



PRINCE WILLIAM SOUND NATURAL HISTORY SYMPOSIUM

CHUGACH REGION ENVIRONMENTAL INITIATIVES

Willow Hetrick & Chelsea Kovalcsik



A Tribal Organization Focusing on Natural Resource Issues affecting the Chugach Region of Alaska

Outline

- Overview of Alaska Native Tribes in the Prince William Sound (Willow)
- CRRC Traditional Foods Research and Initiatives (Willow)
- Wetland Mapping in the Prince William Sound (Willow)
- Tribal, Water Quality Monitoring Program (Chelsea)
- Climate Change and Subsistence Resources (Chelsea)



~When the tide is out, the table is set~

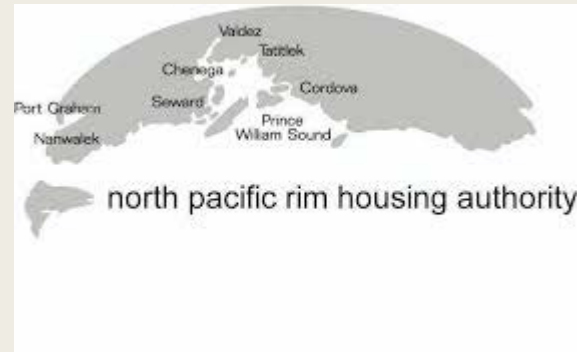
Message from CRRC's Chairman of the Board and Port Graham Village Council Chief

Patrick Norman





Human and Social Service

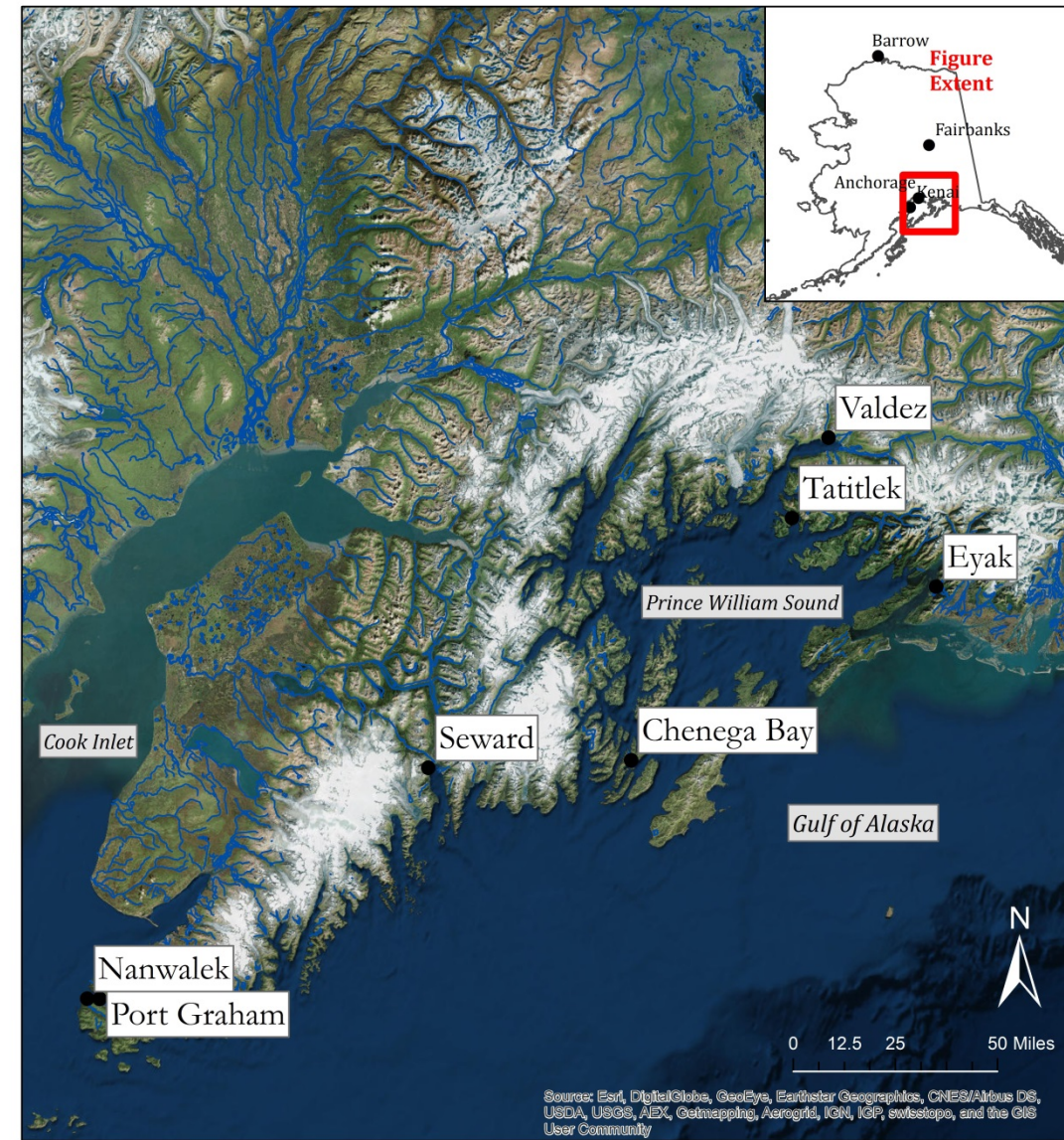


Housing Authority



Natural Resources

CRRC Region



- CRRC Villages



Chugach Regional Resources Commission
Serviced Villages

Chugach Regional Resources Commission Prince William Sound Tribes



Valdez



Tatitlek



Chenega



Eyak (Cordova)

