



# 2025 CHIGNIK REGIONAL Resiliency Symposium

## Symposium Summary

**June 25 – 28, 2025, Chignik Bay, Alaska**

**Coordinated and hosted by Chignik Bay Tribal Council, City of Chignik, Agnew::Beck Consulting, and Flensburg Consulting**

***Thank you to the following partners for supporting the Symposium:***

*Chignik Bay Tribal Council*

*Chignik Intertribal Coalition*

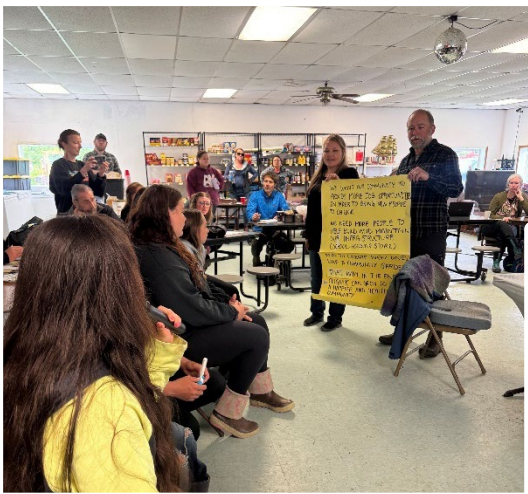
*City of Chignik*

*Bristol Bay Native Corporation*

*University of Alaska Fairbanks (Alaska Coastal Cooperative, NSF ACTION Grant)*

# THANK YOU

to everyone who participated and *Chignik Subregion residents*  
to the *Chignik Bay Tribal Council*  
to the *City of Chignik*  
to *Partners & Presenters*  
and to our *Chignik Bay hosts*



**Save the Date for the 5<sup>th</sup> Annual  
2026 Chignik Regional Resiliency Symposium!**

*Tentatively scheduled for June 2026 (in the three days following arrival of the June 2026 ferry)*



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# Symposium Overview and Summary

## Purpose

- Share progress and findings from regional research and planning projects.
- Convene researchers and community members to identify missing information and discuss emerging solutions to increase the region's ability to respond to change.
- Work together to identify what next steps are most important.

## Key Takeaways

*Repeated themes that occurred during presentations and discussions, plus themes from the evaluation.*

- Residents are encouraged that 2025 has been a better year for salmon.
- The Symposium highlighted the continuing need and benefit of coming together with partners and neighbors.
- The youth culture camp and increased youth involvement at the 2025 Symposium was great, although participants would like to see youth presentations at the beginning instead of the end to help frame the discussion.
- Local data collection is key to understanding local conditions and guiding responses to fisheries disasters. There are exciting efforts underway to increase citizen science. There continues to be a need to ensure different researchers and programs are talking to one another.
- Increasing visitation may be one way for the community to diversify economic activity, and community entities are encouraged to reflect if there is interest in growing this sector.

*From the closing exercise, "What one word would you use to summarize the 2025 Symposium?"*

Advancement  
Fun  
Drones  
Entertaining  
Community  
Happy  
Engaging  
Inspiring  
Motivating  
Moving  
Actionable  
Impactful  
Thanks  
Collaboration  
Important  
Energizing

Future  
Potential  
Forward-looking  
Photovoice  
Networking  
Bidarki  
Learning  
Informative  
Enjoyable  
Enlightening  
Insightful  
Exuberating  
Meeting-of-minds  
Exciting  
Special





July 2025 Culture Camp Participants

## Outcomes

Immediately following the Symposium, participants took the following actions:

- Chignik Bay Tribal Council and Bristol Bay Native Corporation held a July 2025 Culture Camp in Chignik Bay. Kids and adults came together to make Kuspuks, go berry picking, and make cheeduc. An Elder joined to show youth how to make Perok (fish pie) and play inahooks (Aleut darts). The camp also featured story time with Elders, and Aleut dancing.
- The 2025 Convergence Science Cruise took place on University of Alaska Fairbanks (UAF)'s Sikuliaq vessel, including a mid-July visit to Chignik Bay.
- Chignik Bay Tribal Council initiated the Chignik Bay Drainage Map and Stormwater Management Plan, funded by a Clean Water Actions Grant through the Alaska Department of Environmental Conservation. The project team visited the community in early August and distributed survey questionnaires to community residents.
- The Alaska Native Tribal Health Consortium and McMillian (contractor) visited Chignik Bay in September to inspect the road, take core samples, and host a public meeting for the hydro project.

## How The Summary is Organized

This 2025 Symposium summary includes presentation highlights and related discussion, organized by day. For presentations with slides, the summary does not duplicate the content in the slides; please refer to the slides themselves for details. The summary also includes the following appendices at the end of this document:

- Post-Symposium evaluation results
- Outreach materials
- Agenda
- Attendee list
- List of presentations with hyperlinks to full files



*"It was an honor to be included among such a knowledgeable group of participants, and I truly appreciated the chance to share our work with the community. Chignik Bay surely felt like my home away from home. The symposium was thoughtfully organized and created an engaging space for dialogue and collaboration. I came away with new insights and connections that I'm excited to build upon in the future."*

*- Symposium Participant, Emailed Response*



# Acronyms

ACC	Alaska Coastal Cooperative Geoscience Lab
ACTION	The ACTION Project (also referred to as ‘ACTION’), funded by NSF and led by the ACC
ACWA	Alaska Clean Water Actions
AI	Artificial intelligence
ANILCA	Alaska National Interest Lands Conservation Act
ANTHC	Alaska Native Tribal Health Consortium
AOOS	Alaska Ocean Observing System
AVO	Alaska Volcano Observatory
BBAHC	Bristol Bay Area Health Corporation
BBHLT	Bristol Bay Heritage Land Trust
BBNA	Bristol Bay Native Association
BBNC	Bristol Bay Native Corporation
BBRCT	Bristol Bay Region Career and Technical Education
BIA	Bureau of Indian Affairs
BOF	Alaska Board of Fisheries
CBTC	Chignik Bay Tribal Council
CCLR	Center for Creative Land Recycling
CDBG	Community Development Block Grant
CIC	Chignik Intertribal Coalition
CRAA	Chignik Regional Aquiculture Association
CTD	Conductivity, temperature, depth
DEC	Alaska Department of Environmental Conservation
DNR	Alaska Department of Natural Resources
DOT&PF	Alaska Department of Transportation and Public Facilities
EPA	U.S. Environmental Protection Agency
DF&G	Alaska Department of Fish and Game
FAA	Federal Aviation Administration
FDA	U.S. Food and Drug Administration
FRI	Fisheries Research Institute
GIS	Geographic Information Systems
HAB	Harmful Algae Blooms
IGAP	Indian Environmental General Assistance Program
ISN	Indigenous Sentinels Network
LD	Leak detection
LiDAR	Light Detection and Ranging
LPB	Lake and Peninsula Borough
NFWF	National Fish and Wildlife Foundation
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	Natural Resources Conservation Service (USDA division)
NSF	National Science Foundation
NWI	National Wetland Inventory
NWS	National Weather Service
PER	Preliminary Engineering Report
PSP	Paralytic shellfish poisoning
RAC	Regional Advisory Council
STEM	Science, Technology, Engineering, Math
TEK	Traditional ecological knowledge
UAA	University of Alaska Anchorage
UAF	University of Alaska Fairbanks
UAS	University of Alaska Southeast
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

# June 25 (Wednesday) Presentation Highlights

*See presentation slides for details. Results from interactive activities are in blue tables.*

## Welcome & Agenda Overview

**Jeanette Carlson, Chignik Bay Tribal Environmental Coordinator; Shelly Wade, Agnew::Beck Consulting Principal, Owner**

- Billy Anderson began with an opening prayer.
- Jeanette (“Chickie”) welcomed participants to Chignik Bay.
- Participants introduced themselves. For a full participant list, see the appendices.
- Shelly walked the group through the objectives for the Symposium.
- The [Chignik Watershed website](#) features the “Chignik Bay Community Database,” a table listing recently completed, current, and prospective projects for Chignik Bay, including many of the projects and research activities featured at the Symposium.
- Participants broke into small groups and responded to the question below.

**Share one small but powerful community effort you’ve seen work/have a positive impact on your community.**

**Highlights from small group sharing:**

- It is interesting to connect with folks from other places around the globe that have surprising similarities. Kamchatka and Chignik have similar weather!
- Engaging youth – whether community clean up or painting murals on the dumpster. Working together – Tribe and Corporation can help accomplish things better than alone.
- Fairbanks does not have the tax structure for things like trash cleanup, so there is a lot of trash in the spring. Big clean-up day every spring, give prizes and make it fun – by bags or by pound.
- A recent gathering at Chignik Lagoon Subsistence building to meet with the University of Alaska (UAA) folks for food and a cookout.
- One of the most effective programs I’ve ever seen for Bristol Bay was the Peer Outreach Program – part of a fisheries disaster where there were several peers around the region working with the community to provide services the state has.
- The citizen-science effort by the Alaska Volcano Observatory (AVO) to enlist volunteers downwind of an eruption to collect ash samples that the observatory uses to refine ashfall models. The data collected by the volunteers is vital to improving AVO’s and National Weather Service (NWS)’s forecasts of where and when ash will fall from future eruptions.
- Involving kids when it comes to environmental or public health related concerns. We always have kids join us as we walk around doing dog vaccinations, and they ask the best questions and show such a genuine interest in what’s going on in their communities.
- For the past 2 summers I’ve volunteered with Anchorage’s Native Plant Society to remove an invasive plant from along the Seward Highway (I’m blanking on the name, but it has yellow flowers). Once a week, volunteers gather to pull the plants before they go to seed in an effort

to eradicate them. This year, we've found hardly any :) It's been an ongoing community effort, great to see the positive results.

- Bristol Bay Heritage Land Trust (BBHLT) does an excellent job of providing opportunities for the youth in small villages around Alaska. One of the most recent ones I heard about was teaching kids to fly fish. A great opportunity to learn something new and get to travel to different parts of Alaska. We have also hosted a couple of interns at our camp to learn about environmental and juvenile salmon sampling and a great way to visit new places.
- Engaging youth. At a Board of Fish meeting a few years ago, many youth came to the meeting and it was very impactful – one of the reasons I wanted to get involved in fisheries policies.

- **What themes are repeated in these success stories?**

- Collaboration
- What brings this community together and ties us together: our favorite foods.

## Chignik Subregional Watershed Plan Implementation Strategies

*View presentation  
slides for details.*

### *Shelly Wade & Molly Mylius, Agnew::Beck Consulting*

#### *Overview*

- The Chignik Bay Tribal Council recently completed the Chignik Subregional Watershed Plan. The project team shared some background on the project purpose and timeline and celebrated its completion and the many individuals who participated in the process.

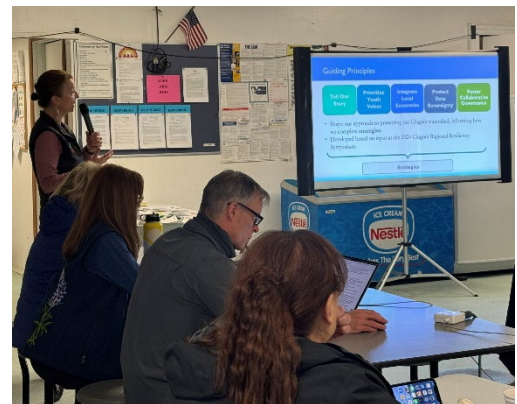
#### *Questions, Comments, Responses*

- **Question.** How did you select priorities?
  - **Response.** Reviewed background documents, stakeholder input, and data gaps. Steering Committee weighed in on and helped narrow down the final list. The 2023 Bristol Bay Native Corporation (BBNC) Leadership Forum was another input; Sue and Chickie will be attending the 2025 BBNC Leadership Forum again.
- When Chignik Intertribal Coalition (CIC) was first born, the Bureau of Indian Affairs (BIA) Tribal Resiliency effort was our very first project. Interviewed each corporation. Priorities there were nearly identical to priorities here. The 2018 disaster funds were used to hire Northern Economics – they did interviews, too, and summarized findings in a 134-page document. A lot of similar themes. George will share the final disaster summary for adding to the [Chignik Watershed Plan website](#).

#### *Discussion of Priorities in the Final Watershed Plan*

##### Priority Strategy A: Establish mitigation programs for alder overgrowth.

- Heard a lot about this throughout Bristol Bay. Not unique to the Chigniks. Alders are interfering with access to subsistence, watershed quality/health, safety.
- Alders can impact infrastructure – lagoons, treatment plants, etc. Looking beyond watershed, that's another potential impact. Other communities have used biomass for heat generation;





could talk with the Alaska Native Tribal Health Consortium (ANTHC) about eligibility for a biomass project.

