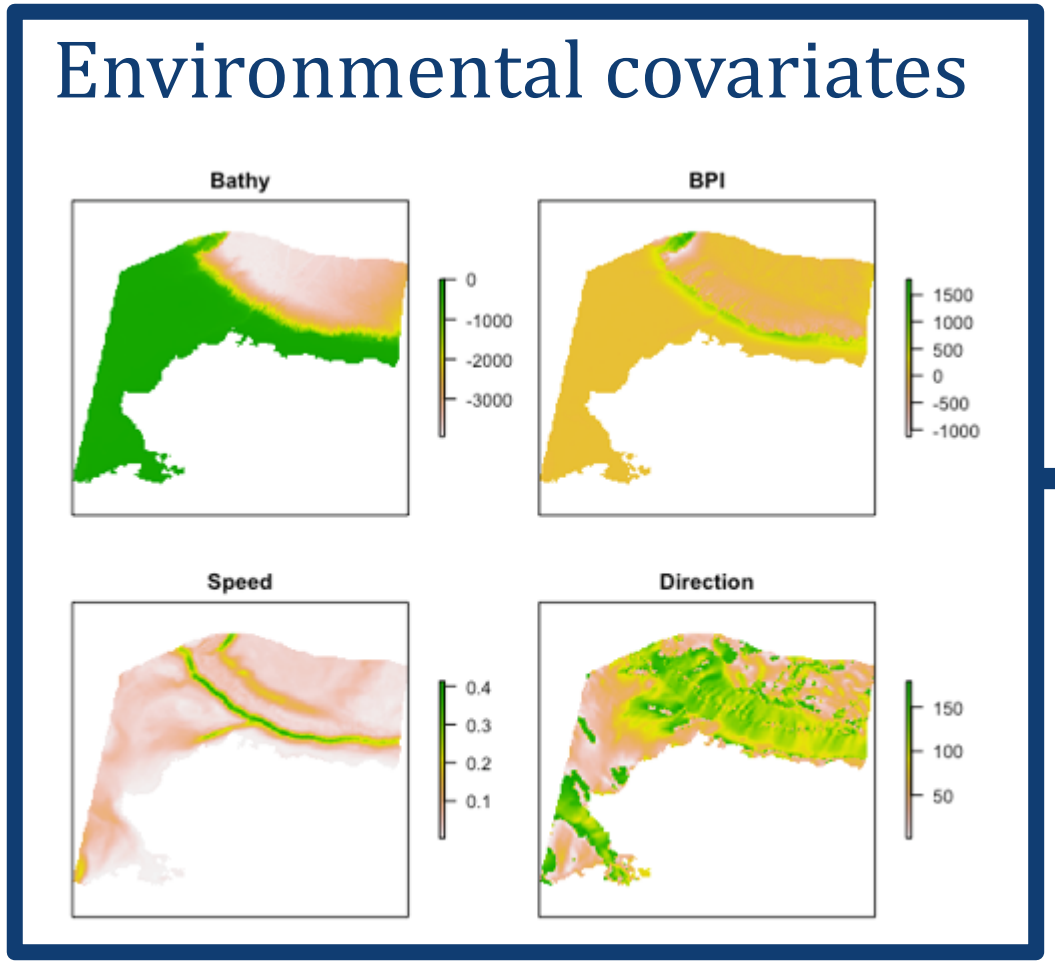
3) Essential Fish Habitat: An Ecosystem Approach