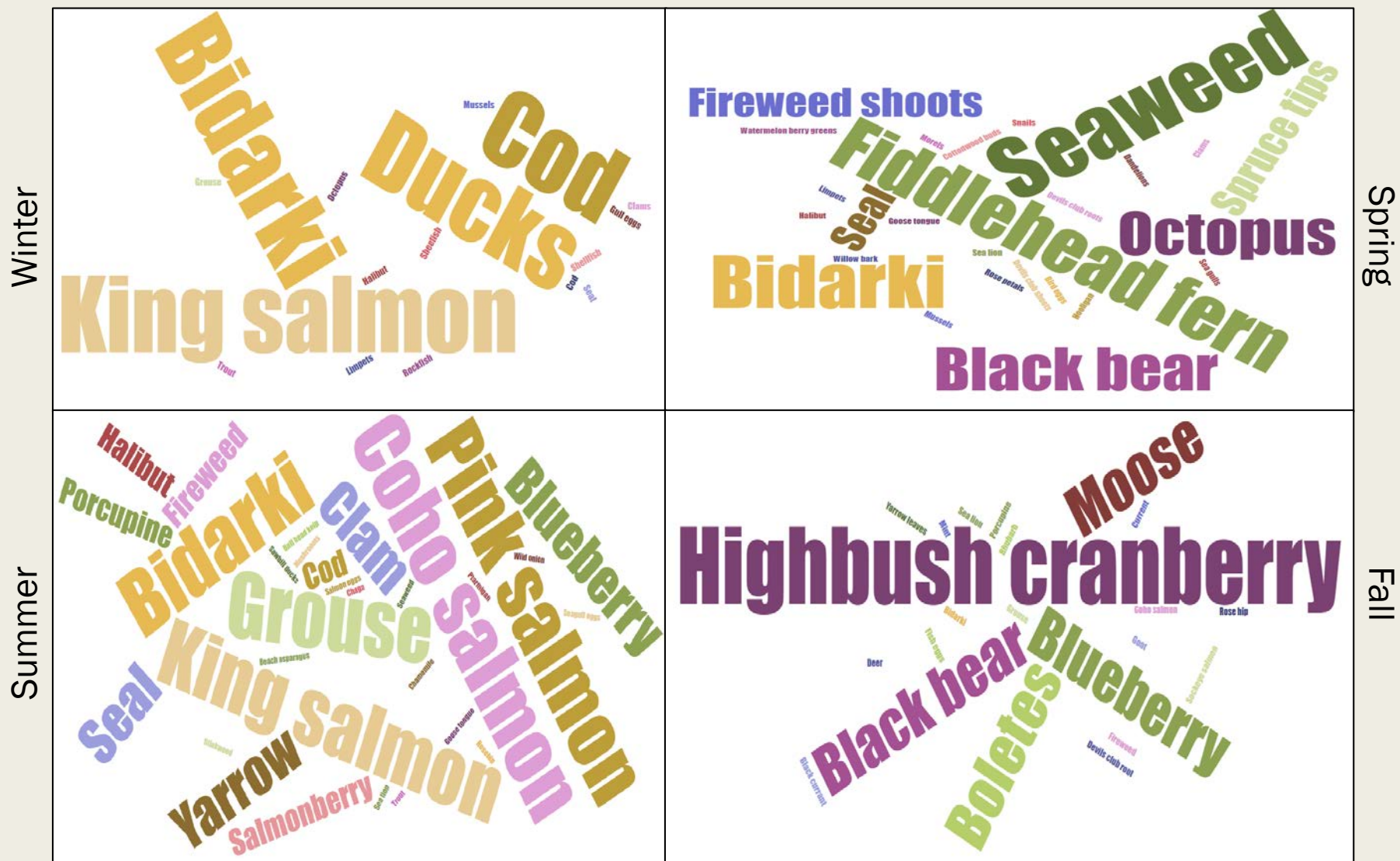
Traditional Foods Assessment

- The participants answered that, overall, hunting/gathering and sharing are the most important sources of food for people in their community with grocery stores being a close third.
- Nearly 100% of our participants answered that they wanted to preserve their cultural food traditions.
- Elders and other relatives were, mainly, the ones with knowledge of their cultural food traditions.
- At least 40 people in their community are skilled in traditional hunting, and/or collection and uses of traditional foods.
 - *60% of participants answered that they had no one in their community teaching courses on culture or food.*



Food represents culture. Food is an intimate personal choice that is influenced by historical patterns, environmental considerations and, most importantly, cultural norms.

Traditional Foods Assessment



Regional Traditional Foods Poster

Suumacirpet asirpiartuq Our way of living is the best



To the Alutiiq people, subsistence is life. There is no easy way to translate the word subsistence - suumacirpet - into the Alutiiq language. Westerners often think of subsistence as the process of obtaining and eating wild foods, an alternative to buying groceries. This definition, however, fails to capture the complexities of living off the land.

Collecting wild foods is not simply an economic act, but a central component of social and spiritual life. Through hunting, fishing, and gathering, Alutiiq people experience and express Native identity. They explore their deep and enduring connection to the land. They care for their families and communities. They celebrate and sustain life.

Subsistence is also a birthright, a way of living passed down from ancestors that has sustained generations. While not a literal translation of the word subsistence, suugucirpet asirpiartuq, "our way of living is best," expresses these many connections.

The Gulf of Alaska, including Prince William Sound and Lower Cook Inlet is one of the richest and biologically productive ecosystems on the planet. A local saying is: When the tide is out, the table is set.



ALL SEASONS 1. Silver Salmon 2. Red Salmon 3. King Salmon 4. Pink Salmon 5. Chum Salmon 6. Dungeness Crab 7. Sea Lion 8. Bald Eagle 9. Dungeness Crab	SPRING 10. Spruce Tip 11. Spruce Tip 12. Fishhook 13. Fishhook 14. Fishhook 15. Fishhook 16. Fishhook 17. Herring 18. Herring Egg 19. Herring Egg 20. Herring Egg	SUMMER 21. Flowered 22. Flowered 23. Flowered 24. Flowered 25. Flowered 26. Flowered 27. Flowered 28. Flowered 29. Flowered 30. Flowered	FALL 31. Moose 32. Moose 33. Moose 34. Moose 35. Moose 36. Moose 37. Moose 38. Moose 39. Moose 40. Moose	WINTER 41. Moose 42. Moose 43. Moose 44. Moose 45. Moose 46. Moose 47. Moose 48. Moose 49. Moose 50. Moose
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Regional Traditional Foods Recipe Book

MEAT

Arctic Fajitas	52	Goat Burgers	58
Barbecue Bear Ribs.....	53	Pot Roast Goat.....	59
Bear Roast	54	Kurtis' Uphill Moose.....	60
Beaver Pot Roast.....	54	Fried Sea Lion	60
Caribou Hand Pies With Creamy		Seal Innards.....	61
Horseradish Sauce.....	55	Seal With Rice	62
Grilled Caribou Or Moose Marinade		Stuffed Seal Lung	63
.....	56	Roasted Seal.....	64
Egg Rolls With Ground Goat	57		

