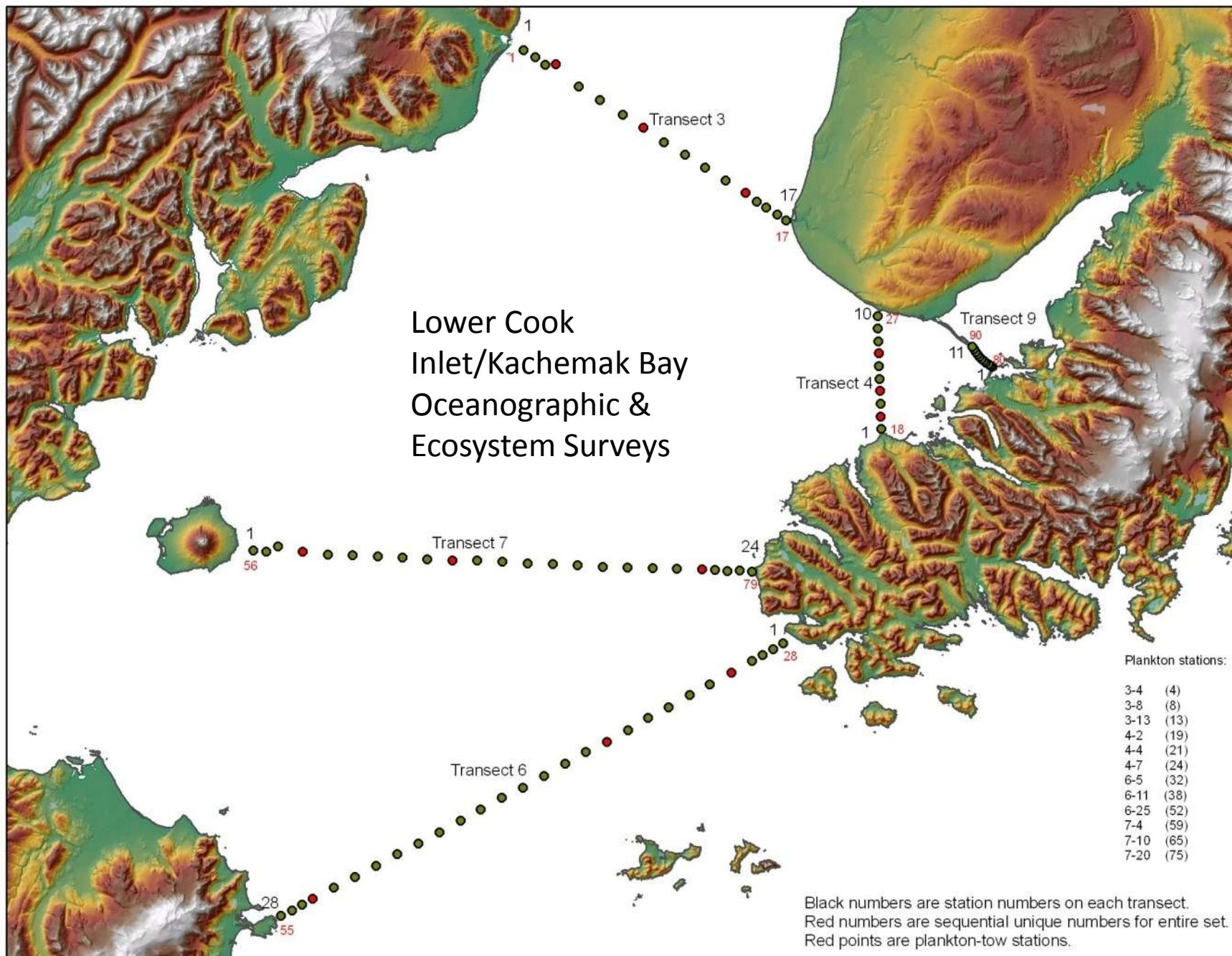


Lower Cook Inlet/Kachemak Bay Oceanographic & Ecosystem Surveys



Plankton stations:

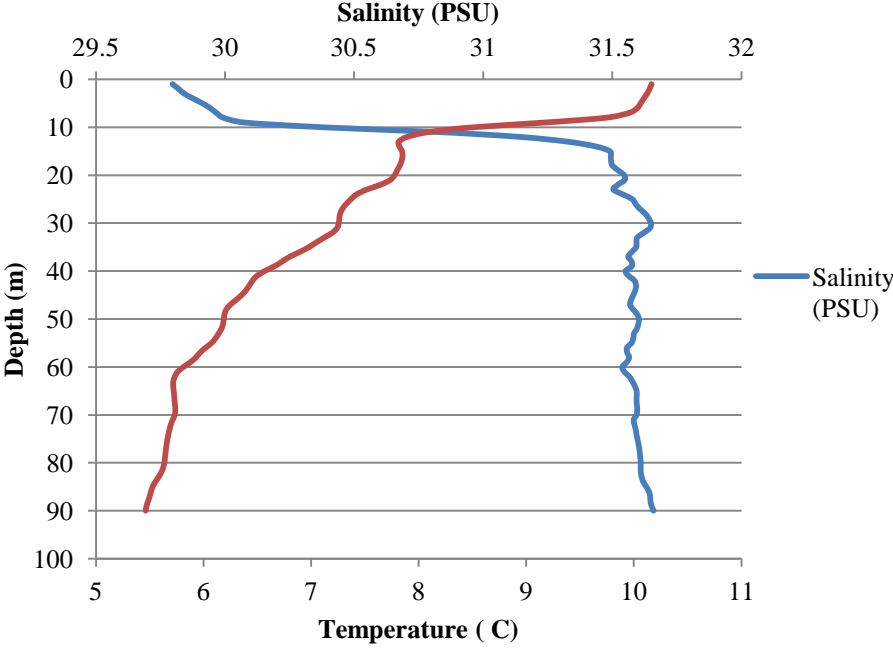
- 3-4 (4)
- 3-8 (8)
- 3-13 (13)
- 4-2 (19)
- 4-4 (21)
- 4-7 (24)
- 6-5 (32)
- 6-11 (38)
- 6-25 (52)
- 7-4 (59)
- 7-10 (65)
- 7-20 (75)