- It is important to look at historic data and imagery, too, not just current. Don't think this was here 40 years ago.
  - Bristol Bay Native Association's Forestry program may have data on this.
  - Local knowledge can help us understand this, too. Chignik Lagoon residents shared that a few decades ago, they had to travel to another island to access alder.
  - Debbie has Chignik Bay photos from 1909 – there are no alders in the photos.
  - Alder overgrowth is abundant this year. Cut alders work great for roadbuilding underlayment in swampy areas. They also work great for bank erosion and wetland protection. Beavers have been using them as long as they been around. Salmonberry bushes are blooming and doing very well this year.
- Community-specific observations and uses:
  - Chignik Bay
    - The Tribe has done a good job clearing.
    - What do we do with all of the cut brush? It's piling up at the landfill.
    - Last fall, Chignik Bay Tribal Council (CBTC) hired a team of 10 for 2-3 weeks to trim alders around town. If folks want them for their steam bath or smoker, there is an aged pile up the hill. The pile is at the dump. There is an incinerator. Did not get to the berry flats last year, hoping to do that later this year.
    - One resident is using alder trimmings to reinforce areas with a lot of erosion. Has also been a helpful barrier for discouraging bears from entering an area.
  - Chignik Lagoon
    - Alders are taking off again. Roads are overgrown – can barely drive up some roads.



#### Priority B: Monitoring of Salmon Populations

- Upgrade on action #1 – just learned yesterday that CIC was awarded the artificial intelligence (AI) & species identification grant award through the National Fish and Wildlife Foundation (NFWF). This is a collaboration through CIC, Wild Salmon Center, and the Alaska Department of Fish and Game (DF&G). Upgrading cameras at the weir, adding AI intelligence. That will be counting the fish. Current project has 3 years of escapement data that will teach the AI how to apportion the salmon. Kicking off next week to discuss launch.

#### Priority C, D, and E: No Discussion

## Group Discussion: Surprising Adaptations

### Share one thing you never expected to adapt to, but did:

- Not having a school in Chignik.
- Adapting to how Chignik is now; bad fishing, no processor, fewer people.
- Being a family that was dependent on the fishery – had to adapt to find other ways to have income and still live in Chignik.
- Picking berries in the fall; berry flats are disappearing due to erosion from ATV/vehicle use and the alder overgrowth. Went berry picking (cranberries) in Willow instead. Used to be a tradition to go to the Lagoon spit and pick moss berries. No one does it anymore.
- Ice storms in Fairbanks; had two last year. Have had to change footwear – introduce cleats. Also different types of snow removal strategies.
- Adapting to hot weather.
- Participating via Zoom. No one had meetings like this ten years ago.

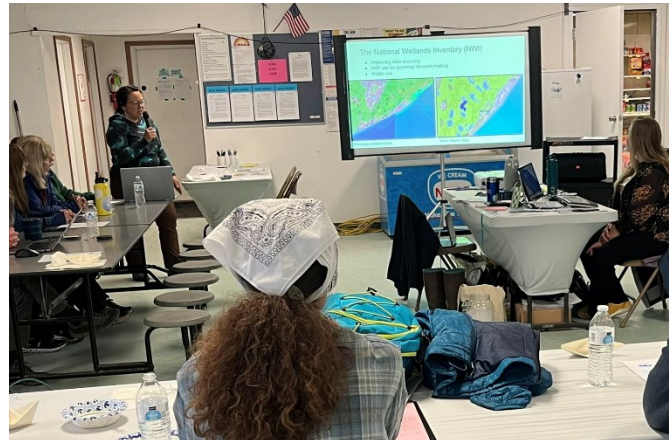
## Chignik Subregion Wetlands Inventory Map

### Leilani Luhrs, Bristol Bay Native Corporation

*View presentation slides for details.*

#### Overview

- Leilani was hired by Bristol Bay Native Corporation to support wetland mapping. The project is being conducted with an America the Beautiful grant from the National Fish and Wildlife Foundation.
- Wetland mapping enables monitoring of change over time.
- Chignik subregion was the first section of mapping that was completed, in final processing now. Will be available online.
- Leilani shared examples of Geographic Information System (GIS) trainings and applications around Bristol Bay.
- The data are available to BBNC Tribal entities for free. Leilani can help any Tribes access an ArcGIS pro account.
- Maps were available onsite for review/markup; participants were invited to correct spellings and place names. If there are additional traditional place names, feel free to add; okay for data to be configured in a way that it is not viewed publicly.
- Examples of Storymaps created by GIS students:
  - <https://storymaps.arcgis.com/stories/ob66cfa55d5b41838417abc712e31f60>
  - <https://storymaps.arcgis.com/stories/67cec55e66474284b83dadb7a5ce5832>



### *Questions, Comments, Responses*

- **Question.** I am interested in workforce development and training! Can you talk more about GIS classes, how you do recruitment, logistics of where they happen, etc.?
  - **Answer.** We partner with UAF, Bristol Bay Region Career and Technical Education (BBRCT), and BBNC for the courses. Money was allocated for internships. We advertise on BBNC website and reached out directly to Tribes.
- **Question.** When do you anticipate being done gathering information?
  - **Answer.** By December 2025 – will be done with the Chigniks (from Becharof Lake to Ivanof Bay). Naknek and King Salmon are next.
- **Question.** How will you be sharing information back to communities? To add an estuary layer would be wonderful.
  - **Answer.** Hope to share at the Bristol Bay Leadership Forum this winter.
- **Question.** How will the data be shared? KML files?
  - **Answer.** Available on National Wetland Inventory (NWI) website. Wetland data is public. There is a tutorial on how you can just download what you want so it's not such a big file. U.S. Fish and Wildlife Service (USFWS) staff can also assist.
- **Question.** Is there a way to make the data importable into GIS? The State has a lot of great databases like contaminated sites; would be great to be able to do this as an overlay to see how they impact each other.
  - **Answer.** Yes – it is available via GIS. Issue is with portable laptops – the file size. These are large files.
- **Question.** What is the resolution of the wetland dataset?
  - **Answer.** Resolution is high. Accurate up to 1 acre. Prior was only accurate to 20 acres.
- **Question.** If we're an entity and want to build a GIS database, is there a starter toolkit?
  - **Answer.** ESRI provides amazing tutorials online. If you team up with a Tribal entity, you gain even more.
- **Question.** Are there technical equipment needs?
  - **Answer.** You can use your phone, although it can be up to 15 feet off. Can also use InReach and plug in with free Basecamp.



# Chignik Subregion Environmental Health Site Visit Findings

## *Melany Stumpner, Bristol Bay Area Health Corporation (BBAHC)*

### *Overview*

#### Water Quality in Chignik Bay

- The State issued a boil water advisory for the Chignik Bay system.
- Melany was onsite to conduct a level 2 assessment last week. Water is required to be disinfected with chlorine. The amount of chlorine in the distribution system has to be at a certain level or the state considers it untreated.
- Chlorine pump was not pumping chlorine into the system. Was able to fix. Things are working as they should be now. The State is keeping the community on boil water notice until there is a full month of data showing chlorine is at the appropriate level.
- The community also tested positive for total coliforms. Coliforms are an indicator bacteria that there could be something harmful in the water. That positive is what triggered the level 2 assessment. During the level 2 assessment, learned the water coming from the tank was not sufficiently chlorinated.

#### Other General Health and Safety

- BBAHC was able to send some smoke and carbon monoxide alarms to the Tribal office. Should be enough for every home – 2 smoke and 1 carbon monoxide alarms. Staff are doing outreach to distribute.
- Also did some training for ATV safety with young folks. Helmets just arrived, “they are really nice.” If anyone else needs one, they can send more.
- Doing leak detection in all Chigniks this summer. There is a big one in Chignik Bay, hopefully GCI will be coming in soon to fix. A lot of water loss; not sure where it’s coming from. Working with remote maintenance workers to do leak detection. Chignik Lake and Lagoon likely need some leak detection, too.
  - Michelle, Chignik Lagoon Tribal Administrator, confirmed – yes, Chignik Lagoon is losing water, too.
- Chignik Bay has a burn box now, hoping it can be going at landfill soon.
- Zender Environmental – Backhaul Program is a great resource for Chignik communities.
  - Some lead acid batteries in Chignik Bay; program could help backhaul.
  - Chignik Lagoon is part of the program, too.



### *Questions, Comments, Responses*

- **Question:** Are you planning on training folks in the village on leak detection?
  - **Answer.** Whenever we send remote operators down for leak detection, we also show the local operators how to use the equipment.
- **Question:** What leak detection (LD) equipment is used? Curious to compare technologies.
  - **Answer.** LD12, LD15, and a Z-core. “Where you drop listeners in pipes and hydrants and the computer listens.”
- **Question:** Can you use the water – if you have a good filtration system set up in your home? Instead of boiling?
  - **Answer.** Depends on what the filter you are using is rated for. If you have a filter that is rated for backcountry use, that is fine. Bacteria is what we’re worried about for a boil water notice. Chlorine residual was back up to current rating last Friday, so if numbers stay in range, then July 18<sup>th</sup> should be the approximate date that will come off.

## **Lake and Peninsula Borough Update on Chignik Subregion Projects**

### ***Jordan Keeler, Lake and Peninsula Borough***

#### *Overview*

- The Lake and Peninsula Borough (LPB) is working on the **hydro project with ANTHC**. There are some questions around federal funding for this project. Jordan has a meeting on this very topic right after this Symposium presentation. LPB is not the only entity in the state facing scrutiny, so working together to make sure responses are complete and can stand up to scrutiny.
- LPB has been working with UAF, the U.S. Geological Survey (USGS), and other partners on **Lidar mapping**. Lidar is like radar but with light. They attempted to do the data collection last fall but because of foliage (alders) and tidal movement, they were unable to complete (data collection can only be done under certain conditions). It typically takes 3-6 months for data to be processed and related quality control. Currently in progress.
- LPB is **updating 2003-2004 community use maps** originally created by the State. LPB is digitizing and will be uploading onto a website that will be available to the public. Viewers will be able to superimpose lot lines, parcel names, ownership. They are done with some communities, others still in progress. Lots of surveying and connecting GIS data with recording office. ANTHC and others came down in late March to assist.
- LPB is using **Community Development Block Grant (CDBG) funds for Chignik uplands and waterfront**. There is a basic plan and documentation. PND Engineers is under contract with subcontractors going out in early July to do surveys of the dock area to see if it can support additional weight of lighting and refer bands (e.g. chill or freezer bands). The dock design was replaced around 2015. Unfortunately no one could find the As Built with the electrical, so have to document this to



move forward. The engineers can design the expansion needed to ensure the existing electrical grid, generation, and transformers have the capacity to take additional load of lighting and refrigeration. Until LPB spends 80% of current funding, they cannot apply for more. LPB is at 40-45% spent now, and that will be more like 60%+ once electrical is done. This CDBG is for planning only; once the plan is done, LPB can use the next round to apply for upgrades. The

- next round of CDBG is due in September, cannot apply until then. Anticipate next round of CDBG will be used for refer bands and high-resolution lighting.

#### *Questions, Comments, Responses*

- **Question.** Where is the GIS data being stored?
  - **Answer.** Jordan's not sure; Danica Wilson at the Borough could answer that question:  
[CDC@lakdandpen.com](mailto:CDC@lakdandpen.com)
- **Question.** Can you provide a grid resilience project update? Borough is doing a lot of work on this – can you speak to it?
  - **Answer.** LPB will be hiring a coordinator to do community training and grid resiliency work. Refining job description, will be posting soon.
- **Question.** Community addresses project update?
  - **Answer.** Not sure, Danica has been on the forefront, but will likely correspond with some of the mapping progress.