FISH

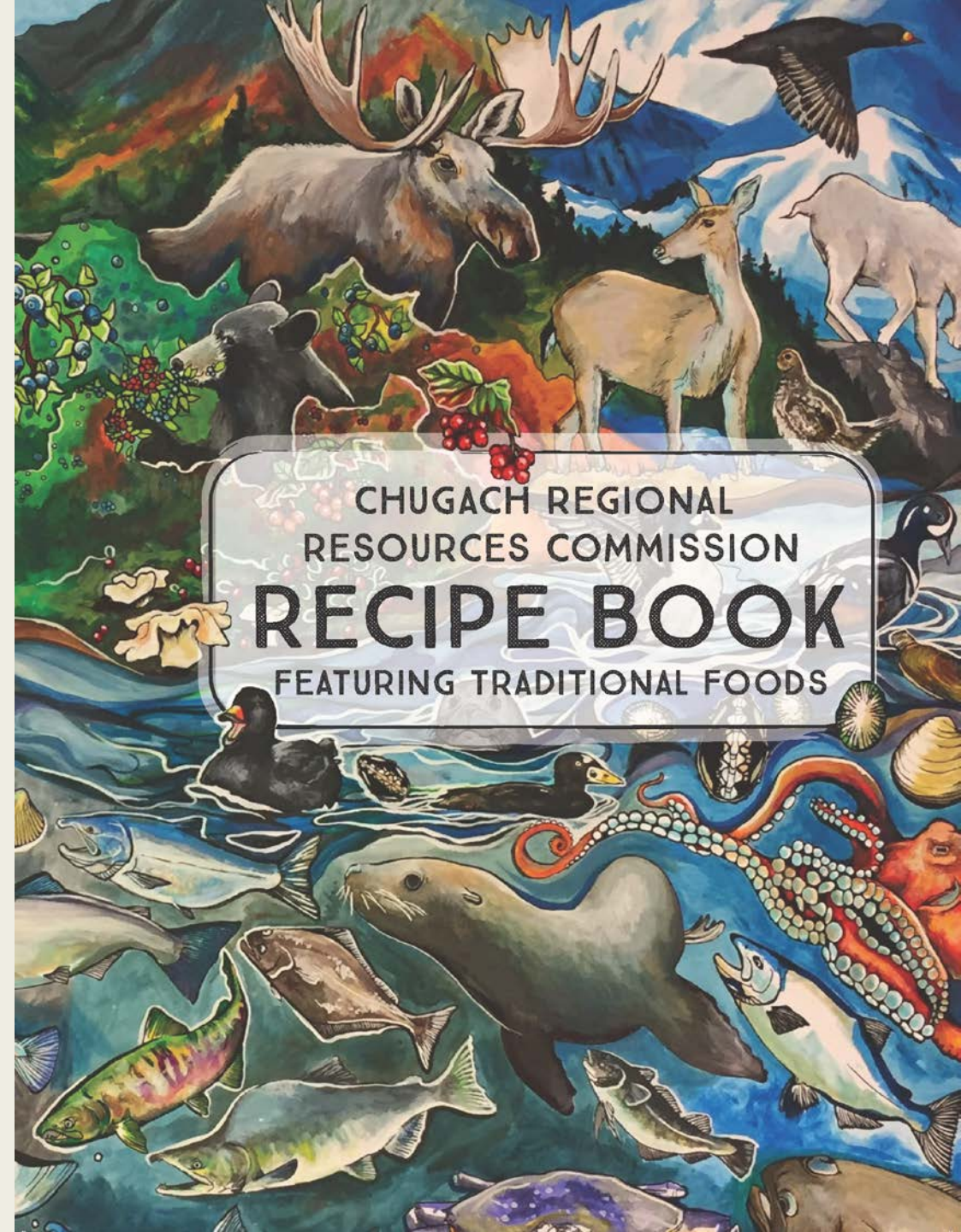
Alaskan Halibut Lasagna.....	6	Boiled King Salmon Heart In Gravy..	19
Ben's Baked Halibut	7	Chugach Salmon Chowder.....	20
Priscilla's Baked Halibut.....	7	Grilled Salmon	21
Halibut Supreme.....	8	Fiddlehead And Salmon Cheeks Stir	
Beer Battered Fish.....	9	Fry.....	22
Broiled Halibut Steaks.....	10	Fish Pie.....	23
Dried Halibut	10	King Salmon Chowder.....	24
Fried Halibut	11	King Salmon Sikyuk	25
Halibut Curry	11	Salmon Chowder	26
Halibut Deep Fry.....	12	Salmon Fritters	27
Chenega Halibut Tacos.....	13	Salmon Soup (Mukaiaggwaq)	28
Derek's Halibut Tacos	14	Smoked Salmon	29
Penny's Halibut Tacos.....	15	Smoked Salmon Dip.....	29
Hot Sauce Halibut	16	Steamed Pink Salmon.....	30
Seaweed Halibut.....	17	Wasabi Mayo Salmon	31
Sweet Cheeks	17	Herring Egg Salad	31
Aunt Mag's Salmon Spread	18	Trout Barbecue Sauce.....	32
Boiled Fish Heads	18	Smokehouses	33
Boiled King Salmon	19		

SHELLFISH

Bidarki Casserole.....	36	Fried Clams	44
Bidarki Chowder	37	Steamer Clams	45
Bidarki With Gravy	38	Stuffed Clams.....	45
Smoked Bidarkis (Urriatq)	39	Boiled Crab	46
Clam Burgers.....	40	Bacon-Wrapped Shrimp	46
Clam Chowder.....	41	Seafood Chowder.....	47
Clam Or Mussel Chowder	42	Clams And Clam Digging.....	48
Clam Fritters.....	43		

PLANTS

Agutag.....	68	Fruit Pizza	74
Blueberry Agutag.....	68	Lemon Blueberry Muffins.....	75
Alaska Low Bush Blueberry Pie.....	69	Goose Tongues	76
Berry Krem	69	Oven Roasted Kelp Chips.....	76
Blueberry Bread Pudding With		Rhubarb Soup	77
Caramel Sauce.....	70	Seaweed Soup.....	77
Blueberry Jam	71	Medicinal: Cough.....	78
Blueberry Pie	72	Medicinal: Cold/Sore Throat.....	78
Blueberry Streusel Cobbler	73		



CHUGACH REGIONAL RESOURCES COMMISSION RECIPE BOOK FEATURING TRADITIONAL FOODS

Regional Traditional Foods Recipe Book

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CHENEGA HALIBUT TACOS

Servings: 2

½ cup sour cream

½ cup mayonnaise

⅓ cup cilantro, chopped

1 packet taco seasoning

1 pound halibut fillets, cut into bite-sized chunks

2 tablespoons olive oil, as needed

1 tablespoon lemon juice

1½ teaspoons lime juice

2 cups cabbage, shredded

2 tomatoes, diced

1 cup pepper jack cheese, or to taste

Taco shells, hard or soft

Salsa (optional)



In a small bowl combine sour cream, mayonnaise, cilantro and 2 tablespoons of the taco seasoning. Set aside. In a zip-close bag, combine 2 tablespoons olive oil, lemon juice, lime juice and remaining taco seasoning. Add the halibut and marinate. In a large pan, heat remaining oil over medium heat. Fry halibut 4-5 minutes or until it flakes easily with a fork.

Layer remaining ingredients of your choice into taco shells and top with sour cream mixture and salsa.

Recipe from "The Halibut Book," courtesy of Chenega Bay School.

Regional Traditional Foods Recipe Book

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BARBECUE BEAR RIBS

Rack of bear ribs

Salt and pepper to taste

1 onion, chopped

Garlic to taste

Worcestershire sauce to taste

Nina's "Empty the Fridge" barbecue sauce:

Ketchup

Mustard

Garlic Pepper

Vinegar

Brown sugar

Various flavors of jam or jelly

Onion

Worcestershire sauce



Cut ribs to the size you want. In a large pot, cover the ribs with water and add salt, pepper, onion, garlic and Worcestershire sauce. Bring to a boil and simmer until meat pulls from bone.