Black numbers are station numbers on each transect.
Red numbers are sequential unique numbers for entire set.
Red points are plankton-tow stations.

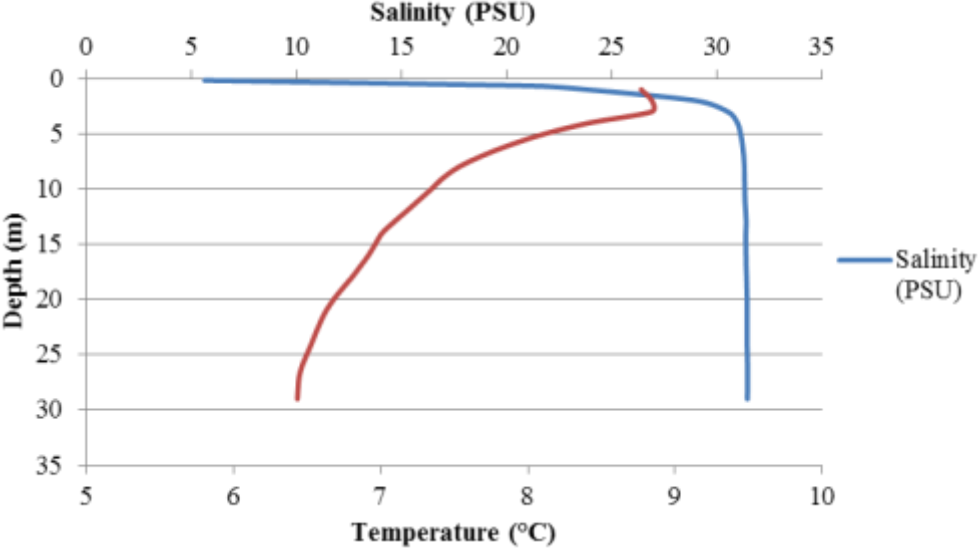
CTD Data Examples

