



Subsistence Mapping Project Newsletter

Iñuunialiqput Ilijugu Nunanņuanun
Documenting Our Way of Life with Maps

January 2015

An Invitation to Participate In Youth Subsistence Education Activities

By Lance Kramer, Jaime Lambert, and Liz Ferguson

The people of the Northwest Arctic use traditional knowledge of hunting, fishing, and gathering to survive and thrive.

Through the Subsistence Mapping Project we've tapped into this vast knowledge bank by interviewing 231 residents from Kivalina, Noatak, Selawik, Noorvik, Deering, Buckland, and Kotzebue.

We observed youth subsist less than older generations. In each community we hear interest for involving youth in the project.

Responding to this trend, the Subsistence Mapping Project developed youth subsistence education activities.

The purpose is to share traditional knowledge of hunting, fishing, gathering, and preparation of nikipiaq with youth.

You're invited to share traditional knowledge of the subsistence way of life by teaching a youth activity



Raymond Lee, Jr. of Buckland harvesting smelt with youth. Photo provided by Raymond Lee, Jr.

You're Invited!

To participate in Kivalina or Noatak call Alvin Ashby, Sr. at 485-5019.

To participate in Deering or Buckland call Raymond Lee, Jr. at 494-5049.

To participate in Selawik, Noorvik, or Kotzebue call Jaime Lambert at 442-2500 x165.

in your community. The Borough can provide up to \$1,800 per

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activity now through the end of the project in May 2015.

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Subsistence Photo Contest

By Jaime Lambert and Zach Stevenson

Spread the word – The Borough invites entries to its Subsistence Photo Contest until 5:00 pm January 11, 2015.

Purpose – The purpose of the photo contest is to show the importance of the subsistence way of life to the people of the Borough and provide a record of the Iñupiaq way of life for children and future generations.

Requirements – Photos must show an activity (e.g., preparation for a subsistence activity, participating in the activity, or preparation and use of the resource once harvested).

Entries must include your name, address, phone number, email address, and a description of the photo.

Photos must be in digital format. Photos must be 20 megabytes or smaller, in JPEG or JPG format, at least 1,600 pixels wide or 1,600 pixels tall.

Judging – The Subsistence Mapping Project Team will judge entries received by the deadline of 5:00 pm January 11, 2015.

Releases – Upon request, each entrant must be prepared to provide within 7 calendar days of receipt of the Borough's request) a signed release from all persons in the photograph.



Students making mittens in a Selawik Youth Subsistence Education Activity. Photo by Norma Ballot.

Contest Prizes

- 1st Place: Drum of stove oil
- 2nd Place: 2 Bering Air Coupons
- 3rd Place: 2 Bering Air Coupons

Contest Entry

There is no limit on the number of entries. The photo must be taken by the person submitting the entry.

All entries must be on Facebook: www.facebook.com/NorthwestArcticSubsistenceMappingPhotoContest?pnref=story.

Use of Photos – Any photograph submitted may be used in the atlas produced for the Subsistence Mapping Project.

For More Information – or help submitting photos call Jaime Lambert, Program Officer at 442-2500 x165 or email JLambert2@nwabor.org.

Youth Activities

By Liz Ferguson and Jaime Lambert

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The money can be used to pay for gas, oil, supplies, and/or an instructor.

The Borough requires each activity to have a written lesson plan which helps document the activity and teach others.

For December we held two activities in Kotzebue. With help from Vika Owens we held a niksik carving class at the Sulainich Arts Center. Langford Adams taught middle and high

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school students how to carve fishing handles to bring home to their families for winter fishing.

The second activity was ice fishing led by Joe Groves of the Northwest Arctic Borough School District.

Mr. Groves took students fishing. The students sent their catch to Kivalina to help provide food after their store that burnt down. Next month we report on youth subsistence education activities in Selawik, Noorvik, and Kivalina.

To participate call Jaime Lambert at 907-442-2500 x165 or email JLambert2@nwabor.org.



Tyler Kramer holds a sheefish. Photo from Lance Kramer.