Meanwhile, make the barbecue sauce by combining a little bit of each ingredient in a bowl until it's the way you like it.

Heat the grill to roughly 325 F. Remove ribs from pot and place on a rimmed baking sheet. Coat ribs with sauce, place on grill and cook until meat has a slight burn or tan from grill.

Recipe from Wally Kvasnikoff

Regional Traditional Foods Recipe Book

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OVEN ROASTED KELP CHIPS

Kelp strips

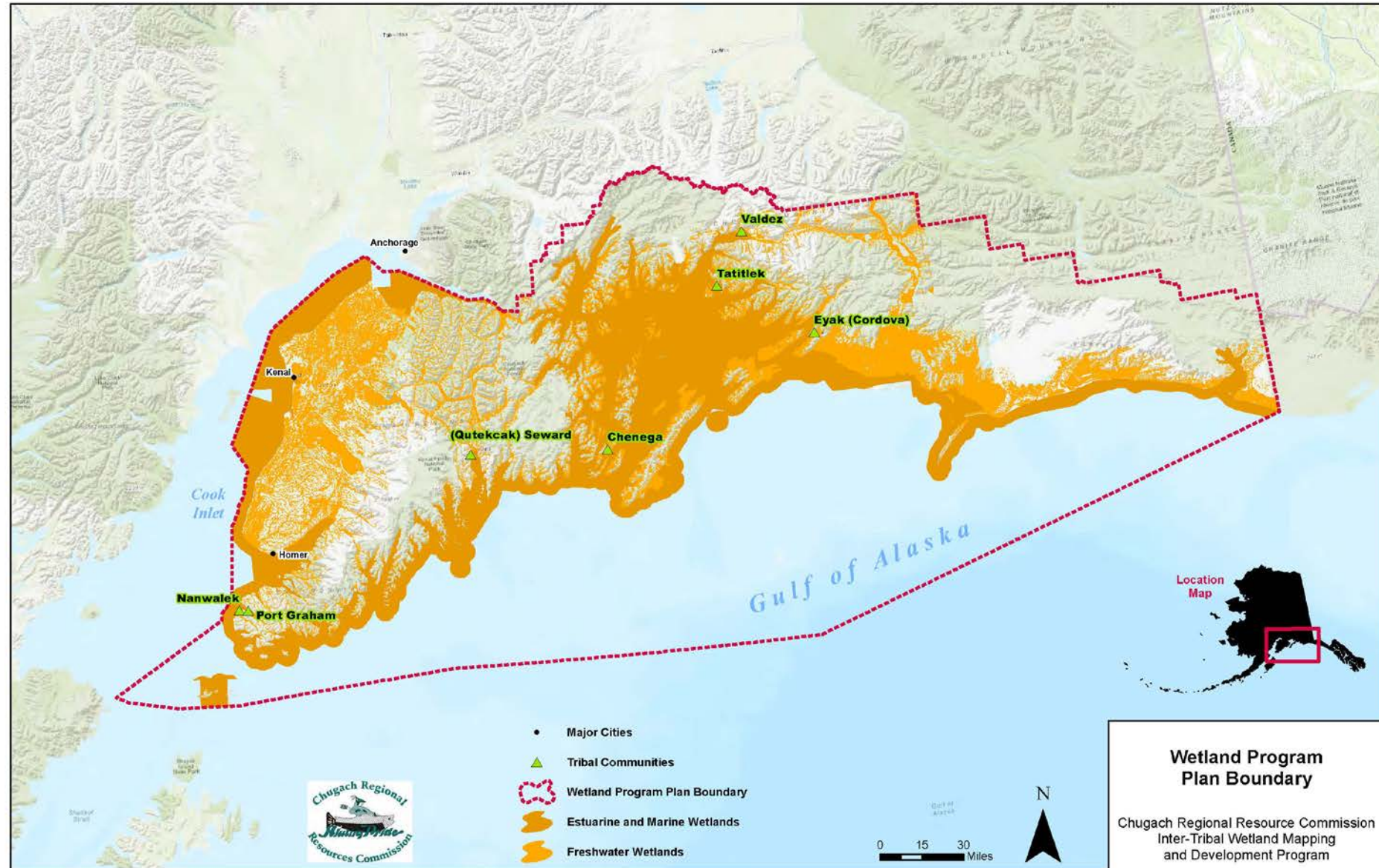
Heat the oven to 200 F. Place kelp strips on a baking sheet and bake 5-10 minutes, or until seaweed turns green. Remove from oven and cool. Serve immediately.

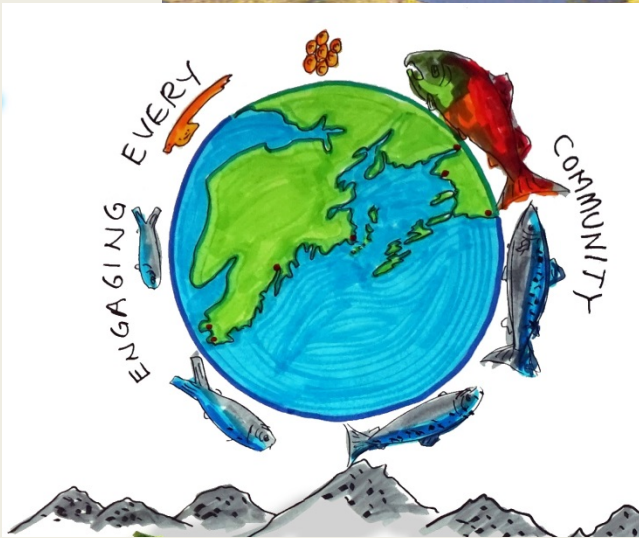
Recipe adapted from Dolly Garza, in the Alaska Native Tribal Health Consortium's "Traditional Food Guide for the Alaska Native People," 2nd Ed.



Wetland Mapping

The Wetland Program Plan details the implementation of effective wetland conservation, restoration, and management. This plan will put in place action items and a procedure for the mapping of wetlands in the Chugach region (specific to CRRC tribes only). In addition to the wetland program plan development, we have money to map existing wetlands in the region using geographic information systems (GIS).







