

## Alaska Coastal Cooperative







2024 Chignik Regional Resilience Symposium 6/6/2024

Presented by Chris Maio, George Anderson, Matthew Balazs, and Mike Willis

### Who we are...

## Alaska Coastal Cooperative 3-Fold Mission

- 1. Enhance communication to identify and act on shared goals
- 2. Advance applied science that addresses local priorities and delivers actionable products
- 3. Contribute towards **building technical capacity** through education and training

















#### **Chignik Fisheries Project**



Advancing Resilience through community driven science, technology, and capacity building



- Prioritize local needs in applied science
- Collect baseline data of the physical environment within the Chignik watershed
- Contribute towards the revitalization of the Chigniks













### Alaska Coastal Cooperative



## AC3TION Project

Alaska Coastal Cooperative for Coproducing
Transformative Ideas and Opportunities in the North

A community-first approach to climate resilience

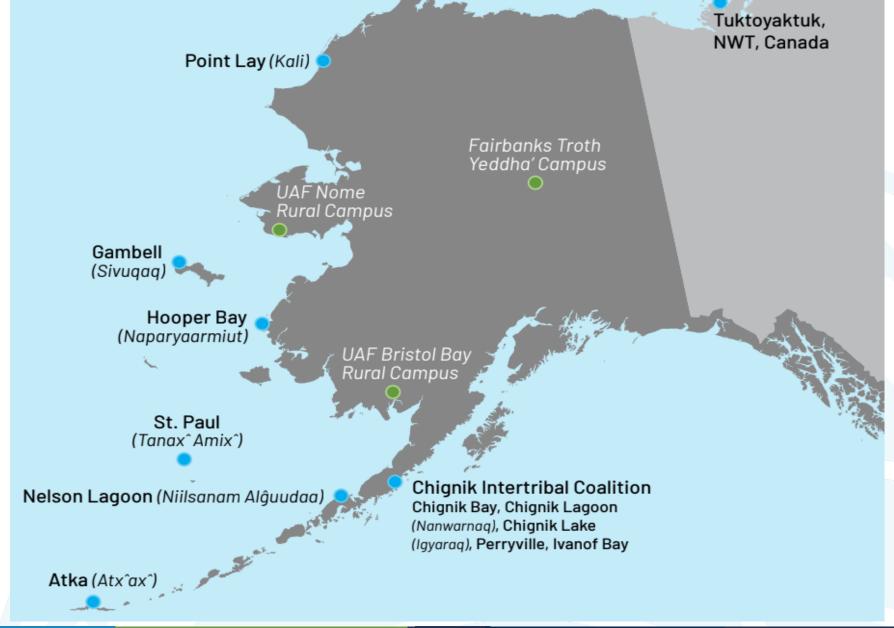






#### **ACTION**

- NSF Funded 4-Year project - \$14 million total
- 12 community partners
- Community Research Lead Network
- Contribute towards understanding coastal hazards and their impacts on communities











### The Visioning Process

Identifying community risks and priorities – matchmaking with researcher expertise

Learning about Chignik Bay's priorities Community priorities and knowledge combined with research expertise

Our goal is to develop reciprocal relationships that lead to actionable research and education that:

- connects diverse knowledge systems with research expertise
- addresses community priorities and needs

In-person
community
visioning
workshop to
co-develop a
research plan

PAUL G. ALLEN FAMILY FOUNDATION

Discussions and

within & between

communities

knowledge exchange

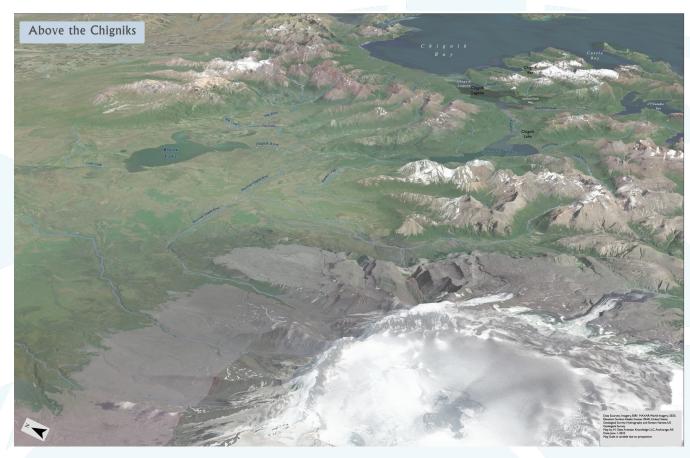






## Chignik Fisheries Project What we've accomplished in the past year

- Elevation Collection
- Water Depth Collection
  - "Bathy Fleet"
- Water Level Monitoring
- Field School in Chignik Bay
- Documentary Film