Project Summary

By Zach Stevenson

The people of the Northwest Arctic Borough harvest fish, game and plants to feed their families while natural resources provide jobs.

Changes in climate, increased marine shipping, and proposed development are expected in the near future.

Responding to these changes and providing a scientifically defensible decision support tool aligned with Northwest Arctic Borough Code (§9.25.020 Area wide standards, B. Subsistence), the Subsistence Mapping Project (Iñuuniatigput Iļiļugu Nunanġuanun) will produce an

atlas using science and traditional knowledge with maps showing:

1. **Subsistence Use** – Places where people look for food by season in the vicinity of Kivalina, Noatak, Noorvik, Selawik, Deering, Buckland, and Kotzebue;
2. **Important Ecological Areas (IEAs)** – Places where animals feed, breed, raise young, and migrate on the terrestrial or in the freshwater and marine environments; and

3. **Resource Development Opportunity Areas (RDOAs)**

– Places where the surface, subsurface, landscape, freshwater or marine environment could be altered for the purpose of economic development.

The Subsistence Mapping Project focuses on the communities of Kivalina, Noatak, Noorvik, Selawik, Deering, Buckland, and Kotzebue. Following Borough

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John Goodwin, Sr. participating in a bearded seal satellite tagging project with the Native Village of Kotzebue. Mr. Goodwin contributed his traditional knowledge as a seal hunter to an article featured in the journal Cultural Survival Quarterly. Photo from Cultural Survival Quarterly, 2012.

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Code, the project promotes subsistence uses and resources in Borough permitting and aids in federal planning including oil spill response. The communities of Kiana, Ambler, Shungnak and Kobuk are not part of this project.

The Borough drives the project. The project methods protect traditional knowledge. The methods were reviewed by a scientific panel and the maps were reviewed by village-based Advisory Group Members to ensure their defensibility and accuracy.

The maps were made using information collected from individual interviews, meetings with Advisory Groups, and through the analysis of existing peer-reviewed publications and scientific reports. Everyone interviewed in the project received compensation.

The maps will be stored in a password protected geographic information system (GIS) database. A final report will be produced containing maps approved for sharing by the interviewees, Advisory Group Members, Mayor Reggie Joule, and the Borough Assembly.

The project builds on 27 years of subsistence mapping in the region including the *Subsistence Use Area Map Atlas for Ten Kotzebue Sound Communities* produced by the Alaska Department of Fish and Game Division of Subsistence and Maniilaq Association in 1987.

Similar atlases have been produced for northern Alaska including:

- Chukchi and Beaufort Seas. See report: <http://ak.audubon.org/arctic-marine-synthesis-atlas-chukchi-and-beaufort-seas> and

- Bering Strait. See report: http://oceana.org/sites/default/files/reports/REDUCED%20FILE_Final%20PDF_Bering%20Strait%20Synthesis_July%202014%20-%20Copy.pdf.