25 June 2012

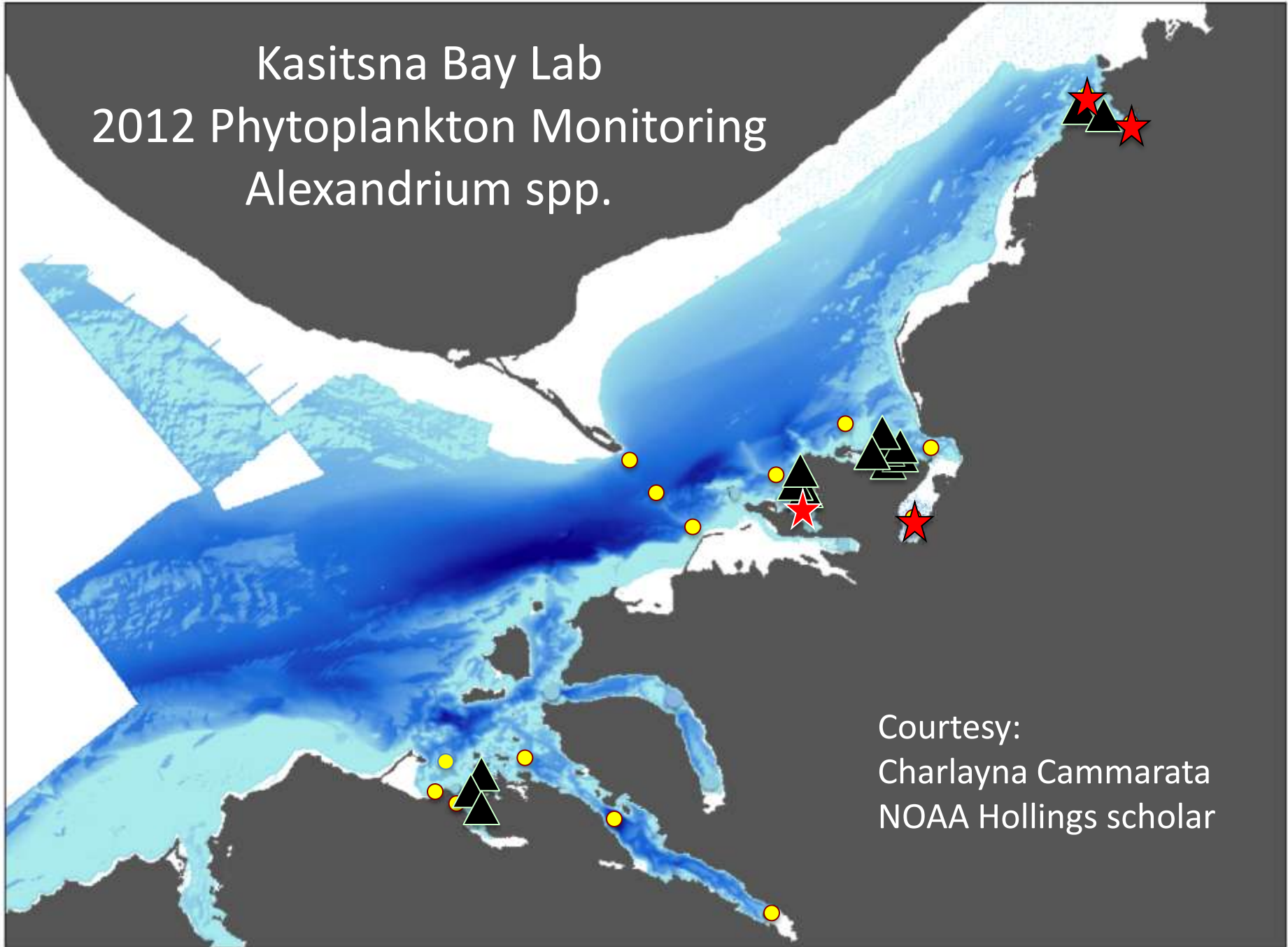
Middle of Spit Line



Tutka Bay

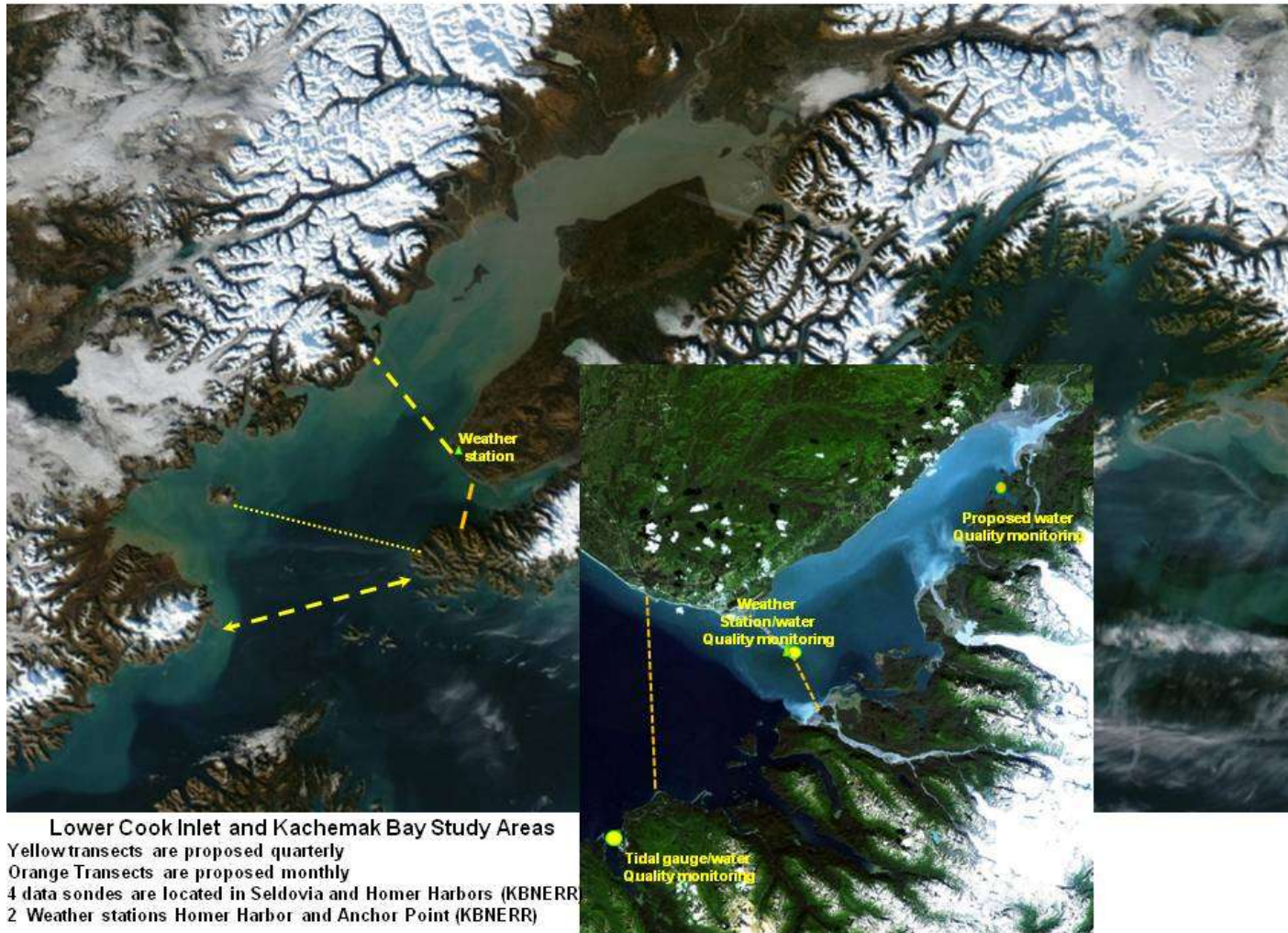


Kasitsna Bay Lab
2012 Phytoplankton Monitoring
Alexandrium spp.



