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The following material was generated through efforts by the Kuskokwim Subsistence Salmon Panel which met in Bethel January 15-16, and August 23-24, 2015.

a. Material from August 23-24, 2015 Meeting
   i. Agenda for August 23-24, 2015 Meeting
   ii. Draft Kuskokwim River Salmon Management Working Group Dip Net Proposal
   iii. Copper Basin Caribou Community Subsistence Harvest Permit Program 2015-2016
   iv. Copper Basin Moose Community Subsistence Harvest Permit Program 2015-2016
   v. Division of Subsistence Presentation, Subsistence Considerations (*PDF 4,222 kB*)
   vi. Draft ONC's Community Harvest Permit Proposal
   vii. Kuskokwim River Inter-Tribal Fish Commission Letter to Commissioner Cotten August 24 2015
   viii. Draft Kuskokwim King Salmon Permit Concepts
   ix. Kuskokwim Subsistence Salmon Panel Notes August 24-25, 2015

b. Material from January 15-16, 2015 Meeting
   i. Agenda for January 15-16, 2015
   ii. ADF&G Division of Commercial Fisheries Panel Overview
   iii. Overview Supplemental Information
   iv. ANS Steps 9-10-09
   v. ADF&G Division of Subsistence Overview October 2014
   vi. Options for Amounts Reasonably Necessary for Subsistence Uses of Salmon: Kuskokwim Area
   vii. Chinook-News-Release-1-06-May-2014
   viii. Special-Action-3-KS-01-14
   ix. Association of Village Council President's January 14 2015 Press Release
   x. Beverly Hoffman Testimony for January 15 2015 Listening Session
   xi. Kuskokwim Native Association Community Harvest Trends for Kuskokwim
   xii. Mike Reardon Testimony for January 15 2015 Listening Session
   xiii. Stony Holitna Advisory Committee December 16 2014 Minutes
   xiv. Stony Holitna Advisory Committee Teleconference Notes
   xv. Anonymous Public Testimony for Public Listening Session January 15 2015
   xvi. Bethel Advisory Committee January 13 2015 minutes
   xvii. Mike Leary Public Comment
   xviii. An Ethnographic Overview of Kuskokwim River Chinook Salmon Subsistence Fishery
   xix. Meeting Summary January 15, 2015 Public Listening Session
   xx. Meeting Summary January 16, 2015 Panel Meeting

ALASKA BOARD OF FISHERIES
Kuskokwim Subsistence Salmon Panel
August 24-25, 2015, Yupiit Piciryarait Cultural Center, Bethel

DRAFT TENTATIVE AGENDA
Note: this tentative agenda subject to change throughout the course of the meeting.

Monday, August 24, 10:00 a.m. – 12:00 p.m.

1. Welcome & introductions (public testimony sign-up, 9:30 – 11:00 a.m.) — Chair Kluberton, panel, & staff

2. Review of panel mission, results to date, expected outcomes — Chair Kluberton

   a. March 2015 Board of Fisheries actions regarding Kuskokwim subsistence salmon fishing — Chair Kluberton & staff

   b. Kuskokwim subsistence salmon fishing proposals received — Glenn Haight

   c. 2015 Kuskokwim River king salmon season summary — Aaron Poetter

   d. Considerations from state subsistence program — Jim Simon

   e. Panel member ideas for additional board-generated proposals — Panel members
      - KRSMWG-requested proposal dip net as legal subsistence gear – KRSMWG representative and group discussion
      - Customary and traditional subsistence salmon fishing conditions during times of shortage – ONC representative and group discussion
      - Moratorium on king salmon – group discussion
      - Household or individual harvest limits – group discussion
      - Community subsistence salmon permits – group discussion
      - Additional ideas – individuals or groups

12:00 p.m. – 1:30 p.m. LUNCH (on your own)

1:30 p.m. – 5:00 p.m.

3. Public testimony session on king salmon conservation and management — Chair Kluberton, moderator

5:00 p.m. Adjourn

Tuesday, August 25, 9:00 a.m. – 12:00 p.m.

1. Welcome & introductions ("People to be heard" sign-up, 9:00 – 10:00 a.m.)	Chair Kluberton, panel, & staff
2. Review of panel mission, recap of Monday discussions, expected outcomes from today	Chair Kluberton
3. Panel member thoughts regarding Monday's discussions	Panel members

10:15 a.m. – 10:30 p.m. BREAK

	Panel members
4. Panel member ideas for additional board-generated proposals – continued	

12:00 p.m. – 1:30 p.m. LUNCH (on your own)

1:30 p.m. – 2:45 p.m.

5. Panel member ideas for additional board-generated proposals – continued	Panel members

2:45 p.m. – 3:00 p.m. BREAK

6. Panel member recommendations and action items

4:00 p.m. – 5:00 p.m.

7. People to be heard regarding king salmon conservation and management options	Chair Kluberton
8. Concluding remarks and recommendations by panel members	Panel members

Adjourn: 5:00 p.m.

INSTRUCTIONS FOR COMPLETING
PROPOSAL FORM
(Revised 10/12/13)

Top of form check boxes*:*

- As appropriate, insert information about the fish or game management unit your regulation would change.

- Depending on the venue in which the regulation change will be heard, check the appropriate box(es) for the activities the regulation change would affect.
  Alaska Legislature Infobase, 5AAC.

Fillable numbered boxes:

1. If known, enter the series of letter and numbers which identify the regulation to be changed. For example, 5 AAC 72.055. If it will be a new section or provision, then enter 5 AAC 72.XXX.

2. Write a short explanation about the issue your proposal addresses, or why you are proposing the regulation change. Address only one issue per proposal. State the issue clearly and concisely. The board will reject proposals that contain multiple or confusing issues.

   State why the regulation change should be adopted or provide an explanation about what will happen if the regulation is not changed.

   To assist you in development of your issue statement (#2 on the form), you may want to consider the following:
   - What would happen if nothing is changed?
   - What are other solutions you considered? Why did you reject them?

3. Print or type your proposal as you would like to see it appear in the regulation book. The boards prefer that revised regulatory language is provided. **New or amended text should appear first and be in bold text and underlined.** [REGULATORY TEXT BEING DELETED SHOULD BE FULLY CAPITALIZED AND ENCLOSED IN BRACKETS]. It is not necessary to bold and underline text if entire change contains new language.

EXAMPLES: **5 AAC 27.810. Fishing seasons and periods.**

In the Togiak and Bay districts, herring may be taken by purse seines and hand purse seines from April 25 through **July 15** [JUNE 1]

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5 AAC 85.025(3). Unit 9(B) Caribou.

NONRESIDENT HUNTERS: **2** [3] caribou; however, no more than 1 bull may be taken.

Alternatively, you may state your changes in clear sentences. For example, "Extend the season to July 15 in the Togiak and Bay districts," or "Reduce the bag limit for caribou in Unit 9(B) to two caribou."

Bottom of form (submission block):

- Write the name of the group that voted to submit the proposal or your name if you are submitting the proposal. This name will be published in the proposal book. The boards of Fisheries and Game will not consider anonymous proposals.

- Fill in your address and zip code, and telephone number. These will NOT be published; it simply enables us to reach you if clarification is necessary.

Mail or fax the completed form to the address at the top of the form.

Alaska Board of Fisheries/Game
P.O. Box 115526
Juneau, AK 99811-5526
Fax: 907-465-6094

NOTE: Proposals must be received by the deadline in the call for proposals; there are no exceptions. A fax is considered an original. The form must be physically received by fax or mail; postmark is not adequate.

If you have any questions or need assistance, please consult staff at any Fish and Game office.

ALASKA BOARD OF FISHERIES
REGULATION PROPOSAL FORM 2015-2016
PO BOX 115526, JUNEAU, ALASKA 99811-5526

***Indicates a required field*

BOARD OF FISHERIES REGULATIONS

☒ Subsistence ☐ Personal Use
☐ Sport ☐ Commercial

***Which meeting would you like to submit your proposal to?**

☐ **Alaska Peninsula/Aleutian Island Areas Finfish** ☒ **Arctic-Yukon-Kuskokwim Areas Finfish**
☐ **Bristol Bay Area Finfish** ☐ **Statewide Provisions for Finfish**

Please answer all questions to the best of your ability. All answers will be printed in the proposal book along with the proposer's name (address and phone numbers will not be published). Use separate forms for each proposal. Address only one issue per proposal. State the issue clearly and concisely. The board will reject multiple or confusing items.

1. Alaska Administrative Code Number 5 AAC 01.270(a)

***2. What is the issue you would like the board to address and why?**

After the successful implementation of dip nets for subsistence salmon fishing as part of conservation efforts to protect king salmon in 2014, the Kuskokwim River Salmon Management Working Group (KRSMWG) requests the Board of Fisheries to recognize dip nets as legal subsistence gear for subsistence salmon fishing in the Kuskokwim River drainage.

Historical literature from the Yukon-Kuskokwim Delta demonstrates the customary and traditional uses of dip nets for catching salmon and other fish (e.g., Brown 1983:143; Fienup-Riordan 2007:273; Hensel 1996:54; Ikuta et al. 2013:17, 52, 107, 112; Nelson [1899] 1979:187; Zagoskin 1967:219-220).

References Cited:

Brown, C.M. 1983. Alaska's Kuskokwim River Region: A History. Bureau of Land Management, State Office, Anchorage.

Fienup-Riordan, A. 2007. *Yuungnaqpiallerput* The Way We Genuinely Live: Masterworks of Yup'ik Science and Survival. Seattle: University of Washington Press.

Hensel, C. 1996. Telling Our Selves: Ethnicity and Discourse in Southwestern Alaska. Oxford Studies in Anthropological Linguistics No. 5. New York: Oxford University Press.

Ikuta, H., A.R. Brenner, and A. Godduhn, editors. 2013. Socioeconomic patterns in subsistence salmon fisheries: Historical and contemporary trends in five Kuskokwim River communities and overview of the 2012 season. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 382, Fairbanks.

Nelson, E.W. [1899] 1979. The Eskimo About Bering Strait. New York: Johnson Reprint Corporation.

Zagoskin, L.A. 1967. Lieutenant Zagoskin's Travels in Russian America, 1842-1844: The First Ethnographic and Geographic Investigations on the Yukon and Kuskokwim Valleys of Alaska. Henry N. Michael, ed. (Anthropology of the North: Translations from Russian Sources 7). Toronto: Published for the Arctic Institute of North America by University of Toronto Press.

***3. What solution do you recommend? In other words, if the board adopted your solution, what would the new regulation say? (Please provide draft regulatory language, if possible.)**

5 AAC 01.270. Lawful gear and gear specifications and operation.
(a) Salmon may be taken only by gillnet, beach seine, a hook and line attached to a rod or pole, handline, **dip net,** or fish wheel subject to the restrictions set out in this section and 5 AAC 01.275, except that salmon may also be taken by spear in the Holitna River drainage, Kanektok River drainage, Arolik River drainage, and the drainage of Goodnews Bay.

***Submitted By:** Kuskokwim River Salmon Management Working Group
Individual or Group

PO Box 1467	Bethel, AK	99559
***Address**	***City, State**	***ZIP Code**

907-543-3239	907-267-2114	bev@kuskofish.com
***Home Phone**	***Work Phone**	***Email**

ALASKA DEPARTMENT OF FISH AND GAME

Copper Basin CARIBOU
Community Subsistence Harvest Permit
PROGRAM 2015-2016

HUNT ADMINISTRATION

Community Subsistence Harvest (CSH) Hunt administration will be in accordance with the Alaska Department of Fish and Game's statutory and regulatory authority, including managing this common use resource for sustained yield while adhering to laws regarding the subsistence preference passed by the Alaska State Legislature.

COPPER BASIN CARIBOU CSH PERMIT

According to regulations found at 5 AAC 92.072 *Community Subsistence Harvest Hunt Area* and at 5 AAC 92.052 *Discretionary Permit Hunt Conditions and Procedures*, ADF&G may issue community-based subsistence harvest permits for big game species where the Alaska Board of Game has established a community harvest hunt area. The board established the Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina, and Kluti-Kaah (Copper Center) Community Harvest Area for moose and caribou in 2009 (5 AAC 92.074(d) *Community Subsistence Harvest Areas*), hereafter referred to as the Copper Basin CSH area.

The CSH permit program allows communities or groups of 25 or more to apply annually for a CSH permit for an established CSH area. A group can choose to apply for a Copper Basin caribou CSH permit, a Copper Basin moose CSH permit, or both. These groups may select, from their group members, individual harvesters who may possess particular expertise in hunting to harvest wildlife resources on behalf of the community or group.

The hunt conditions in this Copper Basin Caribou CSH permit program are made for the purposes of notifying the community/group of users of how to use caribou in a manner consistent with the customary and traditional use pattern described in the board's 2006 and 2011 findings *Game Management Unit 13 Caribou and Moose Subsistence Uses* (2006-170-BOG and 2011-184-BOG), as well as to ensure an orderly administration of the CSH permit program and hunt (CC001).

A community or group may possess only one (1) Copper Basin Caribou CSH permit at any given time and group members may subscribe to only one (1) Copper Basin Caribou CSH group per regulatory year. The Copper Basin Caribou CSH permit expires at the end of the regulatory year for which it was issued. Renewal of a Copper Basin Caribou CSH permit is the responsibility of the community or group coordinator.

APPLICATION PROCESS

THE COMMUNITY OR GROUP COORDINATOR

In addition to permit hunt conditions and procedures found in 5 AAC 92.050 and 5 AAC 92.072, the community or group applying for a Copper Basin Caribou CSH permit must designate a coordinator as part of the application process. The coordinator certifies that the information presented in a Copper Basin Caribou CSH permit application is true and correct to the best of the coordinator's ability; monitors and reports on compliance with the conditions of a Copper Basin Caribou CSH permit; and serves as the primary point of contact, among other duties. ADF&G will issue one (1) Copper Basin Community Caribou Harvest Permit to each coordinator.

For 2015–2016, the application period for group applications will be October 1 – December 15, 2014. Completed group applications must be received by the Glennallen ADF&G office no later than December 15, at which time the group will be assigned a group number for the upcoming season. Groups will not be formally approved until:

1) at least 25 eligible group members have applied (including the group coordinator), and

2) all caribou CSH permit reporting requirements from the previous regulatory year have been met (not applicable to first time CSH groups).

There is no limit to the number of communities or groups that may apply for a Copper Basin Caribou CSH permit and there is no limit to the number of participants who may subscribe to a community or group, except that there must be 25 or more verified eligible members in each group.

INDIVIDUALS/HOUSEHOLDS

The application period for participant applications is November 1 – December 15, 2014. Applications must include a valid 2015-2016 group number, be complete, and be postmarked by December 15 and received by January 2. Participant paper applications must be mailed to the Anchorage address on the applications. Applications will not be accepted over the counter. **Applications can also be submitted online at http://hunt.alaska.gov/ until 5 p.m. (AKST) December 15, 2014.** Incomplete applications will be void per 5 AAC 92.050 *Required Permit Hunt Conditions and Procedures*.

Each household must submit one (1) completed participant application. CSH applicants must be Alaska residents at the time of application. All members of the household must be listed on the application and are subject to all CSH hunt eligibility requirements and conditions. The coordinator must ensure that group members understand the terms and conditions of the CSH permit hunt. A "household" means that group of people domiciled in the same residence per 5 AAC 92.990 (23) *Definitions*.

By submitting a completed participant application, all household members are certifying they have read, understand, and will comply with the hunt conditions as well as the applicable Board of Game findings (*Game Management Unit 13 Caribou and Moose Subsistence Uses*).

ADF&G will issue one (1) Copper Basin CSH caribou harvest ticket/report to each household (the bag limit is 1 caribou / household). ADF&G will mail CSH harvest tickets to those eligible households who provided a hunting license on the participant application. Eligible participants who do not provide hunting license information on the application will be required to present a valid hunting license to department staff, in-person, at the ADF&G offices in Palmer or Glennallen in order to receive a harvest ticket.

Hunters must abide by all applicable state hunting regulations and statute requirements including licensing, hunter education, and reporting requirements. Similar to other state hunts, CSH harvest ticket numbers must appear on the back of the hunter's license, CSH harvest tickets must be carried in the field while hunting, they must be validated immediately upon killing an animal and before leaving the kill site, and must remain in the hunter's possession until the animal has been delivered to the location of processing for human consumption.

PARTICIPANT ELIGIBILITY

All household members subscribing to the Copper Basin Caribou CSH hunt must meet the following eligibility requirements. The requirements apply to the same regulatory year as the CSH participant application (2015-2016).

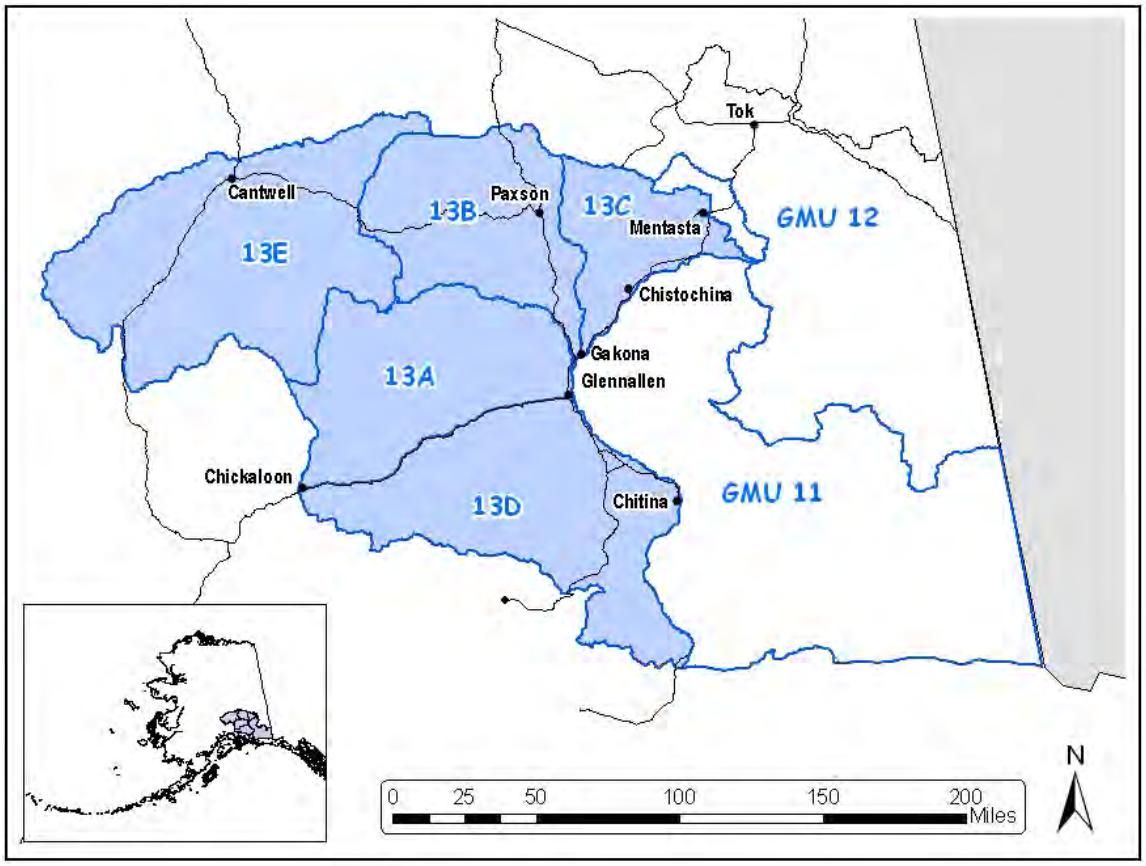
- No member of the household can apply for any drawing/Tier I/Tier II/registration caribou hunts, hold general season caribou harvest tickets, or hold federal caribou permits outside of the CSH hunt area. After the CSH hunt has ended, if the household was unsuccessful in filling the CSH bag limit, household members may hunt in areas outside the CSH hunt area with general caribou

harvest tickets or other state caribou permits where the bag limit is greater than one caribou per household. In Unit 13, no more than one caribou may be retained per household using state harvest tickets or permits.

- No member of the household can apply for, or hold state or federal drawing/Tier I/Tier II/registration moose permits outside the Copper Basin CSH hunt area.
- All household members agree to the hunt conditions herein.
- No member of the household can be on the Failure to Report (FTR) list.

COPPER BASIN CSH PERMIT HUNT AREA, AND AREA OPEN TO CARIBOU HUNTING

The Copper Basin CSH permit hunt area includes all of Unit 11, Unit 13, and a portion of Unit 12 (southwest of the Tok River where it crosses the Glenn Highway Tok Cut-Off) per 5 AAC 92.074 (d). Due to conservation concerns for adjacent caribou herds, only Unit 13 is open to caribou hunting under the terms of a Copper Basin Caribou CSH permit.



OPEN SEASONS AND BAG LIMITS

The Copper Basin Caribou CSH season is: August 10 – September 20, and October 21 – March 31. The bag limit is one (1) caribou per household. For conservation reasons, the season and bag limit may be modified by ADF&G emergency order. Up to 300 caribou can be taken under the Copper Basin Caribou CSH permit program (applies to all groups collectively).

DESIGNATED HUNTERS

The CSH program allows a community or group to designate members (from within the group) who may possess particular expertise in hunting to harvest wildlife resources on behalf of the members of the community or group. To take a caribou on behalf of another household (beneficiary), a hunter must carry both the beneficiary's and their own CSH caribou harvest ticket in the field while hunting. The harvested caribou must be delivered to the beneficiary. The beneficiary is responsible for all reporting requirements.

HUNT TERMS AND CONDITIONS

Customary and traditional uses of Nelchina caribou are thoroughly described in 2006-170-BOG and 2011-184-BOG. The Board of Game found that the subsistence pattern in the Copper Basin is characterized by thorough use of most of the harvested animal. Therefore, all participants in the Copper Basin Caribou CSH hunt must salvage for human consumption:

1. All edible meat from the forequarters, hindquarters, ribs, neck, and backbone, as well as the heart, liver, kidneys, and fat; and
2. Prior to October 1, meat of the forequarters, hindquarters, and ribs must remain naturally attached to the bones until delivered to the place where it is processed for human consumption.

The board also found that the subsistence pattern is characterized by meaningful communal sharing. At least one communal sharing event featuring caribou harvested under the terms of a Copper Basin CSH hunt must be held. A complete description of the event (date, location, number of participants, amount of meat shared, and so forth) must be included in the final hunt report, to be submitted by the group / community coordinator.

CUSTOMARY AND TRADITIONAL USE PATTERN

The edible products of caribou taken under the terms of a Copper Basin Caribou CSH hunt must be used for human consumption and may not be sold or offered for sale. In order to comply with 5 AAC 92.072 (c) (1) (F), the department must ensure that the applicable customary and traditional use patterns described in board findings are observed by subscribers, including meat sharing. Subscribers need not have already established the pattern of community use summarized below; however, by applying, subscribers will be certifying that they have read, understood, and will voluntarily attempt to participate in and establish the pattern of subsistence use described in the Unit 13 board findings summarized below:

1. Participation in the consistent pattern of noncommercial taking, use, and reliance on Nelchina caribou, Copper Basin moose and other local wild foods. The existing pattern of use has been established over many generations and is focused on the total aggregate of fish, wildlife, and plant resources in the Copper Basin CSH area.
2. Participation in the pattern of taking or use of wild resources from the Copper Basin CSH area that follows a seasonal use pattern of year-round harvest effort in the area, with harvests of moose and caribou by community members in both the fall and winter hunts, when legally permissible.
3. Participation in the pattern of taking or use of wild resources in the Copper Basin CSH area that includes methods and means of harvest characterized by efficiency and economy of effort and cost, especially taking advantage of the maximum opportunity to harvest, as efficiently as possible, a variety of usable species in the Copper Basin CSH area.
4. Participation in the pattern of taking or use of wild resources that occurs in the Copper Basin CSH area due to close ties to the area and a familiarity with the terrain and associated history of the Copper Basin CSH area.

5. Use of means of processing and preserving wild resources from the Copper Basin CSH area that have traditionally been used by past generations, including use of all of the parts required to be removed from the field under the terms of a Copper Basin Caribou CSH permit.

6. Participation in the pattern of taking or use of wild resources from the Copper Basin CSH area that includes the handing down of knowledge of hunting skills, values, and lore about the Copper Basin CSH area from generation to generation. The board considered it critical to the perpetuation of the customary and traditional use pattern to provide opportunities for the young and old to participate in subsistence activities; the board also found it extremely important to stress the need to pass on skills and knowledge associated with use of all parts of the harvested animal.

7. Participation in the pattern of taking wild resources from the Copper Basin CSH area in which the harvest is shared throughout the community, including customary trade, barter, and gift-giving.

   In order to observe this pattern, a portion of the edible products of caribou taken under the terms of a Copper Basin Caribou CSH hunt should be primarily shared, in a meaningful way, with other members of the community or group. Hunters should also demonstrate a pattern of meaningful communal sharing that provides first for the needs of the community or group elders and disabled, as identified by the community or group. In addition, hunters who have harvested their first caribou should give a portion to other members of the community or group.

8. Participation in the pattern that includes taking, use, and reliance for subsistence purposes not only on Nelchina caribou and moose, but also on a wide variety of wild resources in the Copper Basin area.

REPORTING

HARVEST TICKET REPORTS

Successful harvest ticket holders must report online, in person, or by phone (822-3461) within 5 days of kill or return from the field. Harvest ticket holders that did not hunt, or were unsuccessful, must mail, deliver, or call in Copper Basin CSH harvest reports to ADF&G within 15 days of the close of the season. Reports must be complete in order to meet reporting requirements.

Failure to report may jeopardize sustained yield management of the Nelchina caribou herd and the future of the CSH hunt; therefore, failure to report according to this schedule may result in citation and/or placement of harvest ticket holders on the state Failure to Report (FTR) list.

WRITTEN GROUP REPORTS

To better address the subsistence needs of Copper Basin Caribou CSH participants, the board requested that all caribou harvested by CSH participants within the CSH area be accounted for, regardless of whether taken under federal or state regulations. All caribou taken by Copper Basin Caribou CSH participants within the CSH area will count against the up to 300 caribou allowed for the CSH hunt.

In order for the department to ensure that permittees have complied with all regulations addressing the terms and conditions of their Copper Basin Caribou CSH permit, as well as the customary and traditional use pattern described in 2006-170-BOG and 2011-184-BOG, and in order to gather additional data on subsistence uses, the community or group coordinator must submit an annual written report, which summarizes the group's member households' required reporting information as well as a description of the communal pattern observed by participants. The report must be postmarked by May 30, 2016. If written reports are incomplete or found insufficient, group participants may not be eligible to participate in future CSH hunts.