Elevation Data: LiDAR

- Lake and Peninsula Borough / USGS / Alaska Coastal Cooperative
- Half of the area collected in 2023
- Second half scheduled for this month









Elevation Data: Drone Flights

- Years Collected:
  - 2017, 2022, 2023, 2024
- Products:
  - Elevation Models
  - Aerial Images
  - 3D models
- Uses:
  - Monitor coastal change
  - Measure sediment in River
  - Useful for planning and engineering solutions
  - Hydro project

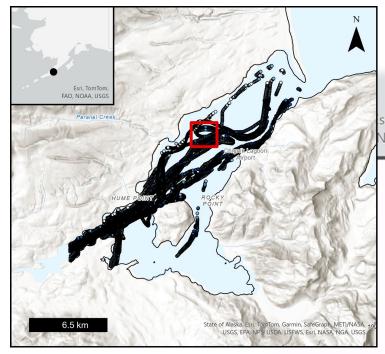


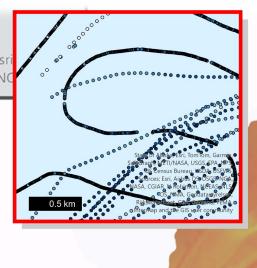






### Water depth and bottom mapping



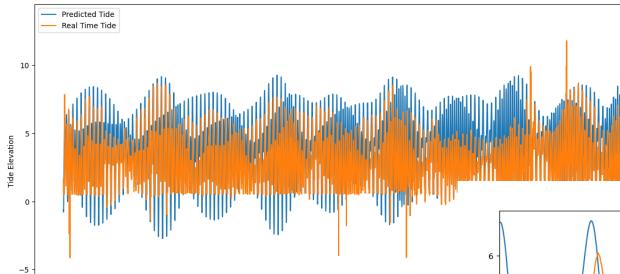












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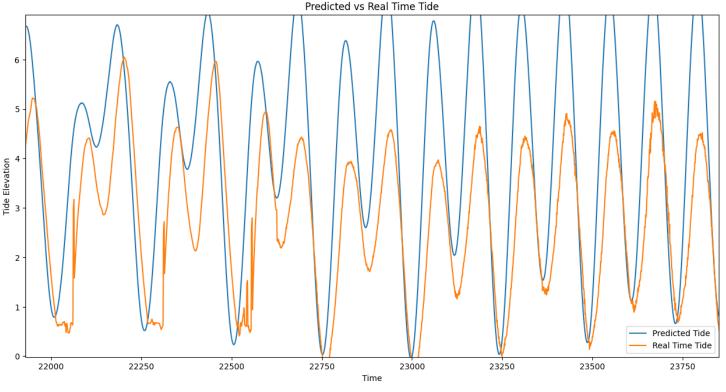
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#### NOAA station on Hump Island, Kuiukta Bay, AK 13.9 miles away

NOAA station on Hump Island, Kuiukta Bay, AK 13.9 miles away

10000

5000











#### Local tide and water levels











#### Local tide and water levels







# Chignik Bay Teacher Training Field Course and Family Camp

GOAL: Leverage the environment and local expertise of the Chigniks to provide a rich educational experience for current and future teachers in rural Alaska

- 12-14 people visiting
- July 25 to July 29
- Will arrive on the Tustamena
- Includes 2 day family day camp



















#### Discussion:

How can we show off the Chigniks?

Who wants to take part?

How to get participants for the family camp?







## Draft Chignik Bay Video Premier and Discussion

The film was produced by Ryan Peterson

 The goal was to highlight the strength of the Chigniks

We welcome your feedback and discussion

https://www.youtube.com/watch?v=rPNFosqq3Xo







### **QUESTIONS AND DISCUSSION**