## City of Chignik Update on Trident Dock Debris

### *Mayor Robert Carpenter, City of Chignik*

#### *Overview*

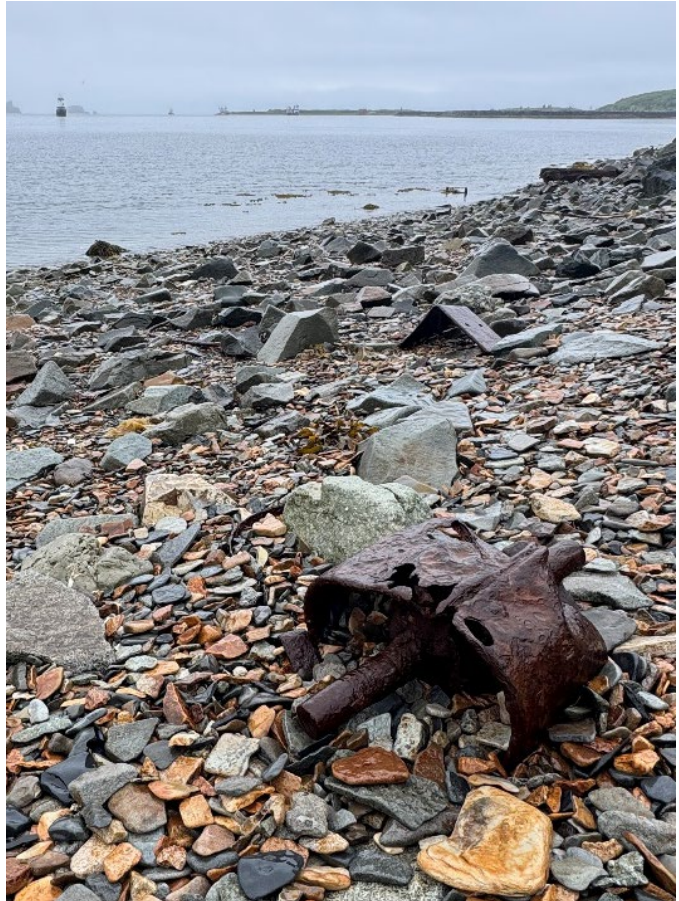
- Background
  - As part of the transfer of facilities to the City, Trident did some clean up.
  - Trident tore down trailers and the “Hilton” (two-story bunkhouse).
    - The sites where buildings were appears super clean. There is a “new lake” – a big hole – but sites are clean. “Did not imagine it would be anything like that.”
  - They were supposed to leave a pile of burnable material.
  - They did leave us a pile – but not all burnable.
  - If the City had trucks that could navigate the bridge, they would have brought the debris to the landfill, but their trucks were too big.
  - Can’t burn the pile in its current location – too close to buildings.
- What’s Happening Now
  - The City of Chignik is working with a lawyer, sponsored by Far West. Gave the City a budget for attorney fees, approved by Far West board. To ensure legal review and participation in this transfer.
  - Trident has offered us \$5,000 to process the pile.
  - Doug Huntman of Backhaul Alaska did a regional backhaul 2 years ago. Doug estimated the pile would be between \$800,000 - \$1 million to bring out a barge and separate and remove the pile. Most is non-burnable. Likely hazardous materials in there too such as asbestos. Not just wood and insulation – also pipes, furniture, furnaces, heaters from the trailers and bunkhouse.

- Working with Alaska Department of Environmental Conservation (DEC) to confirm this pile is not burnable.
- Trident lawyers have not been very responsive to the City's lawyers.
- Trident says they will come back this fall to pick up remaining tanks and leftover debris. They are in breach of contract; still determining how to proceed.
- **Water Quality Concerns**
  - Huge mini lakes forming over there. Water is flowing right into the Bay where people fish, dig clams, bidarkis, etc. "I'm happy we have strong tides to help flush it out, but lots of contaminants likely being introduced."
  - Community is down on resources and manpower/equipment, landfill is full. Landfill becomes a lake of garbage and drains down the hill into Indian Creek.
  - Stormwater Management Plan will be really important to understand where water is going and what contaminants are present.

#### *Questions, Comments, Responses*

- **Question.** What is the status of the Thriving Communities grant?
  - **Answer.** The City applied and the government subsequently froze some of the grant funds. The City later learned their proposal for \$250,000 was not awarded, and subsequently applied (late July) for EPA non-competitive proposal for \$75,000 that, if funded, will cover staffing and heavy equipment to sort the demolition pile left by Trident Seafoods, separate burnable waste for incineration at the landfill, and stage non-burnable materials for future backhaul.
- **Question.** For the sites where Trident cleared, has there been testing for contaminants?
  - **Answer.** No soil testing done on those cleared sites. They look clean, although they might not be clean. Likely some fuel contamination – that exists all over town, even before Trident. DEC has a map of known contaminations and depths.
- **Question.** Far West assisted the City by sponsoring an attorney for the close out. Trident was going to be liable for removing debris and garbage. "It's their mess – it is their responsibility as part of closing the deal." Is there any action on getting Trident to follow through?
  - **Answer.** Lauren (lawyer) is still working on this and reaching out to Trident's lawyers all the time; not a lot of communication back from them. The City is not sure how to proceed. Hoping Trident comes back. Much like many of the backhauls – they only want clean metal so they can make a profit.
  - The City lawyer is drafting a letter to send to Trident.
- Tribe, City, and Far West all have monthly meetings – "Collaboration in the Chigniks" – an effective model of collaboration. Helps the community navigate these topics.
- **Question.** What was the community's historic relationship with Trident.
  - **Answer.** Trident used to have a store and processing facility. They were a major employer. When they left, they gave the store inventory to us (much was not relevant).
  - When they decided to leave, they left fast. They gave the Chignik facilities away. They pulled out of other communities too. Trident donated their processing facilities in another community, and three more were sold and are still functioning plants.
  - When the plant burned down, they didn't replace it. There was no falling out with the community, seems like it was a business decision.

- Trident was here in 2003. They first bought Chignik Pride; in 2004 they bought Norquest. Historically there were 2 processors here but they bought out the competition. In 2009 the processing warehouse caught on fire (some skepticism that it started in the generator room as claimed). Displaced processing workers were temporarily housed in the gym.
- Originally when they were going to give the property it was going to be as-is. The community negotiated for it to be somewhat cleaned up first.
- **Question.** Looking at DEC contaminated sites website – there is one listed from 1999 due to leaking underground storage tank (updated in 2024, shows as still active). With fish processing, might be worth testing for other contaminants? Might give additional insight to come at Trident.
  - **Answer.** Some ex-Trident employees shared “no dig” sites where there is anticipated contamination, but these are not formally on the DEC website.
- **Question.** I understand how frustrating it is to have something sit unaddressed. Would Chignik youth be willing to bring more attention to this? A social media storm to get more notice? Social media accounts could highlight this.
  - **Answer.** There’s already been some success with sharing photos. Once pictures first went online, the Trident contractors were gone within hours.





## Community Updates: Discussion on Upcoming and Potential Projects, Concerns

### Chignik Lake

- Reviewed proposed priorities for Chignik Lake in the Public Review Draft of the Lake and Peninsula Borough Comprehensive Plan (view [here](#)).
- **Question.** Are there resources for communities to seek funding to help implement priorities?
  - **Answer.** For shared challenges/themes heard boroughwide, the Lake and Peninsula Borough may be able to play a greater role in policies, funding.
- **Question.** What are some examples of shared infrastructure/facilities?
  - **Answer.** Bulk fuel infrastructure, fuel delivery, barge transportation, freight.

### Chignik Lagoon

- Reviewed proposed priorities for Chignik Lagoon in the Public Review Draft of the Lake and Peninsula Borough Comprehensive Plan (view [here](#)).
- Overall this demonstrates a great handle on the communities in the Lagoon, and some that are being addressed currently. May readjust because some can come off.
- **Question.** Is there a map of the proposed intertie road?
  - **Answer.** Not in the comprehensive plan, but in the long-range transportation plan.
- Idea from Interior Tribes – sharing resources. For example, all water plant operators have a primary and a back up operator. Could Chigniks do something similar with a back up operator – be trained on all three, and could provide backup?

### Chignik Bay (Isaac Pearson)

- Reviewed proposed priorities for Chignik Bay as captured in the draft Chignik Comprehensive Plan (see slides).
- Shared status update on the Chignik Comprehensive Plan.
  - Final draft was prepared in June 2024. Needs more community engagement and improvement; the community is seeking funding to finalize.
- **Question.** How was this developed?
  - **Answer.** Held a workshop with community leadership and a public meeting.
- Observation: sustainability and diversity of economy is missing. Big concern in Chignik Bay – we’ve lost our school and are losing people. We have a lot of workforce needs – folks are not qualified to meet the jobs that are available.
- The group looked over some of the goals in the overarching public review draft of the Lake and Peninsula Borough Comprehensive Plan, including those related to sustainability, economic diversity, and workforce development.
- Tourism – seems like an omission.
- **Question.** What is the timeline?
  - **Answer.** There are two plans underway:
    - Lake and Peninsula Borough Comp Plan, Chignik Bay Community Plan. The Borough is supporting completion/finalization, since these community plans are included as part of the overarching Boroughwide Comprehensive Plan Update.
    - Chignik Comprehensive Plan Update – finalization has stalled (no funding).

*View presentation slides for details.*

- Tribal Transportation Safety Plan
  - Shared updates on project status and timeline. See slides.
- National Fish and Wildlife Foundation – National Coastal Resilience Fund Proposal
  - Proposed project explores nature-based solutions for erosion mitigation at the sub-regional Clinic. The Pre-proposal was accepted, full proposal due July 17<sup>th</sup>.
- East Side Electrical Distributions – Preliminary Engineering Report (PER)
  - Funded by BIA Tribal Climate Resiliency Grant.
  - Identifying upgrade needs – focus on the east side of Chignik’s infrastructure.
  - See slides for detailed recommendations, estimated costs, and proposed timeline.
  - **Question.** The water system was originally designed to accommodate three-phase power. Is that still the plan?
    - **Answer.** Isaac didn’t think so but was not certain.
  - **Question.** Where is the funding to implement improvements, and who will look for it?
    - **Answer.** There are funding opportunities out there to support these recommendations. Alaska Energy Authority and Denali Commission are both options. This project will help the community understand what to ask for and how much to ask for, since it is easier to submit funding requests when you have details. The existing Grid Resilience funds may be able to help, which will be going to the Tribe and Far West. This is secure funding, in its third and final year. The Borough is working on this – to get the funds to match community needs.
  - **Question.** Dannica requests that Isaac emails the presentation. (Will be posted to the Chignik Watershed Plan website after the Symposium).
  - **Question.** Is there a timeline for the electrical upgrades PER to be complete?





- **Answer.** Submitted alternatives analysis in early June. Next step is to review with utility operator and Tribe. Once that meeting happens, can move toward finalization. Estimates that will happen this winter.
- Indian Creek Bridge Alternatives
  - Looking at options to address erosion and increase stabilization. Shared potential cost estimates. If local rock could be used, costs would come down significantly.
- Landfill Road Alternatives
  - This effort looks at rehabilitating the landfill road from bridge to landfill, including bump-outs or two-lane option.
  - Both options include a potential evacuation pad (exact location needs to be confirmed).
  - **Question.** Does the road need to be complete before starting on hydropower?
    - **Answer.** They are unrelated. Not contingent on one another.