Noteworthy Accomplishments

By Zach Stevenson

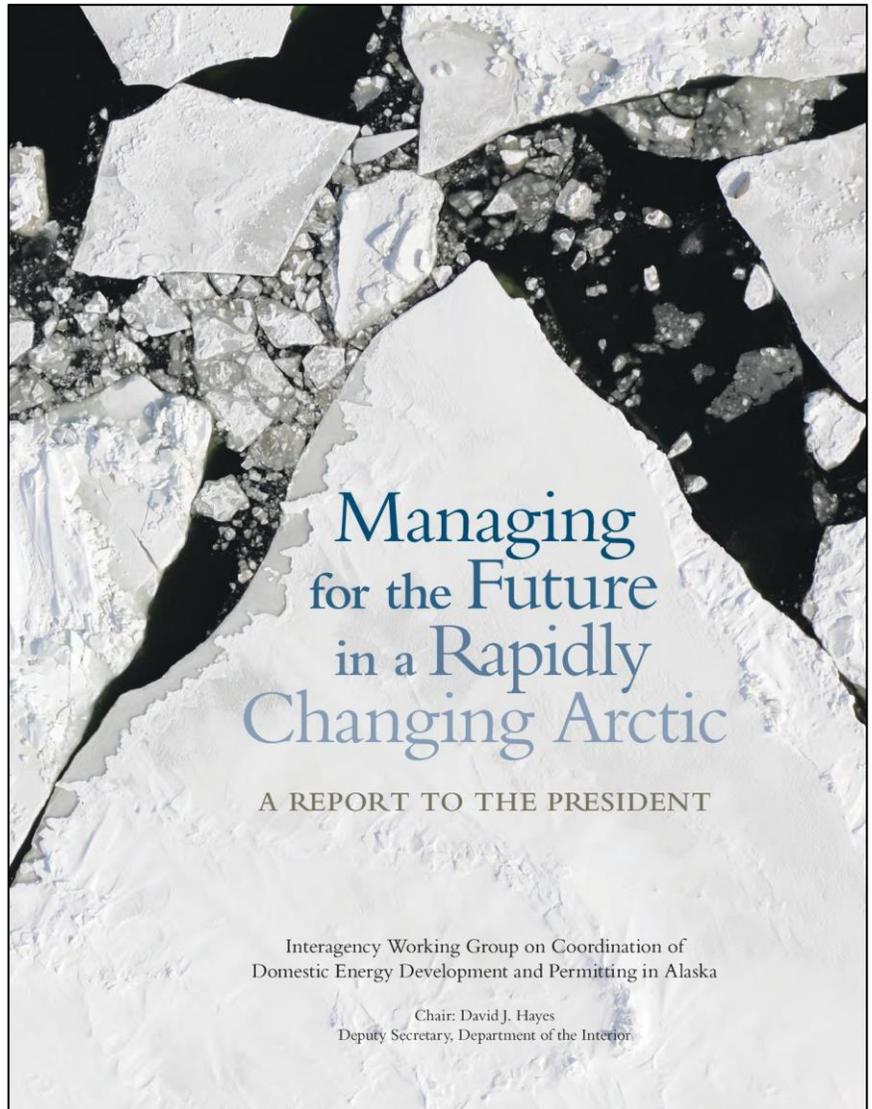
The success of the Subsistence Mapping Project reflects the strong support of Northwest Arctic Borough Communities and leadership, the generosity of our funders, and the dedication of our staff, consultants, and volunteers. Working together since the project started in 2011 some of our noteworthy accomplishments include:

- Developed procedures for protecting traditional knowledge.
- Developed peer reviewed project methods to ensure statistical rigor and scientific defensibility.
- With input and approval from Tribal Councils, Cities, and village-based staff, appointed 49 Advisory Group Members (7 per community in Kivalina, Noatak, Noorvik, Selawik, Deering, Buckland, and Kotzebue).
- Held more than 21 meetings in 7 communities with Advisory Groups to map traditional knowledge

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(Noteworthy Accomplishments –
continued from page 4)

- of subsistence, IEAs, and and check the draft maps.
- Conducted 231 mapping interviews in the 7 communities.
- Developed and reviewed draft maps for subsistence use and important ecological areas in Kivalina, Noatak, Noorvik, Selawik, Deering, Buckland, and Kotzebue.
- Hosted Subsistence Mapping Workshops in 2011, 2012, and 2014 with more than 100 people attending from the region.
- With help from the Alaska Department of Fish and Game Division of Subsistence, produced a digital library and bibliography containing 2,000 reports and scientific publications on subsistence and related information for Northwest Alaska.
- Mapped thousands of Iñupiaq place names to support youth education, help with search and rescue, promote Iñupiaq language preservation, and support oil response. The place names still need to be checked for the correct spelling and location.
- Developed a database containing hundreds of maps showing subsistence use, IEAs, and RDOAs reflecting information collected from individual interviews, Advisory Group Meetings, and existing scientific reports for Northwest Alaska.