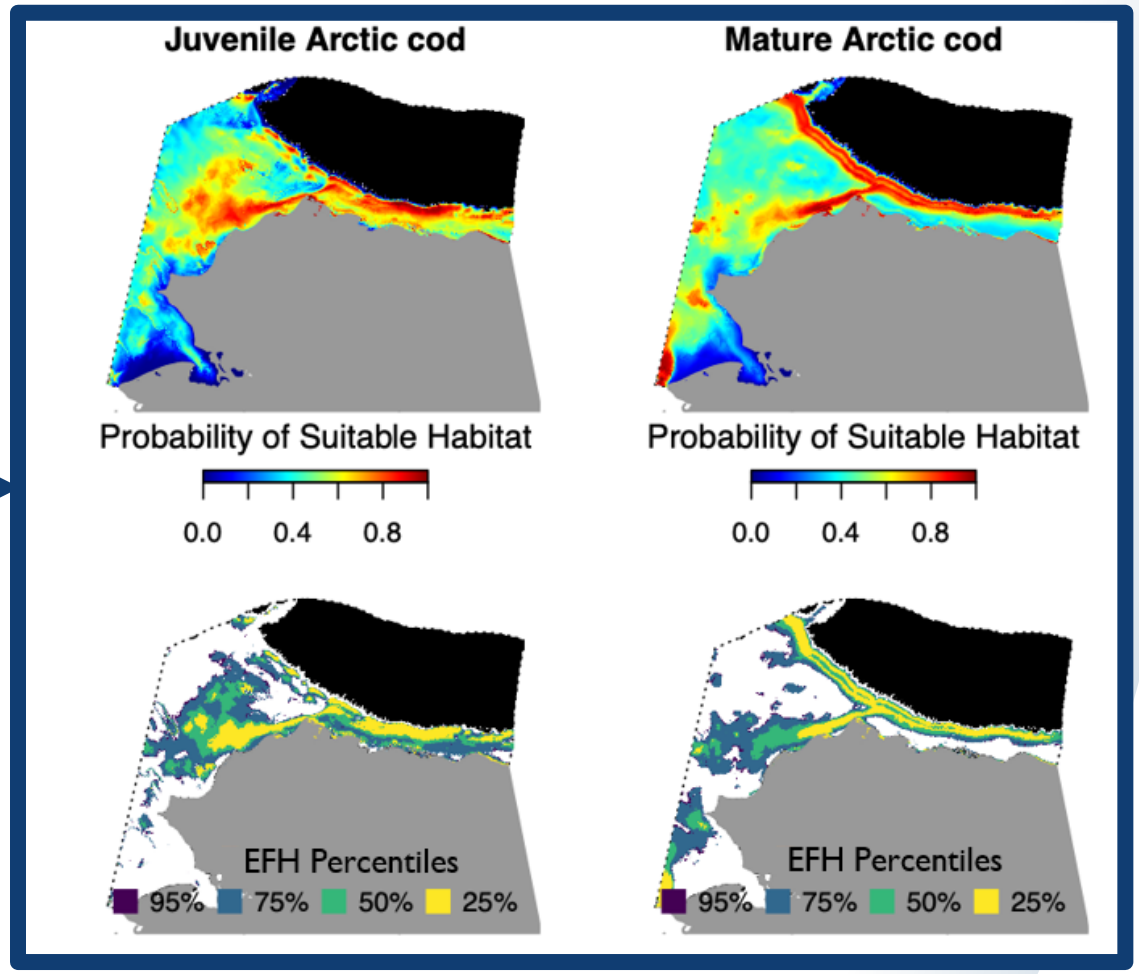
- EFH is: the physical, biological and chemical characteristics necessary to support fish for feeding, spawning, breeding, and growth to maturity