Courtesy:
Charlayna Cammarata
NOAA Hollings scholar

Monitoring Temporal and Spatial Trends in Lower Cook Inlet and Kachemak Bay Waters to Inform Understanding of Ecological Processes



Lower Cook Inlet and Kachemak Bay Study Areas
Yellow transects are proposed quarterly
Orange Transects are proposed monthly
4 data sondes are located in Seldovia and Homer Harbors (KBNERR)
2 Weather stations Homer Harbor and Anchor Point (KBNERR)

The Big Idea

Primary Goal:

The primary goal is to continue monitoring long-term data trends in plankton and sea water attributes which link the outer Gulf of Alaska with the inshore waters in Kachemak Bay and relate these patterns to primary productivity.

- This project is linked to 26 other major studies of the ecosystem in the Gulf of Alaska, Kenai Peninsula and Prince William Sound

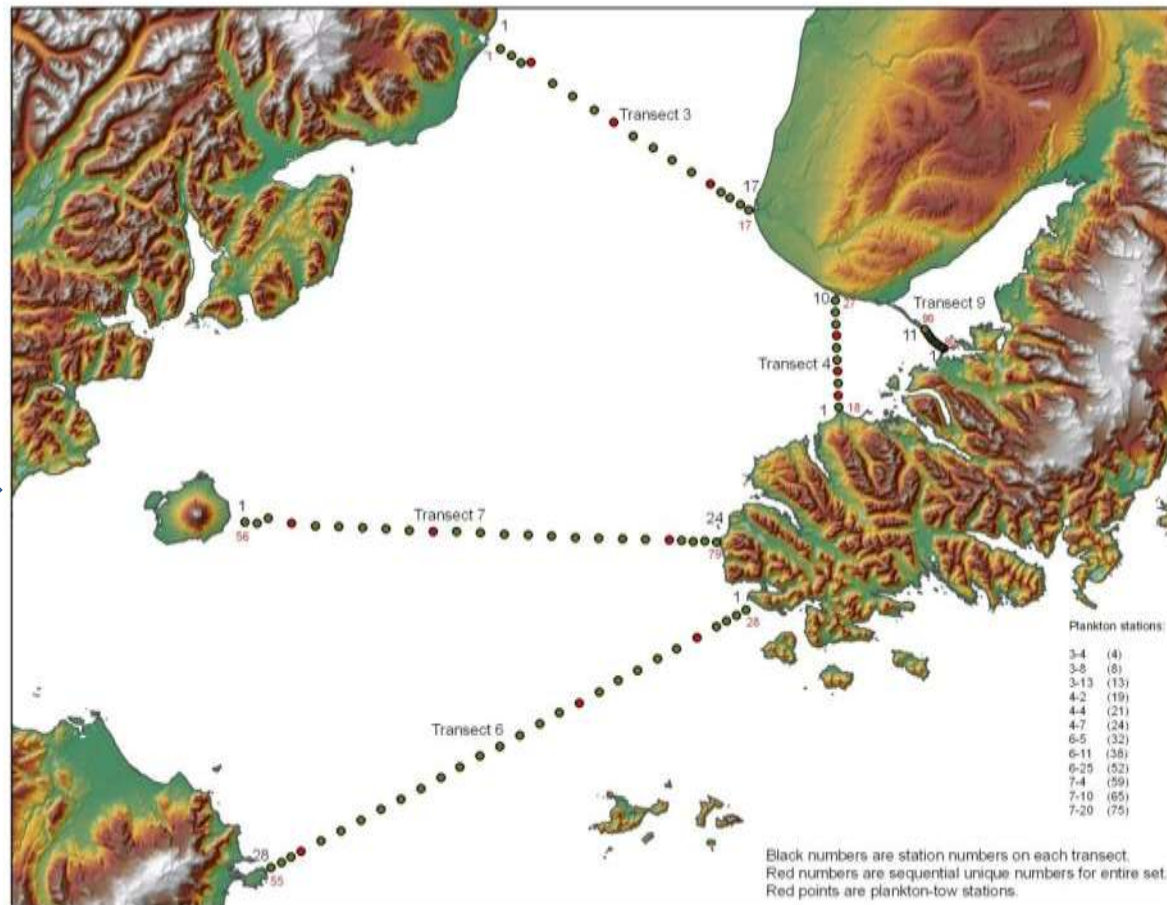
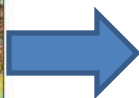
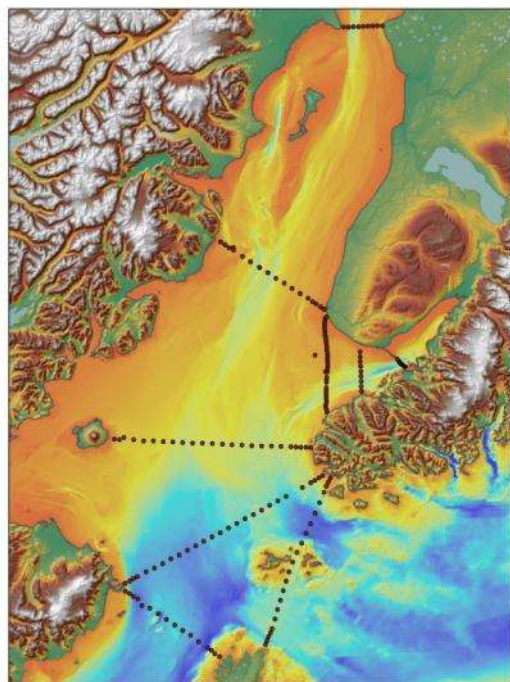