TRIBAL CLIMATE CHANGE ADAPTATION

Presented by: Chelsea Kovalcsik
Regional Environmental Coordinator
Chugach Regional Resources Commission



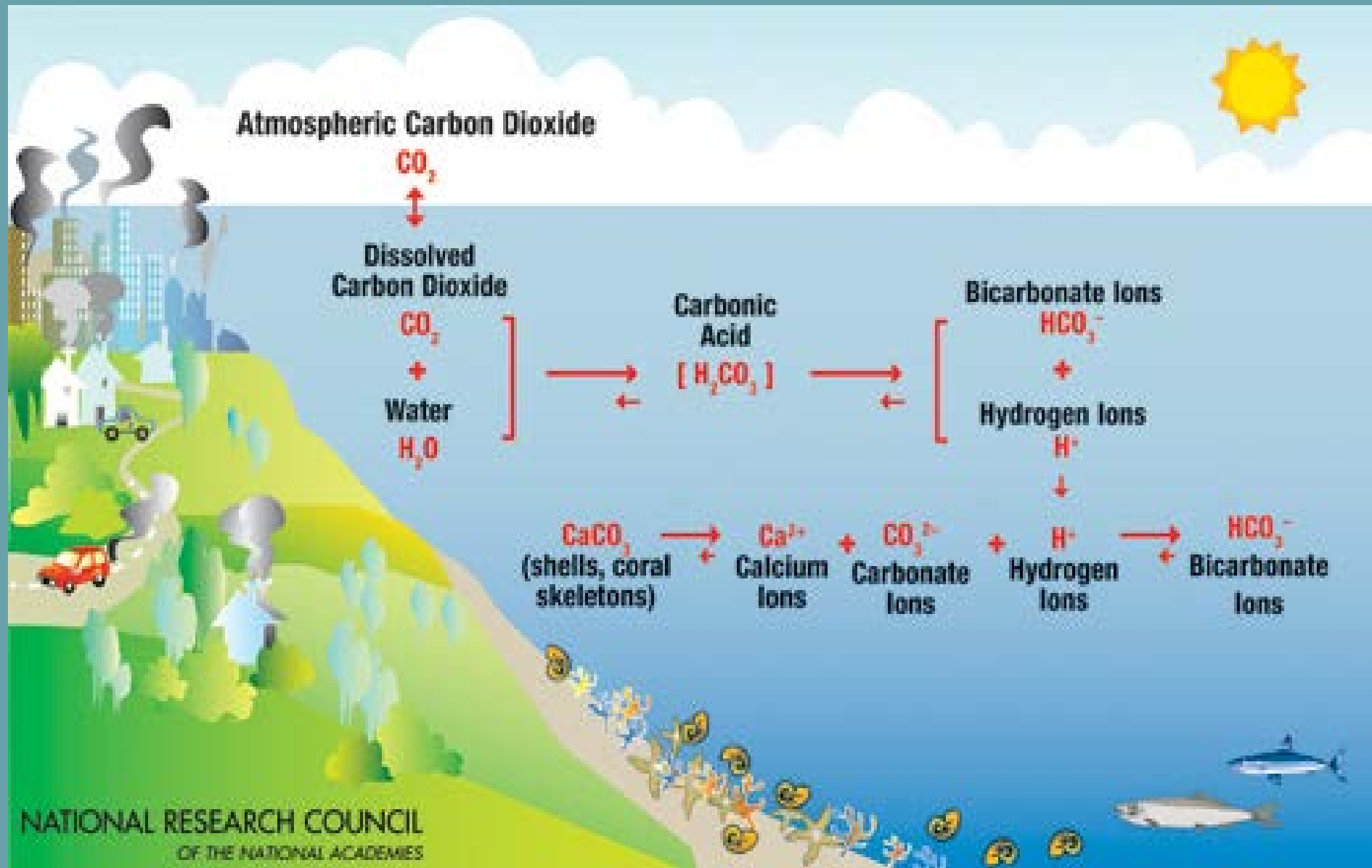
POLL

How often do you eat wild foods?
(moose, shellfish, fish, berries, etc.)

- A. Almost daily
- B. Multiple times a week
- C. A few times a month
- D. A few times a year
- E. Never



Ocean Acidification



Ocean Acidification



Ocean Acidification & Shellfish Research Laboratory



Ocean Acidification & Shellfish
Research Lab



OA Sampling Sites on the Kenai
Peninsula

Burke-o-lator

Invented by Burke Hales,
Oregon State University

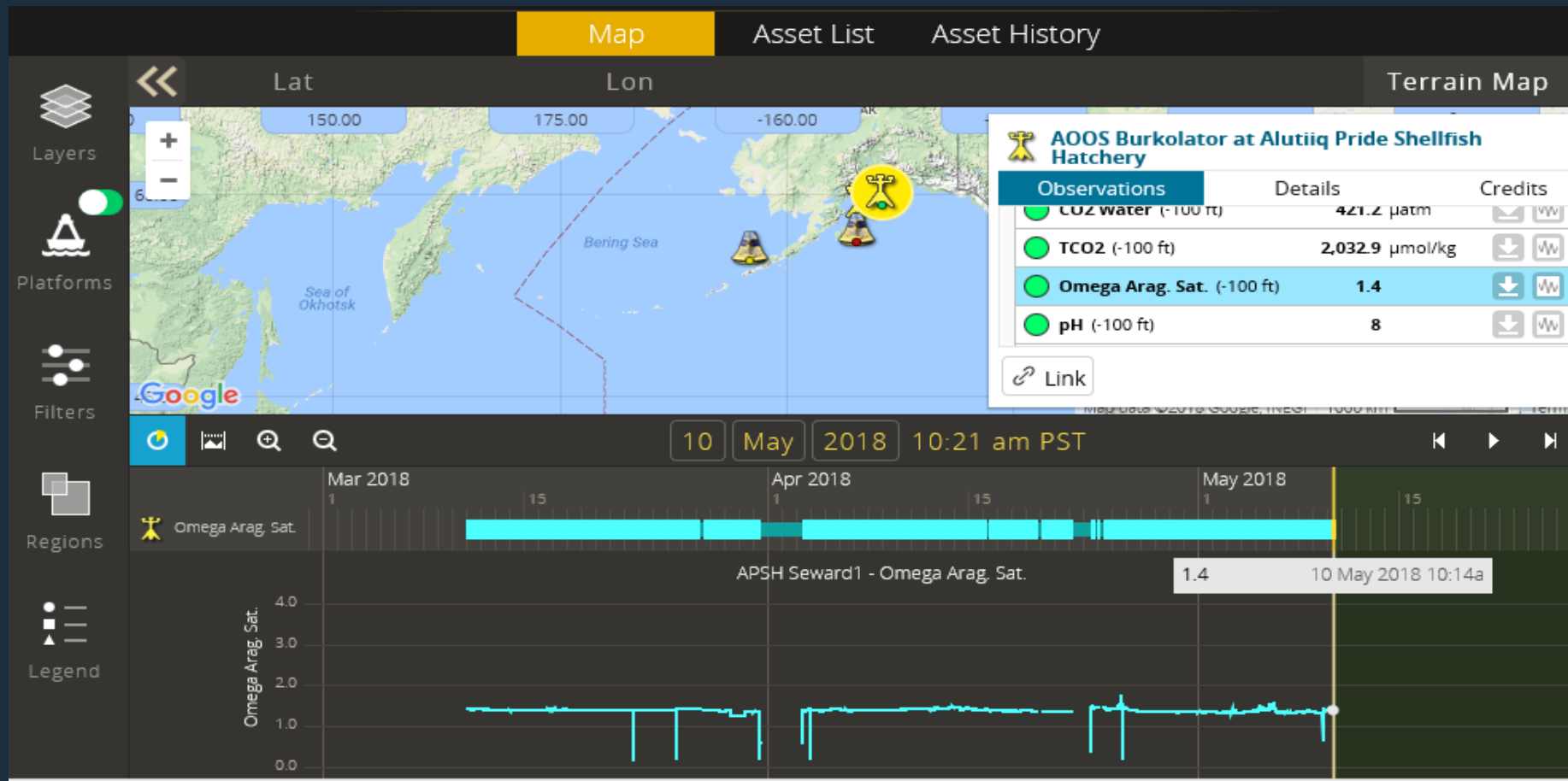
Allows the hatchery to
continuously monitor
multiple ocean
parameters,
distribute that data in
real time, test
discreet samples, and
dose the water tanks.