# June 26 (Thursday) Presentation Highlights

## Small Group Discussion: Resilience 4-Square

### What's a song, movie, or quote that instantly recharges your mindset?

- Rocket Man (I Think It's Going To Be A Long, Long Time) – Elton John
- Mellow Mood (feat. G. Love) – Slightly Stoopid, G. Love & Special Sauce
- Eye of the Tiger – Survivor
- Piano Man – Billy Joel
- Shake It Off – Taylor Swift
- I'll Stand by You – Pretenders
- A Little Less Talk And A Lot More Action – Toby Keith
- Teamwork Makes the Dream Work – Orange Kids Music
- Do or Do Not, There Is No Try – Safe, so Simple
- Better Together – Jack Johnson
- I Will Not Bow – Breaking Benjamin
- Count Your Blessings – Mattiel
- I Will Be Back One Day – Lord Huron
- Hakuna Matata – Nathan Lane, Ernie Sabella, Jason Weaver, Joseph Williams
- Keep Calm Carry On – Rob Giles
- Changes – 2015 Remaster – David Bowie
- Single And Ready To Mingle – Jonny Rhythms
- Stronger (What Doesn't Kill You) – Kelly Clarkson
- Don't Stop Believin' – Journey
- Incomplete – Alanis Morissette
- Something That I Want – Grace Potter
- Walking On Sunshine – Katrina & The Waves
- Zip-A-Dee-Doo-Dah – From "Song Of The South" – James Baskett
- Here Comes The Sun – Remastered 2009 – The Beatles
- Shame, Shame, Shame – Vocal Version – Shirley & Company

Listen to the full playlist on [Spotify!](#)



## If resilience were a superpower, what would your superhero name be?

- Flash Cholyla
- Superman
- Drone Man
- Captain Comeback
- Persistent Plodder
- Springback
- Resilient Raven
- Wonder Woman
- Resilitronator
- Erosion Evadiator
- Super Spring
- Fat Fish
- Fisher Woman
- Pachamama
- Boomerang
- Aqua Scrubber
- Trash Vanisher (The Trasher)
- Salmon Resurrector
- Teleportress
- Greenhouse Goblin
- Fearless Facilitator

## What's something you've done that made you feel resilient?

- Surviving the Lake Clark Air flight to Chignik
- Getting that final package of meat or fish or berries into the freezer after a long day of processing
- Hiking mountains
- Finished grad school and found a job that is loved
- I made it to 70
- Waking up every morning
- Finishing all the Star Wars
- Fall Freezer
- Watershed plan
- Constructive feedback
- Cloth diapers
- Coffee, tea
- E-bike
- Fix your Honda
- Ran back-to-back daycamps
- Motherhood
- Continuing to apply for grants in this climate
- Learning and exploring new places and people
- Got up in the morning
- Hike at 30 degrees
- Landing in Chignik Lagoon
- Commercial fishing
- Home remodeling
- Ran a half marathon in less than two hours



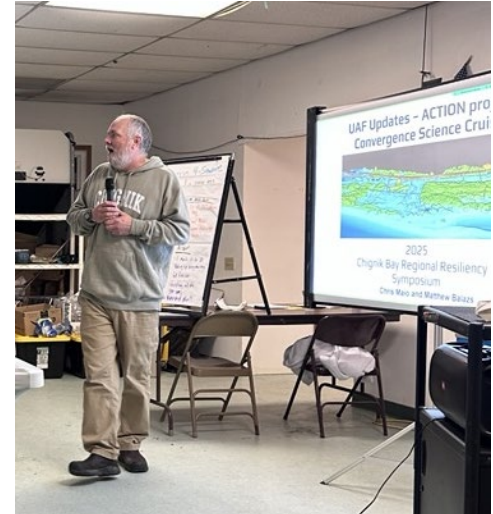
## UAF Update on Chignik Subregion Erosion Monitoring & Related Projects

Chris Maio and Matthew Balazs, University of Alaska Fairbanks

*View presentation slides for details.*

### Overview

- The purpose of this presentation is to share project updates on what the University of Alaska Fairbanks, Alaska Coastal Cooperative team is up to in the region.
- The ACTION project is funded through a \$14 million grant National Science Foundation. It brings together a very robust coalition and is focused on enhancing communication, advancing applied science, and building technical capacity.
- Taught an Alaska Coastal Dynamics for Teachers Field Course in July 2024.
- Connections with University of Alaska Southeast (UAS) Learning and Training Opportunities and Federal Aviation Administration (FAA) on Part 107 Licensing.
- Hosting a Youth Research Camp in the Chigniks this month.
- Supporting LPB with collecting LiDAR data.
  - Data has been partially collected; the areas next to the Lagoon and the Bay needs to be re-collected (ran into issues with tides), which will take place this fall.
  - Alaska Coastal Cooperative (ACC) recently purchased a LiDAR drone to do more localized data collection – shared some examples of photos taken next to the Tribal Council building in Chignik Bay.
- Preparing Topobathymetric mapping in the Chignik Watershed.
  - Topobathymetric mapping looks at water depth in various locations around the Chigniks, including Indian Creek and near the port. The data are free, available online.
  - Download the app at <https://apps.apple.com/us/app/tidecast-by-hohonu/id6447706980>
  - View an example snapshot of the data at <https://dashboard.hohonu.io/map-page/55f6f47a-a8f4-4a6d-8a12-ccc951bdbdf2/ChignikLagoon,Alaska>

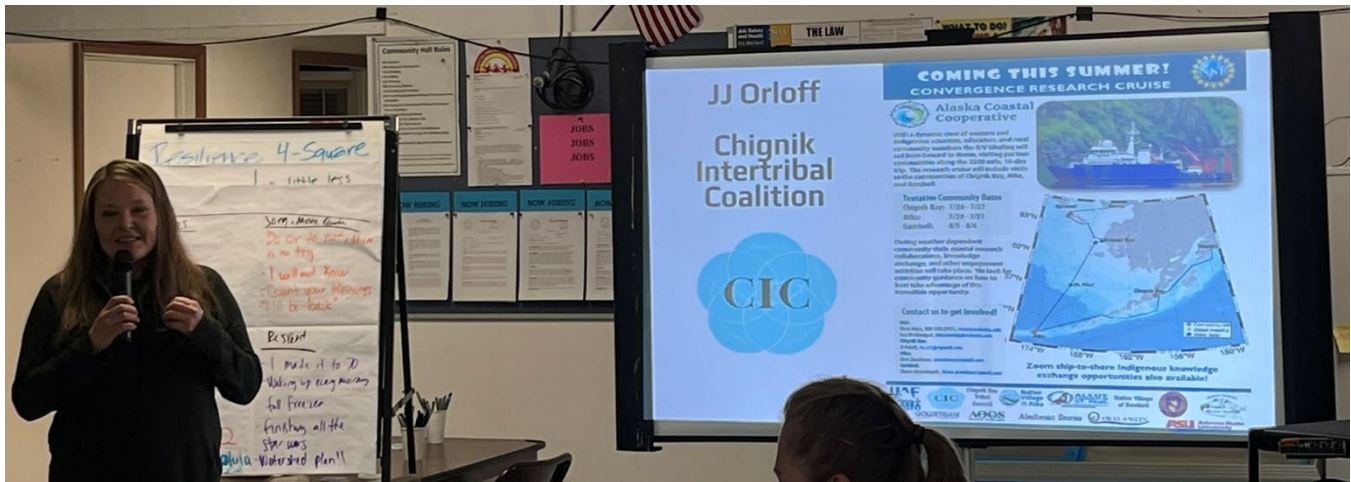


### Questions, Comments, Responses

- **Question.** The teacher training curriculum – can that be used and accessed by other communities?
  - **Answer.** Not yet. It was a pilot; need to evaluate how it went, then reconstruct the next course. Needs to be refined. Happy to meet and talk with anyone about methods.
  - In chat: We do have some professionally developed curricula with Alaska communities ready from other projects. This is where the volcano curriculum we are developing with Perryville will be posted once it is finalized: [culturalconnections.gi.alaska.edu/](https://culturalconnections.gi.alaska.edu/)
- **Question.** We get a lot of teachers from Alaska, and having a way to help them understand the perspectives and uniqueness of rural Alaska before they get here would be great.
  - **Answer.** Agreed, and a few of the participating teachers were new to Alaska.



- **Question.** Data sovereignty is important; also want to make sure people can access data. Are you considering how to put tools into the communities? So data can be used by the community? Such as GIS?
  - **Answer.** Yes. Through ACTION project, there is a workforce development working group. Part of that is a workforce development menu of opportunities. A lot of activities and curriculum, including intro to GIS. There is an Education Coordinator at UAF who we are working with, she has run GIS camps out of Bristol Bay campus.
  - **Answer.** BBNC is supporting GIS training, too. Acknowledged a need for continued collaboration between these different efforts for efficiency and awareness.
- **Question.** The LiDAR results – will these be shared?
  - **Answer.** Yes, when ready. They are still being processed.
- **Question.** Will the topo bathymetric data be available to inform National Oceanic and Atmospheric Administration (NOAA) charts? It is at that standard/quality?
  - **Answer.** Alaska Water Level Watch and Alaska Ocean Observing System (AOOS) have been engaged in this conversation. The data is not collected with professional instrumentation. Mike's research is exploring the errors. It is owned by the community, and is up to them whether to share out.
- **Question.** How long will ACC keep coming out to the Chigniks?
  - **Answer.** As long as the community wants us here!
- **Question.** Impressed with the work that's being done, and amount of resources being invested here. Especially love the youth development. Wondering – what's the local application of this? Is there an application to fishing industry?
  - **Answer.** Yes – a lot of continued collaboration in the development of this work, including with residents.
- **Question.** Love the curriculum for teachers. Is this informing UAF's overarching teaching programs, or just a handful of local ones?
  - **Answer.** Working on having the teacher curriculum be available for teachers' continuing education, including for Alaska Studies. Working with the Alaska Department of Education and to ensure the syllabus reflects criteria for Alaska Studies coursework.
- **Question.** Will this project explore the population loss and sustainability of the Chigniks?
  - **Answer.** UAF team is bringing attention to the area, supporting people coming here through data products. But ultimately, UAF is not in a position to lead conversations around sustainability, population recruitment, etc. Those need to be community led.
  - **Answer.** On the agenda for this afternoon, the Chignik Intertribal Coalition will be hosting a conversation on what happens during the 11 months where fishing is not happening – how to increase community resiliency.



### 2025 Convergence Science Cruise on UAF's Sikuliaq

- Shared details of the upcoming 2025 Convergence Science Cruise, which will be in Chignik in late July 2025).
- Bringing UAF's research vessel to participating ACTION communities.
- Will showcase research tools, bring relevance and attention, conduct research along the way. A one-of-a-kind sailing.
- The ship itself has never seen anything like this. Its riders are usually just scientists; the ship rarely goes into communities. Convergence science is a new way of collaborating.
- Ship will be in Chignik Bay around July 26-27. Hope to meet with everyone and offer tours. JJ Orloff will be teaching a craft activity.
- Folks from Chignik Lake and Chignik Lagoon are invited to come over, too. Will do what they can to get the word out to enable folks to plan and come over.
- **Question.** Who are the people on board? How were they selected?
  - **Answer.** It will be a diverse and dynamic group. Twenty people total. Representatives from all communities we work with. Someone from Nelson Lagoon, a whaling captain from Gambell, JJ Orloff representing CIC, graduate students, UAF participants. Documentary filmmaker Ryan Peterson will be joining for documentation.
- **Discussion:** What activities should we do to teach the participants (including the vessel crew) about the Chigniks when the Sikuliaq is in town?
  - Community potluck, including some traditional foods.
  - Community tour – e.g., boat tour to the Lagoon. The vessel has a skiff, too.
  - Direct examples of climate change and adaptation. For example – the alders. The alder pile at the landfill, and how it's being used.
  - Trident trash pile – environmental justice issues, extractive nature of fisheries.
  - Getting out and hiking on the beach, telling stories about cliffs, mountains. Hike to top of rock quarry.
  - Offer a menu of choices based on interest.
  - Storytelling. Historical photos of the place – could we have some of these printed out to share?
  - "T-rex was born here!" One of the oldest prints in Alaska. Share the story.
  - If they make it to the Lagoon, there is some potential geology viewing on the hydro road.
  - Salmonberry time! Salmon berries will be ripe. Bring ingredients for making jam!

- Visiting the glacier – “it’s diminishing a lot.” Mostly gone. Share before/after photos.
- **Discussion:** What can we do to make it an engaging experience for you?
  - Hearing from other villages about their culture. Representatives from other communities attending the potluck. Can they bring their indigenous foods?
  - What are scientists noticing, observing, seeing? Part of evaluation process – can ask this and share back.
  - Map the lake near the airport. “I’ve heard there is a plane down there.” “I’ve heard it’s bottomless.”
  - Learn and share about the geology – how these mountains around us were formed.
- **Question.** The mouth of Lagoon – what is the salinity and pH like? Is it brackish?
  - **Answer.** Could do conductivity, temperature, depth (CTD) measurements off the lagoon and heading out. Interesting observation.
  - **Answer.** The research team will also be taking short sediment cores in different areas.
- Where to put the wave buoy? If you have ideas – let the ACC team know.
- Related announcement: There is a Culture Camp coming up, hosted by CBTC and sponsored by BBNC. Scheduled for July 14-16. If you’re interested, talk to Debbie Carlson, CBTC Tribal Administrator.

## Harmful Algae Blooms (HAB)

### Noah Tsigonis, Tundra Tough

#### Overview

- Shared information on what harmful algal blooms are and potential negative impacts.
- Project objectives:
  - Understand what might be causing the algal blooms (fish processing? Stormwater or sewage discharge? Something else?)
  - Understand where and when paralytic shellfish poisoning (PSP) or other toxins are occurring so they can be avoided. One milligram can be toxic.
- Aiming to avoid extractive research tendencies; for example, want to preserve sensitive data like important subsistence areas, while still sharing critical information with communities who need data for safety.
- Seeking pilot communities who want to participate in our research. Don’t have funding for actual samples right now, but hopeful the next phase will allow that. This phase is gathering traditional knowledge – what are commonly used sites? Are there historic satellite data/imagery that can be used to see algal blooms? Want to find a community who wants to be involved.
- There is a strong pattern showing PSP is most often detected near communities. Suggests there is a linkage between communities and prevalence.