Background Information

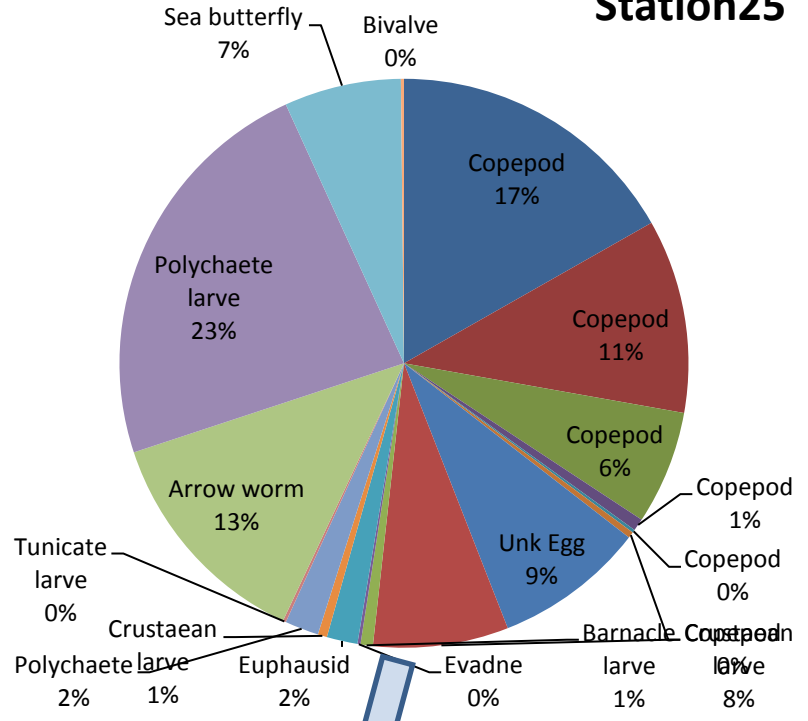
The Kachemak Bay Research Reserve is studying trends in ocean temperature, conductivity, dissolved oxygen, pH, turbidity, and chlorophyll fluorescence in the NERR water quality monitoring program at three sites in Kachemak Bay.

Measurements at these fixed locations are augmented spatially by replicating CTD transects across the Bay (2 transects) and in lower Cook Inlet (3 transects)

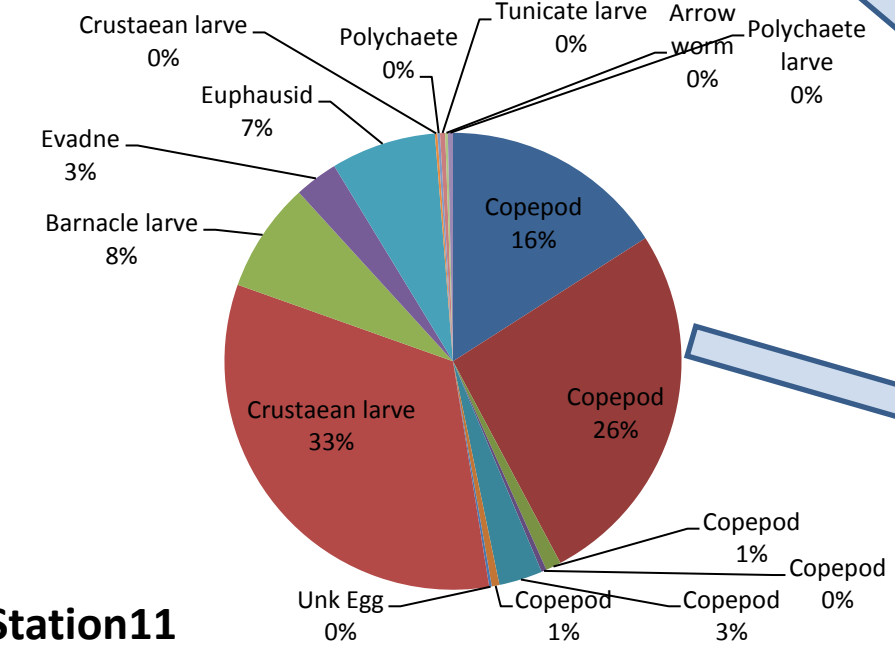
Kachemak Bay and Lower Cook Inlet CTD/Plankton Sampling Sites