The written report must include, at a minimum:

1. A list of the names and harvest ticket numbers for those individuals whose bag limits were filled under the terms of a Copper Basin Caribou CSH permit; and
2. A list of the names and harvest ticket numbers of the beneficiaries whose bag limits were filled by a designated hunter under the terms of a Copper Basin Caribou CSH permit; and
3. The number of caribou taken in federal subsistence hunts by those hunters also participating in the Copper Basin Caribou CSH hunt; and
4. A specific description of how the community or group observed the customary and traditional use pattern described in 2006-170-BOG and 2011-184-BOG. The department will provide a reporting form to assist with this section of the report; however, a summary narrative is also required that includes a description of at least one meaningful communal sharing event.

Some information in these reports may be subject to state confidentiality laws.

Deliver or mail written reports to:

ADF&G Copper Basin CSH
Division of Subsistence
333 Raspberry Rd.
Anchorage, AK 99518-1565

FOR MORE INFORMATION

Visit www.adfg.alaska.gov for more information, or contact Glennallen ADF&G 822-3461.
Send completed GROUP applications to:

ADF&G
P.O. Box 47
Glennallen, AK 99588

Send completed INDIVIDUAL applications to:

ADF&G
CSH Permit Applications
P.O. Box 228080
Anchorage, AK 99522-8080

OR

Apply online at: http://hunt.alaska.gov/

2015-2016 Copper Basin Community Harvest Group Application

Group Applications are due by December 15, 2014 to:
ADFG Glennallen
P.O. Box 47
Glennallen, AK 99588

USE BLACK BALLPOINT PEN ONLY. You MUST PRINT NEATLY within the boxes and use ALL CAPITALS.
Due to the use of scanning technology, failure to do so could lead to your application being rejected.

Group Name

Group Mailing Address

CITY | STATE | ZIP CODE

Group Coordinator

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

HOME PHONE NUMBER ( ) -

CELL PHONE NUMBER ( ) -

All contact information provided is subject to public disclosure.
DO NOT SUBMIT
Unlisted Phone Numbers.

EMAIL ADDRESS

GROUP COORDINATOR'S SIGNATURE | DATE

Secondary Group Contact

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

HOME PHONE NUMBER ( ) -

CELL PHONE NUMBER ( ) -

All contact information provided is subject to public disclosure.
DO NOT SUBMIT
Unlisted Phone Numbers.

EMAIL ADDRESS

Group Number
2015- -
Community Harvest Program Type
☐ Moose **OR** ☐ Caribou

To ADF&G Staff:
1) Have Group Coordinator complete the form above
2) Group Name, Mailing Address, and Group Coordinator sections must be completed and signed before proceeding
3) Group Coordinator must specify whether this application is for the Moose or Caribou program. If necessary they can fill out an additional application and apply for both programs.
4) A Group Number can be retrieved from:
WinfoNet > Traditional Use Permits > Copper Basin Community Harvest
5) Photocopy this form and provide copy to Group Coordinator

REVISION 20140903

2015 Copper Basin Community Harvest Participant Application

Applications will not be accepted over the counter.
Apply online by December 15 at 5 p.m.:
http://hunt.alaska.gov

Paper application deadline: Postmarked by December 15, 2014
Received by January 2, 2015
Mail to: ADF&G CSH Permit Applications, P.O. Box 228080
Anchorage, AK 99522-8080

Department Use Only:

Group Number

☐ Moose 2015- ___ - __

☐ Caribou 2015- ___ - __

If you have questions about the application contact the Glennallen office at (907)822-3461

You must be an Alaska resident at the time of application.

By affixing my signature below, I agree that I have read and understood the customary and traditional use patterns for uses of Nelchina caribou, moose, and other wild resources described in 2006-170-BOG, summarized in the Community Hunt conditions, and furthermore, that I agree, to the best of my ability, to observe the customary and traditional use patterns found therein.

USE BLACK BALLPOINT PEN ONLY. You MUST PRINT NEATLY within the boxes and use ALL CAPITALS. Due to the use of scanning technology, failure to do so could lead to your application being rejected.

HOUSEHOLD MAILING ADDRESS

HOME PHONE NUMBER ( ) -

CITY

STATE

ZIP CODE

All contact information provided is subject to public disclosure-do NOT submit unlisted phone numbers.

Head of Household

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID | AK HUNTING LICENSE NUMBER

EMAIL ADDRESS

I hereby certify that I am the applicant and all of the information I have provided in this application is true and correct. I understand some of this information is subject to public disclosure.

Signature (REQUIRED) **Date**

Household members

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID | AK HUNTING LICENSE NUMBER

SIGNATURE | DATE

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

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SIGNATURE | DATE

Providing false information on this application is subject to a maximum penalty of either a $10,000 fine or 1 year imprisonment, or both, per 5 AAC 92.020, 5 AAC 92.062, AS 16.05.420, AS 16.05.925 and AS 11.56.210. If requested by ADF&G or Alaska Wildlife Troopers to provide additional information to support answers on your application, you must comply or you will be cited.

Additional household members

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID | AK HUNTING LICENSE NUMBER

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ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID | AK HUNTING LICENSE NUMBER

SIGNATURE | DATE

Instructions

You must submit the required information for all household members to participate in this hunt. Failure to submit the required information for each household member will void the application.

Personal Information (REQUIRED)
Print your first name, middle initial and last name. Be sure to include JR., III, etc. after your last name. Use only capital letters.

Date of Birth (REQUIRED)
Enter your birth date. Example: April 1, 1956

Month	Day	Year
04	01	1956

Driver's License or State ID Number.
Enter your Alaska Driver's License or State ID Number.

Alaska Hunting License
Enter your Alaska hunting license number. It can be either the current year's license or next year's license. **OR** If you are an Alaska resident under the age of 16 and do not require a hunting license, enter your current age.

Phone number - Do NOT submit unlisted phone numbers.

Signature and date (REQUIRED)
Read the certification statement carefully. We must reject applications without a signature.

Revised 20140903

ALASKA DEPARTMENT OF FISH AND GAME

Copper Basin MOOSE

Community Subsistence Harvest Permit
PROGRAM 2015-2016

HUNT ADMINISTRATION

Community Subsistence Harvest (CSH) Hunt administration will be in accordance with the Alaska Department of Fish and Game's statutory and regulatory authority, including managing this common use resource for sustained yield while adhering to laws regarding the subsistence preference passed by the Alaska State Legislature.

COPPER BASIN MOOSE CSH PERMIT

According to regulations found at 5 AAC 92.072 *Community Subsistence Harvest Hunt Area* and at 5 AAC 92.052 *Discretionary Permit Hunt Conditions and Procedures*, ADF&G may issue community-based subsistence harvest permits for big game species where the Alaska Board of Game has established a community harvest hunt area. The board established the Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina, and Kluti-Kaah (Copper Center) Community Harvest Area for moose and caribou in 2009 (5 AAC 92.074(d) *Community Subsistence Harvest Areas*), hereafter referred to as the Copper Basin CSH area.

The CSH permit program allows communities or groups of 25 or more to apply annually for a CSH permit for an established CSH area. A group can choose to apply for a Copper Basin moose CSH permit, a Copper Basin caribou CSH permit, or both. These groups may select, from their group members, individual harvesters who may possess particular expertise in hunting to harvest wildlife resources on behalf of the community or group.

The hunt conditions in this Copper Basin Moose CSH permit program are made for the purposes of notifying the community/group of users of how to use the moose in a manner consistent with the customary and traditional use pattern described in the board's 2006 and 2011 findings *Game Management Unit 13 Caribou and Moose Subsistence Uses* (2006-170-BOG and 2011-184-BOG), as well as to ensure an orderly administration of the CSH permit program and hunt (CM300 and CM301).

A community or group may possess only one (1) Copper Basin Moose CSH permit at any given time and group members may subscribe to only one (1) Copper Basin Moose CSH group per regulatory year. The Copper Basin Moose CSH permit expires at the end of the regulatory year for which it was issued. Renewal of a Copper Basin Moose CSH permit is the responsibility of the community or group coordinator.

APPLICATION PROCESS

THE COMMUNITY OR GROUP COORDINATOR

In addition to permit hunt conditions and procedures found in 5 AAC 92.050 and 5 AAC 92.072, the community or group applying for a Copper Basin Moose CSH permit must designate a coordinator as part of the application process. The coordinator certifies that the information presented in a Copper Basin Moose CSH permit application is true and correct to the best of the coordinator's ability; monitors and reports on compliance with the conditions of a Copper Basin Moose CSH permit; and serves as the primary point of contact, among other duties. ADF&G will issue one (1) Copper Basin Community Moose Harvest Permit to each coordinator.

For 2015–2016, the application period for group applications will be October 1 – December 15, 2014. Completed group applications must be received by the Glennallen ADF&G office no later than December 15, at which time the group will be assigned a group number for the upcoming season. Groups will not be formally approved until:

1) at least 25 eligible group members have applied (including the group coordinator), and

2) all moose CSH permit reporting requirements from the previous regulatory year have been met (not applicable to first-time CSH groups).

There is no limit to the number of communities or groups that may apply for a Copper Basin Moose CSH permit and there is no limit to the number of participants who may subscribe to a community or group, except that there must be 25 or more verified eligible members in each group.

INDIVIDUALS/HOUSEHOLDS

The application period for participant applications is November 1 – December 15, 2014. Applications must include a valid 2015-2016 group number, be complete, and be postmarked by December 15 and received by January 2. Participant applications must be mailed to the Anchorage address on the applications. Applications will not be accepted over the counter. **Applications can also be submitted online at http://hunt.alaska.gov/ until 5 p.m. (AKST) December 15, 2014.** Incomplete applications will be void per 5 AAC 92.050 *Required Permit Hunt Conditions and Procedures*.

Each household must submit one (1) completed participant application. CSH applicants must be Alaskan residents at the time of application. All members of the household must be listed on the application and are subject to all CSH hunt eligibility requirements and conditions. The coordinator must ensure that group members understand the terms and conditions of the CSH permit hunt.

A "household" means that group of people domiciled in the same residence per 5 AAC 92.990 (23) *Definitions*.

By submitting a completed participant application, all household members are certifying they have read, understand, and will comply with the hunt conditions as well as the applicable Board of Game findings (*Game Management Unit 13 Caribou and Moose Subsistence Uses*).

ADF&G will issue one (1) Copper Basin CSH moose harvest ticket/report to each household member listed on the application. Harvest tickets/reports will be mailed to eligible participants who provide hunting license on the participant application. Eligible participants who do not provide hunting license information on the application will be required to present a valid hunting license to department staff, in-person, at the ADF&G office in Palmer or Glennallen in order to receive a harvest ticket/report. Additionally, one any-bull locking tag will be issued for every three households within each group. Locking tags will be issued to the group coordinator for distribution, and may be transferred between group members without notifying ADF&G. Hunters will be required to have a CSH any-bull locking tag in their possession to harvest a moose that does not meet general season antler restrictions, and must affix the CSH any-bull locking tag to the main beam of one antler immediately upon the harvest of an any-bull moose. Hunters that do not have a CSH any-bull locking tag in their possession will only be allowed to harvest a bull moose that conforms to the general season antler restrictions for the CSH hunt area.

Hunters must abide by all applicable state hunting regulations and statute requirements including licensing, hunter education, and reporting requirements. Similar to other state hunts, CSH harvest ticket numbers must appear on the back of the hunter's license, CSH harvest tickets must be carried in the field while hunting, they must be validated immediately upon killing an animal and before leaving the kill site, and must remain in the hunter's possession until the animal has been delivered to the location of processing for human consumption.

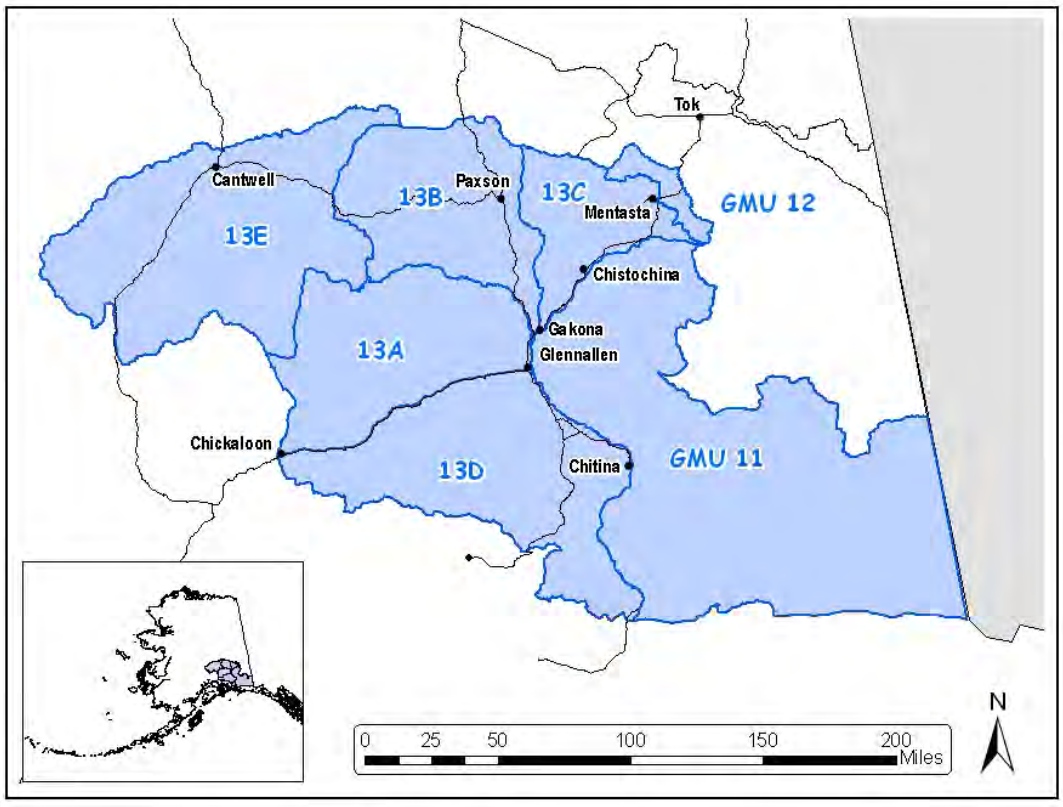
PARTICIPANT ELIGIBILITY

All household members subscribing to the Copper Basin Moose CSH hunt must meet the following eligibility requirements. The requirements apply to the same regulatory year as the CSH participant application (2015-2016).

- No member of the household can apply for any state drawing/Tier I/Tier II/registration moose hunts, hold general season moose harvest tickets, or hold federal moose permits outside of the CSH hunt area. After the CSH hunt has ended, unsuccessful individual household members may hold state harvest tickets or permits for areas where the bag limit is greater than one moose per person.
- No member of the household can apply for or hold any state or federal drawing/Tier I/Tier II/registration caribou permits outside the Copper Basin CSH hunt area.
- All household members agree to the hunt conditions herein.
- No member of the household can be on the Failure to Report (FTR) list.

COPPER BASIN CSH PERMIT HUNT AREA, AND AREA OPEN TO MOOSE HUNTING

The Copper Basin CSH permit hunt area includes all of Unit 11, Unit 13, and a portion of Unit 12 (southwest of the Tok River where it crosses the Glenn Highway Tok Cut-Off) per 5 AAC 92.074 (d).



OPEN SEASONS, BAG LIMITS, ANTLER RESTRICTIONS

The Copper Basin moose CSH hunting season dates and bag limits are specific to game management units within the CSH area. The bag limit for the fall season is one (1) bull moose per person in Unit 11 and 13 and one (1) bull moose with spike/fork, or 50" antlers, or 4 or more brow tines in the open portion of Unit 12, unless modified by ADF&G emergency order.

Up to 100 bull moose that do not meet general season antler restrictions ("any-bulls") can be taken during the fall season. However, for each group, one any-bull locking tag will be issued for every three households. Locking tags will be issued to group coordinators for distribution. Limits may be set on how many "any-bulls" may be harvested from specific geographic areas within the CSH hunt area for conservation reasons.

If the number of "any-bulls" reported taken for any one geographic area reaches or exceeds established conservation limits (announced prior to hunting season), the area will remain open to CSH hunters, although the bag limit will change by emergency order to reflect the general season antler restriction for the area.

The CSH moose hunt also includes winter season for Unit 13 in addition to the fall season. The winter quota of bulls will be managed separately from the fall season.

The Copper Basin Moose CSH hunt season dates and general season antler restrictions are listed below:

Area	CSH Season Dates	General Season Antler Restrictions
Unit 11	August 10–September 20	Spike/fork, or 50″ antlers, or 3 or more brow tines.
Unit 13	August 10–September 20	Spike/fork, or 50″ antlers, or 4 or more brow tines.
	December 1 – December 31	*(no general season)*
Portion of Unit 12	August 24–August 28 and September 8–September 17	Spike/fork, or 50″ antlers, or 4 or more brow tines.

DESIGNATED HUNTERS

The CSH program allows a community or group to designate members (from within the group) who may possess particular expertise in hunting to harvest wildlife resources on behalf of the members of the community or group. To take a moose on behalf of another CSH harvest ticket holder (beneficiary), a hunter must carry both the beneficiary's and their own CSH moose harvest ticket in the field while hunting. The harvested moose must be delivered to the beneficiary. The beneficiary is responsible for all reporting requirements.

HUNT TERMS AND CONDITIONS

Customary and traditional uses of Copper Basin moose are thoroughly described in 2006-170-BOG and 2011-184-BOG. The Board of Game found that the subsistence pattern in the Copper Basin is characterized by thorough use of most of the harvested animal. Therefore, all participants in the Copper Basin Moose CSH hunt must salvage* for human consumption:

1. All edible meat from the forequarters, hindquarters, ribs, neck, and backbone, as well as the head, heart, liver, kidneys, stomach, and hide; and
2. During the fall season, meat of the forequarters, hindquarters, and ribs must remain naturally attached to the bones until delivered to the place where it is processed for human consumption.

**These salvage requirements apply to all bulls harvested under a CSH Moose permit, regardless of potential changes in bag limit in-season.*

The board also found that the subsistence pattern is characterized by meaningful communal sharing. At least one communal sharing event featuring moose harvested under the terms of a Copper Basin CSH hunt must be held. A complete description of the event (date, location, number of participants, amount of meat shared, and so forth) must be included in the final hunt report, to be submitted by the group / community coordinator.

CUSTOMARY AND TRADITIONAL USE PATTERN

The edible products of moose taken under the terms of a Copper Basin Moose CSH hunt must be used for human consumption and may not be sold or offered for sale. In order to comply with 5 AAC 92.072 (c) (1) (F), the department must ensure that the applicable customary and traditional use patterns described in board findings are observed by subscribers, including meat sharing. Subscribers need not have already established the pattern of community use summarized below; however, by applying, subscribers will be certifying that they have read, understood, and will voluntarily attempt to participate in and establish the pattern of subsistence use described in the Unit 13 board findings summarized below:

1. Participation in the consistent pattern of noncommercial taking, use, and reliance on Nelchina caribou, Copper Basin moose and other local wild foods. The existing pattern of use has been established over many generations and is focused on the total aggregate of fish, wildlife, and plant resources in the Copper Basin CSH area.
2. Participation in the pattern of taking or use of wild resources from the Copper Basin CSH area that follows a seasonal use pattern of year-round harvest effort in the area, with harvests of moose and caribou by community members in both the fall and winter hunts, when legally permissible.
3. Participation in the pattern of taking or use of wild resources in the Copper Basin CSH area that includes methods and means of harvest characterized by efficiency and economy of effort and cost, especially taking advantage of the maximum opportunity to harvest, as efficiently as possible, a variety of usable species in the Copper Basin CSH area.
4. Participation in the pattern of taking or use of wild resources that occurs in the Copper Basin CSH area due to close ties to the area and a familiarity with the terrain and associated history of the Copper Basin CSH area.
5. Use of means of processing and preserving wild resources from the Copper Basin CSH area that have traditionally been used by past generations, including use of all of the parts required to be removed from the field under the terms of a Copper Basin Moose CSH permit.
6. Participation in the pattern of taking or use of wild resources from the Copper Basin CSH area that includes the handing down of knowledge of hunting skills, values, and lore about the Copper Basin CSH area from generation to generation. The board considered it critical to the perpetuation of the customary and traditional use pattern to provide opportunities for the young and old to participate in subsistence activities; the board also found it extremely important to stress the need to pass on skills and knowledge associated with use of all parts of the harvested animal.
7. Participation in the pattern of taking wild resources from the Copper Basin CSH area in which the harvest is shared throughout the community, including customary trade, barter, and gift-giving.

   In order to observe this pattern, a portion of the edible products of moose taken under the terms of a Copper Basin Moose CSH hunt should be primarily shared, in a meaningful way, with other members of the community or group. Hunters should also demonstrate a pattern of meaningful communal sharing that provides first for the needs of the community or group elders and disabled, as identified by the community or group. In addition, hunters who have harvested their first moose should give a portion to other members of the community or group.

8. Participation in the pattern that includes taking, use, and reliance for subsistence purposes not only on Nelchina caribou and moose, but also on a wide variety of wild resources in the Copper Basin area.

REPORTING

HARVEST TICKET REPORTS

Successful harvest ticket holders must report online, in person, or by phone (822-3461) within 24 hours of kill or return from the field. Harvest ticket holders that did not hunt, or were unsuccessful, must mail, deliver, or call in Copper Basin CSH harvest reports to ADF&G within 15 days of the close of the season. Reports must be complete in order to meet reporting requirements.

Failure to report may jeopardize sustained yield management of Copper Basin moose and the future of the CSH hunt; therefore, failure to report according to this schedule may result in citation and/or placement of harvest ticket holders on the state Failure to Report (FTR) list.

WRITTEN GROUP REPORTS

To better address the subsistence needs of Copper Basin Moose CSH participants, the board requested that all moose harvested by CSH participants within the CSH area be accounted for, regardless of whether taken under federal or state regulations. All moose taken by Copper Basin Moose CSH participants within the CSH area will count against the 100 any-bull moose allowed for the CSH hunt.

In order for the department to ensure that permittees have complied with all regulations addressing the terms and conditions of their Copper Basin Moose CSH permit, as well as the customary and traditional use pattern described in 2006-170-BOG and 2011-184-BOG, and in order to gather additional data on subsistence uses, the community or group coordinator must submit an annual written report, which summarizes the group's member households' required reporting information as well as a description of the communal pattern observed by participants. The report must be postmarked by February 27, 2015. If written reports are incomplete or found insufficient, group participants may not be eligible to participate in future CSH hunts.

The written report must include, at a minimum:

1. A list of the names and harvest ticket numbers for those individuals whose bag limits were filled under the terms of a Copper Basin Moose CSH permit; and
2. A list of the names and harvest ticket numbers of the beneficiaries whose bag limits were filled by a designated hunter under the terms of a Copper Basin Moose CSH permit; and
3. The number of moose taken in federal subsistence hunts by those hunters also participating in the Copper Basin Moose CSH hunt; and
4. A specific description of how the community or group observed the customary and traditional use pattern described in 2006-170-BOG and 2011-184-BOG. The department will provide a reporting form to assist with this section of the report; however, a summary narrative is also required that includes a description of at least one meaningful communal sharing event.

Some information in these reports may be subject to state confidentiality laws.

Deliver or mail written reports to:

ADF&G Copper Basin CSH
Division of Subsistence
333 Raspberry Rd.
Anchorage, AK 99518-1565

FOR MORE INFORMATION

Visit www.adfg.alaska.gov for more information, or contact Glennallen ADF&G 822-3461.

Send completed GROUP applications to:

ADF&G
P.O. Box 47
Glennallen, AK 99588

Send completed INDIVIDUAL HOUSEHOLD applications to:

ADF&G
CSH Permit Applications
P.O. Box 228080
Anchorage, AK 99522-8080

OR

Apply online at: http://hunt.alaska.gov/

2015-2016 Copper Basin Community Harvest Group Application

Group Applications are due by December 15, 2014 to:
ADFG Glennallen
P.O. Box 47
Glennallen, AK 99588

USE BLACK BALLPOINT PEN ONLY. You MUST PRINT NEATLY within the boxes and use ALL CAPITALS.
Due to the use of scanning technology, failure to do so could lead to your application being rejected.

Group Name

Group Mailing Address

CITY | STATE | ZIP CODE

Group Coordinator

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

HOME PHONE NUMBER ( ) -

CELL PHONE NUMBER ( ) -

All contact information provided is subject to public disclosure.
DO NOT SUBMIT
Unlisted Phone Numbers.

EMAIL ADDRESS

GROUP COORDINATOR'S SIGNATURE | DATE

Secondary Group Contact

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

HOME PHONE NUMBER ( ) -

CELL PHONE NUMBER ( ) -

All contact information provided is subject to public disclosure.
DO NOT SUBMIT
Unlisted Phone Numbers.

EMAIL ADDRESS

Group Number
2015- -
Community Harvest Program Type
☐ Moose **OR** ☐ Caribou

To ADF&G Staff:
1) Have Group Coordinator complete the form above
2) Group Name, Mailing Address, and Group Coordinator sections must be completed and signed before proceeding
3) Group Coordinator must specify whether this application is for the Moose or Caribou program. If necessary they can fill out an additional application and apply for both programs.
4) A Group Number can be retrieved from:
WinfoNet > Traditional Use Permits > Copper Basin Community Harvest
5) Photocopy this form and provide copy to Group Coordinator

REVISION 20140903

2015 Copper Basin Community Harvest Participant Application

Applications will not be accepted over the counter.
Apply online by December 15 at 5 p.m.:
http://hunt.alaska.gov

Paper application deadline: Postmarked by December 15, 2014
Received by January 2, 2015
Mail to: ADF&G CSH Permit Applications, P.O. Box 228080
Anchorage, AK 99522-8080

Department Use Only:

Group Number

☐ Moose 2015- _ _ _ - _ _

☐ Caribou 2015- _ _ _ - _ _

If you have questions about the application contact the Glennallen office at (907)822-3461

You must be an Alaska resident at the time of application.

By affixing my signature below, I agree that I have read and understood the customary and traditional use patterns for uses of Nelchina caribou, moose, and other wild resources described in 2006-170-BOG, summarized in the Community Hunt conditions, and furthermore, that I agree, to the best of my ability, to observe the customary and traditional use patterns found therein.

USE BLACK BALLPOINT PEN ONLY. You MUST PRINT NEATLY within the boxes and use ALL CAPITALS. Due to the use of scanning technology, failure to do so could lead to your application being rejected.

HOUSEHOLD MAILING ADDRESS

HOME PHONE NUMBER ( ) -

CITY

STATE

ZIP CODE

All contact information provided is subject to public disclosure-do NOT submit unlisted phone numbers.

Head of Household

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

AK HUNTING LICENSE NUMBER

EMAIL ADDRESS

I hereby certify that I am the applicant and all of the information I have provided in this application is true and correct. I understand some of this information is subject to public disclosure.