*View presentation slides for details.*





### *Questions, Comments, Responses*

- **Question.** PSP and algal blooms are one part of a big research picture. When looking at algal blooms and testing, are you looking at other organisms, too, that could be impacting those blooms? For example, research on plankton suggests they are decreasing throughout all oceans. Our water ecosystems are interconnected and I'm curious how the research is connected.
  - **Answer.** What is impacting the presence of HAB? This remains an interesting research question – this is being considered as a part of this process.
- **Question.** Does PSP impact other animals beyond shellfish?
  - **Answer.** Yes, PSP can also impact species like octopus.
- **Question.** Chignik Intertribal Coalition was born out of food security concerns. There is a natural fit to explore this, and support what UAF is doing. Would you be interested in deploying and collecting other things, too – salinity, O<sub>2</sub>, etc.? Understand freshwater, brackish, ocean waters, too? Matthew, Chris, and George have been talking about wanting to focus more on food security issues so this is very timely.
  - **Answer.** Yes! Anticipate collecting a variety of data; other research over time has been piecemeal. Want to build a dashboard that utilizes all of it and brings it together.
  - A. There is no data collection in this phase, will be collected in the next phase; that phase could be scoped in parallel with the community, and formatted in a way that is useful.
- **Question.** Is Chignik coming up as a problematic area?
  - **Answer.** Don't have an answer right now. Has historically been a problem based on discussions with residents. Unclear question on whether harvesting is safe.
  - HAB and PSP are related but there is not a direct link.
- **Question.** Chignik Lagoon has partnered with Kenaitze Tribe, they've been testing here, and are consistently finding hot clams here. Do people build up a tolerance? People are still digging up and eating them, and there have been no reports of recent sickness.
  - **Answer.** Not sure. Will need to reflect on the research to understand this.
- **Question.** What does PSP poisoning look like?
  - **Answer.** Most people start feeling numb. Numb lips, tongue are early symptoms.

### *Comments/Discussion*

- Participant expressed confusion about the relationship between nutrients and blooms – “feels overly simplified.”
- What species are being referenced? This is a hugely complex issue. There are many carrier species. Existing and new species migrating in.
- Water temperature is a huge driver. The topic of HABs is more complex than presented; important to acknowledge the local traditional knowledge to understand the risks the communities are facing. Communication is important as you come up with research results – how you are sharing hazards and risks when it comes to subsistence. Want to be very thoughtful on how results are shared. When we work on contaminants – such as formerly used defense sites that show risk to harvesting areas – need to be careful. Not everything is harmful, and don't want to cause unnecessary fear or distrust. When pointing out things the community may perceive as harmful – our messaging needs to be really nuanced.
- Bruce Wright, senior scientist based in Anchorage, worked with Aleutian Pribilof Islands on PSP. He did some work with Chignik on PSP sampling. May be some information there.

- History: there was a family in the 70s, they had PSP and were flown to Dillingham in the middle of the night. It happened during a series of warm summers. After that, samples were sent in annually. A few times, the results came back as “too hot too eat.”
- Chickie and Debbie took a class in Kodiak, were given kits and did some sampling and results turned up clean, but later learned the testing was unreliable.
- Elders always said “don’t dig clams in months without an R.”
- Results last year- Jackie McConnel with Knik Tribe did some testing. Chignik Lagoon clams exceeded the U.S. Food and Drug Administration (FDA) limit.

## Field Work – Erosion Monitoring and Drone Footage of Chignik Subregional Clinic

This site visit to the subregional clinic was cancelled due to poor weather conditions.

*To transition between lunch and the afternoon session of Day 2, Tatiana Degai led the group in a dance from her home community of Kovran, Russia.*



## Chignik Intertribal Coalition Research Workshop

***George Anderson, Chignik Intertribal Coalition, with other presenters identified in subheaders***

### *Overview*

- This Symposium is a definition of resilience!
- The work we are about to present is a direct result of the visioning efforts last summer and this winter.
- Would like to thank the partners that make this work possible including the ongoing support from Bristol Bay Native Association (BBNA).



### *Visitor Industry Panel: Opportunities, Lessons Learned, Potential Impacts*

- Introduction – why are we hosting a visitor industry panel? George provided some context:
  - Not “tourism” – visitation.
  - Looking at ways to diversify the Chignik economy in a way that is respectful of the place and the land.
  - Toni helped with the research plan.
  - CIC has drafted charters to convene committees to investigate these topics (visitation, cultural preservation, etc.), but first wants to understand – is this something the Chigniks want to pursue? We could convene a workshop on visitation if there is interest!
- Part 1: Thoughts on tourism from around the world. Presented by Marty Anderies, University of Arizona.
  - Presented some data on short, medium, and long-term outcomes of increasing tourism across 80 communities around the globe.
  - Tourism benefits change over time. The level of community involvement can impact the outcomes. More community involvement generally = more positive.

*View presentation slides for details.*



- See slides for charts and details.
- Part 2: From Tourism to Hosting: Building New Visiting Economies in the Arctic. Presented by Andrey Petrov, University of Northern Iowa.
  - Tourism in the Arctic has been increasing over the past ten years; many “hot spots” in Europe. Has recovered and in some cases, now exceeds pre-Covid visitation.
  - Many of the increases are via cruise ships.
  - Shared some examples of challenges with Arctic tourism in northern Europe and the indigenous communities in the region.
  - Reframing from “tourism” to “visiting” – purposeful, respectful.
  - See slides and charts for details.
- Part 3: Experience Kamchatka's Ethno-Ecotourism. Presented by Victoria N. Sharakhmatova, ARCTICenter, University of Northern Iowa.
  - Shared experiences and lessons from Kamchatka Peninsula tourism, including indigenous-led tourism efforts and projects, including festivals/events, indigenous/municipal partnerships, and a sled dog training camp.
  - In some cases, visitors are bussed to the communities to observe and participate in key cultural events.
  - See slides for details and photos.
- Part 4: Alaska Visitation Trends. Presented by Tobias Schwoerer, University of Alaska Fairbanks.
  - Shared Alaska visitation data. Trends show increasing visitation, with largest growth in the cruise industry. Mostly seasonal, but some winter tourism for aurora, Iditarod, etc.
  - Significant increases being seen in western Alaska: Kodiak, Dutch Harbor have smaller visitation but significant growth. At the same time, a drop off of visitors in Valdez and Wrangell; if a cruise ship company chooses to visit a community in a given summer or not, that can have a big impact.
  - Shared results of Juneau survey of perceptions of tourism – positive and negative.
  - See slides for details and tables.
- Part 5: Visiting with Indigenous People, Land, and Water. Presented by Tatiana Degai, University of Victoria.
  - Shared indigenous perspectives on tourism and what indigenous, community-owned tourism can look like.
  - Change in perspectives - from consumers to visitors. With indigenous communities moving from “exotic objects” to hosts.
  - Travelers who are seeking cultural tourism love hearing stories about place.
  - A key goal in building local tourism is identifying community aspirations.
  - Shared an example from the Northwest Territories with guidelines for ethical tourism.
  - Shared a video from Nawalakw: <https://nawalakw.com/>
  - See slides for photos and graphics.





- Questions, Comments on Visitation
  - King Salmon Visitor's Center is a partnership between the Bristol Bay Borough, Lake and Peninsula Borough, USFWS, National Park Service (NPS) and the Bristol Bay Borough Chamber of Commerce. They are involved in tourism discussions. We are looking at a new building in King Salmon – we have done an interpretive study – one that includes other communities in the region.
  - We had some funding in the past for consultants to work with us to move us forward – we don't have them anymore so are somewhat stagnate. We have some data on this. The American Indian Alaska Native Tourism Association has done lots of work and has developed different tools including working with Federal Conservation Units. Their marketing efforts are second to none. BBNC, who is in the tourism industry, has been approached through conversations with them about including more shareholders in their tourism efforts. The BBNC place names project would be a good example of something that could contribute to Chignik's efforts. The Lake and Peninsula Borough is mainly an observer in this process but could become more active.
- **Question.** What's next?
  - **Action.** The ACTION project has a little over 2 years remaining. Will likely go further than that but that's when the money expires. We could continue with access to grants but need to gauge interest. Today – presenting strategies and tools but want to know if folks are interested.
- **Question.** What are the recommendations from our panelists and visitors?
  - **Answer.** Are there plans for small business development training, how to teach Tribal members or Shareholders to start a business? UAA Business Enterprise Institute can

- help with business plans, trainings to start a small business. They also offer certificate and degree programs to help gain skills.
- Visit other communities that are successful – see what are they doing, learn their lessons.
  - There are some great examples of success here in Bristol Bay – such as the Fly Fishing Academy, hosted by Bristol Bay Heritage Land Trust. Some lessons learned; it's expensive, it's hard to operate a business. Bristol Bay Campus has been hosting classes that help train individuals who are interested in starting a business.
  - With cruise ship visitors coming – there is an opportunity. Chignik Bay has the only deep sea port in the area. Visitor center in Chignik Bay? Need a business plan to make sure things pencil!
    - Chignik is part of the Bristol Bay family, and they have a robust visitor economy. How can we be a part of folks who are already coming?
  - BBNC is also supposed to support economic development in the region – BBNC Leadership Forum is one opportunity. Presentations are due next week – maybe an opportunity for further dialogue?
  - What is the role of each entity to support tourism? Develop a multi-prong plan. Bringing together ideas such as a visitor center, small business needs, interpretive information and signage, etc.
- Encourage residents and leaders to go back to your organizations, Councils, boards. Is there interest? Should CIC move this initiative forward? CIC like to see resolutions of support before taking this further.
    - General sense that folks are interested!
    - With increasing cruise ships, the gap feels like human and financial resources. What can we do to be ready?
    - Before the City acquired the Trident properties, Chickie reached out to an archaeologist. He told her about the historic cannery, mess hall, old buildings; one was an old hospital (Chickie's father in law's appendix was taken out there!). She did some research, found 2 reports that described the Chignik Historic District. It would be great to rehabilitate buildings; could be a visitor center in one of them. That could happen but needs to happen soon – the buildings are deteriorating.
    - A few weeks ago, a luxurious cruise association reached out to the City – they want to do a site visit in August to check out the place, and depending on the investigative findings, might book the itinerary.



# TOURISM in Chignik

## GREEN PROS

- Economic Diversification**
  - 1. Revitalization of town
  - 2. Infusion of money
  - 3. Starting businesses therefore regional economy
  - 4. Pride in home
- Economic Diversification**
  - Economic boost
  - A way to educate and share history of Chignik w/ traditions
- A New Way of Bringing in Money**
- New Income Source**
  - w/ opportunities for a more resilient future
- A New Way of Bringing in Money**
- Potential here for growth**
- Economic Diversification**
  - Tourism could add to the resiliency of the community through income + outreach
- Like Lifestyle in Chignik**
- Sharing / exchanging**
- For the city to Grow and Make more money**
- PRO**
  - ① Economic opportunity
  - ② Presive History of Chignik
  - ③ Keep Chignik thriving

## PINK CONS

- New Diseases**
  - 1. Requires residents to work together - this is good but challenging = fair fighter
  - 2. Dealing w/ the grief of changing a career - no other commercial jobs but make side money doing stuff
- Future is Scary**
- Tourism would require investment + commitment**
- limited infrastructure capacity**
  - potential negative spillover introduction by cruise ships
  - to protect ongoing by Swisscom
- Harm to our environment/water (Pollution)**
  - 1. Requires residents to work together - this is good but challenging = fair fighter
  - 2. Dealing w/ the grief of changing a career - no other commercial jobs but make side money doing stuff
- Population Decline**
  - 1. Too many people walking on roads
  - 2. No public bathrooms
  - 3. No public trash cans
  - 4. No public parking
  - 5. No public restrooms
  - 6. No public trash cans
  - 7. No public parking
  - 8. No public restrooms
  - 9. No public trash cans
  - 10. No public parking
  - 11. No public restrooms
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- Harm to our environment/water (Pollution)**
  - 1. Requires residents to work together - this is good but challenging = fair fighter
  - 2. Dealing w/ the grief of changing a career - no other commercial jobs but make side money doing stuff
- Partnership / coordination leadership is needed to harness resources + vision**

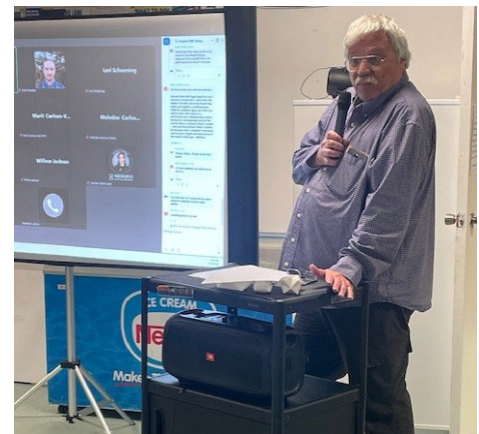
- Board of Fish Update
  - This is a big year! Worked on a budget for most of the winter. Just turned it in on Monday to BBNA.
  - 2018 Disaster: Bristol Bay asked, “How can we help?” They formed a Chignik Fisheries Task Force, with local representation. BBNA has always been a partner but they have different gear, different management – took some time to figure out how to work together and how they can help us.
  - Last winter – data compilation project. Chuck was integral, hired Earl and Axel K. Collected everything and put it onto a drive for sharing with Board of Fish and for grant proposals.
  - Thanks to BBNA, Tribes, Corporations, Municipalities, Universities for all the work. CIC supported a dozen or so contracts this year, and with all but one (hired biologist), all hires were local within the Bristol Bay region. So many organizations have come together to make this possible.