The Northwest Arctic Borough Subsistence Mapping Project is mentioned in an April 2013 Department of the Interior Report to the President regarding Managing for the Future in a Rapidly Changing Arctic prepared by the Interagency Working Group on Domestic Energy Development and Permitting in Alaska. See Chapter 4.2: Promising Approaches, page 41. See report: www.doi.gov/news/upload/ArcticReport-03April2013PMsm.pdf.

- Conducted Youth Education and Outreach activities in the seven participating communities promoting the knowledge and practice of Iñupiaq hunting, fishing, gathering, preparation and sharing of traditional foods.
- Delivered a presentation addressing the Protection of Traditional Knowledge at the 2013 “Workshop on Improving Local Participation

in Research” funded by the National Science Foundation and hosted by the Northwest Arctic Borough and University of Alaska Fairbanks Chukchi Campus. See report: <http://uaf.edu/files/chukchi/Northwest-Alaska-Research-Workshop-Summary---Final--12-26-13-2.pdf>.

(Noteworthy Accomplishments –
continued on page 6)

(Noteworthy Accomplishments – continued from page 5)

- Funded U.S. Coast Guard Six-Pack Captains license training and examination for 12 people from the region. Ten people passed the exam. The captains can take paid passengers on trips by boat. The Borough will offer the training again this year.
- Funded a Selawik Comprehensive Subsistence Harvest Survey conducted by the Alaska Department of Fish and Game. See report: <http://www.adfg.alaska.gov/techpap/TP389.pdf>.
- The Northwest Arctic Borough Subsistence Mapping Project was featured in an April 2013 Department of Interior Report to the President addressing Promising Approaches to Managing for the Future in a Rapidly Changing Arctic.
- Articles, interviews, project updates, and related stories on KOTZ Radio, in reports to Tribal Councils and Cities, the [Arctic Sounder](#) (see link), on [KTUU Channel 2 NBC News](#) (see link), [Alaska Department of Natural Resources Coastal Impact Assistance Program Surge Newsletter](#) (see link), and [Institute of the North Top of the World Telegraph](#) (see link).
- Coverage in the September 2012 issue of *Cultural Survival Quarterly* addressing “[Perspectives of an Iñupiaq Elder: A Half-Century of Continuity and Change in](#)



Reviewing draft IEA maps at the October 2014 Mapping Workshop in Kotzebue. Photo by Zach Stevenson.

[Marine Mammal Hunting in Alaska](#)” (see link) prepared by Brandon Chapman, Ph.D. and John Goodwin, Sr..

The project is funded by the U.S. Department of the Interior Coastal Impact Assistance Program (CIAP), Oak Foundation, ConocoPhillips, and Shell. The project is scheduled for completion on May 31, 2015.

If you have questions please call Zach Stevenson, Program Officer at 907-442-2500 x110 or email ZStevenson@nwabor.org.

Mapping Workshop

By Zach Stevenson

The Northwest Arctic Borough held a third and final Subsistence Mapping Workshop on October 28-29, 2014 at the Alaska Technical Center in Kotzebue.

The goal of the workshop was to

review draft maps showing Important Ecological Areas (IEAs) in the area surrounding Kivalina, Noatak, Noorvik, Selawik, Deering, Buckland, and Kotzebue.

The draft maps were made using information gathered through meetings with village-based Advisory Group Members in the 7 communities. The draft IEA maps show places where animals breed, raise young, feed, and migrate on land, in freshwater, or in the ocean.

The workshop was attended by more than 50 people including 2-3 representatives from each of the village-based Advisory Groups, staff from the Northwest Arctic Borough, and others.

Following the workshop a *KOTZ Radio* interview was conducted

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summarizing the outcomes mentioned in this article. Participants worked in groups and reviewed the draft IEA maps. The maps were organized by species, by season, and by community. Edits and corrections were made to the maps as needed.

In the afternoon a youth mapping activity was led by Lance Kramer with more than 50 students from the Kotzebue High School.

Mr. Kramer taught the students about why subsistence is important to their health and the wellbeing of the community. Students also learned about how the maps will be used to protect subsistence and promote development through planning.