Doug Limpinsel and Paul Irvin, NOAA Fisheries

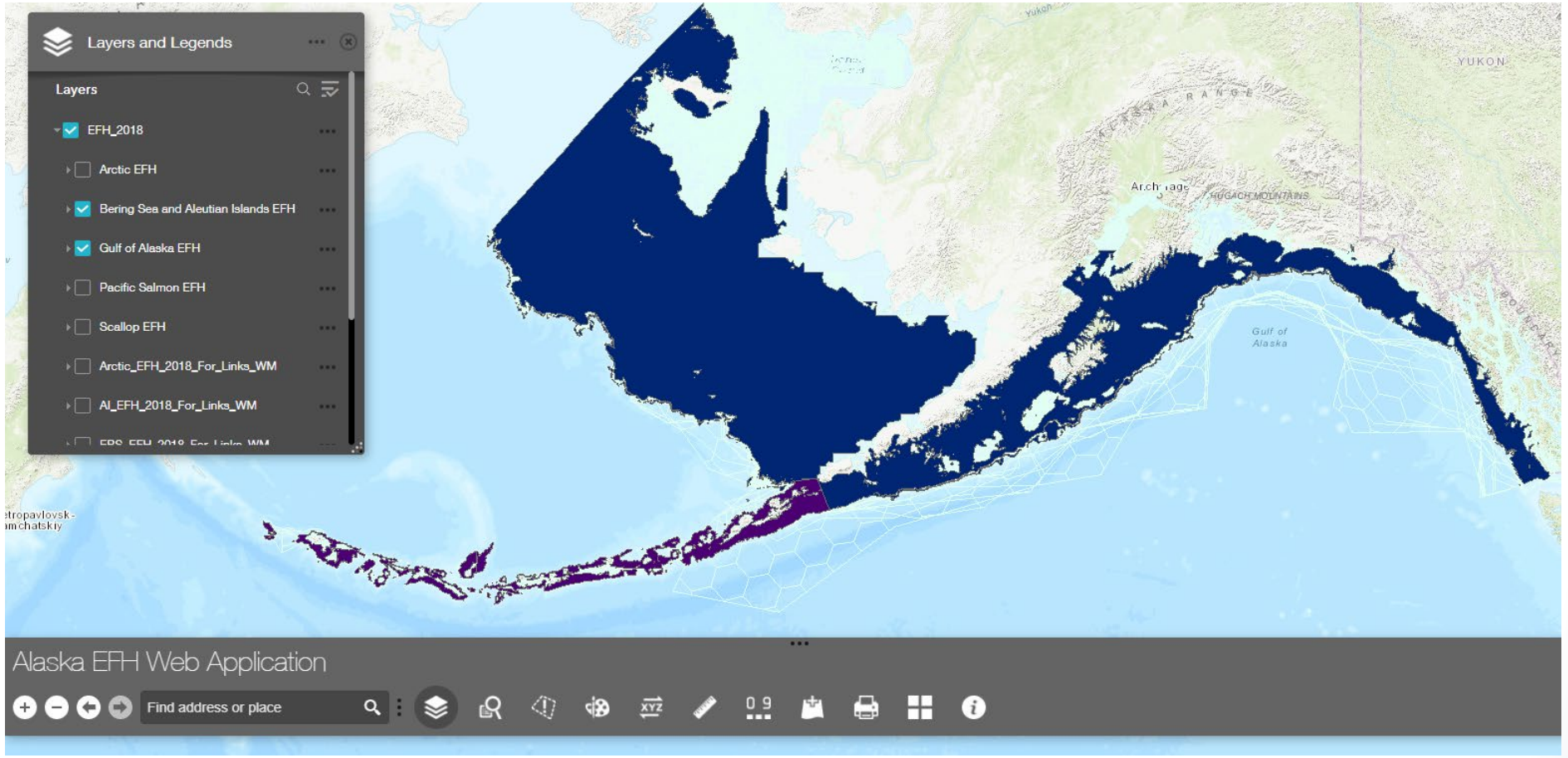
Ongoing EFH Mapping Research





Arctic cod SDM (upper) and EFH (lower) maps (Marsh et al. *in prep*)

New Alaska EFH Web Mapper

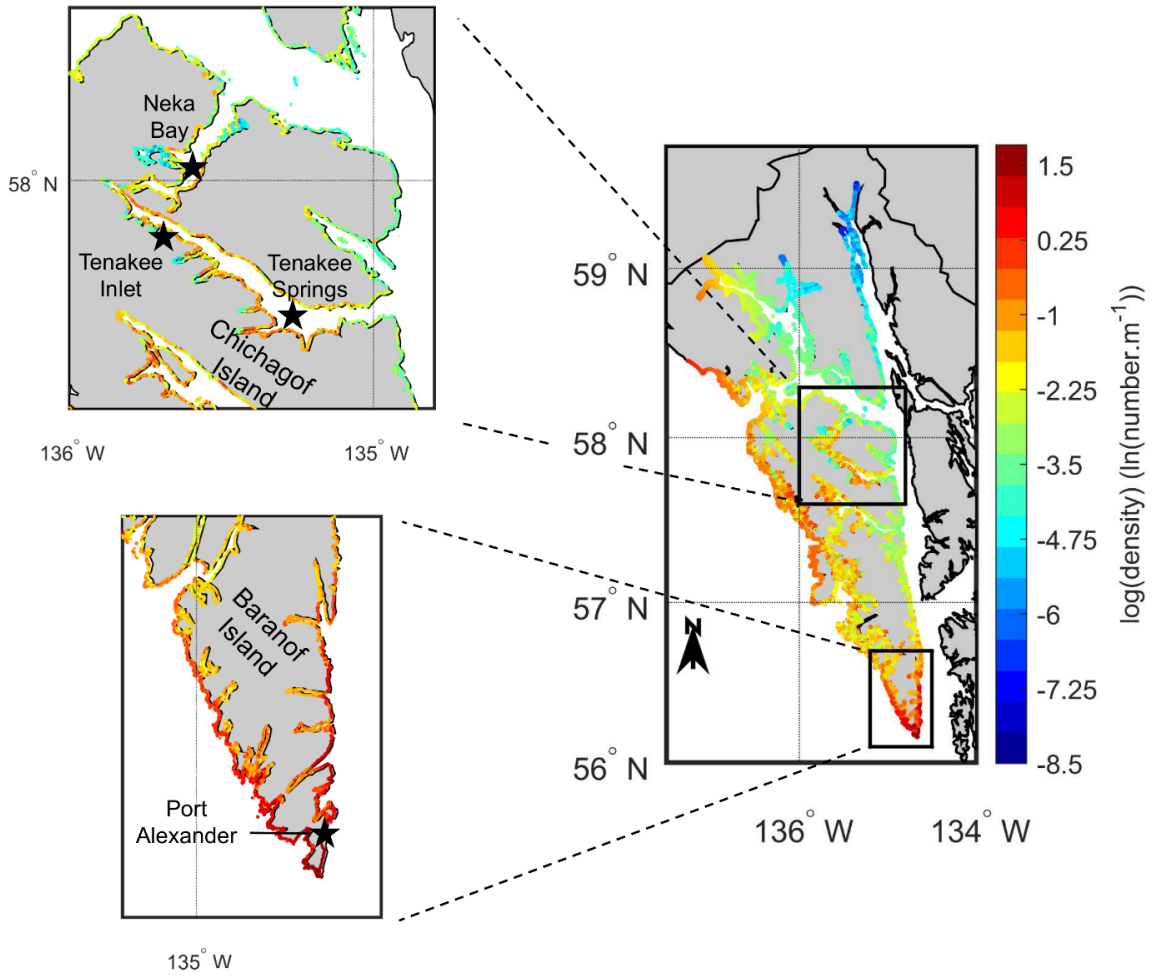


EFH slides content courtesy of Jodi Pirtle

New Nearshore EFH Mapping Research

Analysis combines:

- Species data from the Nearshore Fish Atlas
- Environmental data from ShoreZone
- Results show spatial predictions of habitat-related density in nearshore coastal areas



Grüss et al., *In Review*

Thank you!

For questions and comments, contact:
Ellen Ward – ellen.ward@noaa.gov

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