Two Data Portals

1) <https://portal.aaos.org/real-time-sensors.php>

2) <http://www.ipacoa.org/>

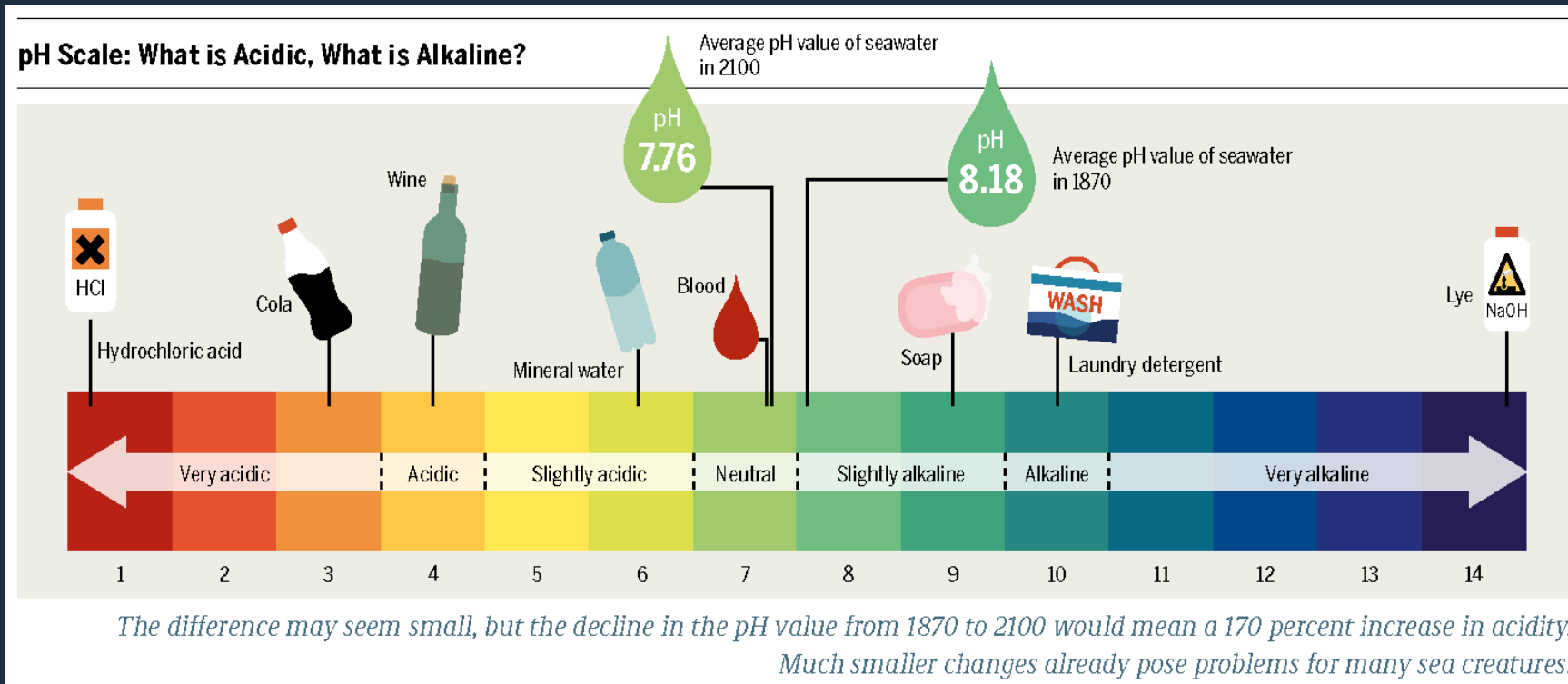




Alutiiq Pride Shellfish Hatchery
Ocean Acidification Existing & Proposed Network

APSH is now processing seawater samples collected on a weekly basis by citizen scientists from Alaska Native communities around Southcentral Alaska following established protocols using APSH produced field kits.

Climate Change Adaptation: Tank Dosing



- Burke-o-lator gives us the capacity to measure water chemistry
- Adding soda ash increases the pH

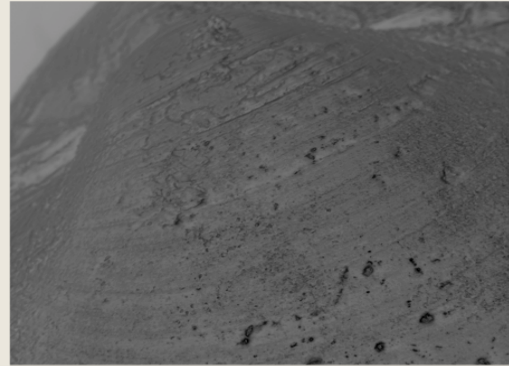
Climate Change & Traditional Foods

“While traditional foods restore physical health, they are also central to cultural and spiritual traditions. Healthy and productive people are the cornerstone of our healthy communities. The intrinsic value of harvesting and consuming local food in traditional ways cannot be over stated.”

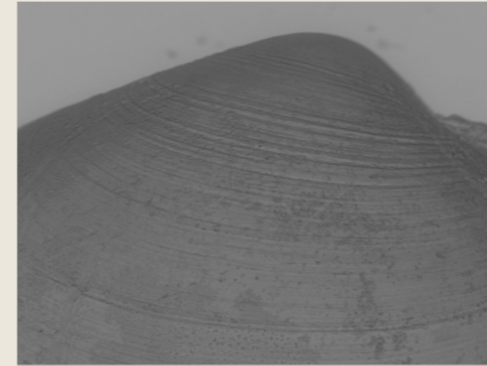
- Patrick Norman, *Chief of Port Graham*

A local statement is,
“when the tide is out, the table is set.”