Signature (REQUIRED) **Date**

Household members

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

AK HUNTING LICENSE NUMBER

SIGNATURE DATE

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

AK HUNTING LICENSE NUMBER

SIGNATURE DATE

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ALASKA DRIVERS LICENSE (DL) NUMBER or STATE ID

AK HUNTING LICENSE NUMBER

SIGNATURE DATE

Providing false information on this application is subject to a maximum penalty of either a $10,000 fine or 1 year imprisonment, or both, per 5 AAC 92.020, 5 AAC 92.062, AS 16.05.420, AS 16.05.925 and AS 11.56.210. If requested by ADF&G or Alaska Wildlife Troopers to provide additional information to support answers on your application, you must comply or you will be cited.

Additional household members

FIRST NAME | MI | LAST NAME | SUFFIX: (JR., SR., ETC.) | DATE OF BIRTH MM DD YYYY

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SIGNATURE | DATE

Instructions

You must submit the required information for all household members to participate in this hunt. Failure to submit the required information for each household member will void the application.

Personal Information (REQUIRED)
Print your first name, middle initial and last name. Be sure to include JR., III, etc. after your last name. Use only capital letters.

Date of Birth (REQUIRED)
Enter your birth date. Example: April 1, 1956

Month	Day	Year
04	01	1956

Driver's License or State ID Number.
Enter your Alaska Driver's License or State ID Number.

Alaska Hunting License
Enter your Alaska hunting license number. It can be either the current year's license or next year's license. **OR** If you are an Alaska resident under the age of 16 and do not require a hunting license, enter your current age.

Phone number - Do NOT submit unlisted phone numbers.

Signature and date (REQUIRED)
Read the certification statement carefully. We must reject applications without a signature.

Revised 20140903

Subsistence Considerations Regarding Kuskokwim River King Salmon in Times of Low Abundance

Presentation to the Alaska Board of Fisheries' Kuskokwim Subsistence Salmon Panel

Lisa Olson
Division of Subsistence

August 24, 2015

Contact Information: lisa.olson@alaska.gov **(907) 267-2545**

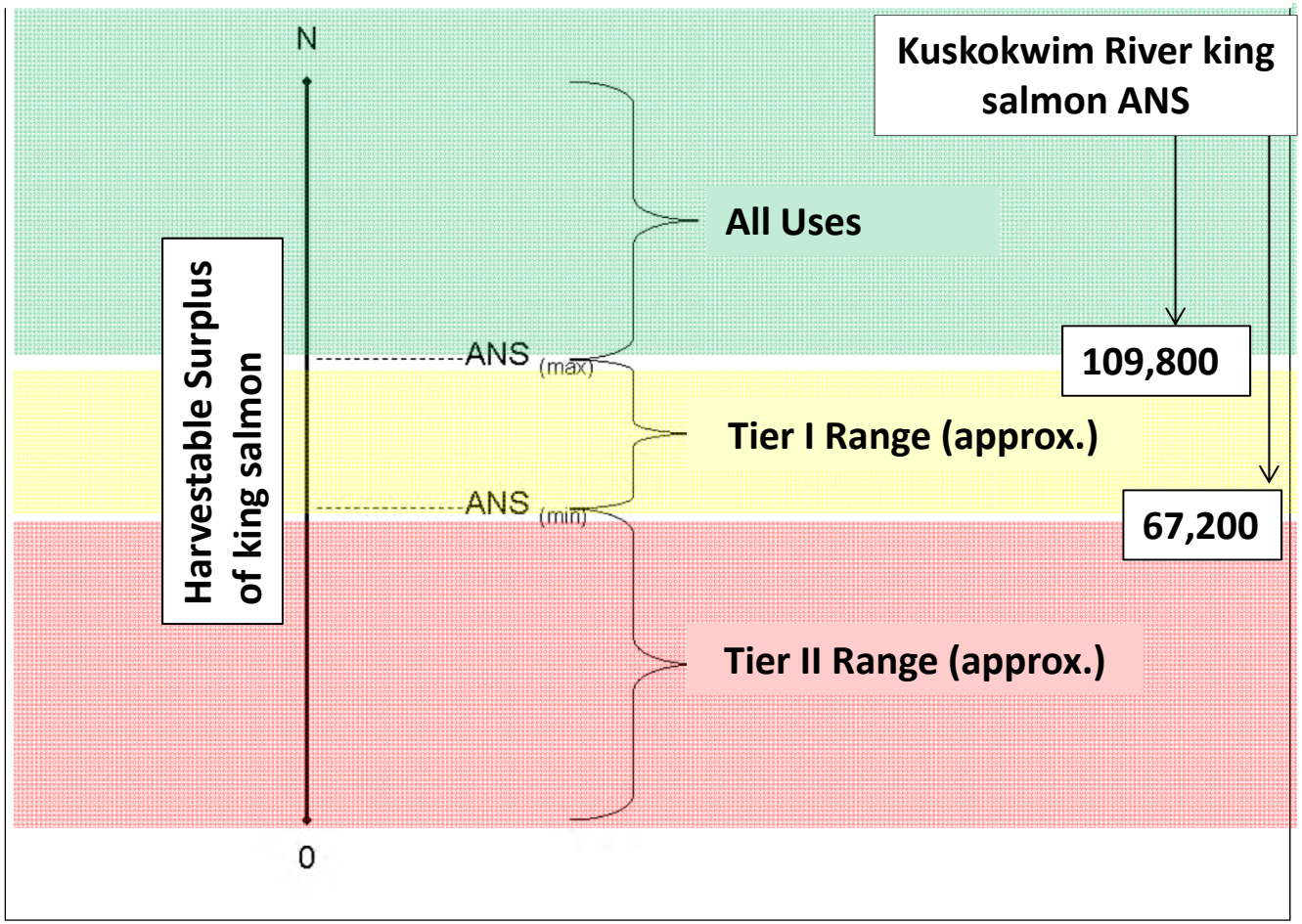
State subsistence law

- Provides priority for subsistence uses in times of shortage
- Benchmark = “reasonable opportunity”
  - An opportunity, as determined by the Alaska Board of Fisheries, that allows a subsistence user to participate in a subsistence fishery that provides a normally diligent participant with a reasonable expectation of success of taking of fish
- What “priority” and “reasonable opportunity” look like are up to board to define on a case-by-case basis
- All Alaskans are eligible to participate in subsistence fisheries
- Proposals 92–100
- Additional ideas?

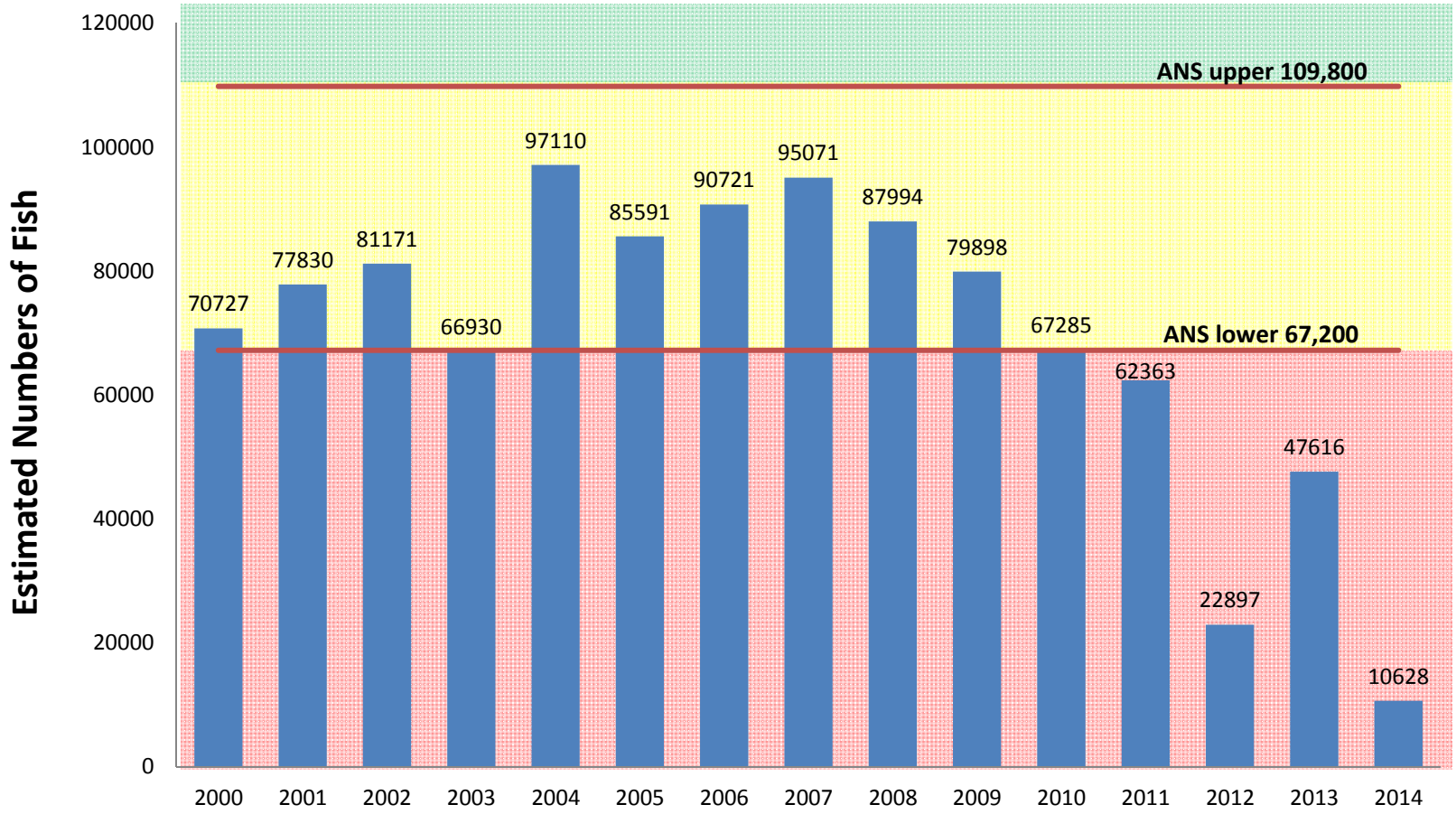
A way to measure reasonable opportunity:

Amounts reasonably necessary for subsistence (ANS)

Proposals 95 and 96



Kuskokwim River King Salmon Harvest History, 2000-2014



Harvest data provided by Dr. Hamazaki, AYK biometrician, Division of Commercial Fisheries on July 17, 2015.

Additional Subsistence Considerations:

- No subsistence harvest limits; no proposals
  - Except rod & reel in part of Aniak River
- Currently no permits required, but the board can adopt if needed
  - The Board of Fisheries… may adopt regulations providing for the issuance and expiration of subsistence permits for areas, villages, communities, groups, or individuals as needed for authorizing, regulating, and monitoring the subsistence harvest of fish…. The boards shall adopt these regulations when the subsistence preference requires a reduction in the harvest of a fish stock… by nonsubsistence users.
  - Proposal 97 household permits
  - Community permits.

Additional Considerations

- Community fish wheels: Copper River Glennallen Subdistrict community fish wheel permits
- Community moose and caribou hunts, Copper River Basin
- Other ideas for discussion:
  - Dip nets as subsistence gear
  - Other ideas?


Questions?

ONC
ORUTSARARMIUT NATIVE COUNCIL
Box 927, Bethel, AK 99559
(907)543-2608 (907)543-2639 FAX

August 24, 2015

DRAFT – Potential KSSP/BOF generated proposal

In accordance with A.S. 16.05.330; within 5 AAC 01.280, create a Community Harvest and/or Household permit opportunity for the Kuskokwim Management Area under a Conditional Tier 1 permit for subsistence, that incorporates the C & T subsistence use pattern involved with air drying and smoking that include/exhibit the following characteristics:

1. Long term drying racks w/ a smoke house established for processing quantities of fish and significant time/effort required for participation in this pattern of use

2. Salvage/preservation of majority of carcass, (excluding viscera) for human consumption

3. Includes extended sharing of activities involving harvest, processing and preservation in processing activities and extended sharing of harvest within the community.

4. A pattern of use dependent on earlier season harvest for preservation due to more favorable weather conditions that reduce waste and spoilage concerns; and recognizes conflict with later seasonal subsistence activities that are also dependent on, and/or limited to, short periods for effective harvest due to weather factors etc., inherent to seasonal round aspect of subsistence activities.

5. Incorporates reliance on this use pattern for reasonable opportunity in providing for their subsistence needs and amounts necessary.

Other aspects of this permit could include *1)* pre-season registration; *2)* harvest limits (ranges?) of 20-50 +/- chinook per permit as determined by pre-season run forecasts (potential trigger of 180,000 or less?) and observed surplus available in-season; *3)* start date of appx June 10 +/-; *4)* affidavit and/or physical location of drying rack/smoke house associated w/ permit; *5)* …

Reasonable opportunity for other contemporary subsistence use patterns not dependent on seasonal aspects of Chinook salmon harvest, c/would still be fully accommodated through unrestricted incidental harvest occurring later in season that is associated with the run overlap timing of directed chum and sockeye salmon harvest.

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Bethel Fish & Game Advisory & ONC Subsistence Committee meetings 1/12-13/2015

Initial recommendations to BOF Chinook Subsistence Panel (1/15-16/15)

As long as current depleted King run conditions continue, maintain 4" or less mesh restrictions in 2015 with up to 2 openings per week, until the Kusko Salmon Mgmt Working Group and the area manager determines that 75% of the King run has passed the Bethel Test Fishery.

4" or less mesh, fish wheels, beach seines or dip nets only beginning May 15, 2015 (or potential of dip net/beach seine only openings).

When limited to 4" or less mesh/60' setnet; Only 1 net per household allowed & net must be attached to the bank. (Potential amendment of BOF Proposal #271)

Alternate days of fishing (windows) when gear liberalization is implemented following the 75% BTF passage trigger point referenced above.

Do not support pursuit of Tier II fishery - maintain closures/restrictions until a Tier I status can be achieved. If above not deemed realistic or necessary maintain current

Look further into Tier I permit system with customary/traditional use criteria conditions incorporated, potential harvest limits, and/or length of years included in eligibility score; and further exploration of community harvest permit potential

No nets or fish wheels allowed in salmon spawning tributaries; or, within 1 mile of tributary mouth

No commercial sale/purchase of Kings including Districts 4 & 5 (Quinhagak/Goodnews)

Continue pursuit of equitable test fish distribution.

Further investigation/pursuit of potential enhancement projects

Mike Williams, Sr., Chairman
Nick Kameroff, Jr., Vice Chairman
Charlene Erik, Secretary

Kuskokwim River Inter-Tribal Fish Commission

"Working together to ensure our people and fish remain healthy"

Steering Towards a Better Tomorrow

August 24, 2015

The Honorable Sam Cotten
Commissioner
Alaska Department of Fish & Game
PO Box 115526
Juneau, AK 99811-5526

Dear Commissioner Cotten:

This letter presents some resolvable challenges that Kuskokwim River Drainage Tribes and communities experienced during the 2015 fishing season. We also present some expectations for working with the ADF&G and the BOF.

Effective Kuskokwim Fisheries In-season Management will require collaboration and expedient decision-making between the U.S. Fish and Wildlife Service (USFWS), Alaska Department of Fish and Game (ADF&G), and the Kuskokwim River Drainage Tribes and rural residents. During the 2015 fishing season, the Kuskokwim River Inter-Tribal Fish Commission (KRITFC) and the Yukon Delta National Wildlife Refuge (Refuge) manager established the Kuskokwim Fisheries In-season Management Team (KFIMT) for the purpose of working together to manage our Kuskokwim Fisheries. We also invited the ADF&G Kuskokwim Area manager to participate. Refuge and KRITFC managers agreed upon a conservative plan that sought to achieve or exceed the mid-point of the Kuskokwim River Chinook salmon escapement goal. This plan also authorized cultural harvest permits to distribute the negotiated amount of 7000 Chinook salmon among 32 Kuskokwim River Drainage communities.

The ADF&G Kuskokwim Area manager supported the plan, but he asserted that decisions regarding the allocation of fish must be made by the Alaska Board of Fish (BOF). Because the ADF&G Kuskokwim Area manager lacked the authority and tools necessary to enter into agreements regarding the allocation of fish, several frustrated communities above Aniak in state managed waters were forced to endure unnecessary and unequal harvest restrictions. During the 2015 fishing season, the KRITFC's goal was to begin rebuilding our declining Chinook salmon populations while providing each Tribe and community with an equal opportunity to harvest some Chinook. It was not then and will never be our goal to divide our people. We are a sharing culture.

To ensure that that the ADF&G is able to enter into collaborative agreements with Refuge and KRITFC managers regarding the allocation of fish when restrictive allocations are necessary to rebuild the population of any Kuskokwim fish species, we expect the following three actions to occur. First, the KRITFC expects that the ADF&G will work with the USFWS and the KRITFC to draft and enter into a MOU for the purpose of formalizing a collaborative partnership to manage Kuskokwim Fisheries. Second, we expect that the BOF will work with Kuskokwim River Drainage Tribes and communities to ensure the ADF&G Kuskokwim Area manager possesses the authority and tools necessary to allocate fish equally between communities in state managed waters for the purpose of providing subsistence opportunities when restrictive measures are necessary to rebuild fisheries. Finally, we expect that the ADF&G Kuskokwim Area manager will meaningfully engage in negotiations with other KFIMT Partners to reach

an agreement on the total number of any fish species to be distributed among our 32 Kuskokwim River Drainage communities when restrictive allocations are necessary.

We look forward to working together with the ADF&G to ensure our people and fish remain healthy.

Sincerely,

Mike Williams, Sr., KRITFC Chairman

Nick Kameroff, KRITFC Vice-Chairman

SAMPLE DRAFT CONCEPTS
FOR KUSKOKWIM RIVER SUBSISTENCE [PERMITS, HARVEST RECORDS, CERTIFICATES …]

Note: The following is <u>not</u> regulatory language, but concepts from the Kuskokwim Subsistence Salmon Panel to the Board of Fisheries; as such, the specific wording may change.

5 AAC 01.280. Subsistence fishing permits.

(a) Except as provided in this section, fish may be taken for subsistence purposes without a subsistence fishing permit.

(b) In times of king salmon conservation, the commissioner may close the Kuskokwim River drainage subsistence fishery and immediately reopen the fishery with the following provisions. In the Kuskokwim River drainage, subsistence fishing for king salmon is allowed only by permit. For purposes of this section, [permit/harvest record/certificate] is synonymous with "permit".

(1) A Kuskokwim River drainage king salmon community subsistence fishing [permit/harvest record/certificate] may be issued to communities or groups of _____ or more individuals who demonstrate a communal subsistence pattern of use of king salmon as described in the applicable board finding.

(i) Season dates for Kuskokwim River king salmon drainage community subsistence fishing [permit/harvest record/certificate] are _____ (perhaps earlier than household permit: May 20?) to _____ (July 31?).

(ii) Annual permit limit is _____ (higher than household permit?) king salmon per [permit/harvest record/certificate].

(4) A household [permit/harvest record/certificate] for Kuskokwim River king salmon may be issued.

(i) Season dates for household [permit/harvest record/certificate] are _____(June 10?) to _____ (July 31?).

(ii) Annual limit is _____ for a household of one, and _____ for each additional household member.

(5) Members of households listed on a Kuskokwim River king salmon community fishing [permit/harvest record/certificate] are not eligible for a separate household Kuskokwim River king salmon subsistence fishing [permit/harvest record/certificate];

(7) This regulation expires at _____ (Next Arctic-Yukon-Kuskokwim meeting 2019? Following AYK meeting 2022?).

(c) Unless otherwise provided in this section, regulations governing fishing under the authority of a community [permit/harvest record/certificate] issued under (b) of this section, or other [permit/harvest record/certificate] issued under this section, are those generally applicable to the statewide subsistence finfish regulations regarding subsistence fishing permits and reports outlined in 5 AAC 01.015.

(d) The [permit/harvest record/certificate] must be retained, and in the possession of the permittee, and readily available for inspection upon request by a peace officer of the state, while taking or transporting Kuskokwim River king salmon taken for subsistence uses under this [permit/harvest record/certificate].

(e) A record of subsistence-caught king salmon must be kept on the reverse side of the [permit/harvest record/certificate]. The record must be completed immediately upon taking subsistence-caught king salmon and must be returned to the local representative of the department no later than _____ (September 30?).

(f) A permittee who fails to comply with reporting requirements in this section is ineligible to receive a subsistence fishing [permit/harvest record/certificate] for Kuskokwim River king salmon subsistence fishing during the following calendar year, unless the applicant demonstrates to the department that failure to report was due to unavoidable circumstances; notwithstanding the provisions of this paragraph, the department may determine that it is administratively impractical to apply the penalty for failure to report.

The panel also recommended the following as language to be on the [permit/harvest record/certificate…]

1. Species caught while fishing for king salmon must be retained. [Use "wanton waste" language/use unfit for "human consumption" language/put a version of this language on the permit itself].
2. Permit limits tied to abundance: "up to" or "no more than" language added to permit limits; permit limits compared to pre-season forecasts, estimates of run abundance.
3. Pre-season registration: deadlines for signing up for the permits needs to be timely in order to determine the number of people who want to fish under this opportunity.
4. Availability of permits: on line, villages, in person, etc.
5. Consider developing instructions to community coordinators (who fishes, when he/she delivers fish, etc.)
6. Consider allowing even-numbered permits to fish on even-numbered days, and odd-numbered permits to fish on odd-numbered days.

The panel also asks the board to consider the following additional concepts for discussion at the board's October 2015 Work Session:

1. When fishing for other species, what should be done with incidental harvest of king salmon?
2. Limiting the number of communities.

SAMPLE DRAFT FINDING OF BOARD OF FISHERIES REGARDING SUBSISTENCE USES OF KUSKOKWIM RIVER KING SALMON

Note: The following is not regulatory language or final language for a Board finding, but concepts from the Kuskokwim Subsistence Salmon Panel to the Board of Fisheries; as such, the specific wording may change.

The board finds that subsistence uses of king salmon are used in two general patterns. The first is a communal pattern of use exhibited by:

1. Long term drying racks w/ a smoke house established for processing quantities of fish and significant time/effort required for participation in this pattern of use
2. Salvage/preservation of majority of carcass, (excluding viscera) for human consumption
3. Includes extended sharing of activities involving harvest, processing and preservation in processing activities and extended sharing of harvest within the community.
4. A pattern of use dependent on earlier season harvest for preservation due to more favorable weather conditions that reduce waste and spoilage concerns; and recognizes conflict with later seasonal subsistence activities that are also dependent on, and/or limited to, short periods for effective harvest due to weather factors etc., inherent to seasonal round aspect of subsistence activities.
5. Incorporates reliance on this use pattern for reasonable opportunity in providing for their subsistence needs and amounts necessary.

The board also finds an individual or household pattern of use exhibited by: [to be provided at a later date].

Kuskokwim Subsistence Salmon Panel
August 24–25, 2015, Yupiit Piciryarait Cultural Center, Bethel

Attendees:

Panel: Tom Kluberton, Board of Fisheries/Chair, John Jensen, Board of Fisheries, Fritz Johnson, Board of Fisheries, Bob Aloysius, At-large member, James Charles, Lower Kuskokwim Advisory Committee, Tim Andrew, Association of Village Council Presidents, Mike Williams, co-chair, Kuskokwim Inter-tribal Fisheries Commission, Lisa Feyereisen, Central Kuskokwim Advisory Committee, Mark Leary, Kuskokwim River Salmon Management Working Group, Ray Collins, McGrath Advisory Committee, Barbara Carlson, Stoney-Holitna Advisory Committee, Greg Roczicka, Orutsararmiut Native Corporation.

ADF&G: Lisa Olson, Hiroko Ikuta, John Linderman, Aaron Poetter, Zach Liller, Aaron Tiernan, Colton Lipka, Tom Taube, John Chythlook, Jennifer Peeks, Glenn Haight

USFWS OSM: George Pappas, Dr. Jennifer Harding, Stewart Cogswell.

Alaska Wildlife Troopers: Marc Cloward.

Alaska Department of Law: Seth Beausang.

6–10 members of public.

Monday, August 24

Review of panel mission, results to date, expected outcomes:

a. March 2015 Board of Fisheries (board) actions regarding Kuskokwim subsistence salmon fishing:
   - ACR became Proposal 272. Board established Kuskokwim Subsistence Salmon Panel (panel) to seek public input for equitable distribution of salmon resource (king salmon in particular) in Kuskokwim River drainage communities.
   - First panel meeting in Bethel in January 2015 with Orville Huntington, Mr. Kluberton, and Mr. Johnson.
   - Proposal 278 – board adopted to allow use of fish wheels if king salmon released. (March 2015 board meeting) and gave ADF&G (department) authority to limit length of setnets in time of conservation.
   - MrHuntington and Mr. Kluberton (board members) traveled to river communities during fishing season in June. Observed limited subsistence fishing activity and near empty smokehouses.

b. Kuskokwim River subsistence salmon fishing proposals received:
   - Nine proposals submitted for 2016 Board of Fisheries' Arctic-Yukon-Kuskokwim meeting were presented to the panel.
   - Proposal 92: amend Kuskokwim River Salmon Management Plan to manage based on Bethel Test Fishery (BTF), 50% of run past test fishery when king salmon outlook is less than 150K. Greg Roczicka—this proposal is a placeholder for plan; may be unrealistic for current management; they'll likely request withdrawal of support.
   - Proposal 93: establish inriver goal for king salmon of 95K above BTF. Dan Gillikin—this proposal

is an attempt to pass more fish past Bethel to provide more harvest opportunity in communities upstream and increase escapement. Based on confidence interval around BTF and additional 20K fish, based on historical harvest of lower villages and midpoint of current escapement goal range. Does fall within existing sustainable escapement goal (SEG) range, so presumably sustainable. Department would manage for inriver goal based on test fishery model and catch-per-unit-effort (CPUE) indices.