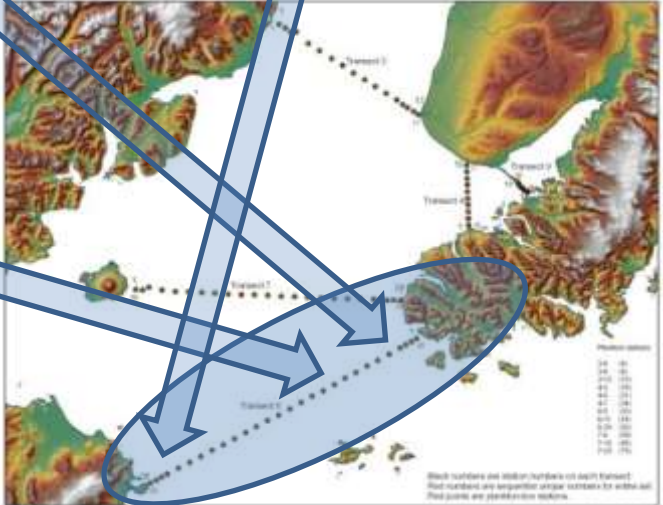
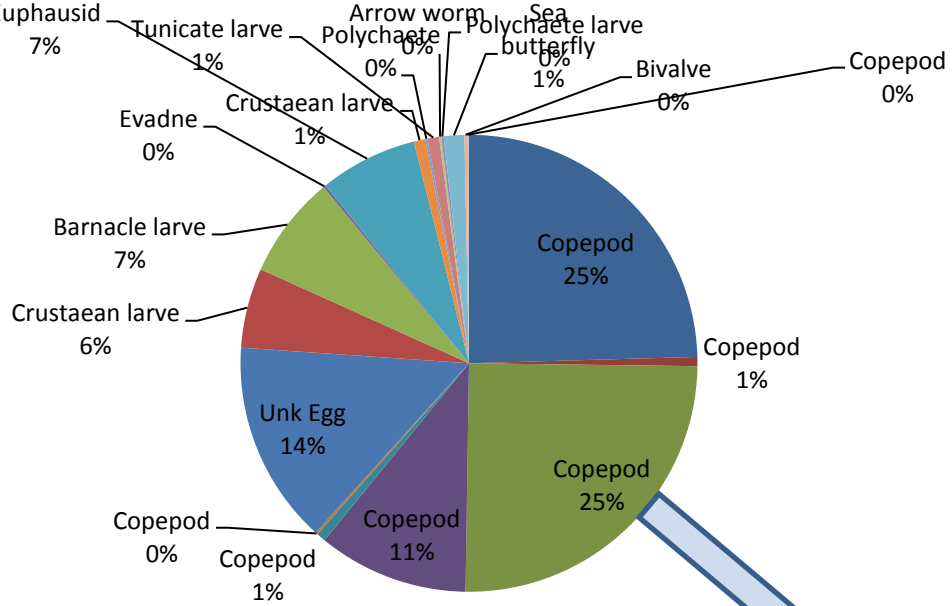
Station25