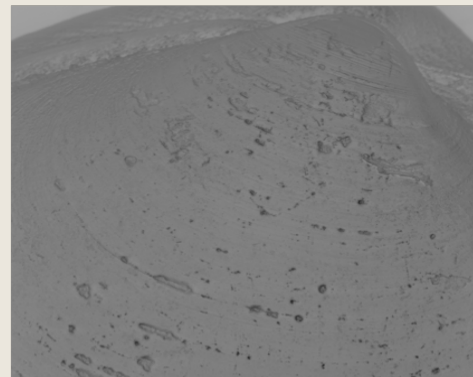
Arctic waters contain higher concentrations of carbon dioxide than tropical or temperate waters, making them more susceptible to **ocean acidification**.



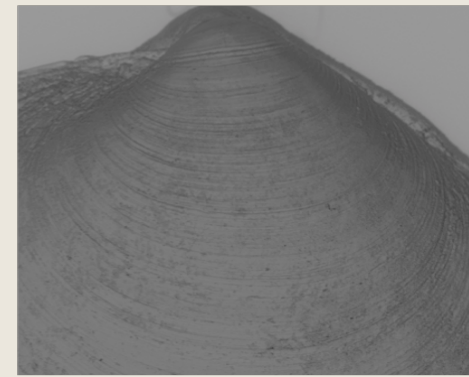
Dissolution of shell



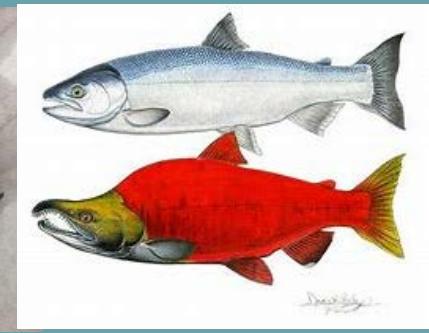
Healthy shell



Dissolution of shell



Healthy shell



UNDERSTANDING THE REGULATORY PROCESS

Aiding co-management of Tribal Subsistence Resources

Presented by: Chelsea Kovalcsik
Chugach Regional Resources Commission
Regional Environmental Coordinator
PWS Natural History Symposium



Understanding the Board of Game Regulatory Process: Aiding Co-Management of Tribal Subsistence Resources



Chelsea Kovalcsik, Rachel Fischer and Willow Hetrick

Chugach Regional Resources Commission, 1840 Bragaw Street, Suite 200, Anchorage, Alaska 99508



Introduction

Chugach Regional Resources Commission partnered with the UAF Tribal Management program to host a four-day workshop on the operations and processes of the State of Alaska Board of Game (BoG). The workshop was titled: Hunting, Fishing, and Gathering Regulations. Funded by the Alaska Community Foundation's Alaska Native Social Justice Fund and led by Dr. Jim Simon, the purpose of this workshop was to provide Tribal members with the tools necessary to advocate for equitable access to their traditional, subsistence resources. The opportunity for tribal advocates to understand regulatory activities will greatly enhance tribal natural resource management. CRRC identified this as an opportunity to help build technical and administrative capacity for our community members to manage subsistence resources at a Tribal level.

	WHEN	MARCH 12-15, 2019
	WHERE	SHERATON HOTEL ANCHORAGE
	TIME	9:00 AM - 5:00 PM, EACH DAY
	DAYS	T, W, TH, F
THIS COURSE WILL BE HELD IN CONJUNCTION WITH THE BOARD OF GAME REGULAR SOUTHCENTRAL MEETING. THIS COURSE WILL SUPPLY AN INTRODUCTION TO THE OPERATIONS OF THE BOARD OF GAME, A REVIEW OF PROPOSALS AFFECTING SOUTHCENTRAL HUNTING REGULATIONS IN ALASKA, AND METHODS OF PROVIDING EFFECTIVE TESTIMONY.		

Community Concerns

Community Members of Port Graham and Nanwalek vocalized concern about upcoming proposals within their hunting unit and wanted to address these concerns at the BoG Workshop. The amount reasonably necessary for subsistence (ANS) for moose was below the acceptable minimum number for harvestable surplus, indicating insufficient population numbers and placing Port Graham and Nanwalek in a Tier II hunt. Despite this, ADF&G sought to liberalize moose hunting in Game Management Unit 15C for other user groups, without first addressing the concerns of the communities in the same GMU that operate under a Tier II hunt.



Context

When game population numbers are low, the tiered hunt system provides a preference to regions where subsistence use occurs. A Tier II hunt indicates that game populations are low and thus differentiates between subsistence users, whereas a Tier I hunt provides for subsistence users but differentiates between other user groups. In the 2019 cycle, ADF&G indicated that the Unit 15C moose population was healthy with high bull:cow ratios. As result of the ADF&G data that indicated that moose populations in Unit 15C are healthy, proposals were submitted at the Anchorage Southcentral regulatory meeting to liberalize moose hunting in this game management unit. In 2019 only four moose permits were issued between Nanwalek and Port, even though four permits are not deemed by the communities to be sufficient to feed their people. The BoG should address issues like the one facing Port Graham and Nanwalek, such as moving subsistence users from a Tier II to a Tier I system in order to be granted more moose permits, before liberalizing the hunt for non-subsistence users in Unit 15C. There have been several recent efforts to present proposals to the BoG that have been rejected at either the advisory committee level or the Board level due to the stringent requirements necessary to have a proposal considered. This case study brought forth by CRRC's Member Tribes provides a glimpse into the complicated nature of game management in Alaska, the dynamics of competing user groups, and the types of issues that communities relying on subsistence resources might run into.

The Workshop

Several CRRC Tribes have expressed frustration with the federal and state management of subsistence resources and specifically, the Board of Fish (BoF) and BoG processes. The purpose was to provide an introduction to the operations of the BoG, review the proposals affecting subsistence hunting regulations in southcentral Alaska, and learn methods of providing effective public testimony.

A significant amount of participants' time was spent becoming familiar with the hunting regulations for moose, goats, black bears, and ptarmigan that govern Game Management Unit 15C. The workshop also focused on learning about BoG board members and their stances on game management.

This workshop's student learning objectives include...

1. Describe the BoG's basic operations in the establishment of subsistence hunting regulations;
2. Identify the components of the BoG regulatory proposal process;
3. Identify the components of providing effective testimony at the BoG and regulatory meetings.

Public Testimony

Participants were asked to create testimony that addressed their community's concerns in their own words. To help prepare participants to give compelling oral testimony, Dr. Jim Simon facilitated three days of drafting and editing of each proposal. Participants practiced their testimony independently and with other classmates to ensure that they could confidently and clearly advocate for their communities upon sitting in the spotlight in front of the Board of Game.

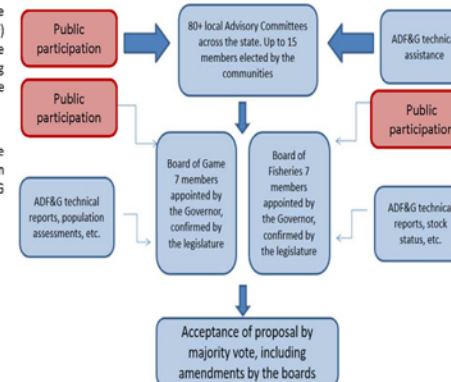
Timothy Malchoff, Port Graham

"We would hope that Board issues more Tier II hunting permits or make that area (TMS49) a Tier-1 hunting area to help the local residents be able to hunt and harvest moose. Port Graham and Nanwalek have a combined population of 462 residents and because employment opportunities are limited, these residents heavily rely on a subsistence lifestyle to feed their households."

