



# Wetland Mapping and Geographic Information System work across the Bristol Bay Region

Presented By:  
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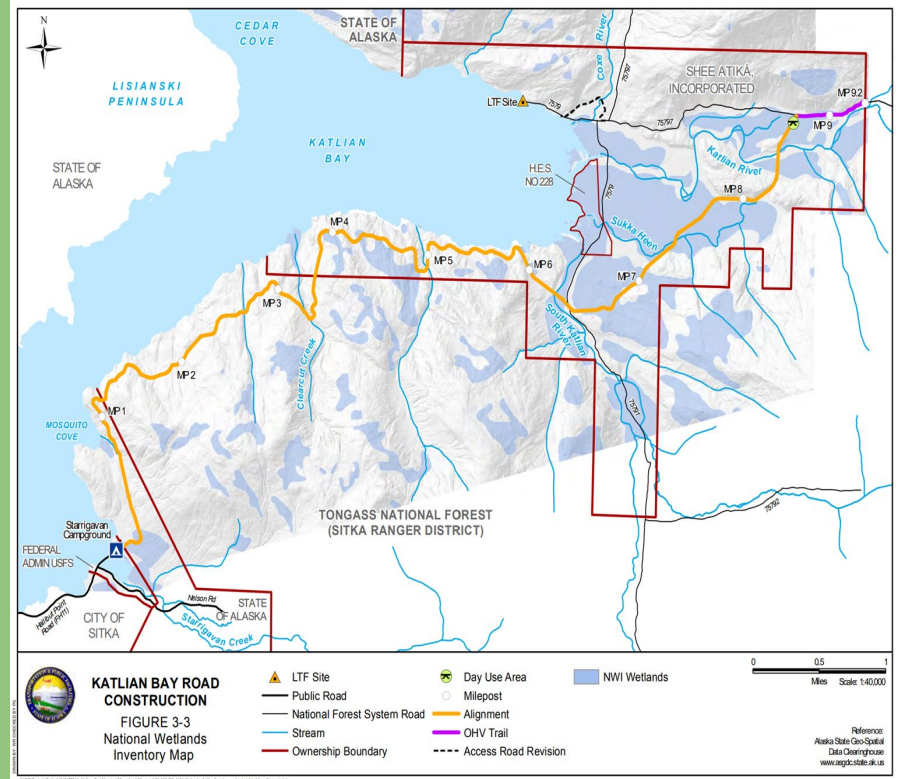
# Project Overview

- In 2021, BBNC was awarded \$1 Million from the National Fish and Wildlife Foundation America the Beautiful Challenge Grant
- The project included a wetland mapping component and an outreach and education component





# Why do we need wetland maps?



# The National Wetlands Inventory (NWI)

- Improving data accuracy
- NWI use for planning/ decision making
- Public use



Previous wetland data



Most recent data



# Mapping Status

- 2021 Identified a priority data gap as the Bristol Bay Fisheries Reserve (BBFR)
- 2022 Mapping began
- 2023-2024 Field work
- 2023-2025 Outreach and Training
- 2026 Final data available



Project: EVOSTC II  
Site ID: 964  
TMU: 1 acre  
HLC: Cook Inlet

Site Question(s):  
verify NWI

Notes:

*PEMIE*  
*standing water*

Ground Work:

☐ Detailed Plot?

☐ Touch down? ☐ Hydrophytes?

☐ Soil Probe? ☐ Hydric Soil?

☐ Permafrost? ☐ Hydrology?

☐ Salinity CK? ☐ CAPSURE?

Depth to Permafrost?

☐ Visited? ☒ Associated video? ☒ Fly-by Only? ☒

Land Status: State  
Image Date: 2019-07-22

Three maps are shown. The top map is a large-scale map of a coastal area with red and green areas, labeled PEMIE, PEMID, and EIUUB. The bottom left map is a smaller-scale map with a yellow outline. The bottom right map is a smaller-scale map with a green outline.

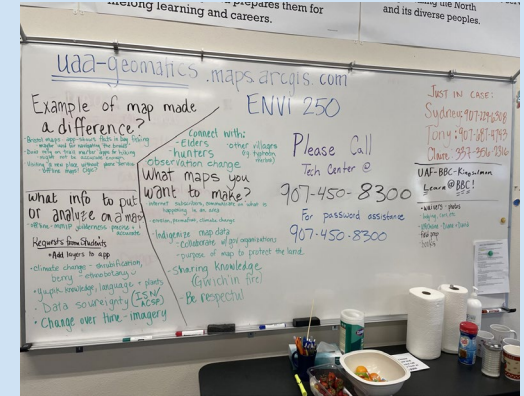
# Capacity Building in the Bristol Bay Region

- ENVI 250 Introduction to Community Geographic Information Systems
- Informational meetings in communities
- Created two BBNC internships to help produce community wetland maps
- Created two BBRCTE High school interns who are updating wetland maps.



# GIS Training - Experience as a student

- Learn about the advancements in geospatial systems
- Apply concepts to relevant topics
- Network with professionals





# GIS Training In Bristol Bay

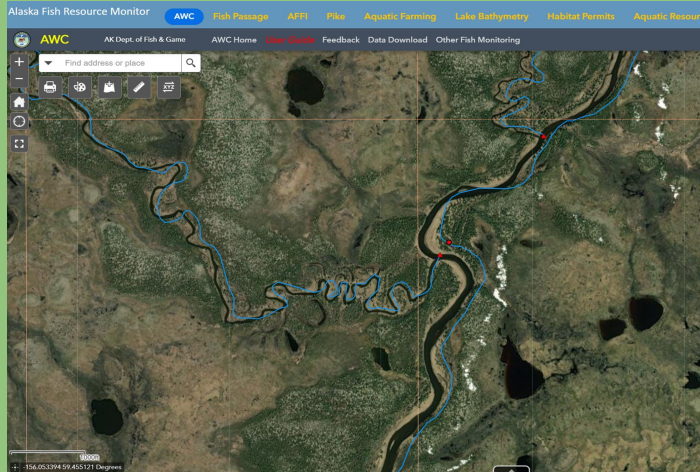
- Share real life experiences
- Create internship and job opportunities
- Advocate for Bristol Bay youth and professional needs





# Future opportunities using geospatial wetlands data

- Science and conservation support
  - Habitat suitability models
  - Forage availability by wetland type
  - Salt marsh migration
  - Carbon storage



- Quantify potential salmon habitat
  - Document known wetland salmon habitats
  - Explore and model system connectivity

# Summary

- Wetlands data will be available through the NWI public portal for use
- Maps can be generated on the web, or in GIS to support conservation efforts of our remarkable region
- Want this project to set the stage for future geospatial training and jobs
- Want this project to be a catalyst for what is possible!



# Questions:

- What are the main types of wetlands in Chignik area?
- How were the wetlands identified?
- What type of satellites were utilized in this project?





# Quyana!

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**National Fish and Wildlife Foundation**

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