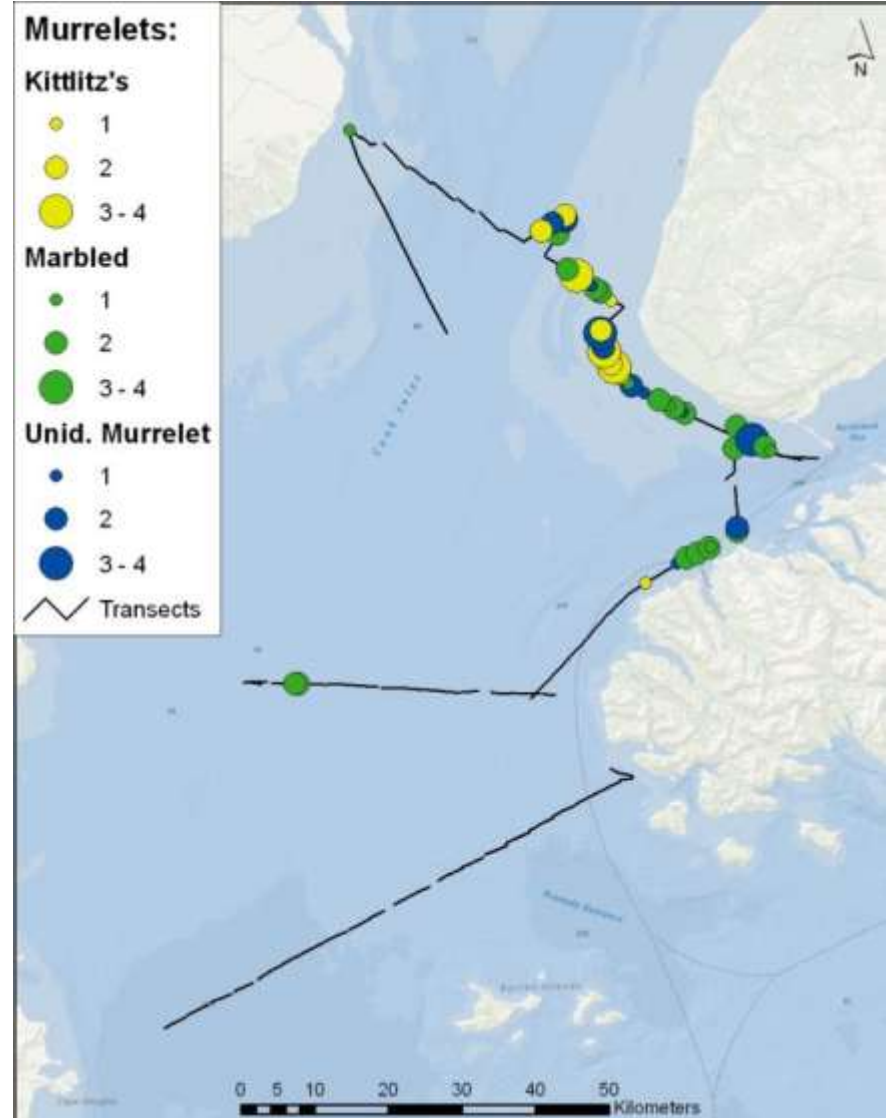
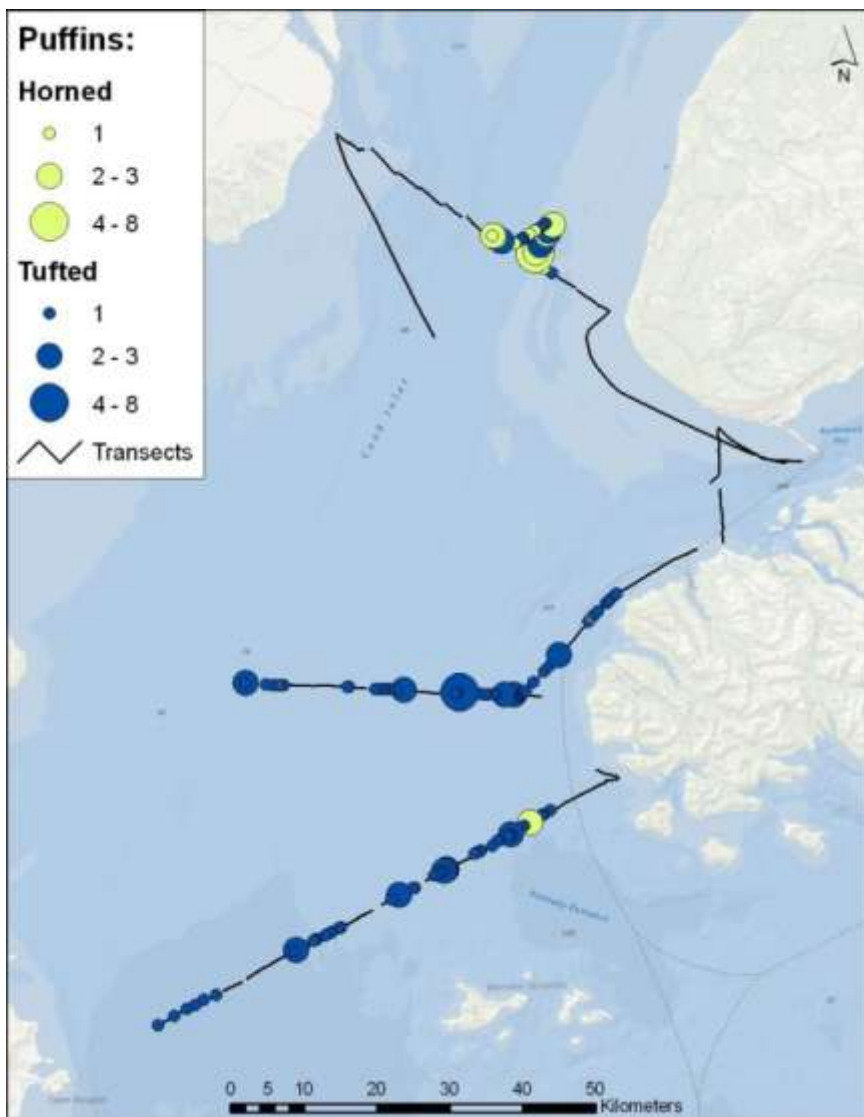