- The Board of Fish has data. The problem is – they know where it is, but no one else does. Earl Krygier has been heading up local collection of data. So much of the information is irrelevant; how do you determine which information is relevant for you and your community? Collaborating on data collection, written testimony, oral testimony. Closed that project out last year.
- The Board of Fish chair mentioned the importance of youth engagement; that's an important part of the work CIC is doing.
- Thanks to BBNA – all CIC board members are able to travel for meetings. There is a strong partnership between BBNC, BBNA, CIC. Next meeting will be in Kodiak this year. When proposals come out in August, the group will be meeting to review and determine whether we support/oppose and submit comments and determine who will attend workshops. Want to do a one-day workshop with youth – a re-creation of a Board of Fish meeting.

### *Chignik Regional Aquaculture Association (CRAA) & Lake and Peninsula Borough Update*

#### Project 1: Black River and Black Lake

- Identified by the Army Corps of Engineers as places that have seen a lot of change over the past 20 years.
- CRAA originally formed to examine those changes. Black Lake getting shallower, Black River changing.
- Eventually the Army Corps determined the situation had stabilized, but encouraged ongoing monitoring to ensure there is no additional downcutting or changing in other ways that might negatively impact the fishery. No immediate rehabilitation required.



#### Project 2: Genetic Study of Sockeye Entering the Fishery

- Our areas has two very specific different runs. One to Black Lake, and the second to Chignik Lake.
- It is important we understand the strength and timing of both runs. ADF&G looking at the situation differently. CRAA and BBNA are making sure funding is on track and completed in time for Board of Fish meeting.

#### Project 3: Egg Box to Support Chinook Salmon

- In 2023, numbers were well below the target minimum of 1,350.
- Egg box is being introduced to see if it helps.
- Hatcheries have developed a negative public face, many folks are critical of hatcheries. This technology was lumped into that basket. However, an egg box is like a life support system for a run that is experiencing challenges.
- **Question.** What is the status of the incubation project?
  - **Answer.** Yes, target is to complete it this year. There remains a lot that needs to be done to hit those targets, but hoping to do so.
- **Question.** Have you talked to Israel Payton of ADF&G?
  - **Answer.** Chuck – no. George – yes. Briefing/connecting with him.
- **Question.** Clarification – do the eggs stay in the egg box?
  - **Answer.** We take eggs (unit is out of water), cycle in water from the stream, and raise them to hatching; then move from the box and put into gravel where they would've hatched.

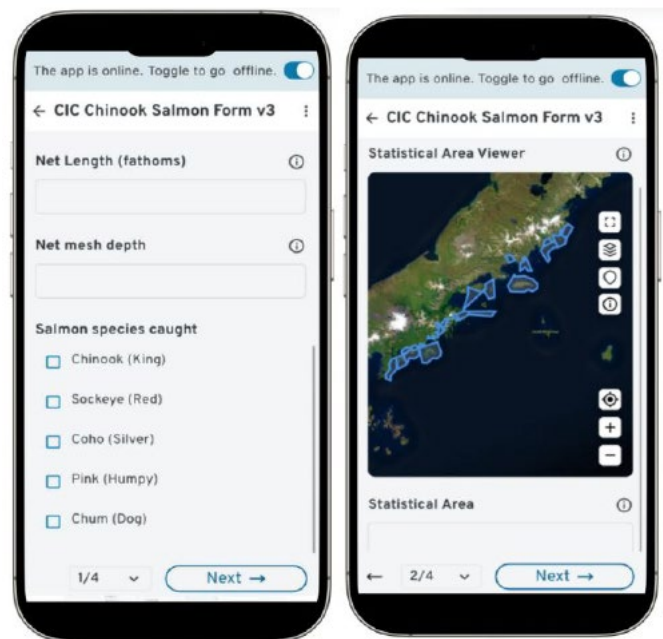
*Chinook App Demo. Presented by Hannah-Marie Ladd and Chris Tran, Indigenous Sentinel Network, Aleut Community of St. Paul Island.*

*View presentation slides for details.*

#### Overview

- Shared purpose of Chinook monitoring project and partners involved.
- Indigenous Sentinels Network (ISN) was originally developed about 20 years ago for the St. Paul Island community for marine mammal monitoring, but has expanded to communities and species around Alaska and beyond. At ISN they work with local observers in communities.
- Includes software that supports environmental monitoring (with data sovereignty/access protections built in), as well as programmatic support and consulting – including grant writing, fundraising, knowledge sharing, partnership development, science communication, storytelling.
- ISN is working with CIC on some data collection tools and integrating with ACTION project.
- Focus on Chignik Salmon Monitoring. What data to collect, without being overwhelming – lots of customization.
- The presenters demo'd some example screenshots of the Chignik app in development. It works offline, too, and uploads once online.
- Walked through what the draft community dashboard for Chignik looks like so far. Community members and observers can log in and access; administrators can export, or give specific individuals customized access.
- Next steps: Rolling out for testing this summer. CIC is leading the rollout. Interested? Reach out to Chris or George (contact information on the slide).
- Comments:
  - (in chat) Clapping, cartwheeling, incredible. So exciting!!!
  - Commend the work that has been done on this. ADF&G will be doing subsistence surveying next week in the Chigniks. That is really helpful information as we go into this next Board of Fish cycle, so encourage everyone to share and participate. Because there is a subsistence priority in state law, this will help augment.
  - “I’m literally beaming.”

*Screenshots from the Chinook App, a citizen science application under development by the Indigenous Sentinels Network for Chignik Intertribal Coalition*



*Update on Local Research Projects: Sockeye & Chinook Otolith Microchemistry. Presented by Jonny Singleton, University of Washington Fisheries Research Institute (FRI)*

*View presentation slides for details.*

- Shared highlights from master research this winter across two projects: a sockeye project and a Chinook project.



- Using otolith to understand fish dynamics. Otolith are the inner ear structures of fish; can learn about fish history by studying (age, location, etc. – similar to tree rings); shared information on how the otoliths are analyzed and how many have been analyzed.
- Sockeye project: shared overview of purpose (juvenile behavior strategies), motivated by 2018 collapse. Dataset looks at 2017 through 2024.
- Chinook project: shared overview of purpose (life cycle of Chinook), including investigating importance of freshwater and lagoon rearing
- What is the data telling us so far? Blue (Strontium-calcium ratios) – when low, shows time in freshwater. When high, shows time spent in saltwater. Shows whether fish are spawning locally.
- **Question.** Is this one life cycle? (slide 10)
  - **Answer.** Yes, all are 2016 Chinook, each chart is one fish. X axis are microns from core of the otolith (young) to later (ocean entry point).
  - Fish #1 – need to age the fish to pair that with the length of time.
  - Fish #3 (far right) – can look at how long their life span was spent in freshwater vs. saltwater.
- The green row of charts measures manganese. Black Lake = high manganese, so higher manganese rates = fish likely spent more time in Black Lake than Chignik Lake.
- **Question & Answer**
  - **Question.** How are you acquiring otolith samples for Chinook?
    - **Answer.** For 2015-2017, getting from John Ranch on recreationally harvested Chinook. After that, FRI has been collecting opportunistically, mainly from spawned out salmon washing out on the weir.
  - **Question.** We were in a non-retention time, there is now mandatory retention; is there discussion with the fleet on getting samples? Would that be helpful?
    - **Answer.** That would be helpful, but would need more funding to do this sampling. If we could get more than 10 – could add more years and more data.
    - Coordinate/communicate with fleet? Could it be synced with the new app?
  - **Question.** Some rivers and streams are more and less impacted by glacier melt. Have you looked at how that glacier melt impacts salmon population dynamics?
    - **Answer.** No, not looked at. Might be interesting with West Fork, being a primary input into the lake.
  - **Question.** In looking at otolith, are there any other traumas or environmental stressors you can learn in by examining?
    - **Answer.** Only one thing – vaterite. Otoliths are calcium carbonate structures. It's not clear how this impacts fish, but it's something that shows up sometimes when



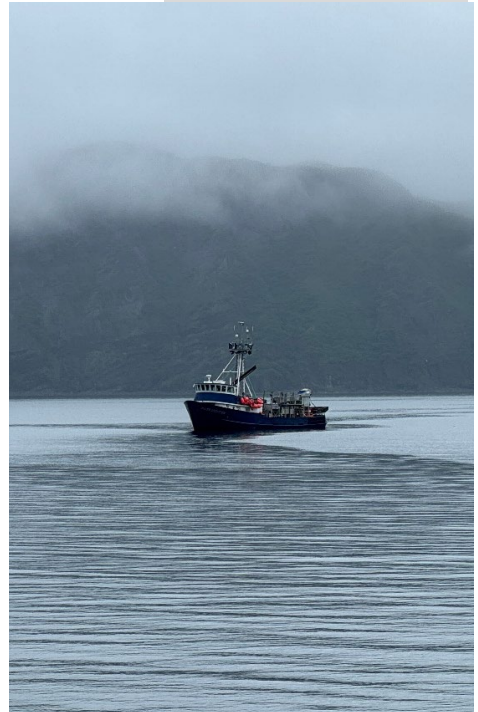
processing sockeye. Could have an impact but they are returning adults that are successfully reproducing, so it may not be impacting them.

- **Question.** Can you tell the difference between first and second run fish?
  - **Answer.** We only collect samples from the first run, so don't know. Would be interesting to look at some and see if there are observable differences.
- **Question.** Are there corresponding genetics for these samples? Just curious!
  - **Answer.** No.

*Chignik Sockeye Disaster Research. Presented by Scott Chandler, Salmonid Evolutionary Ecology and Conservation Lab, UAF.*

[View presentation slides for details.](#)

- Introduction
  - Scott presented his sockeye disaster research findings and plan going forward.
  - His research focuses on why sockeye salmon are less robust in the Chigniks. He is especially interested in salmon during two key points: when smolts transition from freshwater to ocean, and when spawners transition from ocean to river.
  - Relying on ADF&G data with a focus on body size and outmigration patterns. Unfortunately data collection stopped in 2016.
  - Relying on data about length. Fish length (fork length) is biggest predictor of success.
    - Longer fork lengths suggest better growing conditions.
    - Early run fish are generally larger than late run fish.
  - Scott will be visiting Chignik later this summer.
    - Scott, Peter, and a few others traveling with Jonny to explore how female sockeye body size might impact survivability of their young. Want to understand if/how body size might impact survivability, how deep the nests are dug, etc.
    - Will be counting eggs and conducting some climate studies.
    - Will need to kill a few fish to count their eggs; will have some red fish if folks would like them.
- Q&A
  - **Question.** Can you share a bit more about climate surveys?
    - **Answer.** Remote sensed and in situ data from populations across southwest Alaska. Want to understand if Chignik is perhaps getting more rain on snow events that could be impacting salmon than other parts of the region. Hoping to set up a weather station but also want to get data from public resources.
  - **Question.** Would you also look at atmospheric river changes, glacier changes?
    - **Answer.** Scour angle is looking at the early run since that seems to be the one struggling the most, and has less variation in spawning. That is mostly in the Alec River, which is not glacial. Would be interesting to explore in the future,



especially on the Chinook front. Would imagine – glacial silt funnels down into the lake and then the river, suspect it would have a bigger impact on the Chinook.