- Proposal 94: establish inriver goal which includes historical median escapement (1976–2013) plus the proposed amount reasonably necessary for subsistence (ANS) for communities in the upper third of Kuskokwim River (above Bethel). Barbara Carlson - Discussed in a group with proposals 96 and 97. All three proposals may help to ensure equitable king salmon harvest upriver and downriver. All three would be applicable both in times of shortage and times of abundance, and would allow management of various stocks of king salmon in the river.
- Proposal 95: manage Kuskokwim River king salmon fishing under Tier II. [no direct discussion, proponent not in attendance]. Tuntutuliak has been against Tier II from the beginning: right now, when the river is closed, it is closed for everybody. Under Tier II, it would be open for some and not others.
- Proposal 96: create "nested" ANS. Ms. Carlson - Divide existing ANS into thirds: one-third below Bethel, one-third for Bethel, and one-third above Bethel. Would provide a measure for department postseason to see if management provided for the 3 ANS groupings, assuming fishing normally.
- Proposal 97: Ms. Carlson - create permitting system for king salmon subsistence fishery. Of the three proposals, this is the focus. The proponent was not supportive of how community permits were provided under federal management because upriver communities had an allocation but very difficult access. There were also problems in communities with dividing up fish. Household permits would give department a number of fishery participants. In times of shortage, harvest would be limited through a permit system, at department discretion. Permit would require end of season reporting – would capture those households that might leave the area and are not captured by subsistence surveys, and provide other data. This proposal made more sense [than community permits] to upriver people because there was too much favoritism under the federal community permit, and some were hoarding fish. Anyone could apply for a household permit, and that makes sense.
- Proposal 98: establish sections of Kuskokwim River for management during king salmon shortages. [Little discussion, but generally supportive.]
- Proposal 99: limit 4-inch gillnets to one net per household. Mr. Roczicka - Protects whitefish and other species because many households purchased multiple nets to target salmon with 4-inch nets. Suggestion to use 4-inch nets before and after the salmon season. Not enough enforcement.
- Proposal 100: establish specifications for subsistence beach seines in the Kuskokwim Area. Currently no specifications for beach seines leaving it open for fishermen to operate nets as a beach seine, which may be inappropriate.

c. 2015 Kuskokwim River king salmon season summary:
   - Sonar update: feasibility work still ongoing, site location, duration of operation (species covered), evaluation ongoing this winter.
   - Run reconstruction data look good: very preliminary escapement estimate of 137K king salmon (better than previous 5 years, exceeded drainagewide goal, almost double 2001 run), expect king subsistence harvest to fall between 15–25K but the department will not have clarity until post season survey results. This year was a weak chum run, but the sockeye salmon run was good; coho salmon run lagging but expected to meet escapement based on BTF; the runs were lower than average for all species. Some limited commercial fishing opportunity provided on coho salmon.
   - Lots of restrictions on subsistence fishery because of weak king and chum salmon runs. Commercial and sport fisheries closed/restricted on these species as well.
   - US Fish and Wildlife Service (USFWS) Yukon-Delta Wildlife Refuge cultural harvest permit:

7,000 allocation plus harvest upstream of Aniak = approximately 20K in harvest, with range 17,000–25,000, including incidental harvest.
- BTF expected to continue for several years, even if sonar used, to validate sonar.
- Pitka Fork weir counts higher, but weir has been moved to capture both forks so not comparable to previous years.
- There was commercial fishing for king salmon in the past; prices were $0.65 - $4.00 per fish.

d. Considerations from state subsistence program:
   - Overview of salient points of subsistence law (harvestable surplus, reasonable opportunity, ANS), considerations for the board when reviewing proposals 92–100.

e. Panel member ideas for additional board-generated proposals:

• Kuskokwim River Salmon Management Working Group (KRSMWG)-requested proposal for using dip net as legal subsistence gear – KRSMWG representative and group discussion:
- Trying to align federal and state regulations with the same type of gear.
- Traditionally used in headwaters area for king salmon.
- Works on Yukon River because allowed for commercial fishing, plus there is a higher fish density.
- Akiak only used for smelt, not salmon – not accepted in Kuskokwim.
- The Association of Village Council Presidents (AVCP) is sending out 3 dip nets to each community for testing use.
- OK as a tool to conserve king salmon.

• Customary and traditional subsistence salmon fishing conditions during times of shortage – Orutsararmiut Native Corporation (ONC) representative and group discussion [ONC handout]:
- This is a Tier I permit that sets conditions for participation.
- Harvest occurred out of desire, not due to need.
- Limited opportunity for harvest, provides opportunity for harvest by those with customary and traditional practices based on a thousand-year-old pattern, vs those in Bethel who work for the government. No change to gear types.

• Moratorium on king salmon – group discussion:
- Strategy used to rebuild moose population in Kuskokwim Area.

• Household or individual harvest limits – group discussion:
- [no direct discussion at this time in the agenda].

• Community subsistence salmon permits – group discussion:
- [no direct discussion at this time in the agenda].

• Additional ideas – individuals or groups:
- [no direct discussion at this time in the agenda].

Public testimony session on king salmon conservation and management:

- Phillip Peter – talked about this season's king salmon closure, fished June 10 using federal community permit for 500 salmon. Limited openings with restrictive gear, 4-inch gear kills all fish, not protecting king salmon. If need to protect king salmon should close entire river. Community people (Kwethluk) want to reconsider using permit. Only got 3 fish [under community permit]. Fishes for six families, sent 4-5 gallons down to the coast.

- Nick Kameroff – Think of a three-legged stool: department, federal managers, Intertribal Fish Commission. Upriver users had hardships getting their fish this past season. Resource is for all people on the river. Permit system in 2015 worked pretty well, except for those people that had to travel to fish in federal waters. Elders' fishery may be a viable option.
- Jeff Sanders – does not support Area M proposal (Proposal 181) to close June Area M fishery. There's not a lot of attention paid to sockeye salmon.
- James Paul – Napaskiak Tribal Council – Choke point, traditional fishing spot for local villages – 4-inch mesh a problem. Permit system (federal) was good for communities – could also work under state system.

Tuesday, August 25

a) Public testimony session on king salmon conservation and management:

- Michael Martin – Kasigluk, Nunapitchuk, Atmautluak – federal permits this past season, villages did not like permitting process, many residents did not achieve goal for king salmon (limits set by permits not enough – village of Kasigluk had a limit of 308 king salmon, about 3 per household). Each village may have different needs and setting permit limits does not address the individual household needs. Some are heavily reliant on salmon, especially king salmon, for dry fish. Costs $100 in gas just to get to the Kuskokwim River [traveling down via Johnson River]; traditional council provided some funds for gas. Communication is Number One to any community anywhere. Educating the area would help with concerns on low abundance and helping people understand they cannot take as much as they need. Harvest timing is important: coho salmon season is the worst for drying. They rely on the elders' knowledge and teachings: when it is healthy you take what you can – each has its own cycle. Speaking in Yupik needs to happen in the villages. Household permits are a way for everyone to get fish – it would not be as much as they want, but more than 3 fish. People in Bethel can go whenever they want; people in tundra villages used to have fish camps nearby but not any more.
- Marvin Kiokun – limit trawler bycatch, Bristol Bay runs are good, harvesting Kuskokwim River king salmon. Until this is reduced, king salmon numbers will not increase and will continue to cause reduced runs to the Kuskokwim River.
- Nicolia Alexie – Kwethluk – They are willing to conserve but there should not be a rush to set up a permit system. They do not like regulations telling when, what, and how to fish. Came to this meeting to be part of the solution, help to provide king salmon for subsistence. In the 1870 expedition, there was abundant resources. They did not like federal designated fisher permits, not all people in village got fish from the designated fishers. Alaska Native Claims Settlement Act (ANSCA) is the problem – loss of Native rights, and Alaska National Interest Lands Conservation Act (ANILCA) and state's noncompliance with rural priority. What would be least offensive would be providing king salmon to those that need it year-round, also for culture and their way of life: they hunt, fish and gather year-round and it keeps them active and healthy. Timing is everything: when fish are there, they fish for them. Managers should go to villages on a monthly basis and get feedback: most people cannot afford to travel to Anchorage or Bethel. Not everyone has a boat or a snowmachine, so if there are household permits, some people would be left out. Concerns that if there is a permit system, it would be in place forever. Guides should have permits, and there are environmental factors, such as mining in the headwaters. Proxy fishing does not cover all situations, such as a broken boat or no nets.
- Charlton Epchook – Kwethluk – Kwethluk River a subsistence use river, state has not recognized this use, sport fishermen and guides still using river and disrespecting the fish resource. Subsistence users should not be burdened with subsistence permits. Coho salmon are not being fully utilized, backbones and heads left on the river banks.

b) Panel member thoughts regarding Monday's discussions:

- Permit options:
  - Cultural harvest permit, or community permit, or household harvest permit:
    - under state law when allocating a subsistence resource if the harvestable surplus is lower than the low end of the ANS, it is a Tier II situation.
  - Board could set permits that have specific limits
  - Community harvest permit concept – Concept document provided to panel that blended community cultural harvest permit [ONC handout] with individual household permits (Proposal 97).
    - Community permit – provide for traditional king salmon pattern of use, including sharing, smokehouse, drying aspects.
    - Individual household permit (Proposal 97) – pattern of use tied to individual household use: freezing, canning, more contemporary uses.
    - Additional potential instructions to fishermen included on concept document.
    - See "Kuskokwim king salmon permit draft" document.
- General discussion of state elder fishery. Concerns about elders having to stay with the net while it is fishing. Panel questioned if the elder fishery should stay on the books, if the community cultural permit is adopted, since the communities should be looking out for the elders, and others in need.
- Concepts for a board-generated proposal regarding the use of 4-inch nets were discussed.
  - Panel not supportive of permits for use of 4-inch nets.
  - Many of the traditional whitefish/nonsalmon fishing sites are in intertidal areas.
  - Considerable differences in upriver vs downriver use and timing.
  - Panel did not recommend a board-generated proposal for 4-inch nets.

c) Panel member recommendations and action items:

1. Send forward to the board's October 2015 work session, for consideration as a board-generated proposal, the concept document blending community cultural permits and household permits. Included in the concept document are additional concerns and recommendations on administration of the permits.
2. Send forward to the board October 2015 draft board finding concepts supporting two patterns of use of Kuskokwim River king salmon.
3. The panel made the following recommendations to the board on the current Kuskokwim River proposals:
   a. Proposals 93/94 (inriver goals) – [no comments or recommendation].
   b. Proposal 95 (Tier II) – consensus to oppose.
   c. Proposal 96 (nested ANS) – No recommendation. Without good inseason assessment difficult to manage. An ANS is not an inseason tool; rather it is a postseason tool to assess the season's management. The headwaters are more important than previously thought, and this potential production needs to be addressed in the management plan. Proposals 94, 96, and 97 were created to give department direction on where the fish should go. Metrics are just a measurement tool, but if the department does not have ability and confidence that the actions will achieve the goals, they are all for naught. The department has the same obligation to provide opportunity to all subsistence users regardless of their geographic location in river. Need to find the balance between providing for upriver and lower river. Subsistence harvest timing is weighted toward early portion of run.
   d. Proposal 97 (permits) - [see recommendation and action items above].
   e. Proposal 98 (establish management river sections) – There was a lively discussion but no recommendation. One border aligns with upper USFWS refuge border.

Consistency with federal actions. Lower boundary requires GPS coordinates and equipment to locate location. State regulations are different than lower refuge boundary to provide visual references to that boundary. Move Section 5 boundary to above the mouth of the Holitna River, separates upriver stocks from Holitna River stocks. Boundaries in proposal are based on recent rolling closures – codifies what has been used. Concerns expressed about locations of boundaries resulting in splitting of villages and management of upper river stocks.

f. Proposal 99 (one 4-inch mesh net per household) – Consensus to support, with one in opposition.
g. Proposal 100 (beach seine definition) – Consensus to support.
h. Proposals 101–105: no discussion [101 specific to the commercial fishery, 102–105 specific to Kuskokwim Bay fisheries].

d) People to be heard

- Mary Awinowak (?) We are all human beings. Education is important, and people of all ages should be involved. Grants can be written.

e) Concluding remarks: The Board of Fisheries is hugely appreciative of the work, time, passion of the panel members and the Kuskokwim people.

ALASKA BOARD OF FISHERIES
Kuskokwim Subsistence Salmon Panel
January 15-16, 2015, Yupiit Piciryarait Cultural Center, Bethel

DRAFT TENTATIVE AGENDA

Note: this tentative agenda subject to change throughout the course of the meeting.

Thursday, January 15, 1:30 p.m. – 5:00 p.m.

1. Welcome and introductions — Co-chairs, panel, and staff
2. Review of panel mission, expected outcomes — Chair Kluberton, co-chairs, panel members
3. Public listening session (Tentative sign-up time for testimony is 1:30–2:30 p.m.)
4. Adjourn

Friday, January 16, 9:00 a.m.

1. Welcome and introductions — Co-chairs, panel, and staff
2. Review of panel mission, scope, expected outcomes, meeting operations, communications — Chair Kluberton, co-chairs, panel members
3. Agency reports
   (A tentative list of reports will be published in advance of the meeting.)
4. Panel mission and scope in relation to management plan — Panel discussion

Lunch: 12:00 p.m.

Back at 1:30pm

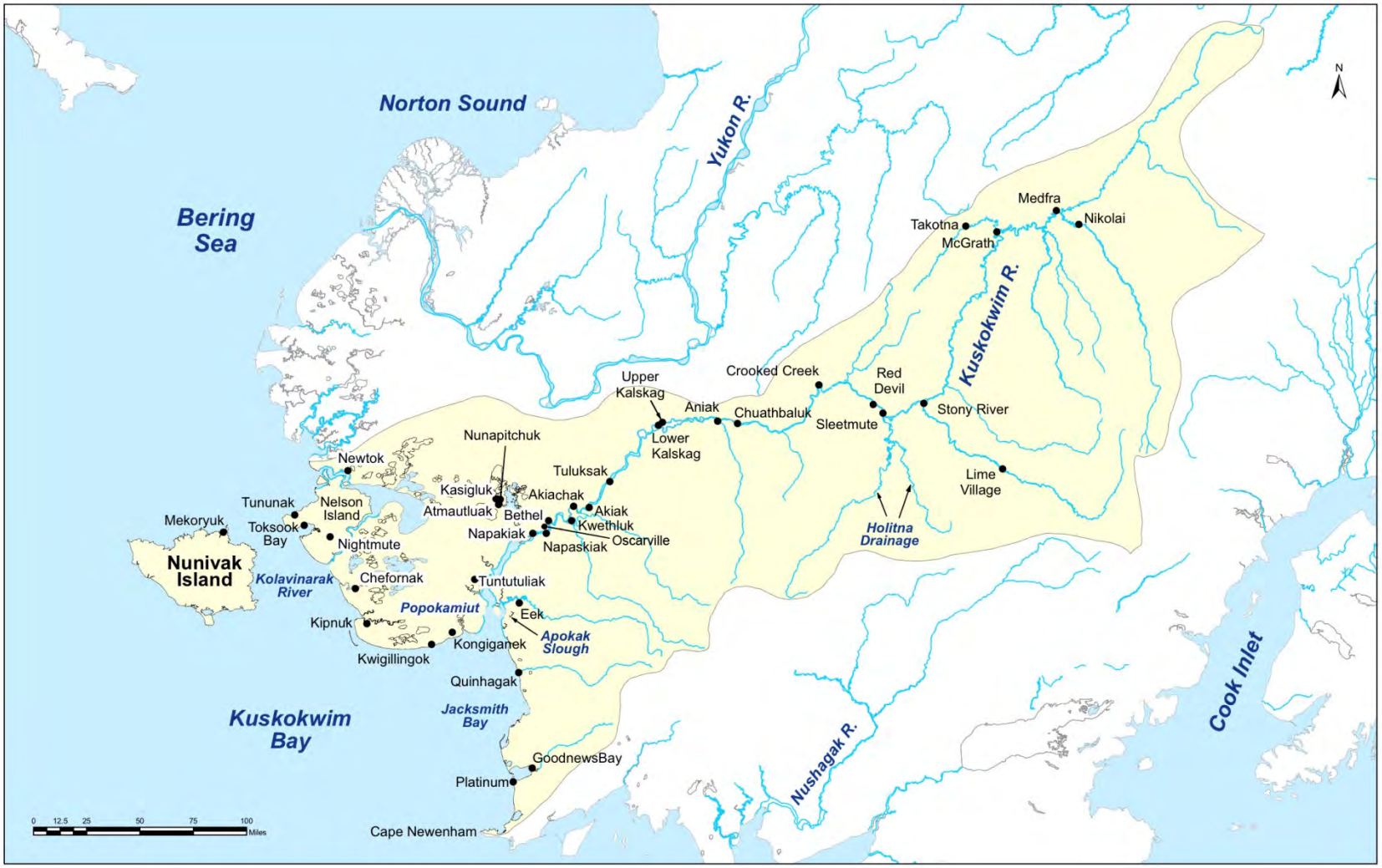
5. Identification of issues and potential tools (Including, but not limited to, Board of Fisheries' proposals 271 and 272) — Panel discussion
6. Set/discuss dates for next meeting(s) — Chair Kluberton, co-chairs, panel members
7. Miscellaneous business, if any
8. Adjourn: 5:00p.m.

Alaska Board of Fisheries Kuskokwim Subsistence Salmon Panel

ADF&G

January 2015

Kuskokwim Area Communities

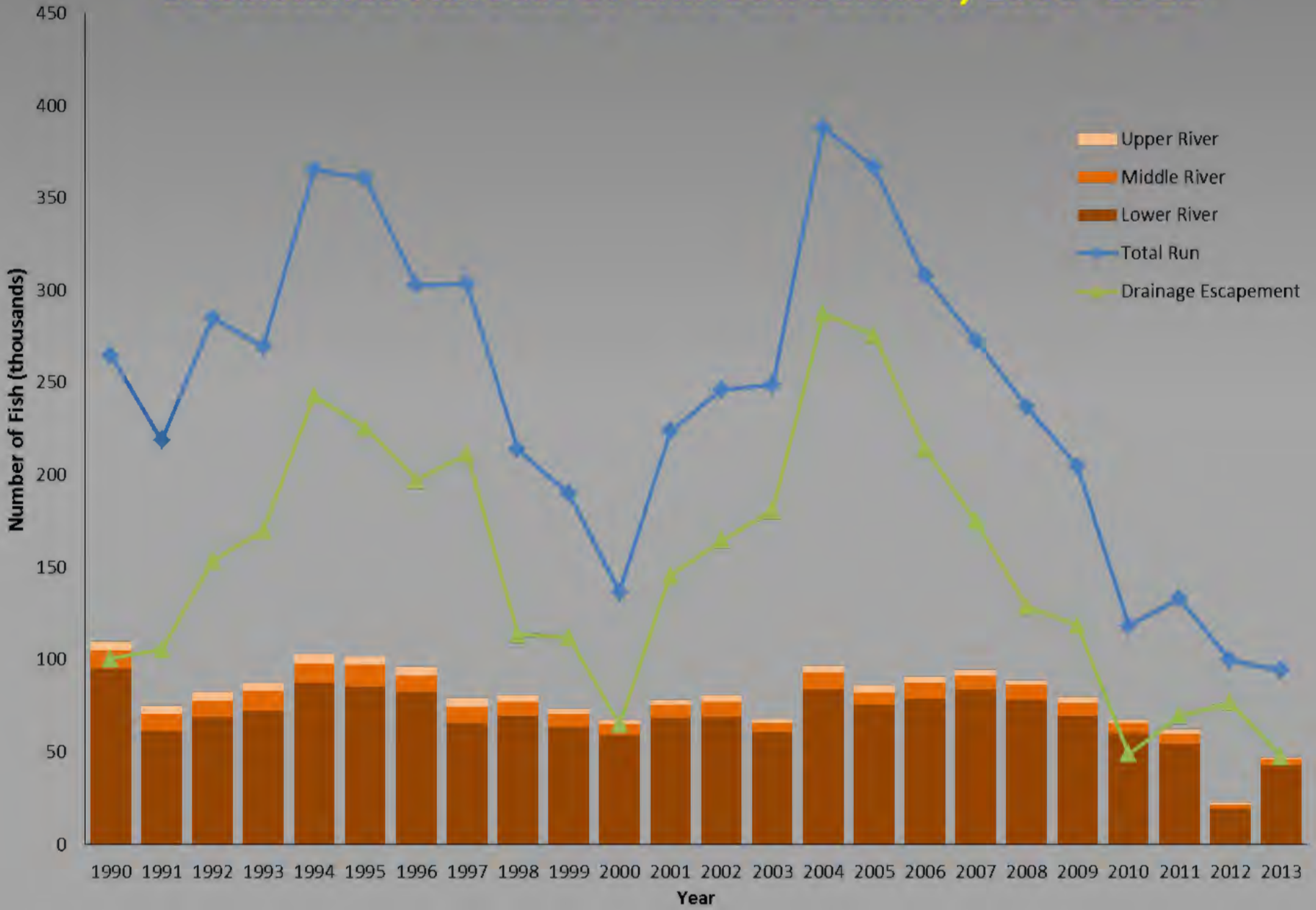


Lower River Communities

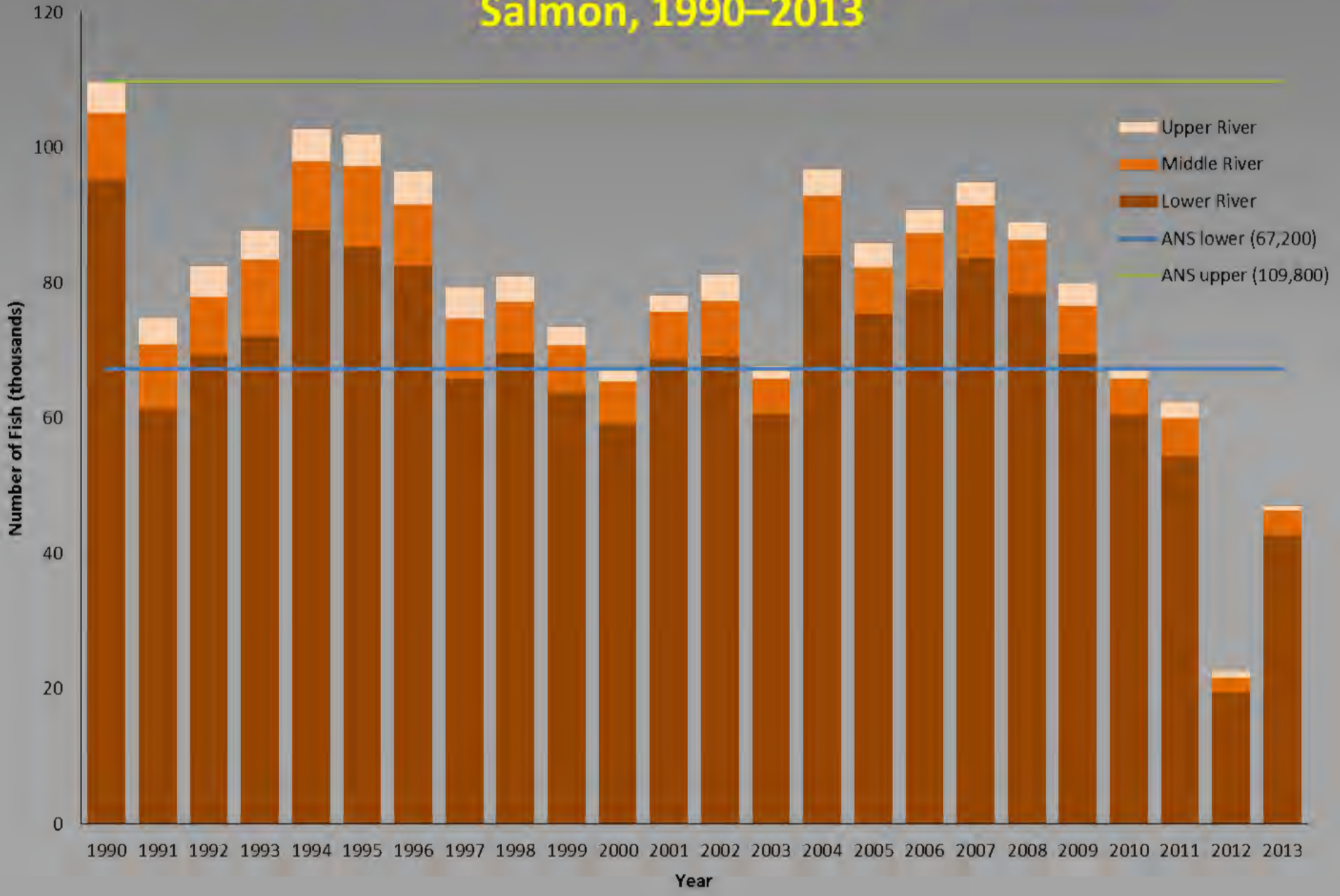
Middle River Communities

Upper River Communities

Kuskokwim River Total Run, Escapement, and Subsistence Harvest of Chinook Salmon, 1990–2013



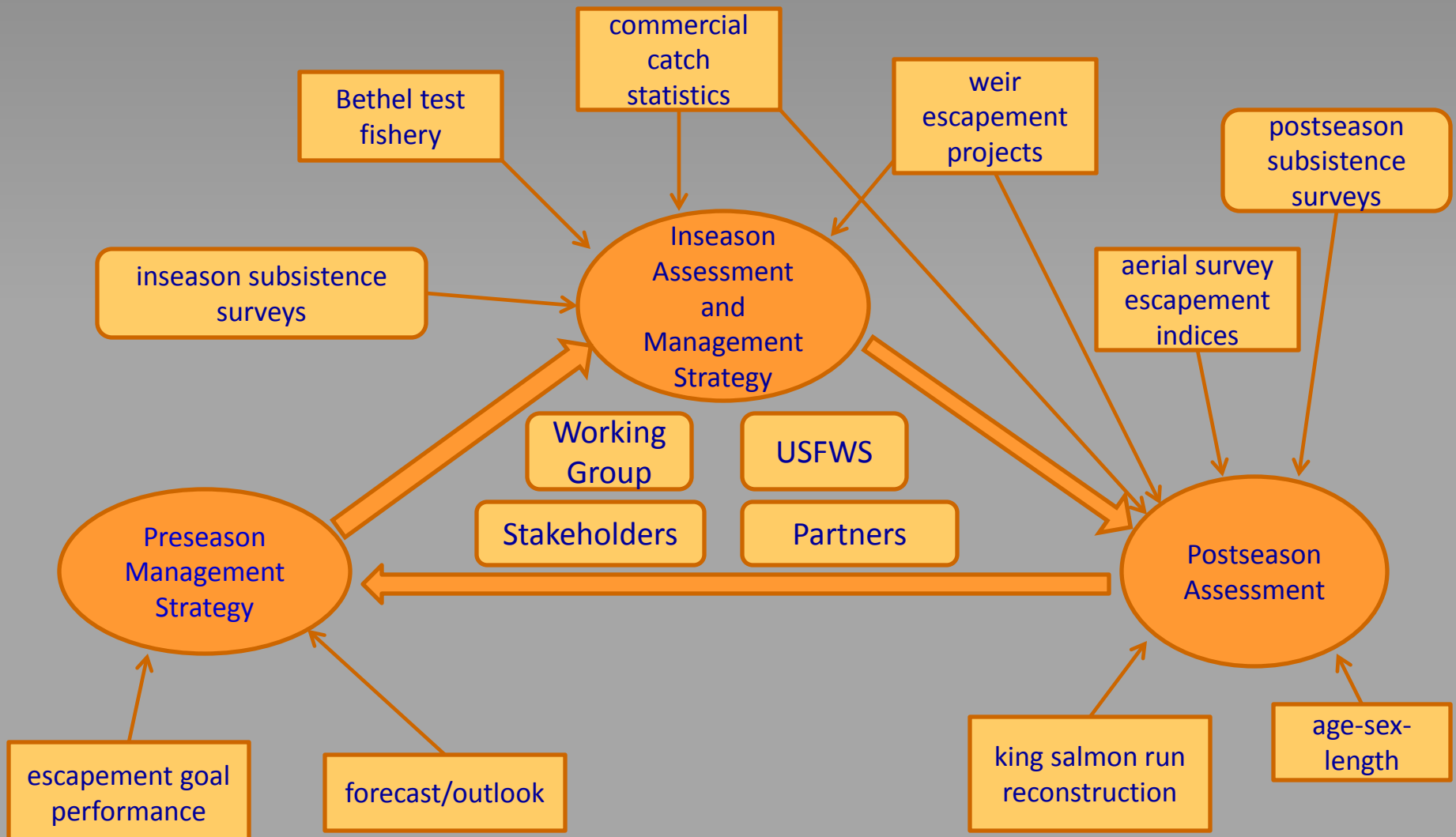
Kuskokwim River Subsistence Harvest of Chinook Salmon, 1990–2013



Chinook Speeds and Timing

- Chinook salmon speed is variable
  - Five days from Bethel Test Fishery (BTF) to Kalskag tagging site
  - Travel speed increases as they move up river
  - Lower River tagging project
- Run timing is assessed at BTF
  - Chinook begin entering the river in late May and early June
  - Second week of June abundance increases
  - Mid July is when the run tails off

Management


commercial catch statistics
Bethel test fishery
weir escapement projects
postseason subsistence surveys
inseason subsistence surveys
Inseason Assessment and Management Strategy
aerial survey escapement indices
Working Group
USFWS
Stakeholders
Partners
Preseason Management Strategy
Postseason Assessment
escapement goal performance
forecast/outlook
king salmon run reconstruction
age-sex-length

Management Tools

- Time and Area
- 5 AAC 01.270 *Lawful gear and gear specifications and operation*
  - Gear Restriction
    - Six inch mesh restriction
    - Live box requirement for fish wheels
- 5 AAC 07.365 *Kuskokwim River Salmon Management Plan*
  - "Elder Fishery"
    - 60 years of age or older
  - Gear Restriction
    - Four inch mesh gillnets
    - 25 fathom
  - Dip nets
  - Manage sections of the river differently based on run timing, abundance, and harvest trends (5 AAC 07.365(d)(3))

Table 1. – Chinook Salmon total run and subsistence harvests of the Kuskokwim River, 1990–2013.