Station5

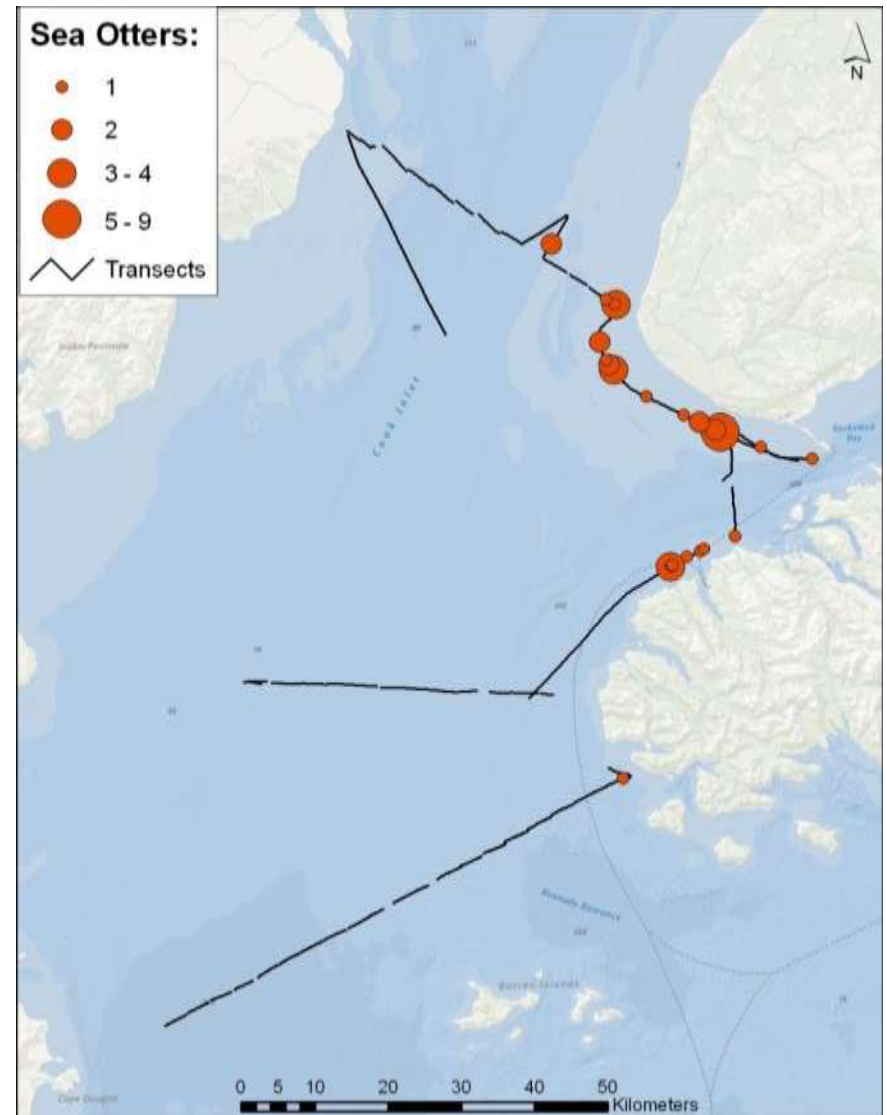
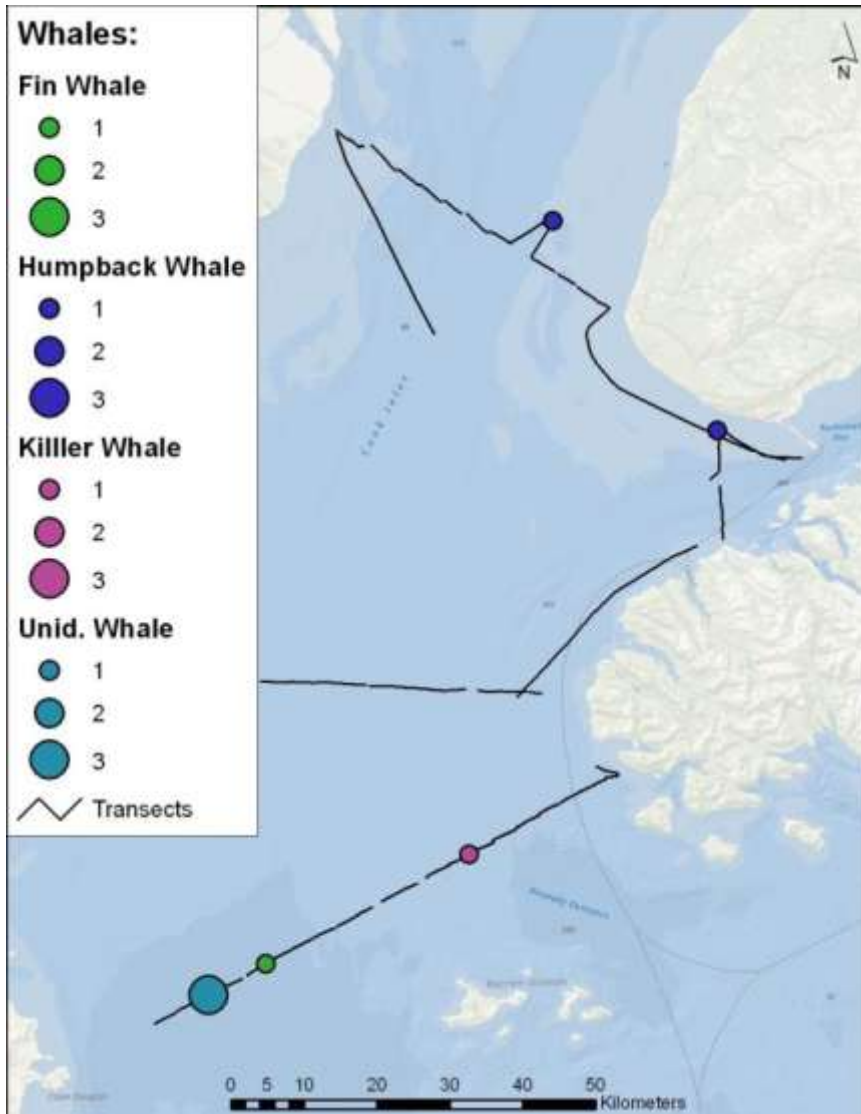


Station11





U.S. Fish and Wildlife Service, Migratory Bird Management At Sea Observer Program.
 Maps provided by L. Labunski and K. Kuletz



U.S. Fish and Wildlife Service, Migratory Bird Management At Sea Observer Program.
 Maps provided by L. Labunski and K. Kuletz

Steps Along the Way



- Develop a library of common plankton species for the region
- Refine plankton sampling locations based on CTD sampling
- Assess the temporal patterns for plankton blooms in Kachemak Bay and lower Cook Inlet