*Understanding Fisheries Governance. Presented by Andrey Petrov, University of Northern Iowa.*

*View presentation slides for details.*

- Shared complexities of fisheries governance, the benefits of understanding and reflecting on governance, and commonly seen fisheries issues.
- Prepared a mind map of fisheries governance in February 2025 – a first attempt at articulating what exists today, followed by a list of all stakeholders. Also considered how fisheries SHOULD BE and how fisheries ACTUALLY are. Right now, processors are controlling most of the interests – you can buy a permit but processors determine whether and how you participate.
- Acknowledges this is stressful to talk about – too much space between what is meant to be/what the intentions are, and what exists. How can we mitigate some of these things?
- Preliminary governance chart – how to read:
  - Pink = community, green = private, purple = government
- Initial findings
  - Red circles = points of contention.
  - There are very few opportunities for communities/indigenous communities to inform governance/decision making.
- Proposed revisions/changes:
  - Advisory Committee bubble should include Regional Advisory Councils (RACs).
  - Missing Federal Subsistence Board? In the lower right – populated by Tribal voices, but they make policy decisions.
  - Add a link between processors and communities.
  - Should informal connections be captured, or just formal connections?
- Observations and discussion.
  - Many of the challenges boil down to conflicts between Alaska National Interest Lands Conservation Act (ANILCA) and federal and state laws. “I’m so encouraged that these conversations have begun and are evolving.”
  - Here is another resource that I recently became aware of for helping kids and the general public understand more about the salmon issue:  
<https://storymaps.arcgis.com/stories/43ae5f7ae3b84a85889e7b8ada4561fo>
  - Pricing is also a factor in all of this, too – if salmon prices are going down because of fish farming, then that impacts the markets and what processors can and cannot do.
  - The Bristol Bay Economic Development Group is looking at occupational endorsements, etc. Looking at frameworks for fishery education. Bristol Bay is also involved in bottom fishing, not just salmon. Education at elementary, secondary, post-secondary levels.





## June 27 (Friday) Presentation Highlights



### Youth Culture Camp Presentations

***Presented by Matthew Balazs, JJ Orloff, Morgen Bertheussen***

#### *Overview*

- This was the first year of this camp. It came together and it's been a great journey. Hosted three rounds, one each in the Lake, Lagoon, and the Bay.
- These camps built from many years of conversation and dreaming.
- 23 youth participated; 10 at Lake, 6 at Lagoon, 7 at Bay (participation shrunk because of the fishing opening). Ages ranged from 6 to 17 years old. Invited littlest ones to participate in the drone activity even if not formally designed for them – didn't want them to feel excluded.
- JJ, Matthew, and Morgen shared the types of activities they did at each camp:
  - Starting each days with games and discussing photography basics.
  - Planning for walks and drone flights; discussed place names and identified places they love, places of importance, places they would change (e.g., reopening the store).
  - Did drone photography around town and talked about composition.
  - Spent time in the classroom reviewing photos, sharing stories about them.
  - Held a lunch with Elders. Shared stories, shared photos, talked about favorite places and changes. That was a highlight for many participants.
  - Built drones together that the youth get to keep.
  - Wrote messages to the world individually, then together to draft a collective message. (recordings from the messages are available on the [Chignik watershed website](#)).
  - The teaching team showcased some of the photos taken from the three camps. Photos told pictures of places, humans, animals (lots of dogs!). Defining what it means to be home, observing changes.

*Chignik youth statement to the world:*

“We want our community to provide more job opportunities in order to bring new people to Chignik.

We need more people to help build and maintain our infrastructure (school, housing, store).

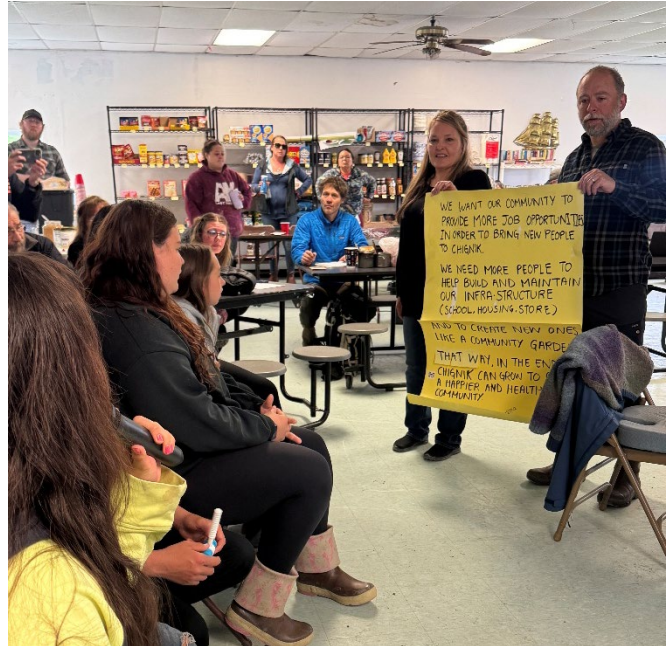
And to create new ones like a community garden. That way, in the end, Chignik can grow to be a happier and healthier community.”

*Descriptions of the photos they chose to share and why:*

- Kelly
  - Shared photos of home, stories of a bee encounter in the shed; adjacent to the former cannery bunkhouse.
  - Shared photo of Indian Creek; memories of bears there over the years; water levels have been dropping and fewer salmon, so don't see bears as often. Families used to fish there.
  - Would like to cut down some alders because they are overgrowing the school playground and the airport – worry about hidden bears.
- Janessa
  - Shared a salmonberry blossom with a caterpillar. Salmonberries are important and the blooms are beautiful.
- Aluhk
  - Shared photo of harbor – a place she loves.
- Trevin
  - Shared photos of an Alaska rose in Castle Cape.
- Kailey
  - Shared photo of Indian Creek from beginning, middle, and end. Used to try and catch fish with her hands; then it started to dry up and there were fewer fish. On more recent visits, haven't seen any fish. Rocks are taking over the water – the fish run is drying up.
  - Want to understand how to bring people back, would love to see Chignik come back from all the challenges.
  - We had a great time at the camp.

*Closing Comments From Participants on the Youth Camp*

- Reflections from participating youth:
  - Flying drones was awesome.
  - More fresh fruit.
  - Liked the camp, was really fun.
  - Liked the camp, liked flying drones, thank you for getting us drones.



- Enjoyed the camp, got everyone out and about because it was raining; taking photos of places and were reminded of places that are important. Places like Bunbun's house.
- One thing I would change: bring kids from the Chigniks together. Hear stories from Elders in other places, see what their communities look like, how they grew up, what their stories are. Especially the Lake.
- Three days was not enough. Would like a full five days. More activities – rides, hikes.
  - If it was a couple days longer – we showed places we loved on the map, but didn't even get to walk the entire bay. Would like to get to visit more places – take teachers to places of importance/significance. How youth see Chignik, not just how adults see Chignik.
- Question for youth – what do they want to see in five or ten years based on the challenges?
  - Better connection between Lakes and Lagoon. Learn people live, how you take a boat to get the mail. Exciting to talk about a potential road. Kids could participate in activities together, could visit more. With struggles with school, could travel to school and enroll.
  - If all the corporations brought money together, could build a highway between the Chigniks. Wouldn't have to drive skiffs back and forth.

#### *Community Reflections on Youth Camp and Presentation*

- Loved the labels. Curious to know the similarities between what youth labeled.
- Cameras and printing – how did this work?
  - Cameras had SD cards and also some instant print cameras. They had a shoot & print, but most of them were run over by a truck in the Lake when the backpack they were in was run over. Also had Go Pros and iPhones.
- Great to hear from youth. Call to action to Tribe, Corp, City – add a youth component to your governance? In each seat, a leader. Not sure what this could look like.
- This has brought to fruition what we heard about engaging youth in a position of being leaders.
- Great to hear voices from youth about the future of the Chigniks.
- Youth camp from BBNC – would like to incorporate some of these elements. Would also be great to share what we did with BBNC, Far West, Lagoon, Lake Corps – see if they would support in the future. Great to see youth coming together and speaking at this forum. “Gotta keep it going, youth are our future. Can't do one year and stop – need to keep it going.” Young people have great ideas. So proud!
- Would love to get a summary of youth input from the activities and share with regional leadership. Elder and Youth Conference – thank about joining, it happens annually.
- Could we incorporate a historical element, too? Why are we here, how did the rocks and mountains here form?
- A number of the young participants shared they don't know how to swim. In the past, there have been some teachers brought in – could be incorporated in a future camp.
- Have youth at the beginning of Symposium instead of the end?
- “Longer stays and buffer days.” Also a rest/transition day between camps.
- Want to be sure we're documenting the photos and stories that were shared. Will be really special in the future.
- Still thinking about how to share and bring this all together. Would like to offer this activity elsewhere. Talked about having a pen pal; sharing photos and stories between different remote communities. Brainstorming.



## What's one word you would use to summarize the week?

*Advancement  
Fun  
Drones  
Entertaining  
Community  
Happy  
Engaging*

*Inspiring  
Motivating  
Moving  
Actionable  
Impactful  
Thanks  
Collaboration  
Important*

*Energizing  
Future  
Potential  
Forward-looking  
Photovoice  
Networking  
Bidarki  
Learning*

*Informative  
Enjoyable  
Enlightening  
Insightful  
Exuberating  
Meeting-of-minds  
Exciting  
Special*





# Appendices

**Symposium Evaluations**

**Symposium Flyer**

**Symposium Agenda**

**Attendees List**

**List of Presentations/Attachments (hyperlinked)**



## 2025 Symposium Evaluations

23 participants (22 in-person attendees and one zoom attendee) submitted evaluations about the Symposium. Their feedback is below.

### Questions 1-4: Rate these statements.

Category	Prompt	Average Score 1 = Strongly Disagree 5 = Strongly Agree
Symposium Purpose	I understood the purpose of the Symposium.	4.8
	There was value in what we worked on, and my days were well spent.	4.5
	<b>Comments:</b> <ul style="list-style-type: none"> <li>Would be nice to spread over 3 days.</li> </ul>	
Openness	I felt comfortable asking questions and expressing my views.	4.8
	Discussion was facilitated in an appropriate manner.	4.8
	Adequate time was given for questions, answers and discussion.	4.5
	<b>Comments:</b> <ul style="list-style-type: none"> <li>More time was needed to cover the many topics / projects. Parts felt rushed or perhaps like there was too much content to absorb.</li> <li>More time.</li> <li>Too compact, at least 3 FULL days are needed.</li> </ul>	
Productivity	The Symposium ran efficiently with minimum interruptions/ disruptions.	4.5
	I was satisfied with the overall outcome of the Symposium.	4.6
	<b>Comments:</b> <ul style="list-style-type: none"> <li>More breathing room/breaks. A lot of dense presentations.</li> <li>Weather, internet caused delays and cancellations.</li> <li>All speakers did not speak clearly.</li> </ul>	
Logistics	The Symposium location, technology, and space was satisfactory for the group's needs.	4.8
	The time and length of the Symposium was appropriate.	4.3
	<b>Comments:</b> <ul style="list-style-type: none"> <li>It would be better to hold this before fishing season opens to increase participation. Perhaps make it three full days too.</li> <li>More time.</li> <li>Same as above - need 3 full days.</li> <li>More breathing room/breaks. A lot of dense presentations.</li> <li>More time for youth.</li> </ul>	



### **Question 5: What did you enjoy most about the symposium? (grouped into themes)**

- Community Connections
  - The community members participated.
  - community interaction
  - Connecting with people from Chigniks and agency staff.
  - Gathering of people at the community hall! It was fantastic.
  - Meeting everyone, networking, sharing ideas to collaborate and work on community needs. So grateful, thank you, looking forward to 2026 Annual Symposium.
  - People are very welcoming
  - Reconnecting with community and partners that do work in the region.
  - Networking
  - Bringing people together to talk about important topics/research that matter to the Chigniks.
  - Togetherness
  - All our community come together and bring out thoughts together.
- Youth
  - Hearing about the youth research camp and from the kids!
  - The youth
  - Youth presentation. Great Job!
  - Us kids got to speak our minds, got fed very well
  - Everything! Especially youth presentation
- Good facilitation and organization
  - Great in-person and zoom interactions/questions and responses. Great facilitation.
  - Thank you Chignik Bay for hosting. And to Agnew::Beck and Flensburg Consulting for their technical assistance.
  - It was well paced and engaging.
  - The emcee did a great job- she spoke clearly, showed respect, and had energy. Also enjoyed the food.
  - Food
- Learning
  - Learning about the local community and natural environment
  - The wonderful presentations and the valid content and the food. Call all villages within CIC to join. Wonderful symposium, thank you.
  - Scientific study reports
- Other
  - I enjoyed the Russian dancer.