Year	Total Run	Lower River Harvest [a]	Middle River Harvest	Upper River Harvest	Combined Middle & Upper River Harvest	Total Harvest	Drainage Escapement
1990	264,802	95,284	9,871	4,623	14,494	109,778	100,614
1991	218,705	61,327	9,613	3,880	13,493	74,820	105,589
1992	284,846	69,276	8,621	4,584	13,205	82,481	153,573
1993	269,305	72,039	11,379	4,412	15,791	87,830	169,816
1994	365,246	87,815	10,111	4,891	15,002	102,817	242,616
1995	360,513	85,248	11,955	4,717	16,672	101,921	225,595
1996	302,603	82,524	9,074	4,879	13,953	96,477	197,092
1997	303,189	65,767	8,888	4,679	13,567	79,334	211,247
1998	213,873	69,649	7,544	3,777	11,321	80,969	113,627
1999	189,939	63,739	7,034	2,765	9,799	73,538	112,082
2000	136,618	59,144	6,306	2,146	8,452	67,596	65,180
2001	223,707	68,694	6,965	2,515	9,480	78,174	145,232
2002	246,296	69,144	8,161	3,864	12,025	81,169	164,635
2003	248,789	60,627	5,126	1,984	7,110	67,737	180,687
2004	388,136	83,956	8,971	3,861	12,832	96,788	287,178
2005	366,601	75,408	6,840	3,615	10,455	85,863	275,598
2006	307,662	78,957	8,362	3,494	11,856	90,812	214,004
2007	273,060	83,779	7,710	3,409	11,119	94,898	174,943
2008	237,074	78,273	8,055	2,584	10,639	88,912	128,978
2009	204,747	69,424	7,228	3,244	10,472	79,896	118,478
2010	118,507	60,502	5,339	1,445	6,784	67,286	49,074
2011	133,059	54,350	5,655	2,361	8,016	62,366	69,726
2012	99,807	19,422	2,117	1,005	3,122	22,544	76,945
2013	94,166	42,667	3,656	790	4,446	47,113	47,488

Note: This is the data that all graphs were built from.

[a] Lower River harvest includes harvest from North Kuskokwim Bay (Kongiginak).

Table 2.– Commercial salmon harvest, District W-1, Kuskokwim River, Kuskokwim Management Area, 2003–2014.

Year	Chinook		Sockeye [a]	Coho [a]	Chum [a]
	Sold	Personal Use			
2003	158	0	282	284,064	2,764
2004	2,305	0	8,532	435,407	20,150
2005	4,784	0	27,645	142,319	69,139
2006	2,777	0	12,618	185,598	44,070
2007	179	0	703	141,049	10,763
2008	8,865	0	15,601	142,862	30,516
2009	6,664	0	25,673	104,546	76,790
2010	2,731	1	22,428	58,031	93,148
2011	49	680	13,482	74,108	118,256
2012	14	449	2,857	86,389	65,171
2013	1	162	768	114,069	52,235
2014	0	31	2,714	117,557	19,048

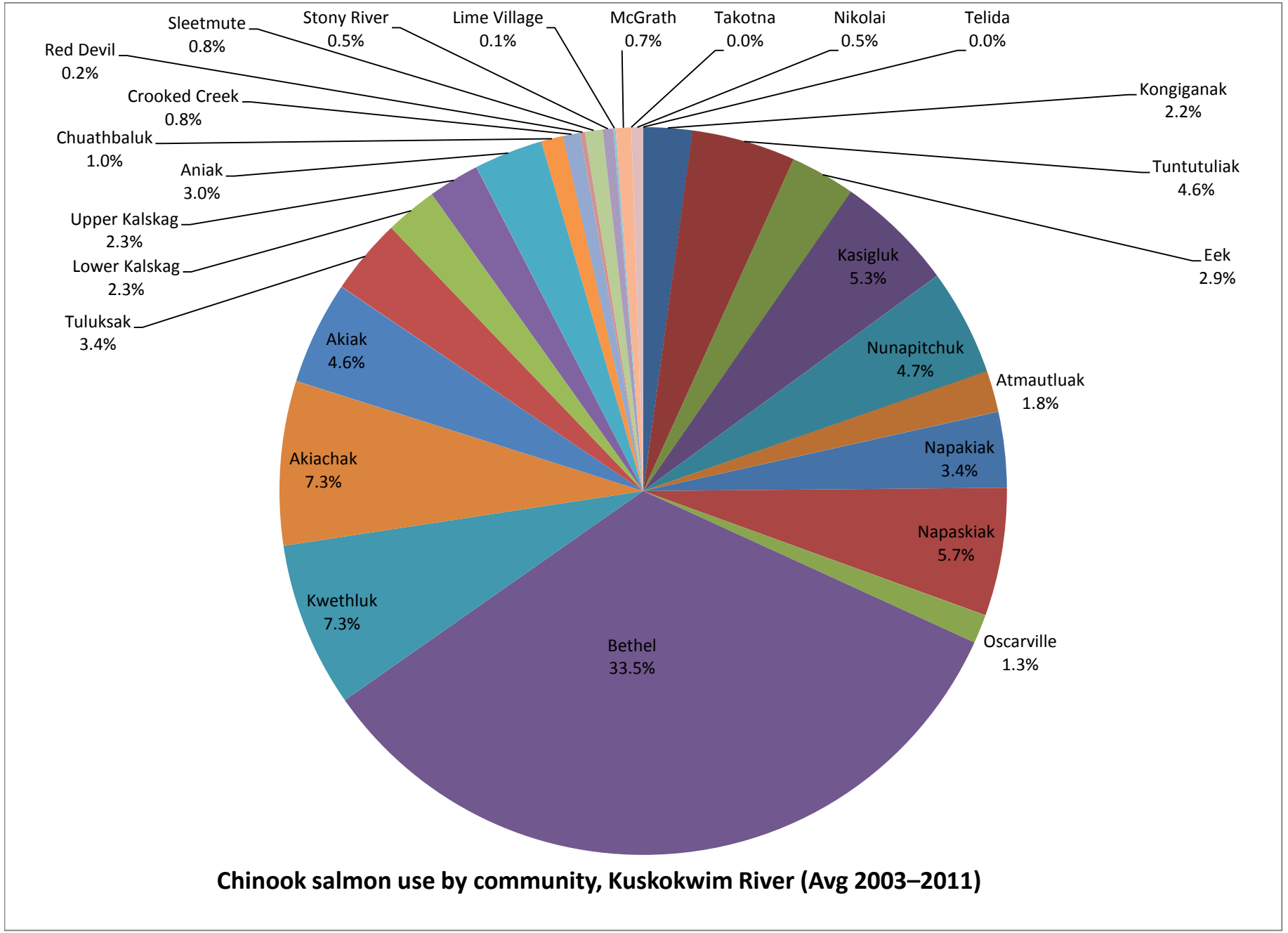
[a] Very small amouts of personal use were reported for these species. Numbers are represented in the post season subsistence harvest estimates for these species.

Table 3.–Estimated number of Chinook salmon harvested in the Kuskokwim area, 2003 to 2013.

Community	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average 2008-2012	Average 2003-2012
Kongiganak	2,003	2,663	1,536	***1,729***	1,865	2,233	1,243	1,456	1,208	***287***	***641***	1,285	1,622
North Kuskokwim Bay	2,003	2,663	1,536	1,729	1,865	2,233	1,243	1,456	1,208	287	641	1,285	1,622
Tuntutuliak	2,657	3,912	4,545	4,469	***4,614***	4,266	3,067	3,261	3,032	1,123	2,448	2,950	3,495
Eek	2,075	2,954	***3,133***	***2,501***	***2,512***	2,966	1,982	1,761	1,378	1,004	1,188	1,818	2,227
Kasigluk	4,711	***7,859***	***5,242***	***4,905***	***5,167***	2,471	2,464	3,014	2,823	552	2,919	2,265	3,921
Nunapitchuk	3,179	4,921	4,103	4,121	***4,661***	4,234	3,468	2,548	3,559	845	2,563	2,931	3,564
Atmautluak	547	2,153	***1,927***	1,758	***1,890***	1,298	1,567	1,088	1,236	234	1,592	1,085	1,370
Napakiak	2,438	2,839	3,060	5,125	3,245	1,903	2,387	1,674	1,963	457	1,588	1,677	2,509
Napaskiak	3,390	4,058	4,485	5,877	6,392	4,555	5,372	4,333	3,360	1,108	2,939	3,746	4,293
Oscarville	1,153	1,325	1,069	1,052	1,360	1,351	754	618	694	51	585	694	943
Bethel	24,584	29,443	28,293	27,805	30,422	27,800	26,170	26,157	25,093	7,321	17,246	22,508	25,309
Kwethluk	4,206	7,157	6,089	7,258	6,466	8,451	7,130	4,440	2,467	1,709	3,192	4,839	5,537
Akiachak	2,493	7,131	5,411	5,561	7,621	9,719	7,361	4,470	3,852	2,862	3,585	5,653	5,648
Akiak	3,905	3,775	3,860	4,423	4,297	4,090	3,247	3,625	2,455	***1,218***	1,449	2,927	3,489
Tuluksak	3,286	3,766	2,655	***2,372***	3,266	2,937	3,212	2,057	1,230	651	732	2,017	2,543
Lower Kuskokwim	58,624	81,293	73,872	77,228	81,914	76,040	68,181	59,046	53,142	19,135	42,026	55,109	64,847
Lower Kalskag	1,556	1,991	1,417	3,494	1,937	1,748	2,525	1,030	1,260	459	744	1,404	1,742
Upper Kalskag	1,328	2,498	2,533	1,569	1,383	2,435	1,696	1,496	1,772	562	1,317	1,592	1,727
Aniak	1,837	3,022	1,977	2,412	3,417	3,100	2,130	2,262	2,214	993	1,440	2,140	2,336
Chuathbaluk	405	1,460	913	***887***	973	772	877	551	409	103	155	542	735
Middle Kuskokwim	5,126	8,971	6,840	8,362	7,710	8,055	7,228	5,339	5,655	2,117	3,656	5,679	6,540
Crooked Creek	582	946	948	***736***	647	488	608	240	402	124	***145***	372	572
Red Devil	31	156	181	232	301	148	258	33	186	225	77	170	175
Sleetmute	600	906	522	750	861	933	693	272	242	132	96	454	591
Stony River	118	***688***	***311***	***288***	530	514	704	189	134	***151***	51	338	363
Lime Village	34	***69***	***171***	***103***	***95***	***29***	***75***	***47***	***118***	29	***43***	60	77
McGrath	395	***587***	910	689	495	288	600	262	829	68	95	409	512
Takotna	0	***16***	8	***0***	***10***	***0***	***8***	0	0	***0***	***0***	2	4
Nikolai	224	493	564	696	471	184	298	402	450	276	283	322	406
Telida	-	-	-	-	-	-	-	-	-	-	.		
Upper Kuskokwim	1,984	3,861	3,615	3,494	3,409	2,584	3,244	1,445	2,361	1,005	790	2,128	2,700
Kuskokwim River*	67,737	96,788	85,863	90,812	94,898	88,912	79,896	67,286	62,366	22,544	47,113	64,201	75,710

Note: Dashes indicate harvest was not estimated, Bold indicates Bayesian estimates.

* Kuskokwim River Total includes the Lower, Middle, Upper Kuskokwim areas and North Kuskokwim Bay.



Chinook salmon use by community, Kuskokwim River (Avg 2003–2011)

Table 4 .−Estimated number of chum salmon harvested in the Kuskokwim area, 2003 to 2013

Community	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average 2008-2012	Average 2003-2012
Kongiganak	897	2,958	1,960	2,420	***2,353***	1,755	1,420	2,522	2,809	***1,638***	***1,397***	2,029	2,073
North Kuskokwim Bay	897	2,958	1,960	2,420	2,353	1,755	1,420	2,522	2,809	1,638	1,397	2,029	2,073
Tuntutuliak	1,288	2,546	3,568	4,024	3,350	***3,375***	3,330	2,439	1,865	2,614	2,180	2,725	2,840
Eek	578	688	**877**	***1,075***	***783***	***788***	782	721	486	1,552	1,232	866	833
Kasigluk	***3,581***	5,064	***4,194***	***5,461***	***4,309***	***1,502***	1,857	2,338	2,029	3,261	2,197	2,197	3,360
Nunapitchuk	2,865	5,053	4,167	5,150	**6,619**	***4,705***	3,468	3,223	4,257	5,312	2,977	4,193	4,482
Atmautluak	849	2,271	1,940	***2,337***	2,193	*2,177*	1,665	1,386	1,864	2,701	2,409	1,959	1,938
Napakiak	1,560	2,328	3,238	8,143	3,628	1,313	1,638	1,759	1,546	1,711	1,185	1,593	2,686
Napaskiak	2,061	2,705	2,205	4,323	3,032	2,400	1,451	3,110	1,783	3,216	2,589	2,392	2,629
Oscarville	804	828	686	1,151	932	847	534	352	402	599	490	547	714
Bethel	11,452	13,448	14,273	20,953	16,540	15,853	10,055	9,575	15,324	26,872	12,506	15,536	15,435
Kwethluk	2,294	4,288	4,328	6,328	6,291	5,729	4,111	3,112	3,484	3,849	3,825	4,057	4,381
Akiachak	2,650	3,880	2,428	4,333	4,782	6,856	2,872	2,856	3,205	4,150	3,417	3,988	3,801
Akiak	2,928	3,499	3,528	3,095	4,141	3,522	1,350	1,163	2,421	***2,925***	2,212	2,276	2,857
Tuluksak	894	2,433	2,183	3,094	***3,202***	2,920	1,570	3,180	2,697	2,585	3,062	2,590	2,476
Lower Kuskokwim	33,804	49,031	47,615	69,466	59,803	51,988	34,683	35,214	41,363	61,347	40,281	44,919	48,431
Lower Kalskag	1,087	1,316	997	4,703	1,997	1,004	930	691	1,643	3,284	1,214	1,510	1,765
Upper Kalskag	516	1,656	1,201	2,469	294	2,432	329	391	1,599	1,930	1,534	1,336	1,282
Aniak	820	2,535	2,952	3,722	4,108	2,830	2,602	2,515	2,391	5,667	2,880	3,201	3,014
Chuathbaluk	2,502	2,352	530	1,451	***1,541***	593	937	535	686	796	935	709	1,192
Middle Kuskokwim River	4,925	7,859	5,680	12,345	7,940	6,859	4,798	4,132	6,319	11,677	6,563	6,757	7,253
Crooked Creek	750	1,583	1,064	1,513	***813***	352	519	539	862	610	***1,803***	576	861
Red Devil	63	135	214	41	186	188	244	122	434	516	981	301	214
Sleetmute	468	1,054	422	1,475	818	373	367	524	689	1,004	542	591	719
Stony River	361	754	***324***	***790***	***540***	1,247	771	338	516	***491***	***27***	673	613
Lime Village	110	199	***573***	***316***	***419***	***297***	***405***	***314***	***499***	419	909	387	355
McGrath	513	290	***470***	999	464	676	825	944	476	885	598	761	654
Takotna	***0***	0	*4*	0	***0***	***0***	***0***	***0***	0	***0***	***12***	0	0
Nikolai	191	277	230	308	223	54	292	440	349	1,044	513	436	341
Telida	-	-	-	-	-	-	-	-	-	.	–		
Upper Kuskokwim River	2,456	4,292	3,301	5,442	3,464	3,187	3,423	3,221	3,825	4,970	5,386	3,725	3,758
Kuskokwim River*	42,082	64,140	58,555	89,674	73,560	63,789	44,324	45,089	54,316	79,631	53,627	57,430	61,516

Note: Dashes indicate harvest was not estimated, Bold indicates Bayesian estimates.

* Kuskokwim River Total includes the Lower, Middle, Upper Kuskokwim areas and North Kuskokwim Bay.

Table 5.−Estimated number of sockeye salmon harvested in the Kuskokwim area, 2003 to 2013.

Community	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average 2008-2012	Average 2003-2012
Kongiganak	929	1,809	1,103	1,464	***960***	1,502	1,018	1,869	1,266	***1,307***	***1,031***	1,392	1,323
North Kuskokwim Bay	929	1,809	1,103	1,464	960	1,502	1,018	1,869	1,266	1,307	1,031	1,392	1,323
Tuntutuliak	1,148	1,620	2,145	1,834	1,763	***2,120***	932	2,068	1,274	1,516	1,183	1,582	1,642
Eek	586	567	1,033	***684***	***558***	***834***	1,019	1,241	664	1,490	1,319	1,050	868
Kasigluk	***2,429***	1,668	***1,634***	***2,248***	***1,786***	***1,041***	1,215	1,441	1,269	1,451	1,470	1,283	1,618
Nunapitchuk	1,714	1,659	1,821	1,871	2,147	***2,549***	1,538	1,902	2,223	2,396	1,806	2,122	1,982
Atmautluak	679	1,103	1,444	***1,012***	1,041	***1,250***	624	731	827	1,623	1,316	1,011	1,033
Napakiak	1,453	1,351	2,122	1,845	1,962	1,244	917	1,183	1,351	1,141	1,105	1,167	1,457
Napaskiak	1,643	1,148	1,344	1,784	1,738	2,620	1,579	1,979	1,587	2,065	2,069	1,966	1,749
Oscarville	806	436	278	778	712	677	332	250	228	323	347	362	482
Bethel	12,198	11,679	14,297	12,816	13,902	15,247	11,272	11,103	16,946	18,282	12,616	14,570	13,774
Kwethluk	1,903	3,302	2,457	2,770	3,536	4,920	2,432	2,534	2,357	2,884	2,705	3,025	2,910
Akiachak	1,607	3,109	2,372	2,661	3,269	4,354	2,407	2,433	2,647	3,443	2,594	3,057	2,830
Akiak	995	1,258	1,920	2,000	3,695	2,881	1,290	1,161	2,576	***1,818***	1,731	1,945	1,959
Tuluksak	875	1,670	987	2,247	***1,845***	2,133	1,691	2,483	1,699	1,380	1,541	1,877	1,701
Lower Kuskokwim	28,036	30,570	33,854	34,550	37,955	41,869	27,248	30,509	35,648	39,812	31,802	35,017	34,005
Lower Kalskag	515	775	439	1,434	780	1,583	1,044	507	802	891	977	965	877
Upper Kalskag	431	686	945	563	417	1,000	369	460	938	770	662	707	658
Aniak	756	996	1,015	692	1,261	1,585	923	1,165	1,168	1,375	1,466	1,243	1,094
Chuathbaluk	274	526	369	508	***484***	363	564	403	300	297	480	385	409
Middle Kuskokwim	1,976	2,983	2,768	3,197	2,942	4,531	2,900	2,535	3,208	3,333	3,585	3,301	3,037
Crooked Creek	571	732	693	544	***523***	220	329	302	243	234	***514***	266	439
Red Devil	309	88	272	510	318	359	477	475	502	511	270	465	382
Sleetmute	504	980	673	1,181	1,303	1,164	684	1,024	693	715	362	856	892
Stony River	158	896	***688***	***746***	***1,019***	1,476	977	372	303	***469***	447	719	710
Lime Village	374	874	***1,368***	***1,216***	***1,406***	***659***	***1,080***	***932***	***739***	780	***831***	838	943
McGrath	112	194	***454***	149	375	417	965	650	630	233	538	579	418
Takotna	***1***	0	***1***	0	***1***	***3***	***3***	***2***	0	***2***	***2***	2	1
Nikolai	2	1	10	20	14	13	66	65	13	0	0	31	20
Telida	-	-	-	-	-	-	-	-	-	.	–		
Upper Kuskokwim	2,031	3,765	4,160	4,365	4,960	4,310	4,581	3,822	3,123	2,945	2,964	3,756	3,806
Kuskokwim River*	32,973	39,127	41,885	43,577	46,817	52,213	35,747	38,735	43,245	47,396	39,382	43,467	42,171

Note: Dashes indicate harvest was not estimated, Bold indicates Bayesian estimates.

***** Kuskokwim River Total includes the Lower, Middle, Upper Kuskokwim areas and North Kuskokwim Bay.

Table 6.−Estimated number of coho salmon harvested in the Kuskokwim area, 2003 to 2013

Community	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average 2008-2012	Average 2003-2012
Kongiganak	236	937	740	657	883	***557***	561	483	613	***356***	***412***	619	630
North Kuskokwim Bay	236	937	740	657	883	557	561	483	613	356	412	619	630
Tuntutuliak	2,092	1,189	1,074	948	703	1,620	***359***	698	250	565	450	726	993
Eek	747	1,018	378	773	***459***	***661***	***176***	315	280	612	483	378	534
Kasigluk	***1,762***	***5,034***	1,304	***3,070***	***1,753***	***867***	***629***	1,043	430	303	418	944	1,766
Nunapitchuk	627	555	807	692	1,752	508	***286***	195	407	319	226	630	648
Atmautluak	283	744	530	254	***424***	262	***67***	36	263	383	203	210	318
Napakiak	992	1,648	742	2,363	1,244	1,006	420	877	927	402	634	895	1,135
Napaskiak	983	655	602	1,640	639	903	786	1,029	471	269	772	766	856
Oscarville	19	304	60	175	180	62	67	12	43	38	37	73	102
Bethel	15,062	17,040	12,994	18,810	12,972	15,839	12,895	20,426	18,141	13,280	12,662	16,055	16,020
Kwethluk	1,787	3,430	3,048	1,245	1,624	7,262	4,333	1,495	1,097	1,013	1,555	3,162	2,813
Akiachak	1,627	2,397	1,817	1,714	2,355	4,311	1,790	1,181	1,440	714	1,106	2,215	2,070
Akiak	1,094	1,342	1,847	379	1,325	1,358	661	475	505	***455***	454	865	998
Tuluksak	921	1,007	484	498	1,131	***635***	857	330	163	341	473	623	670
Lower Kuskokwim River	27,996	36,363	25,687	32,561	26,561	35,293	23,326	28,112	24,417	18,694	19,473	27,542	28,924
Lower Kalskag	314	368	319	1,415	515	76	318	96	684	1,107	529	338	456
Upper Kalskag	462	1,500	594	1,799	381	2,350	181	92	998	360	636	800	929
Aniak	1,164	2,355	2,032	1,018	3,003	2,883	2,223	2,533	2,215	3,365	3,102	2,571	2,158
Chuathbaluk	259	284	346	727	419	***525***	96	76	109	179	319	245	316
Middle Kuskokwim River	2,199	4,507	3,291	4,959	4,318	5,834	2,818	2,797	4,006	5,011	4,586	3,955	3,859
Crooked Creek	375	713	312	401	289	***952***	283	87	297	149	***255***	382	412
Red Devil	351	65	331	171	193	307	126	88	130	238	318	169	196
Sleetmute	731	505	581	671	360	228	403	458	426	784	219	375	485
Stony River	214	679	468	***322***	***336***	***552***	634	201	333	***358***	120	411	415
Lime Village	***46***	231	372	***132***	***443***	***695***	***210***	***146***	***596***	117	***384***	418	319
McGrath	997	1,228	799	***894***	279	247	1,175	1,053	1,331	2,257	523	817	889
Takotna	6	***51***	8	***0***	8	***6***	***28***	***20***	3	***22***	***0***	13	14
Nikolai	379	171	166	407	95	53	203	135	20	214	119	101	181
Telida	-	-	-	-	-	-	-	-	-	.	–		
Upper Kuskokwim River	3,099	3,643	3,037	2,998	2,005	3,040	3,062	2,188	3,136	4,139	1,938	2,686	2,912
Kuskokwim River*	33,531	45,450	32,755	41,175	33,766	44,724	29,767	33,580	32,172	28,200	26,409	34,802	36,324

-: Harvest was not estimated

Bold Italic : Bayesian Imputed estimates

* Kuskokwim River Total includes the Lower, Middle, Upper Kuskokwim areas and North Kuskokwim Bay.