Participants noted there is always new information that can be mapped. Participants also emphasized ongoing mapping is needed due to changes in climate and increased development.

Participants recommended the Borough hold annual mapping meetings after the project ends in May 2015 and keep the maps updated and accurate.

A summary report was mailed to Tribal Councils, Cities, and NANA Resource Offices.

To get a copy of the report please call 907-442-2500 x110 or email ZStevenson@nwabor.org.



The Northwest Arctic Borough Subsistence Mapping Project supported development of the Film "Effects of Weather and Climate on Subsistence Communities."

See: <https://www.youtube.com/watch?v=Uy2ZpiVTv8o>.

Climate Change Film

By Zach Stevenson

Interviews for the Northwest Arctic Borough Subsistence Mapping Project show local concern about the effects of climate change on the subsistence way of life.

Some examples of local observations of climate change encountered during the subsistence mapping interviews include melting sea ice; the increased cost of travel to go hunting; changes in the timing and location of animal migration; and the sighting of plants, animals, and insects in the region that were once uncommon.

The Subsistence Mapping Project Team received requests for

information on local observations of climate change from Advisory Group Members and the Borough Assembly.

Responding to these requests, the Northwest Arctic Borough Subsistence Mapping Project supported development of the film "Effects of Weather and Climate on Subsistence Communities" produced by Sarah Betcher (January 2014) of [Farthest North Films](#) (see link).

The film provides local perspectives from Kotzebue, Kivalina, Point Hope, Noatak, Ambler, Buckland and Deering addressing how people are dealing with and adapting to ever changing and less predictable environmental conditions.

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The film features interviews with Cyrus Harris, John Gallahorn, Lorena and Wit Williams, Siikauraq Whiting, Ross Schaeffer and many more.

The interviews provide perspectives on weather, climate, subsistence, and safety issues related to climate change. The film was made possible by the University of Alaska Fairbanks, the National Oceanic and Atmospheric Administration and the Northwest Arctic Borough Subsistence Mapping Project.

The film was developed to help people better understand how the effects of weather and climate affect subsistence communities in northwest Alaska.

The film is available for free viewing on YouTube at <https://www.youtube.com/watch?v=Uy2ZpiVTv8o>. The film was shared at the October 2014 Northwest Arctic Borough Subsistence Mapping Workshop in Kotzebue.

Additional information on climate change is available for free on the web at the Local Environmental Observer Network (LEO) provided by the Alaska Native Tribal Health Consortium (ANTHC). See: <http://www.anthc.org/chs/ces/climate/leo/>.

The LEO Network provides information to Northern communities changing due to

environmental impacts, climate change and development. Monitoring the environment is important for understanding the risks and benefits and for adaptation. The ANTHC describes LEOs as “the eyes, ears and voice of environmental change in our communities.”

The LEO Network is represented by tribal professionals from throughout Alaska who apply traditional knowledge, western science and technology to document unusual plants and wildlife, extreme weather, erosion, flooding, droughts, wildfire and other events that can threaten food security, water security and community health.

You are also invited you to join a free electronic newsletter called *The Northern Climate Observer* produced by the ANTHC which shares news and events occurring in Arctic communities and encourages good ideas about achieving wellness in a rapidly changing world.

To subscribe please go to: <http://www.anthc.org/chs/ces/climate/listserv.cfm>.

Project Calendar

By Zach Stevenson

The Northwest Arctic Borough Subsistence Mapping Project follows a work plan with goals, objectives, budget, and project calendar.

In June 2014 a presentation was delivered at the Northwest

Arctic Borough Assembly Work Session providing an overview of the Subsistence Mapping Project and addressing benefits to communities, reporting measures, and accountability measures.

For a copy of the presentation and a related informational handout please contact Zach Stevenson by telephone at 907-442-2500 x110 or email ZStevenson@nwabor.org.

The Subsistence Mapping Project is scheduled for completion in May 2015. The calendar below summarizes key project milestones between January 2015 and project completion on May 31, 2015.

Project Calendar