### **Question 6: What was your least favorite part of the Symposium? (Grouped into themes)**

- Weather
  - The rain.
  - Rainy weather.
  - The rain
  - Weather was too wet
- Length of time
  - Back-to-back presentations with little time/breaks to reflect and digest.

- Not having more time to discuss CIC workshop topics
- Other
  - Dancing
  - Nothing. Very good. Great people, food, and conversation
  - Youth half-day, incorporate talking circles.
  - Minor, though annoying connectivity delays
  - People should not be allowed to be on laptops the entire time. We should have a “you are here so let’s be present” guideline. Phones are fine, but sitting in front of a laptop the whole time seems like the person doesn't want to be there.
  - Boring except for food
  - Certain speaker's presented in a boring way- perhaps presentations could be more engaging and stimulating. I looked around and noticed yawning. Some attendees were looking at their phones and doing some kind of activity on their phones.

**Question 7: Do you have any specific suggestions for improving future Symposiums? (grouped into themes)**

- More opportunities for interactive sessions and community input
  - Highlight how community involvement / feedback was incorporated in the projects. I didn't hear anything about surveys or door-to-door inquiries, or even an open house. More community input please.
  - Schedule more small group discussions based on participants’ interest.
  - More interactive discussions
  - More space between talks spread it over 3 days (full) instead of having only 1 presentation on the last day. Thank you!
- More participation from other Chigniks
  - Participation from community members, especially from other communities in the Chigniks.
  - More people from villages, for example, the other Chigniks. I hope to have the Chigniks in the future to be more connected.
- More youth engagement
  - I really appreciated our youth coming together laying out their thoughts.
  - Include a children's component.
- Other
  - More introductions to orient the talker
  - None, but thanks for working so hard to include virtual participants!
  - Additional day breaks for free time or planned activities for new folks in the region. Thank you!
  - Planning for the day after the June ferry. Planning throughout the year must continue.
  - Perhaps speakers could be better prepared or rehearsed. They need to plan and prepare to deliver more dynamic presentations. Do not think because we live in a village that we deserve mediocre presentations?

## Symposium Flyer



# 2025 CHIGNIK REGIONAL Resiliency Symposium

**June 25-27, 2025 | Chignik Bay Community Hall**

**All attendees are eligible for door prizes!**

## SYMPOSIUM SCHEDULE OVERVIEW

### WEDNESDAY, JUNE 25

**9:30 AM** Welcome, Opening Prayer, Introductions & Agenda Overview

*Presenter* Jeanette Carlson, CBTC Environmental Director

**10:00 AM** Chignik Regional Watershed Plan: Implementation Strategies

*Presenter* Shelly Wade & Molly Mylius, Agnew::Beck Consulting

**11:30 AM** Lunch (sandwiches provided)

**1:00 PM** Chignik Subregion Wetlands Inventory Map

*Presenter* Leilani Luhrs, BBNC

**1:30 PM** Chignik Subregion Environmental Health Site Visit Findings

*Presenter* Melany Stumpner, BBAHC

**2:00 PM** Lake & Peninsula Borough Update on Chignik Subregion Projects

*Presenter* Jordan Keeler, LPB

**2:30 PM** Break

**3:00 PM** City of Chignik Update on Trident Dock Debris

*Presenter* Robert Carpenter, City of Chignik

**3:00 PM to 4:30 PM** Community Projects Roundtable

*Open discussion on upcoming and potential projects, concerns*

**6:00 PM** Community Potluck

### THURSDAY, JUNE 26

**9:30 AM** UAF Update on Regional Erosion Monitoring & Related Projects

*Presenter* Chris Maio, Arctic Coastal Geoscience Lab

**10:30 AM** Harmful Algae Blooms

*Presenter* Noah Tsigonis, Tundra Tough LLC

**11:00 AM** Field Work (in person only)

- Erosion Monitoring
- Drone Footage of Chignik Subregional Clinic

*Presenter* Chris Maio Arctic Coastal Geoscience Lab

**11:30 AM** Lunch (sandwiches provided)

**1:30 PM to 5:30 PM** Chignik Intertribal Coalition Research Workshop

- Visitor Industry Potential
- Chignik Intertribal Coalition Update
- Chignik Regional Aquaculture Association & Lake and Peninsula Borough Update
- Chignik App Demo
- Update on Local Research Projects
- Fisheries Governance


**6:00 PM** Barbecue Dinner

### FRIDAY, JUNE 27

**9:30 AM** Youth Culture Camp Presentations

**11:30 AM** Closing Remarks

### Need More Information?

 Jeanette Carlson, CBTC Environmental Director: 907-749-4019

 <https://chignikwatershed.com/>

 Detailed agendas are available at the Tribal & City offices

### JOIN VIRTUALLY VIA ZOOM:

Join by phone

Dial: 888-475-4499 (Toll-free)

Meeting ID: 859 1153 4651#

If Prompted, Enter Passcode: 447537#

**CLICK  
HERE TO  
JOIN**



## Symposium Agenda

# Chignik Regional Climate Resiliency Symposium

## June 25-27, 2025

### June 25 (Wednesday)

9:30 am	Opening Prayer/Introductions/Agenda Overview
10 – 11:30 am	Chignik Subregional Watershed Plan Implementation Strategies
11:30 am – 1 pm	Lunch
1 – 1:30 pm	Chignik Subregion Wetlands Inventory Map
1:30 – 2 pm	Chignik Subregion Environmental Health Site Visit Findings
2 – 2:30 pm	Lake and Peninsula Borough Update on Chignik Subregion Projects
2:30 – 3 pm	Break
3 – 3:30 pm	City of Chignik Update on Trident Dock debris
3:30 – 4:30 pm	Community Updates: Upcoming and Potential Projects, Concerns
6 – 7:30 pm	Dinner

### June 26 (Thursday)

9:30 – 10:30 am	UAF Update on Chignik Subregion Erosion Monitoring & Related Projects
10:30 – 11 am	Harmful Algae Blooms
11 am – 12 pm	Field Work - Erosion Monitoring and Drone Footage of Chignik Subregional Clinic <i>(in person only – no Zoom portion)</i>
Noon – 1:30 pm	Lunch
1:30 – 5:30 pm	Chignik Intertribal Coalition Research Workshop -Visitor Industry Potential -Chignik Intertribal Coalition Update -Chignik Regional Aquaculture Association & Lake and Peninsula Borough Update -Chinook App demo -Update on Local Research Projects -Fisheries Governance
6 – 7:30 pm	Barbecue

### June 27 (Friday)

9:30 – 11:30 am	Youth Culture Camp presentations
11:30 – noon	Closing Remarks

## Attendee List

### *In person (41)*

Name	Organization (alphabetical)
Shelly Wade	Agnew::Beck Consulting
Molly Mylius	Agnew::Beck Consulting
Kailey Frazier	Alaska Department of Fish and Game
Kellie Blair	Alaska Department of Fish and Game
Marty Anderies	Arizona State University, University of Alaska Fairbanks
Leilana Luhrs	Bristol Bay Native Corporation
Chickie Carlson	Chignik Bay Tribal Council
Debbie Carlson	Chignik Bay Tribal Council
Roderick Carlson	Chignik Bay Tribal Council – President
Robert Carpenter	Chignik City Council - Mayor
George Anderson	Chignik Intertribal Coalition
Charles (Chuck) McCallum	Chignik Regional Aquaculture Association
Alex Daugherty	Chignik Resident
Aluhk Anderson	Chignik Resident
Billy Anderson	Chignik Resident
Kailani Scanlan	Chignik Resident
Angela Krause	Chignik Resident
Lars Lee Anderson	Chignik Resident
Arlene Kopun	City of Chignik
Dannica Anderson	City of Chignik
James Anderson	City of Chignik
Lana Anderson	City of Chignik
Melissa Stamge	City of Chignik
Ailene Ashby	City of Chignik
Guy Ashby	City of Chignik, Chignik Volunteer Fire Department
Sue Flensburg	Flensburg Consulting
Jen Danielson	Goldstream Group
Morgen Bertheussen	McGill and University of Alaska Fairbanks
Noah Tsigonis	Tundra Tough
JJ Orloff	University of Alaska Fairbanks
Chris Maio	University of Alaska Fairbanks
Matthew Balazs	University of Alaska Fairbanks
Toby Schwoerer	University of Alaska Fairbanks
Toni Abbey	University of Alaska Fairbanks
Jen Danielson	University of Alaska Fairbanks
Tatiana Degai	University of Alaska Fairbanks
Andrey Petrov	University of Alaska Fairbanks
Victoria Sharakhmatova	University of Northern Iowa, University of Alaska Fairbanks
Jeff Yeabsley	University of Washington
Jonny Singleton	University of Washington
Emma	Unknown

Alex Flinders	Unknown
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### ***Over Zoom (32)***

<b>Name</b>	<b>Organization</b>
Adelheid Hermann	Alaska Center for Climate Assessment and Preparedness
Jenna Travers	Alaska Conservation Foundation
Mary Inovejas	Alaska Department of Environmental Conservation
Melany Stumpner	Bristol Bay Area Health Corporation
Everette Anderson	Bristol Bay Native Corporation, Fisheries Policy
Isaac Pearson	Bristol Engineering Services
Rhonda Gregorio	Chignik Lagoon Native Corporation
Alvin Pedersen	Chignik Lagoon Resident
Amber Peterson-Tanuvasa	Chignik Lagoon Resident
Ray McCarter	Chignik Lagoon Resident
Jeffrey Moore	Chignik Lagoon Resident
Oscar Mills	Chignik Lagoon Resident
Michelle Anderson	Chignik Lagoon, Village Administrator
Ashley Monroe-Carlson	Chignik Resident
Melodee Carlson-Forbes	Chignik Resident
Phyllis Carlson-Van Dort	Chignik Resident (former)
Lana Anderson	Chignik Resident
Anya Nelson	Chignik Resident
Märit Carlson-Van Dort	Far West Native Corporation
Nicole Koelbl	Far West Native Corporation
Hannah-Marie Ladd	Indigenous Sentinel Network
Chris Tran	Indigenous Sentinel Network
Nicole Cabera	Ivanof Bay Tribe
Earl Krygier	KEE Biological Consultants
Jordan Keeler	Lake and Peninsula Borough
Hazel Nelson	Land & Sea Resources
Tom Murray	National Environmental Justice Association
Willow Jackson	National Ocean and Atmospheric Association Coastal Resiliency
Mike Willis	University of Alaska Fairbanks
Scott Chandler	University of Alaska Fairbanks
Lori Schoening	University of Alaska Fairbanks Geophysical Institute



## List of Presentations/Attachments (hyperlinked when available)

1. Chignik Subregional Watershed Plan Implementation Strategies (Shelly Wade & Molly Mylius, Agnew::Beck Consulting): [Presentation Slides](#)
2. Chignik Subregion Wetlands Inventory Map (Leilani Luhrs, Bristol Bay Native Corporation): [Presentation Slides](#)
3. Update on Chignik Projects and Grant Applications (Isaac Pearson, Bristol Engineering): [Presentation Slides](#)
4. University of Alaska Fairbanks Update on Chignik Subregion Erosion Monitoring & Related Projects (Chris Maio and Matthew Balazs): [Presentation Slides](#)
5. Harmful Algal Blooms (HAB) (Noah Tsigonis, Tundra Tough): [Presentation Slides](#)
6. Dancing with Tatiana Degai: [Presentation Slides](#)
7. Visiting Chignik: Opportunities, Lessons Learned, Potential Impacts (Marty Anderies, Andrey Petrov, Victoria Sharakhmatova, Tobias Schwoerer, Tatiana Degai): [Presentation Slides](#)
8. Chinook App demo (presented by Hannah-Marie Ladd and Chris Tran, Indigenous Sentinel Network, Aleut Community of St. Paul Island): [Presentation Slides](#)
9. Update on Local Research Projects: Sockeye & Chinook Otolith Microchemistry. (Jonny Singleton, University of Washington Fisheries Research Institute): [Presentation Slides](#)
10. Chignik Sockeye Disaster Research. (Scott Chandler, Salmonid Evolutionary Ecology and Conservation Lab, University of Alaska Fairbanks): [Presentation Slides](#)
11. Understanding Fisheries Governance. Presented by Andrey Petrov, University of Northern Iowa. [Presentation Slides](#)
12. Chignik Youth Day Camp – [Presentation Slides](#)
13. Chignik Intertribal Coalition: Socioeconomic Impacts of Fishery Disasters and Pathways to Resilience for Subsistence Users in the Chignik Region. [Final Report, April 2025](#)
14. Chignik Bay Community Database. Updated September 19, 2025. [PDF of Matrix](#)