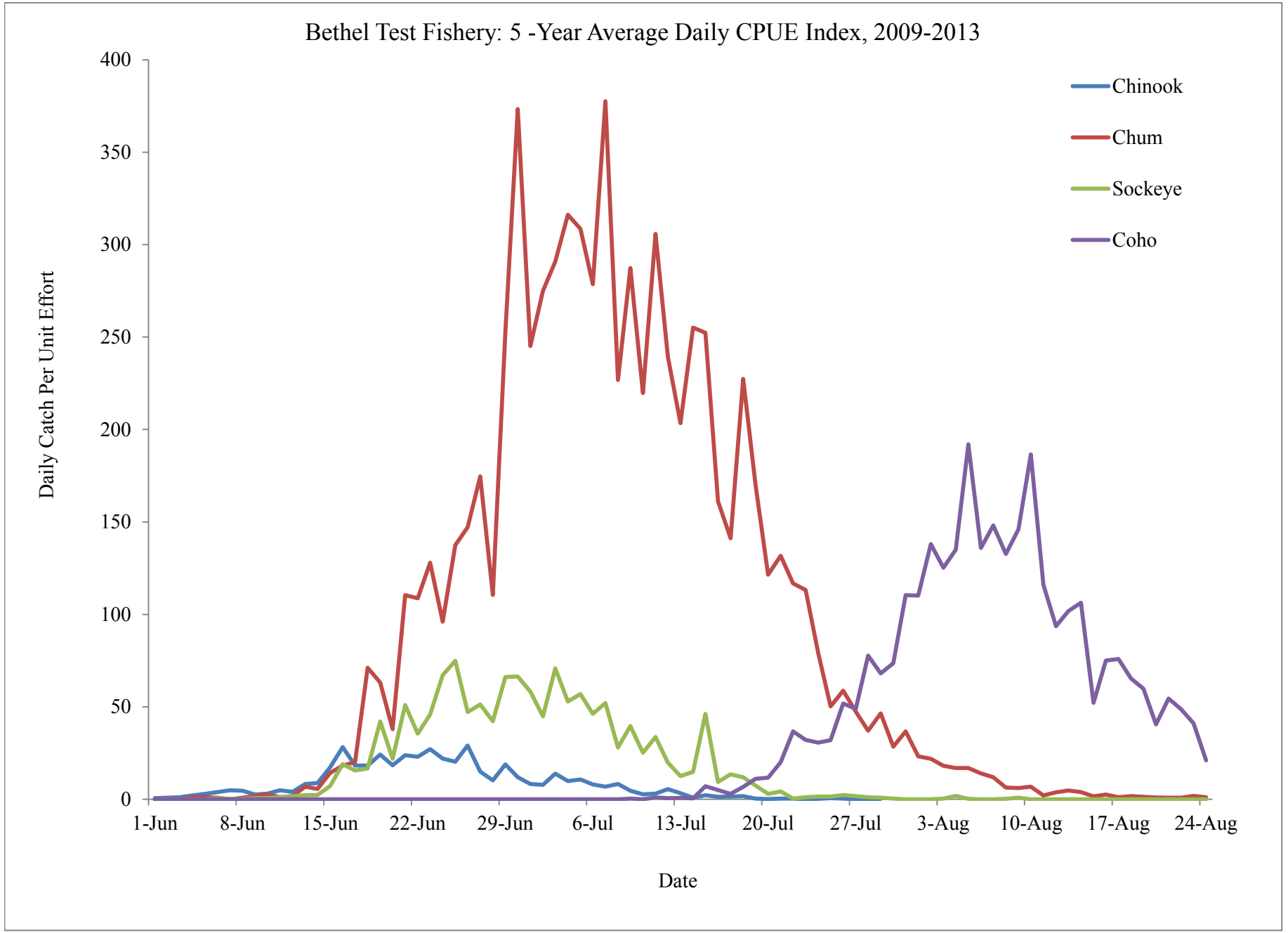

Bethel Test Fishery: 5 -Year Average Daily CPUE Index, 2009-2013
Daily Catch Per Unit Effort
400
350
300
250
200
150
100
50
0
1-Jun
8-Jun
15-Jun
22-Jun
29-Jun
6-Jul
13-Jul
20-Jul
27-Jul
3-Aug
10-Aug
17-Aug
24-Aug
Date
Chinook
Chum
Sockeye
Coho

Table 7.– Estimated number of households that subsistence fished in communities surveyed, Kuskokwim Area, 2007-2014.

Community	2008	2009	2010	2011	2012	2013	2014*	Average 2008-2011
Kongiganak	65	57	62	69	–	–	–	63
N. Kuskokwim Bay	65	57	62	69	–	–	–	63
Tuntutuliak	–	66	72	73	75	74	–	70
Eek	–	52	66	58	68	73	55	59
Kasigluk	65	62	74	86	68	86	83	72
Nunapitchuk	–	73	83	92	87	87	97	83
Atmautluak	–	41	42	36	38	46	43	40
Napakiak	52	67	60	74	62	68	47	63
Napaskiak	59	79	77	66	71	80	80	70
Oscarville	17	15	13	11	10	10	13	14
Bethel	886	941	1,353	1,175	824	968	832	1,089
Kwethluk	121	119	102	108	96	123	120	113
Akiachak	120	110	114	108	113	127	107	113
Akiak	61	55	66	58	79	64	59	60
Tuluksak	75	60	62	56	67	70	68	63
Lower Kuskokwim	1,454	1,739	2,183	2,000	1,659	1,876	1,614	1,844
Lower Kalskag	53	43	36	54	57	45	49	47
Upper Kalskag	36	45	41	51	37	48	39	43
Aniak	132	119	98	107	107	117	100	114
Chuathbaluk	23	24	19	16	21	24	21	21
Middle Kuskokwim	245	231	195	227	223	234	208	225
Crooked Creek	25	20	15	24	21	–	18	21
Red Devil	13	9	8	9	7	9	9	10
Sleetmute	22	25	22	22	18	19	23	23
Stony River	11	13	12	9	–	7	6	11
Lime Village	–	–	–	–	8	–	–	–
McGrath	43	46	23	36	41	34	40	37
Takotna	–	–	–	8	–	–	0	8
Nikolai	16	22	19	18	22	17	18	19
Telida	–	–	–	–	–	–	–	–
Upper Kuskokwim	129	133	99	125	117	86	115	122
Kuskokwim River	1,893	2,160	2,538	2,421	1,998	2,197	1,937	2,253

* Preliminary and subject to change.

– indicates no data

Table 8.– Chinook salmon travel speed (mile/day) based on radio telemetry data

Section	Distance (mile)		Year 2002	2003	2004	2005	2006	2007	2014	Avg.
S1 - S2	48	*n*							68	
		Time (days)							6.4	
		Speed (mi/day)							7.5	
S2 - S3	72	*n*							40	
		Time (days)							4.7	
		Speed (mi/day)							15.5	
S3 - S4	81	*n*	226	438	282	342	113	316	265	1,982
		Time (days)	3.6	4.0	4.5	2.9	2.7	5.1	4.3	4.0
		Speed (mi/day)	22	20	18	28	30	16	19	20
S4 - S5	104	*n*	76	322	165	273	92	219	234	1,381
		Time (days)	3.6	4.3	4.0	4.2	4.0	3.8	3.6	4.0
		Speed (mi/day)	29	24	26	25	26	28	29	26
S5 - Headwaters	163	*n*	9	37	6	19	22	18	63	174
		Time (days)	8.7	8.3	8.9	7.6	7.9	11.2	8.6	8.6
		Speed (mi/day)	19	20	18	21	21	15	19	19

Section Key:

S1	Apokak Slough
S2	Johnson River
S3	Tuluksak River
S4	Chuathbaluk
S5	Holitna River
Headwaters	McGrath

Table 9.–Sport fishing harvest and catch of king salmon in the Aniak, Kisaralik, Kwethluk, and other Kuskokwim rivers, 2003–2013.

	Aniak River		Kisaralik River		Kwethluk River		Holitna River		Kuskokwim River Total	
Year	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch
2003	12	874	75	552	103	861	48	272	401	5,020
2004	335	1,103	58	1,774	150	778	136	619	857	5,133
2005	189	594	40	907	65	385	180	470	572	2,652
2006	29	1,201	86	359	183	493	16	173	444	3,480
2007	162	5,380	446	1,096	93	733	86	171	1,683	11,224
2008	26	3,614	148	1,583	149	845	122	928	739	7,382
2009	10	796	51	287	42	499	0	676	917	3,586
2010	0	1,902	0	717	136	584	39	130	354	3,564
2011	51	1,069	17	864	0	0	318	1,641	757	4,249
2012	0	135	0	97	0	86	0	0	0	415
2013	0	328	0	0	0	211	0	0	0	662
Average 2003–2012	81	1,667	92	824	92	526	95	508	672	4,671
Average 2008–2012	17	1,503	43	710	65	403	96	675	553	3,839

Source: Sport Fish Statewide Harvest Survey

Table 10.–Kuskokwim River drainage guided angler king salmon harvest and king salmon released, 2006-2013.

	Aniak River		Kuskokwim River drainages below Aniak River[a]		Other streams above Aniak River[b]		Total Kuskokwim River drainage	
Year	Harvest	Release	Harvest	Release	Harvest	Release	Harvest	Release
2006	ND	ND	5	824	135	449	140	1,273
2007	14	1,600	0	316	61	577	75	2,493
2008	31	957	0	149	184	429	215	1,535
2009	25	492	0	10	16	447	41	949
2010	10	443	6	39	76	219	92	701
2011	12	500	2	35	154	221	168	756
2012	5	39	0	2	0	135	5	176
2013	0	12	0	5	31	30	31	47
Average 2008-2013	17	486	2	47	86	290	105	823

Source: Sport Fish Guide Logbook Database

[a] Data for 2006 includes Aniak River.

[b] Includes Holitna River data.

Steps to Follow in Preparing Background Information and Options for Board of Fisheries and Board of Game "Amount Reasonably Necessary for Subsistence" (ANS) Findings (Implementing AS 16.05.258(b))

Division of Subsistence
Alaska Department of Fish and Game
September 2009

Please note: These steps are a synopsis of a more detailed set of ANS development guidelines prepared by the Division of Subsistence, ADF&G, as part of its "Subsistence Research Handbook." Consult the guidelines in the Handbook for more detail and for examples of ANS worksheets and recommendations. For more information, contact James Fall @ jim.fall@alaska.gov.

Preliminary Considerations

- A positive "customary and traditional use" (c&t) determination for the game population or fish stock must be in place before the boards proceed with an ANS finding (AS 16.05.258 (a) & (b)).

- An ANS determination is only made for stocks and populations for which a harvestable surplus exists.

- Be clear about data sources and data limitations.

- Note that two or more options can be established at each step. Spell out the differences between options.

- In all cases, final ANS determinations are made by the Board of Fisheries and the Board of Game. The boards may consider information in addition to that provided by the department in establishing the ANS ranges. The goal of the department is to provide a good administrative record of harvests and other considerations as background for ANS options.

1. Define the fish stock or game population.

- This should be done in consultation with the Division of Wildlife Conservation for game and the Divisions of Commercial Fisheries and Sport Fish for fish.
- Stocks and populations "are manageable as a unit" and have a uniform regulatory structure.

2. Compile harvest data

Organize a table with harvest data.

If a reliable time series is available from harvest tickets, permits, or household surveys:

- The table should include all years for which data are available.
- The table should break out harvests into 3 columns: harvests by local residents, harvests by other Alaskans, and total harvests by all Alaskans. Exclude non-resident harvests from the table.
- Identify years for which data limitations exist (that might result from poor sampling, for example); recommend years to exclude from further analysis.
- Identify any other data limitations, such as communities that are systematically missing from the harvest data; develop estimates for missing communities by using values for surrogate communities or by using other data sources (see below).
- Recommend a range of years upon which to base the ANS. This range of years should reflect recent demographic and socioeconomic conditions as well as the current harvestable surplus of the stock or population (or a range of harvestable surpluses).
- Identify years within this time series that are anomalous due to unusual hunt or fishery conditions or other factors and that should not be part of the ANS calculation.
- Include the mean harvest for the recommended time series as the bottom line in the table.

If a reliable time series from harvest tickets, permits, or surveys is not available:

- Develop a table with estimated harvests for the stock or population based on Division of Subsistence household surveys for local communities (or another similar source); use the per capita harvest estimate and multiply by the most recent population estimate for the community to develop a harvest estimate.
- For communities for which household harvest survey data are not available, select a similar community as a surrogate and use that community's per capita value to calculate a harvest estimate. (An alternative is to use the mean for all known communities, if there is no appropriate surrogate community.)
- If more than one survey estimate is available for a community, choose the most recent one or develop an average for the study years.
- The table can also report a low and high estimate for each community based on the 95% confidence interval.
- Add the estimates together; this is the estimate of local harvests.
- For non-local harvests, harvest ticket data will need to suffice, because household survey data will not be available.

➢ If no reliable harvest data are available, the department should recommend that an ANS determination be postponed until a harvest data series is established; 3 to 5 years of data is the minimum needed to begin to understand patterns and trends.

➢ The board chooses the harvest data set to use, i.e. whether it uses harvests by all Alaskans, local residents, and some non-local residents, or just local residents.

3. Prepare options for ANS range

A. Options, if a time series is available, include:

1. Calculate the mean for the time series; bracket the mean by a fixed percentage (25% has been used frequently) to determine the ANS range; or,
2. Use the low estimate and the high estimate within the range as the bounds; or,
3. Use the low estimate and the mean as the bounds.

B. Options, if ANS to be based on household harvest surveys and limited study years:

1. Add estimated harvests for each local community; bracket the estimate by a fixed percentage (25% has been used frequently) to determine the ANS range; or,
2. Add the low and high estimates for each community (based on the 95% CI) and use these sums as the bounds for the ANS; also,
3. Provide an estimate of non-local harvests (based on harvest ticket or permit time series) and add it to the local harvest estimate

➢ Two or more methods can be used to present options.

➢ **<u>Step to take following the board action:</u>**

4. Write a short synopsis of board actions.

Include:

- Date
- Final action
- Differences from staff options if any
- Reasons for modifications
- Any other major discussion points

State of Alaska
Department of Fish and Game
Division of Subsistence

State of Alaska Subsistence Priority Overview

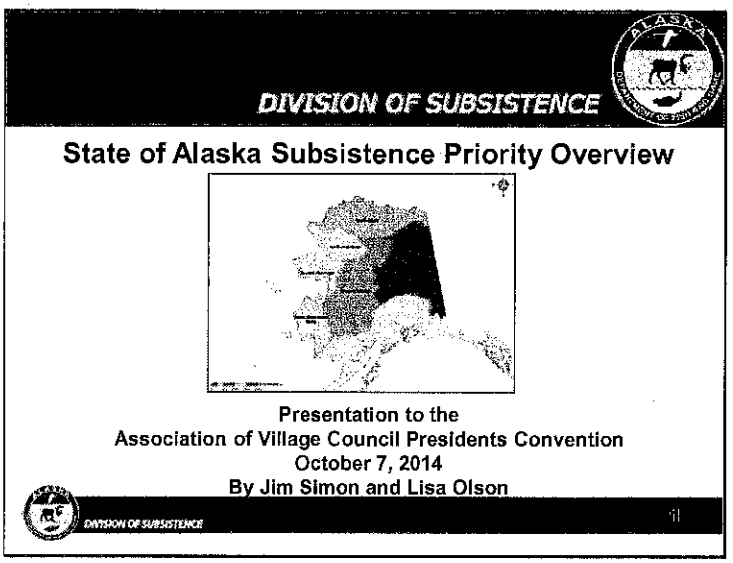
Presentation to the

Association of Village Council Presidents Convention

October 7, 2014

Slides and script

Slide 1

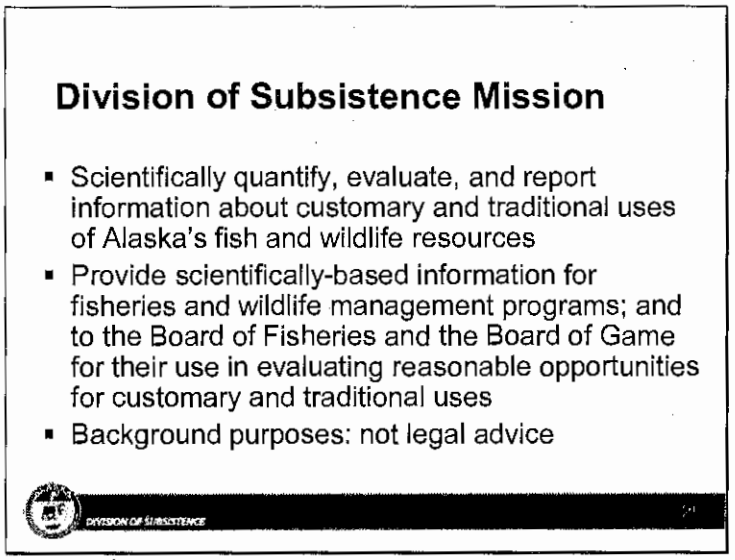


My name is Jim Simon. I have lived in Fairbanks for the past 25 years, but spent part of my childhood in Nelchina, Eagle River, and Anchorage. I have worked for the ADF&G Division of Subsistence since November 2002. Prior to coming to the Subsistence Division I worked as an anthropologist and archaeologist for a variety of companies and organizations, including the University of Alaska Fairbanks, Tanana Chiefs Conference, the National Park Service, Kodiak Area Native Association, Bering Straits Foundation, Ukpeagvik Inupiat Corporation, and North Land Use Research.

And I'm Lisa Olson, the deputy director for the Division of Subsistence. I was born and raised in Anchorage and have been with the Department of Fish and Game since 1998.

In this presentation, Jim and I will review the State of Alaska subsistence priority statute with a particular focus on Kuskokwim River king salmon.

Slide 2

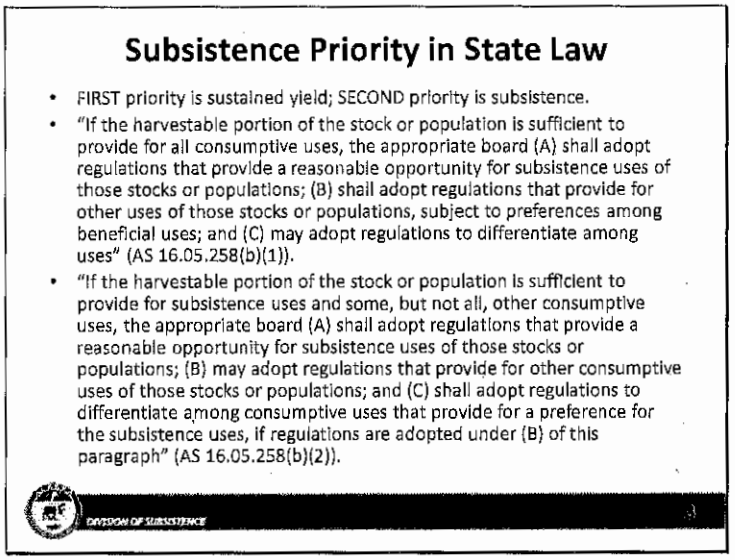


The mission of the Subsistence Division is to scientifically quantify, evaluate, and report information about customary and traditional uses of Alaska's fish and wildlife resources.

We furnish this information to meet resource management goals, aid in regulation development, facilitate collaborative agreements, aid in assessing environmental impacts, and to describe the unique role of wild resources in the lives, communities, and cultures of Alaskans as specified in Alaska statute. We conduct research on subsistence harvest and use of both fish and wildlife, including wild resources not managed by either the State of Alaska or the Federal Subsistence Board, such as migratory birds, marine mammals, and subsistence halibut.

This presentation is intended to provide an overview of Alaska's subsistence system for background purposes. The Division of Subsistence does not give legal advice and is not authorized to advise on the legality of particular situations or actions.

Slide 3



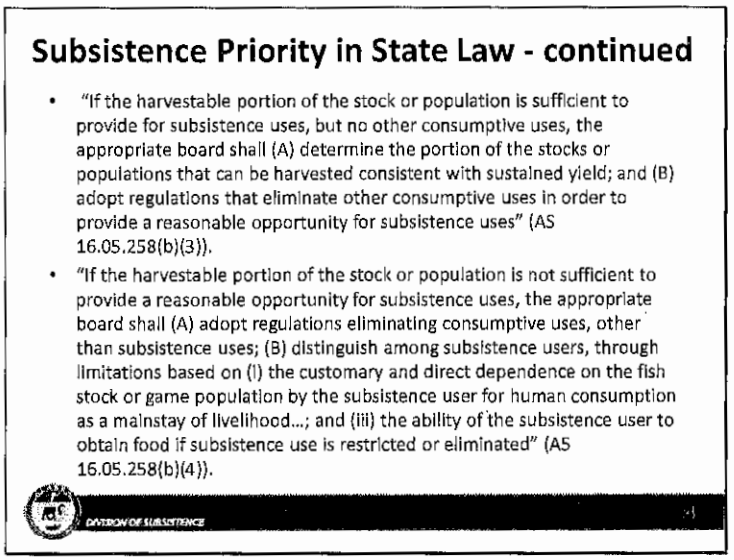
The Alaska Department of Fish and Game is charged with managing fish stocks and wildlife populations consistent with the principles of sustained yield; therefore, conservation for sustained yield is the first priority. Then, Alaska state law directs the Board of Game and Board of Fisheries to provide a REASONABLE OPPORTUNITY for subsistence uses first, before providing for other uses of any harvestable surplus of a fish or game population. Before we discuss what "reasonable opportunity" means in later slides, we will review the different directions the Alaska legislature gave to the Alaska Board of Fisheries and Alaska Board of Game in implementing the subsistence law.

Here is the text of the state subsistence law: "If the harvestable portion of the stock or population is sufficient to provide for ALL consumptive uses, the appropriate board (A) SHALL adopt regulations that provide a reasonable opportunity for subsistence uses of those stocks or populations; (B) SHALL adopt regulations that provide for other uses of those stocks or populations, subject to preferences among beneficial uses; and (C) MAY adopt regulations to differentiate among uses" (AS 16.05.258(b)(1)).

"If the harvestable portion of the stock or population is sufficient to provide for subsistence uses and SOME, BUT NOT ALL other consumptive uses, the appropriate board (A) SHALL adopt regulations that provide a reasonable opportunity for subsistence uses of those stocks or populations; (B) MAY adopt regulations that provide for other consumptive uses of those stocks or populations; and (C) SHALL adopt regulations to differentiate among consumptive uses that

provide for a preference for the subsistence uses, if regulations are adopted under (B) of this paragraph." (AS 16.05.258(b)(2)).

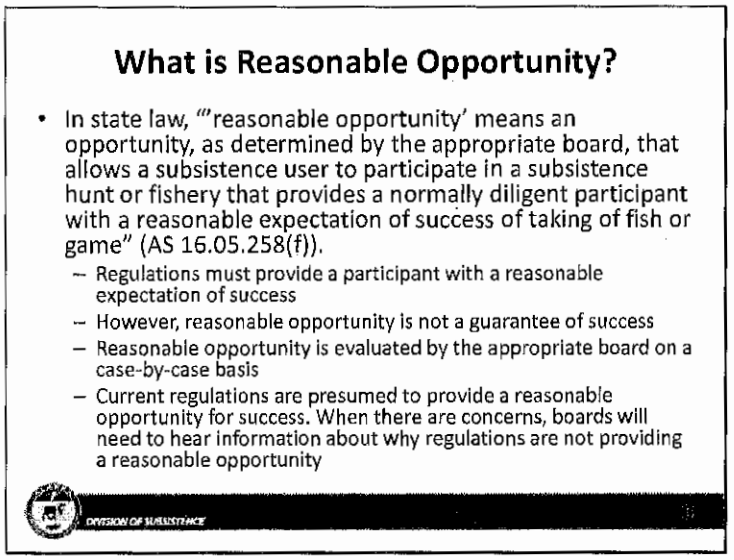
Slide 4



Continuing to quote directly from the subsistence law: "If the harvestable portion of the stock or population is sufficient to provide for subsistence uses, BUT NO OTHER CONSUMPTIVE USES, the appropriate board SHALL (A) determine the portion of the stocks or populations that can be harvested consistent with sustained yield; and (B) adopt regulations that eliminate other consumptive uses in order to provide a reasonable opportunity for subsistence uses" (AS 16.05.258(b)(3)).

Finally, "if the harvestable portion of the stock or population is NOT SUFFICIENT TO PROVIDE A REASONABLE OPPORTUNITY FOR SUBSISTENCE USES, the appropriate board SHALL (A) adopt regulations eliminating consumptive uses, other than subsistence uses; (B) distinguish among subsistence users, through limitations based on (i) the customary and direct dependence on the fish stock or game population by the subsistence user for human consumption as a mainstay of livelihood...; and (iii) the ability of the subsistence user to obtain food if subsistence use is restricted or eliminated" (AS 16.05.258(b)(4)).

Slide 5

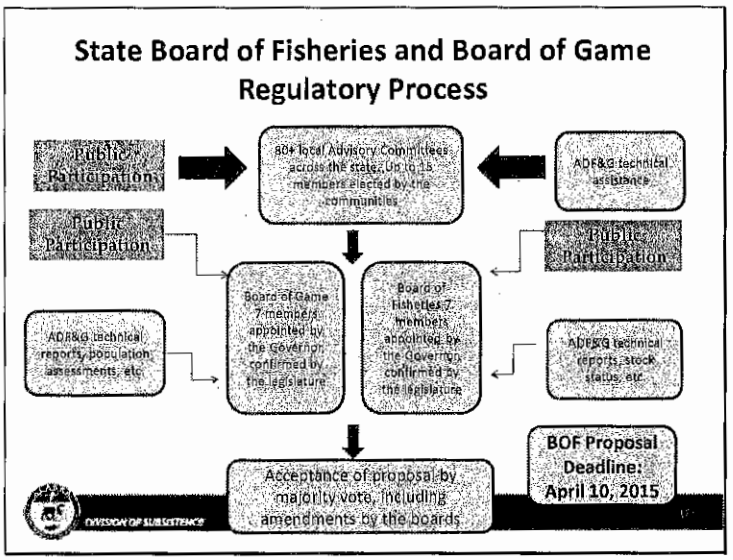


Here is the definition of reasonable opportunity in Alaska's subsistence law. Note that it is the Board of Fisheries' or Board of Game's job to determine what reasonable opportunity is. Another thing to note is that the regulations must provide a participant with a reasonable expectation of SUCCESS in taking the fish or game, not just any opportunity to fish or hunt.

It is also important to keep in mind throughout this presentation that reasonable opportunity is not a guarantee of success and that reasonable opportunity is evaluated by the appropriate board on a case-by-case basis.

Current regulations are presumed to provide a reasonable opportunity for success. When there are concerns, the boards will need to hear information about why the regulations are not providing a reasonable opportunity.

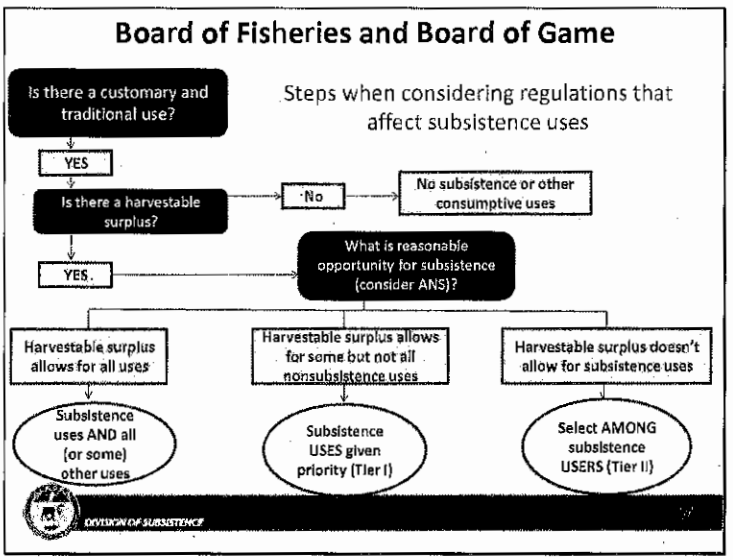
Slide 6



This slide shows an overview of the process by which the state Board of Game and state Board of Fisheries adopt regulations, and this is where you all come in. The public has several avenues for addressing subsistence issues and participating in the regulatory process as outlined here. You can attend advisory committee meetings, attend board meetings, send in written comments, provide public testimony, and send in proposals, petitions, and agenda change requests.