Eric Kvasnikoff, Nanwalek

"Villages are majority subsistence, we're limited on employment and a lot of people rely on local foods for warmth and part of their income, so when other people come in it's hard for our people to fill our freezers for winter... we rely on people to share their meat with each other..."

Alaska Board of Fisheries and Board of Game Regulatory Process



Outcomes

"I appreciate you folks (Timothy Malchoff, Deborah McMullen and Eric Kvasnikoff) for coming up and enlightening us on your home country there so thank you for coming, thank you for that!" (Karen Linnell, former Board Member).

Although the workshop did not spur regulatory change, it did empower the two participating tribes to become more aware of and involved with the Board of Game processes.

As a result of the workshop, Tribes, Tribal members and CRRC were able to build technical capacity to:

1. Increase Alaska Native Influence in Regulation & Policy;
2. Enhance Alaska Native Management; and
3. Seek Action, Legislation & Policy.

Future Directions

In this first workshop we focused on Port Graham and Nanwalek and their concerns, however through our funding with the First Nations Development Institute we hope to bring this training to all of Chugach Regional Resources Commission's Member Tribes as well as interested Tribal communities around the state of Alaska.

This workshop was the first step to CRRC's long terms goals of developing management policies and regulations established by Alaska Natives based upon a traditional way of life, providing food security and community well-being, and the protection of hunting and fishing rights on all Alaska lands and waters.

Broadly, we hope this sort of training will empower Tribal Communities to take a larger role in the regulatory processes that govern their subsistence resources as well as encourage regulatory agencies to provide a seat at the table for Tribal Members. We also hope to extend our trainings to include the Board of Fish, the Federal Subsistence Board, the Indigenous People's Council for Marine Mammals, the Alaska Migratory Bird Co-Management Council, and the North Pacific Fishery Management Council.

Acknowledgements

Chugach Regional Resources Commission would like to thank the Alaska Community Foundation for funding this project. CRRC would like to express the most sincere gratitude to Jim Simon for the time and expertise he has extended to our organization and the students of this workshop, and for his continued involvement as this project grows. CRRC would also like to recognize the University of Alaska Fairbanks' Tribal Management Program for their partnership and accreditation of this course. Finally, CRRC would like to acknowledge the tireless efforts of Port Graham and Nanwalek in this process.

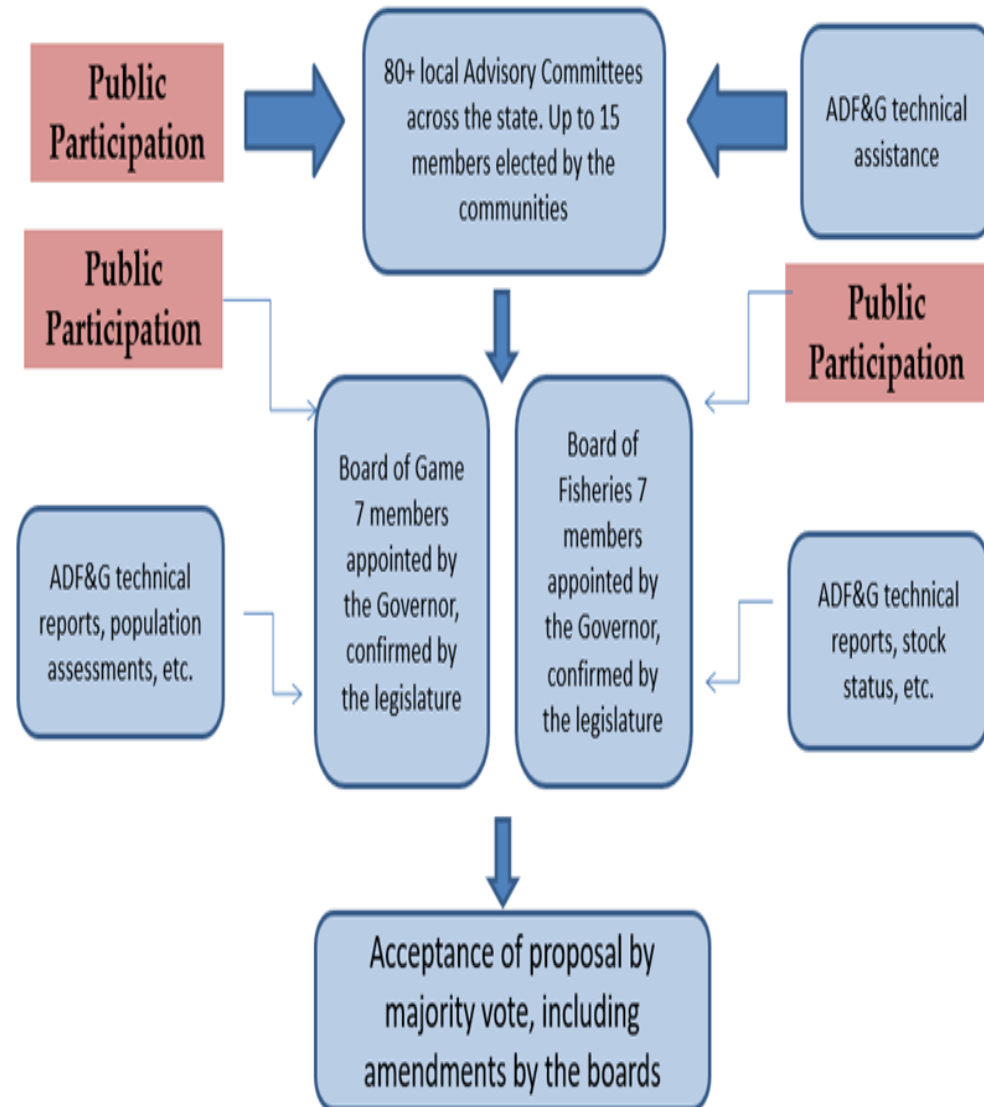


Workshop participants at the Sheraton Hotel. From left to right: Chelsea Kovalcsik, Loren Peterson, Jim Simon, Deborah McMullen, Melissa Ingersoll, Hope Upiksoou, Eric Kvasnikoff, and Tim Malchoff.

Purpose of the Workshop

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Alaska Board of Fisheries and Board of Game Regulatory Process



Public Testimony

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OUTCOMES

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Future Directions – Fertile Ground Campaign

Awarded a one-year grant through First Nations Development Institute to continue our project, “Chugach Hunting, Fishing, and Gathering Taskforce – Empowering our People, Encouraging Involvement, Changing Regulations” in all seven CRRC Member Tribes.





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