The proposal submission deadline for the next regularly scheduled 2016 Arctic-Yukon-Kuskokwim Board of Fisheries meeting is April 10, 2015. We have observed that boards tend to highly value the information provided to them from working groups such as the Kuskokwim River Salmon Management Working Group.

Slide 7



This is a flow chart illustrating the steps the Board of Fisheries and Board of Game take when considering proposals to regulate hunting and fishing. First step is whether there is a customary and traditional use determination on a particular stock or population. On the Kuskokwim River, the Board of Fisheries determined years ago that Chinook salmon, or king salmon, are associated with customary and traditional uses. As a result, the subsistence law applies.

Next, the boards consider, based on information provided by the department, whether there is a harvestable surplus. Unlike wildlife populations that can generally be counted across a landscape, salmon enter the river in pulses and continue migrating upriver; it is not clear how many fish will actually return until they have actually all returned, at which time, most are already through the lower reaches of the Kuskokwim River.

According to the subsistence law, if the harvestable surplus allows for all uses, then commercial and/or sport opportunities may be provided. If the harvestable surplus consistently allows for some but not all non-subsistence uses, the board may wish to adopt a Tier I program where harvests are restricted to Alaska residents. By the way, state law also states that the boards shall adopt subsistence permits when harvests by non-subsistence users are reduced (AS 16.05.330(c)), and we will talk more about this later.

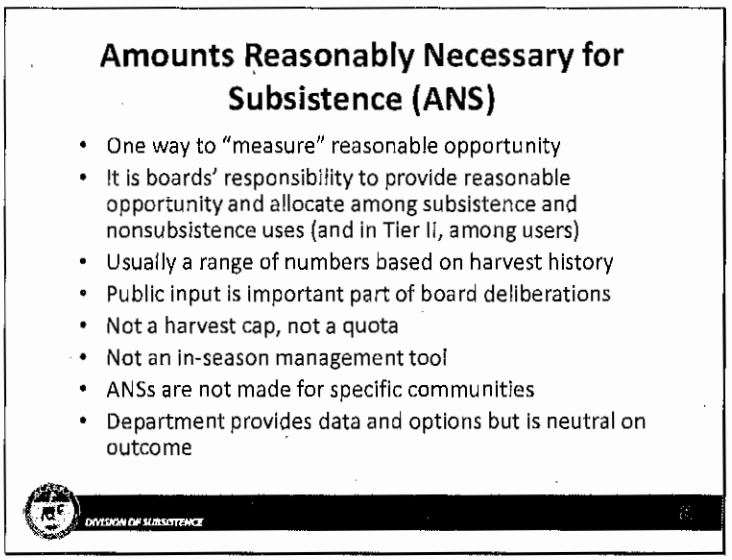
If the harvestable surplus is so low that it cannot provide for subsistence uses, and other management strategies aren't providing a reasonable opportunity, then the law directs the

boards to adopt a Tier II program. A Tier II program is the only way that the board can distinguish among Alaskan subsistence USERS.

There has only been one Tier II subsistence fishery in the state's history, for Nome Subdistrict chum salmon; we'll talk about this more later.

The bottom of this slide shows that there are actually three general frameworks for providing reasonable opportunity for subsistence uses. From left to right, they are "wide open" (no restrictions other than board allocations), Tier I (Alaska residents only – and remember we are talking about ALL Alaska residents), or Tier II (just SOME Alaska residents can fish and hunt). How does a board evaluate whether reasonable opportunity is being provided?

Slide 8

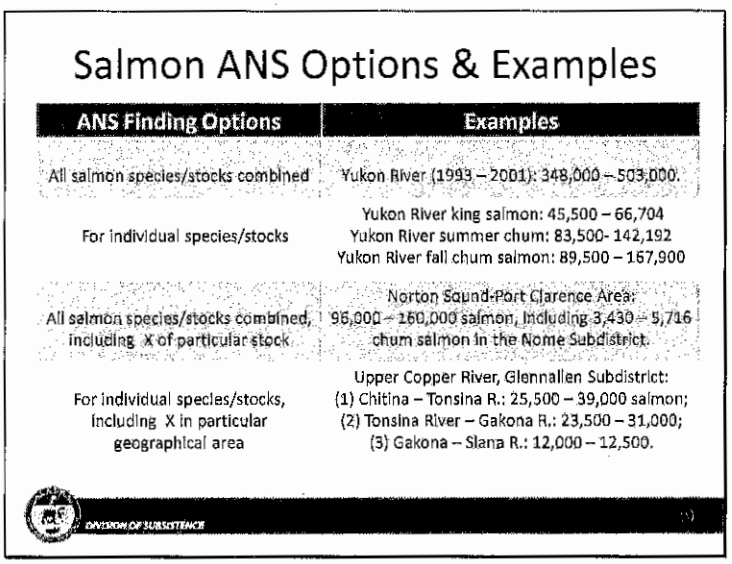


The amount reasonably necessary for subsistence, or ANS, is one way to measure if reasonable opportunity for subsistence uses is being provided. ANS findings also assist the boards in allocating among subsistence and nonsubsistence uses.

Once the Board of Fisheries or Board of Game has determined that there are customary and traditional uses of a fish stock or game population, they set the ANS by considering information about the subsistence use pattern. ANS amounts are usually adopted as a range of numbers and should be based upon historical harvest levels and the number of Alaskans engaged in the subsistence opportunity. Public input is also an important part of board deliberations and adoption of subsistence regulations, including ANS.

ANS findings are not a harvest cap or quota. Also, ANS amounts are not used as an in-season management tool. ANS findings cannot be made for specific communities. ADF&G provides data and helps the boards by providing options for ANS amounts, but the department is neutral on the outcome of the boards' deliberations.

Slide 9



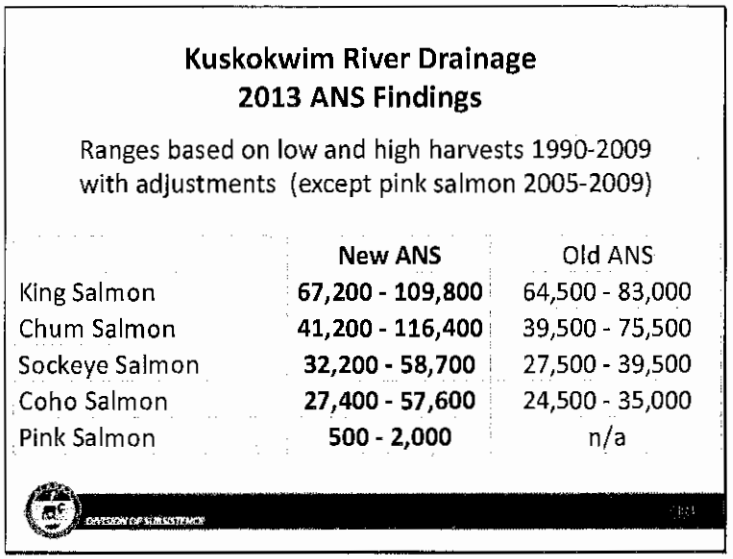
The Alaska Board of Fisheries has established subsistence salmon ANS findings in a variety of ways across the state of Alaska. In many cases, the board determined that there was a customary and traditional use of all salmon species in a particular area and determined ANS based on customary and traditional harvest history of salmon in general. For the first example at the top of this slide, the board determined that there were customary and traditional uses of Yukon River salmon in 1987, and in 1993 established an ANS of 348,000 – 503,000 salmon, all species combined.

The second example of ANS options is where the board determined ANS findings for each species in an area, like the Yukon and Kuskokwim rivers, and in some cases established ANS findings even for certain salmon stocks, like the separate ANS findings for Yukon River summer chum salmon and fall chum salmon.

The third example of ANS options adopted by the board includes a number of cases where the board established an ANS for all salmon in an area and further determined that a certain amount of a certain species or stock were also necessary for subsistence; this is an example of a "NESTED" ANS. The closest example geographically of a nested ANS for salmon is in the Norton Sound-Port Clarence Area, where the board determined the ANS to be 96,000 – 160,000 salmon, including 3,430 – 5,716 chum salmon in the Nome Subdistrict.

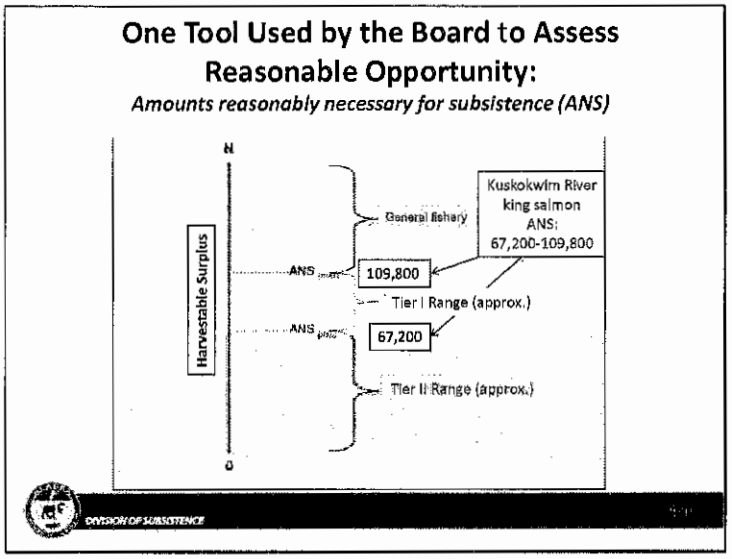
Finally, the board has also established ANS findings for stocks occurring in specific portions of a river system; in this case, different sections of the Copper River.

Slide 10



Here are some specifics for the Kuskokwim River king salmon situation. In 2013, the Board of Fisheries revised the ANS findings for Kuskokwim Area salmon species to reflect a new method of estimating salmon harvests, as shown here. You'll note that the old ANS for Kuskokwim River king salmon was 64,500 - 83,000. The new ANS is 67,200 - 109,800 king salmon, as of 2013. The data used to assist the board in making these ANS findings comes from the household surveys that many of you participate in annually, and thank you for your help.

Slide 11



This is a complicated slide and there is much to say. If a board makes a positive C&T finding, the law says the board should then determine the amount of the harvestable surplus that is reasonably necessary for subsistence, or ANS. The boards evaluate harvest history and other information, such as the number of participants likely to participate in a subsistence fishery to determine ANS findings. Recall earlier that there is a difference between how biologists determine if there is a harvestable surplus of wildlife and how they determine there is one for fish. It is easier to count moose before a hunting season opens than it is to count fish in the ocean, before they have returned to spawn. For most fisheries, fisheries managers do develop a pre-season outlook based on recruitment models that indicate how many salmon will likely return. Essentially, the harvestable surplus is that number minus the number needed for escapement, keeping in mind that, for salmon, the harvestable surplus is often an evolving number as salmon return to the river.

As mentioned earlier, ANS findings are typically adopted as a range. The vertical axis of this chart represents the harvestable surplus of a resource population, let's say Kuskokwim River king salmon. The two dotted lines to the right correspond to the upper and lower bounds of the ANS. Where the harvestable surplus falls in relation to the upper and lower bounds of the ANS helps guide the Board of Fisheries in determining if the regulations provide reasonable opportunity for success.

If the harvestable surplus consistently is greater than the upper range of an ANS finding (the green zone), then the board almost always has authorized nonsubsistence uses in addition to subsistence uses.

If the harvestable surplus consistently falls only within the ANS range (the yellow zone), and reasonable opportunity for subsistence uses can be provided, then the BOARD may need to restrict or eliminate non-subsistence uses, such as commercial fishing or sport fishing.

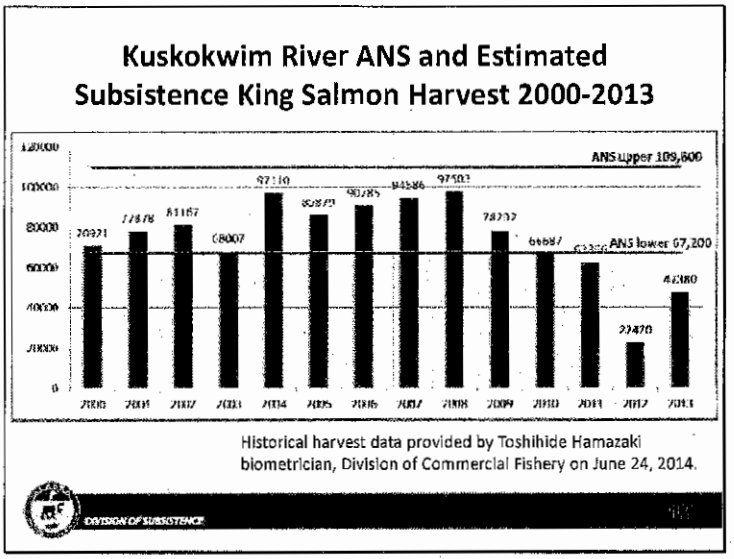
If the harvestable surplus consistently falls below the lower end of the ANS range (the red zone), and THE BOARD determines a reasonable opportunity for subsistence uses CANNOT be provided, then the board may need to distinguish among Alaskans through an application and ranking of scores process known as Tier II. The intent of Tier II management is that those who are most dependent upon the resource get an opportunity to participate in the limited subsistence fishing opportunity.

To illustrate how ANS findings can affect allocation of fishing opportunities, we will look at the Kuskokwim River king salmon ANS, which is 67,200-109,800 fish. If no conservation concerns exist and the harvestable surplus is ABOVE 109,800 king salmon, the Board of Fisheries may provide for subsistence, sport fishing, and commercial fisheries, in other words, ALL USES, the green zone. However, if the harvestable surplus falls BETWEEN the upper and lower ANS findings, the yellow zone, and the board can provide for some, but not all uses, then non-subsistence uses may need to be restricted or eliminated. If nonsubsistence uses are not allowed, the subsistence fishery is referred to as a Tier I fishery, and participation is restricted to Alaska residents only.

If the harvestable surplus consistently falls BELOW the lower ANS range, the red zone, and the board cannot provide for other uses, and even for all Alaskans to participate, then opportunities may need to be restricted among Alaska residents through a Tier II fishery. A Tier II fishery ranks individual applicants based upon customary and direct dependence on the fish stock for human consumption as a mainstay of livelihood, and the ability of the subsistence user to obtain alternative resources if the subsistence use is restricted or eliminated. In other words, in a Tier II situation there is not a sufficient harvestable surplus to provide for subsistence uses.

The department already has emergency order authority to manage subsistence fisheries in the green and yellow zones.

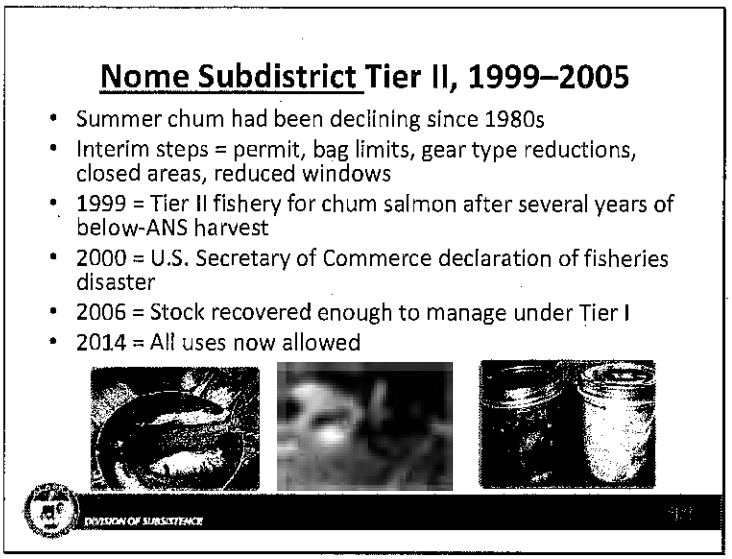
Slide 12



This bar graph depicts the harvest levels of king salmon on the Kuskokwim River drainage since 2000. The red lines indicate the established upper and lower bounds of the ANS range as modified in January 2013. In the 14 years beginning in 2000 through 2013, the king salmon harvest in the Kuskokwim River has fallen below the lower end of the ANS range 4 times.

The ANS range provides one index of the extent to which reasonable opportunity is provided in a subsistence fishery. Harvests consistently below the lower bound of the ANS range (in the red zone) may indicate, along with other evidence such as restricted fishing times, gear restrictions, harvest limit requirements, etc., that there was not a reasonable opportunity for subsistence harvests during the previous season. Again, ANS findings are not intended to be used as an in-season management tool. Harvests consistently lower than the lower bound of the ANS are an indication to the BOF to consider whether more conservative management actions are necessary to provide reasonable subsistence opportunities.

Slide 13



As mentioned, ANS findings have been used by the Board of Fisheries to allocate fishing opportunity. The Nome Tier II chum salmon fishery, which occurred from 1999-2005, is the only Tier II subsistence fishery in the history of the state.

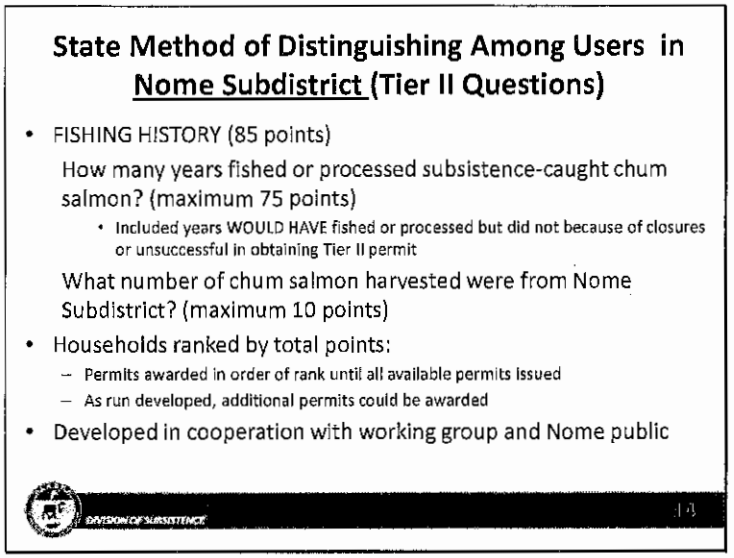
Norton Sound suffered a sustained collapse in salmon populations beginning in the 1980s which affected the lifestyles and culture of most Nome residents. The decline first began affecting the Nome Subdistrict, then moved to the rest of the Seward Peninsula, and by the late 1990s had affected the Bering Sea summer chum stock as a whole.

After reviewing historical harvest data, and after several years of meetings, the board determined that 96,000 – 160,000 salmon were reasonably necessary for subsistence uses in the Norton Sound-Port Clarence Area, including 3,430 – 5,716 CHUM salmon in the Nome Subdistrict of Norton Sound. However, the expected harvestable surplus of chum salmon was only 2,000, and the Board of Fisheries directed the department to manage Nome Subdistrict chum salmon as a Tier II fishery. The board adopted Tier II regulations that went into effect for the 1999 fishing season.

In August 2000 the Secretary of Commerce declared a fisheries disaster in the region.

In 2006, the stock recovered enough so that all interested Alaskans could participate in the subsistence fishery with reasonable opportunity for success, and today, it has recovered enough so that all uses – subsistence, commercial, and sport – of chum salmon can be provided for.

Slide 14



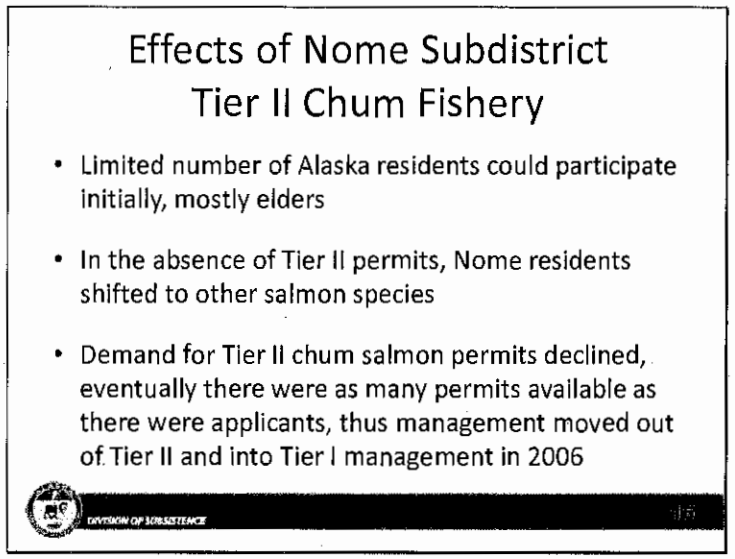
Under Tier II, not everyone who wants to fish is able to do so. The subsistence law directs the board to give a priority to those who have the greatest customary and direct dependence on the fish for food, and the fewest alternative resources to obtain food if subsistence use is restricted or eliminated. Determining who gets to fish cannot be based upon where someone lives under the state subsistence law and Alaska's constitution.

In order to distinguish between subsistence users, the Board of Fisheries -- in cooperation with the Nome Salmon Working Group, ADF&G, and the Nome public -- developed two questions, shown here. The first question asked applicants: "How many years have you fished or processed subsistence-caught chum salmon from the Nome Subdistrict?" Applicants were awarded one point for each year of fishing history, to a maximum of 75 points.

The second question asked applicants: "How much of your chum salmon came from the Nome Subdistrict during the past four years?" The more chum that came from the Nome Subdistrict, the more points were awarded, up to a maximum of 10 points.

People who wanted to fish for subsistence chum salmon in the Nome Subdistrict had to fill out an application each spring, and answer these two questions. Applicants were scored and ranked, and the top 10 or 20 ranking households got permits. Ultimately, only fishers 60 years and older with long-term use patterns were awarded permits.

Slide 15

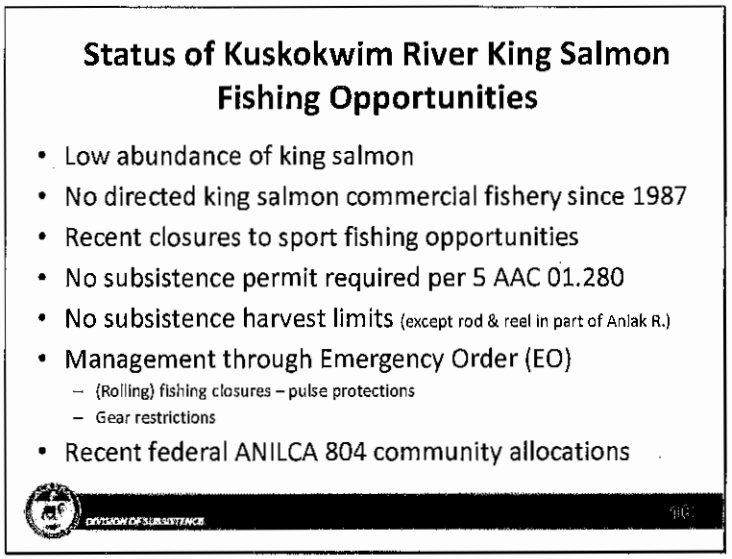


While a detailed investigation of the effects of the Nome Subdistrict Tier II subsistence fishery has not been conducted, certain effects have been documented. Initially, most permits went to elder residents of Nome. In the absence of subsistence chum salmon opportunities in the Nome Subdistrict, other Nome residents shifted their attention to sockeye salmon and other salmon species, in the Port Clarence District and elsewhere.

Ultimately, the demand for Tier II chum salmon permits declined, so that eventually there were as many permits available as there were Tier II applicants. As a result of the decreased number of Tier II chum salmon permit applicants and the increase in chum salmon abundance, Nome Subdistrict chum salmon management shifted from Tier II back to Tier I in 2006.

Subsistence fishing permits are still required and harvest limits are still implemented through the authority of 5 AAC 01.015(b)(1) & (4).

Slide 16

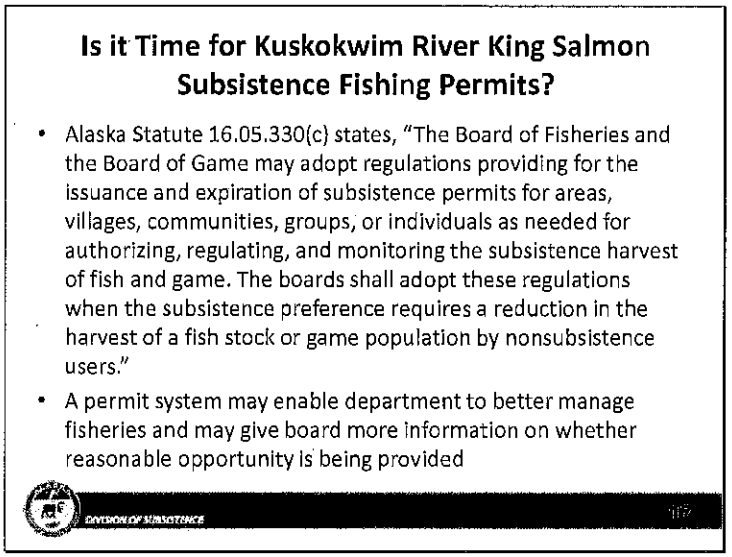


So, let's go back to the Kuskokwim River. We have a king salmon conservation situation in many areas of Alaska, including the Kuskokwim River. There have been no directed king salmon commercial fishing opportunities on the Kuskokwim River since 1987. Sport fishing for king salmon in the Kuskokwim River has been closed in recent years.

There are currently no subsistence fishing permit requirements in the Kuskokwim River. There are currently no daily or annual king salmon harvest or possession limits, except when rod and reel subsistence fishing by Alaska residents on the Aniak River upstream of Doestock Creek. Subsistence fisheries management has been implemented through Emergency Order authority consisting of king salmon pulse protection through rolling fishing closures and gear restrictions in efforts to achieve king salmon escapement goals.

In 2014, the Federal Subsistence Board preempted state management of king salmon subsistence fishing along the Kuskokwim River from its mouth up to Aniak, which restricted subsistence fishing to rural residents only. Federal subsistence opportunities were further restricted to limited community allocations for only a "taste" of king salmon for some Kuskokwim River communities.

Slide 17



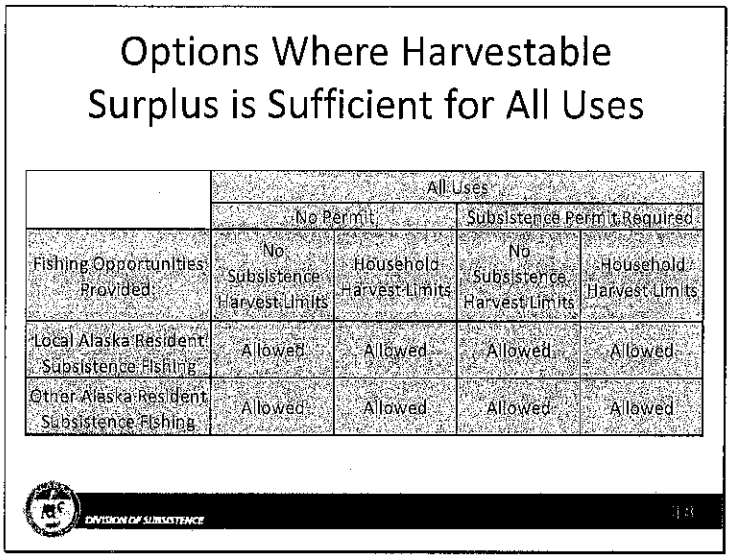
In most of the Arctic-Yukon-Kuskokwim fisheries management region, subsistence fishing permits are not required.

Alaska Statute 16.05.330(c) states, "The Board of Fisheries and the Board of Game may adopt regulations providing for the issuance and expiration of subsistence permits for areas, villages, communities, groups, or individuals as needed for authorizing, regulating, and monitoring the subsistence harvest of fish and game. The boards shall adopt these regulations when the subsistence preference requires a reduction in the harvest of a fish stock or game population by nonsubsistence users."

A permit program may give the board more information on whether reasonable opportunity is being provided.

So, the law contemplates that permits may be issued, though not necessarily Tier II permits, and a permit system may have the benefit of helping the board assess if regulations provide a reasonable opportunity for success. What options exist for the Alaska Board of Fisheries to consider?

Slide 18



In the ideal situation, Kuskokwim River king salmon harvestable surpluses would be sufficient to provide for all uses: subsistence fishing, sport fishing, and commercial fishing. Let's call this the green zone.

While the Board of Fisheries could adopt subsistence fishing permit requirements during times when king salmon abundance provides for all uses, subsistence fishing permits are generally only required in the Arctic-Yukon-Kuskokwim fisheries management region where demand for subsistence resources could exceed supply: namely the road system of Interior Alaska and the Seward Peninsula.

In most of these cases, harvest limits associated with the subsistence fishing permits are either adopted in regulation by the Board of Fisheries or have been delegated by the board to the department through the authority of 5 AAC 01.015(b)(1) & (4). This regulation also provides the department with the delegated authority to set gear restrictions and time or date limitations in subsistence fishing permits.

Slide 19

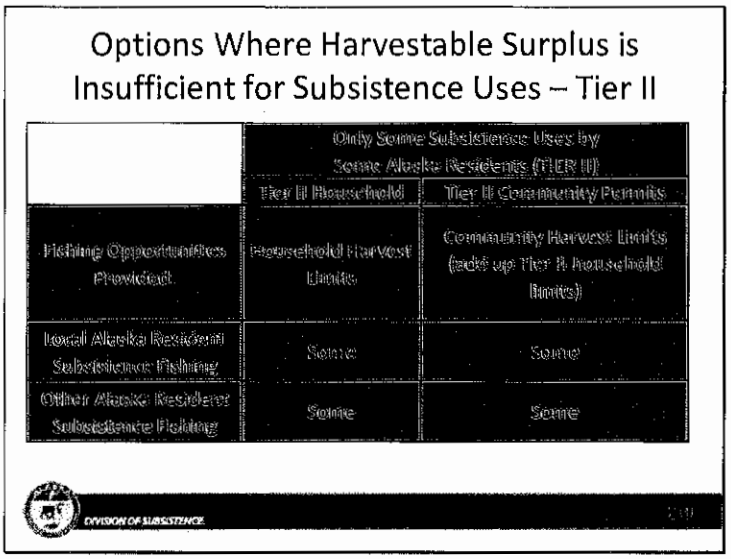
Options Where Harvestable Surplus is Sufficient Only for Subsistence Uses – Tier I

	Only Subsistence Uses by Alaska Residents (TIER I)			
	Tier I Household Permits		Tier I Community Permits	
Fishing Opportunities Provided:	No Subsistence Harvest Limits	Household Harvest Limits	No Subsistence Harvest Limits	Community Harvest Limits (add up household limits)
Local Alaska Resident Subsistence Fishing	Allowed	Allowed	Allowed	Allowed
Other Alaska Resident Subsistence Fishing	Allowed	Allowed	Allowed	Allowed

DIVISION OF SUBSISTENCE

In situations when the Board of Fisheries determines the harvestable surplus of Kuskokwim River king salmon allows only for subsistence uses, let's call it the yellow zone, and fishing opportunity can be provided only for subsistence fisheries, a variety of options exist consistent with AS 16.05.330(c) and the Board of Fisheries may wish to adopt subsistence fishing permit requirements since nonsubsistence uses have been reduced or eliminated. Based on this law and the subsistence law, Tier I permits, with or without daily or seasonal harvest limits, could be provided to individual households or to communities, organizations, or groups.

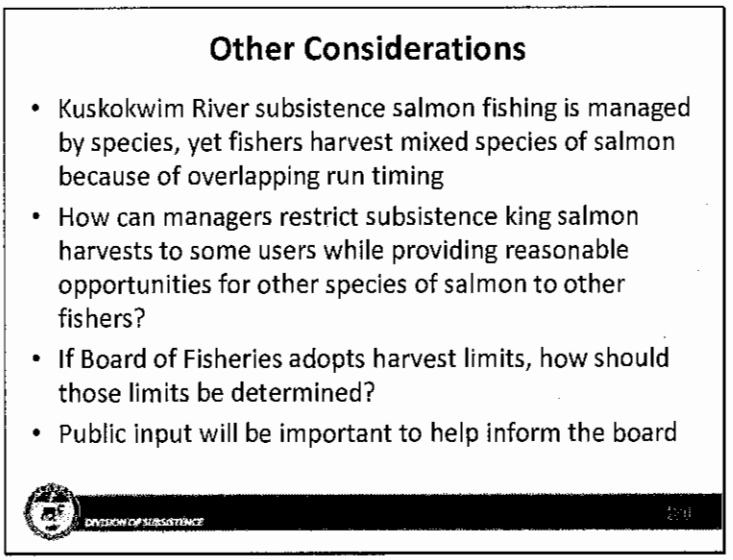
Slide 20



In situations when the Board of Fisheries determines the harvestable surplus of Kuskokwim River king salmon cannot provide for subsistence uses, let's call this the red zone, a reasonable opportunity CANNOT be provided for subsistence uses and nonsubsistence uses have been eliminated. As a result, based on the subsistence law, the Board of Fisheries may adopt regulations that distinguish among Alaska residents – who will be able to participate in a limited subsistence fishing opportunity – based upon a ranking of scores from household Tier II applications.

Applicants would be ranked on their customary and direct dependence on the fish stock for food as a mainstay of livelihood, and the ability of the subsistence user to obtain alternative foods if subsistence uses are restricted or eliminated. Tier II permits are typically associated with household bag limits. The board could provide that Tier II permits be issued to individual households, or that Tier II permit winners could pool their permits in a community or group Tier II permit.

Slide 21

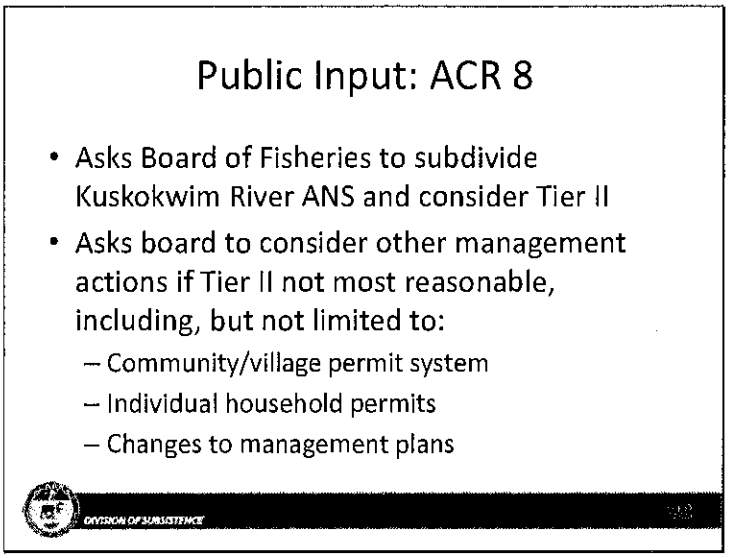


Other considerations for the Board of Fisheries in allocation of fishing opportunity include the challenge of managing subsistence opportunities of one salmon species in a mixed stock fishery.

Also, how can managers restrict subsistence king salmon harvests to some users while providing reasonable opportunities for other species of salmon to other users? And if the Board of Fisheries were to adopt subsistence king salmon harvest limits, how would those limits be determined?

These are questions that the board will be struggling with, and public input will be important to help inform the board.

Slide 22

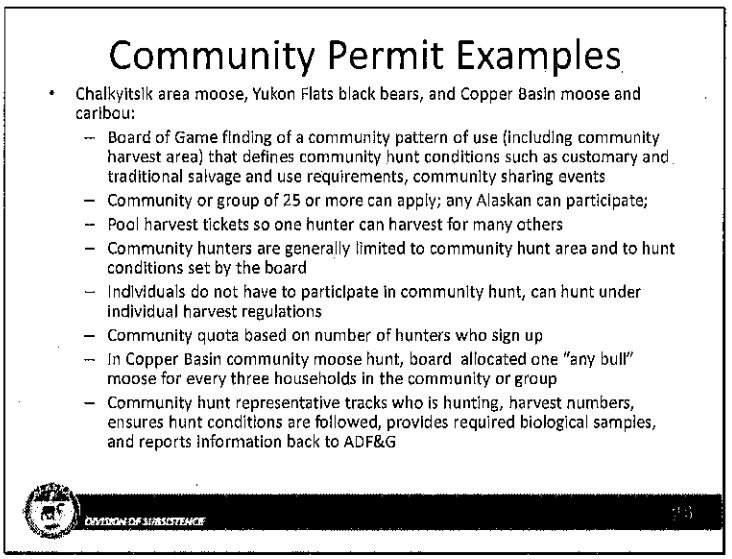


One way the Board of Fisheries hears public input is through agenda change requests, and one has been submitted that asks the board to consider subdividing the ANS and to consider Tier II for king salmon on the Kuskokwim River.

This presentation has talked about ANS and Tier II, and mentioned a little about permits. In regards to changes in management plans, we strongly encourage stakeholders to work on proposals to the Board of Fisheries that ensure the subsistence fishing management is relevant to their concerns. As mentioned, the proposal deadline is April 10, 2015, so that the board can take up proposals in the 2016 meeting.

We'd like to provide a little background on the idea of a community or village permit system.

Slide 23



State law says the boards have the authority to adopt subsistence permits for areas, villages, communities, groups, and individuals. Here are the examples in regulation. There are community hunts for moose near Chalkyitsik, black bears in the Yukon Flats region, and moose and caribou in the Copper River basin.

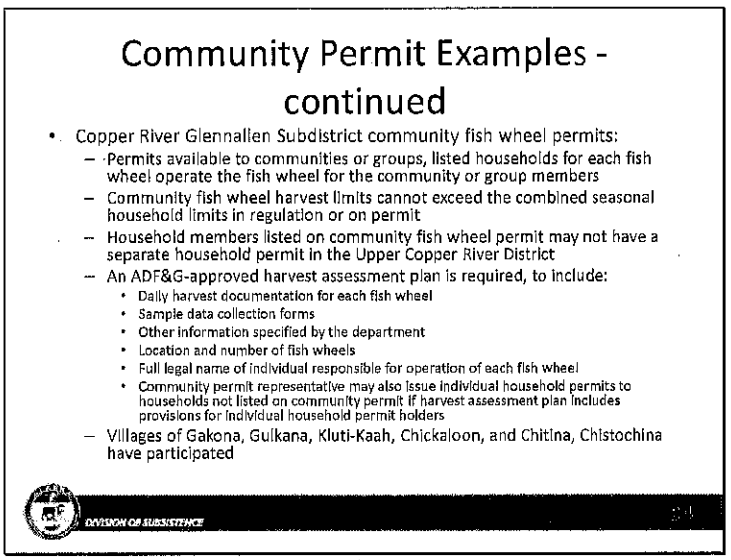
In these community hunts, the Board of Game has recognized a customary and traditional community harvest area and community use pattern that includes a pattern of sharing and specific customary and traditional uses by members of the community. The Board of Game also made findings that identify specific hunt conditions, such as salvage and use requirements and community sharing events. Groups of at least 25 individual Alaskan residents, from any part of the state, can sign up on a community permit application and pool their individual harvest tickets. Community hunters can harvest animals for others in the community, but in most cases are limited to hunting in the community hunt area adopted by the board and subject to hunt conditions specified by the board.

Community members are not required to participate in the community hunt; they can choose to hunt under individual harvest regulations. The community hunt quota is based on the number of hunters who sign up for the community hunt unless the Board of Game specifically allocates a certain number of animals for the community quota, like they did for the Copper Basin community "any bull" moose hunt, where one "any bull" moose is allocated for every three households in the community or group. Each community hunt has a hunt representative who tracks who is hunting, how many animals are harvested, how permit conditions are followed

(such as meat sharing), provides required biological samples, and reports information back to the department.

There is also a community fish wheel permit fishery in the Glennallen Subdistrict of the Copper Basin.

Slide 24

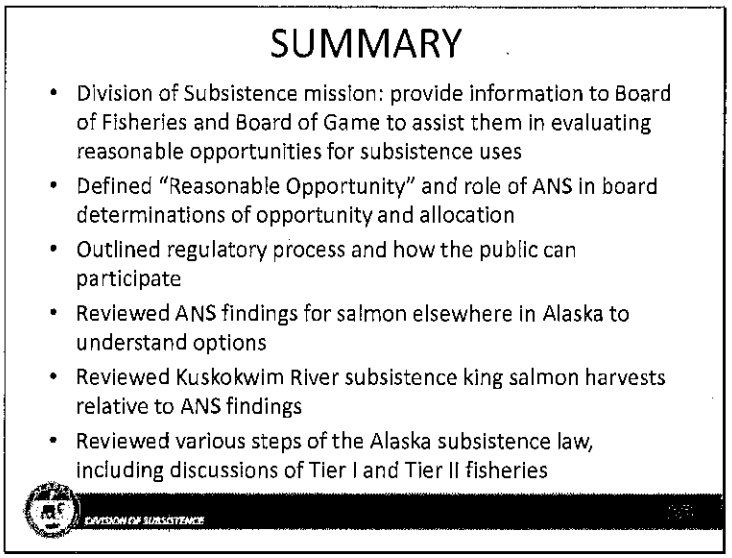


There is also a community fish wheel permit fishery in the Glennallen Subdistrict of the Upper Copper River District. A permit may be issued to a community or group whose listed households and household members for each fish wheel use the fish wheel to harvest fish for its members. The community fish wheel permit has a harvest quota that may not exceed the combined seasonal household harvest limits as outlined in regulation or on the permit.

Household members listed on a community fish wheel permit may not hold a separate household permit in the Upper Copper River District. A community permit application requires a harvest assessment plan, approved by the department, and implemented by the community that includes, recording the daily harvest for each fish wheel, sample data collection forms, other information specified by the department, the location and number of fish wheels, and the full legal name of the individual responsible for the lawful operation of each fish wheel.

A community fish wheel permit representative may also issue individual household permits to households not listed on the community permit, if the community harvest assessment plan includes provisions for documenting the necessary information for individual household permit holders.

Slide 25



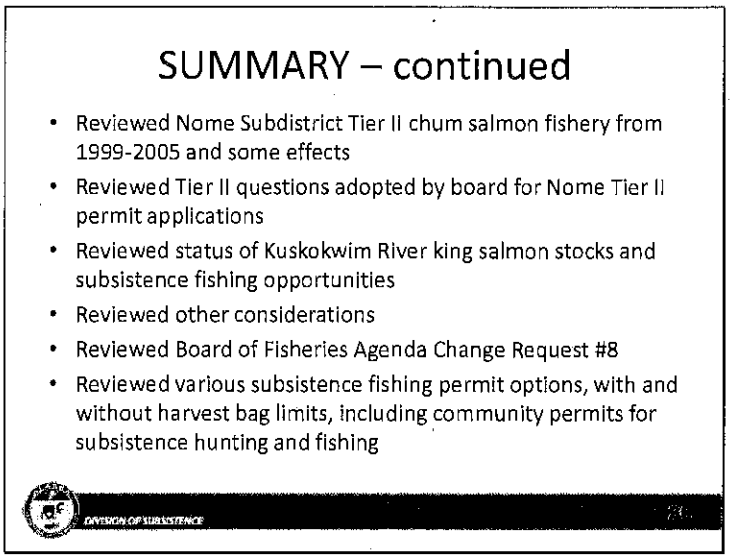
In summary, this presentation reviewed the mission statement of the Alaska Department of Fish and Game's Division of Subsistence, part of which is to provide information to the Alaska Board of Fisheries and Board of Game to assist them in evaluating reasonable opportunities for subsistence uses.

We reviewed the definition of reasonable opportunity and the role of ANS, or amounts reasonably necessary for subsistence, in board determinations of opportunity and allocation.

We outlined the regulatory process and how the public can participate. We also reviewed ANS findings for salmon elsewhere in Alaska to help understand options for ANS findings. We also reviewed Kuskokwim River king salmon harvests compared to ANS findings.

We reviewed the various steps of the Alaska subsistence law, including discussions of Tier I and Tier II subsistence fisheries.

Slide 26

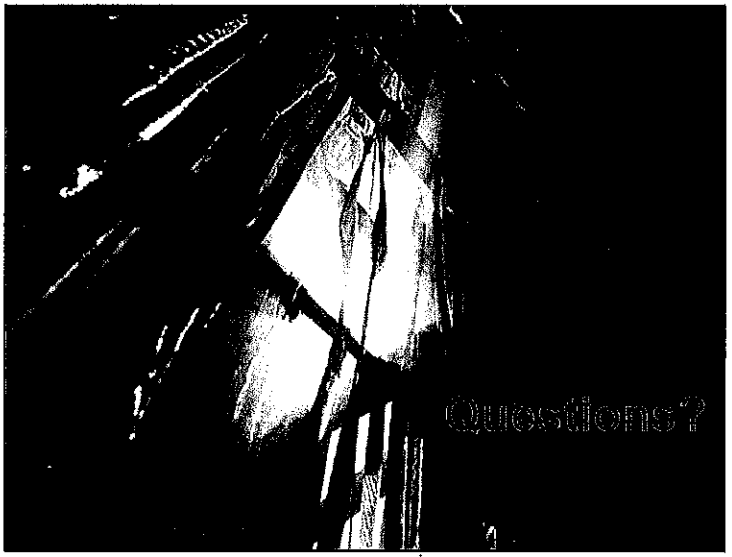


This presentation also reviewed the Nome Subdistrict Tier II chum salmon subsistence fishery from 1999-2005 and some of its effects. We reviewed the Tier II questions adopted by the board for Nome Subdistrict chum salmon Tier II permit applications. We also reviewed the status of Kuskokwim River king salmon stocks and subsistence fishing opportunities.

We reviewed other considerations the Board of Fisheries will have to address in considering Kuskokwim River king salmon subsistence fisheries, such as how to conserve king salmon while still allowing reasonable opportunities for other salmon species in these mixed stock fisheries.

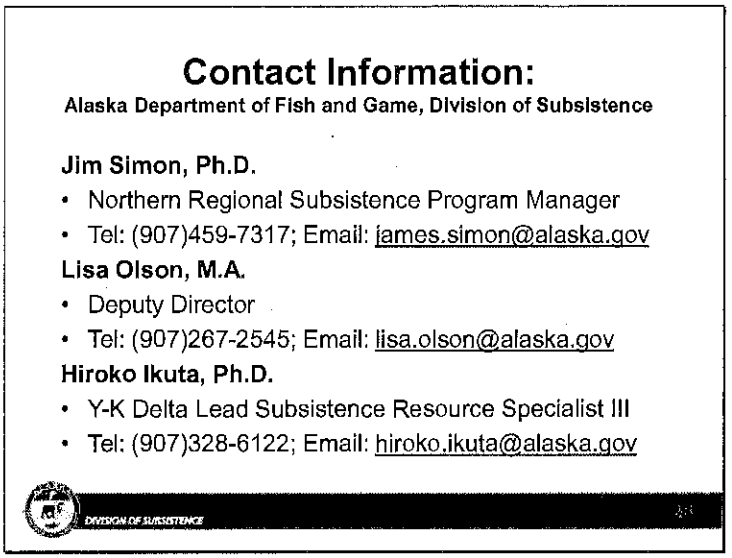
We reviewed the Agenda Change Request #8, submitted by Grant Fairbanks, that asks the board to consider establishing ANS findings for different parts of the Kuskokwim River and to consider Tier II regulations. We also reviewed various subsistence fishing permit options, both with and without harvest bag limits, including community permits for subsistence hunting and fishing.

Slide 27



We thank you for listening, and we will be happy to take any questions

Slide 28



If questions or concerns arise following this evening, here is our contact information.

Special Publication No. BOF 2012-07

Options for Amounts Reasonably Necessary for Subsistence Uses of Salmon: Kuskokwim Area

Prepared for the January 2013 Anchorage Alaska Board of Fisheries Meeting

By

Hiroko Ikuta

December 2012

Alaska Department of Fish and Game

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the reports by the Department of Fish and Game. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

all commonly-accepted abbreviations e.g., Mr., Mrs., AM, PM, etc.	
all commonly-accepted professional titles e.g., Dr., Ph.D., R.N., etc.	
Alaska Administrative Code	AAC
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	$, ¢
months (tables and figures):	first three letters (Jan,...,Dec)
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Measures (fisheries)

fork length	FL
mideye-to-fork	MEF
mideye-to-tail-fork	METF
standard length	SL
total length	TL

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

DIVISION OF SUBSISTENCE

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M E M O R A N D U M

TO: Administrative file
FROM: Jim Simon, Ph.D., Northern Regional Program Manager
DATE: January 22, 2014
SUBJECT: Results of Alaska Board of Fisheries deliberations on Proposal 104

Special Publication No. BOF 2012-07 was prepared for the Board's deliberations on Proposal 104 at the January 2013 Alaska Board of Fisheries meeting for the Arctic-Yukon-Kuskokwim region held in Anchorage. Proposal 104 was submitted by the department asking the Board to revisit the amounts reasonably necessary (ANS) for subsistence for Kuskokwim River salmon species based upon a new method of harvest estimation.

The Board adopted ANS findings using substitute language presented in Record Copy 56, which is attached here. It is important to note that 2010 and 2011 years were excluded from the options presented here due to below average runs in those years. In short, the Board revised the Kuskokwim River king salmon ANS based upon the low and high harvest years between 1990 and 2009, representing an ANS of 67,200 – 109,800. The Board revised the Kuskokwim River chum salmon ANS based upon the second lowest and second highest harvest between 1990 and 2009, representing an ANS of 37,400 – 153,800. The Board revised the Kuskokwim River sockeye salmon ANS based upon the low (1995) and high harvests (2008), representing an ANS of 30,900 – 58,700. The Board revised the Kuskokwim River coho salmon ANS based upon the second lowest and the highest harvest between 1990 and 2009, representing 27,400 – 57,600. The Board adopted a pink salmon ANS based upon the low and high harvests between 2005 and 2009, representing 500 – 2,000 in the Kuskokwim River drainage.

The Board revised the ANS findings for the remainder of the Kuskokwim Fisheries Management Area by making an ANS finding for Districts 4 and 5 salmon combined and for the remainder of the Kuskokwim Area for salmon combined. The Board established an ANS of 6,900 – 17,000 salmon in Districts 4 and 5 based upon the low and high subsistence salmon harvests between 1990 and 2009. The Board established an ANS for the remainder of the Kuskokwim Area, or the Bering Sea Coast, of 12,500 – 14,400 salmon based upon Option G, representing the low and high harvest documented in 2011 by the Association of Village Council Presidents.

SPECIAL PUBLICATION NO. BOF 2012-07

OPTIONS FOR AMOUNTS REASONABLY NECESSARY FOR SUBSISTENCE USES OF SALMON: KUSKOKWIM AREA

PREPARED FOR THE JANUARY 2013 ANCHORAGE ALASKA BOARD OF FISHERIES MEETING

By Hiroko Ikuta

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December 2012

The Division of Subsistence Special Publications series was established for the publication of techniques and procedure manuals, informational pamphlets, special subject reports to decision-making bodies, symposia and workshop proceedings, application software documentation, in-house lectures, and other documents that do not fit in another publications series of the Division of Subsistence. Most Special Publications are intended for readers generally interested in fisheries, wildlife, and the social sciences; for natural resource technical professionals and managers; and for readers generally interested the subsistence uses of fish and wildlife resources in Alaska.

Special Publications are available through the Alaska Resources Library and Information Services (ARLIS), the Alaska State Library and on the Internet: http://www.adfg.alaska.gov/sf/publications/. This publication has undergone editorial and professional review.

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ABSTRACT

This report provides options for amounts reasonably necessary for subsistence (ANS) for consideration by the Alaska Board of Fisheries (board) as it discusses proposals addressing subsistence salmon fisheries in the Kuskokwim Area during its January 2013 meeting. The subsistence salmon fisheries are important for residents of the Kuskokwim Area, as well as for subsistence fishers in the Yukon-Kuskokwim Delta in general. New information resulting from methodological changes in the postseason subsistence salmon harvest monitoring program warrants revisiting the data used by the board to establish the current ANS findings for the Kuskokwim Area.

Key words: Subsistence fishing, amount necessary for subsistence, customary and traditional uses, Kuskokwim River drainage, Kuskokwim Area, king salmon, chum salmon, sockeye salmon, coho salmon, Board of Fisheries.

INTRODUCTION

This report has been prepared for the Alaska Board of Fisheries (board) for reference when considering Proposal 104, which has implications for subsistence fisheries, during its January 2013 meeting. This proposal provides an opportunity for the board and public to revisit the amounts reasonably necessary for subsistence findings (ANS) for salmon stocks in the Kuskokwim Area. Under 5 AAC 01.286., current ANS findings are 64,500–83,000 king salmon in the Kuskokwim River drainage; 39,500–75,500 chum salmon in the Kuskokwim River drainage; 27,500–39,500 sockeye salmon in the Kuskokwim River drainage; 24,500–35,000 coho salmon in the Kuskokwim River drainage; and 7,500–13,500 salmon in the remainder of the Kuskokwim Area.

The subsistence salmon fisheries in the Kuskokwim Area are some of the largest in the state of Alaska, in terms of the number of residents who participate and the number of salmon harvested (Fall et al. 2012). Since 1994, when the department began acquiring reasonably complete statewide coverage of subsistence harvest survey data, 54% of king salmon harvested under subsistence regulations have been taken in the Kuskokwim Area, mostly in the Kuskokwim River drainage. Alaska Department of Fish and Game (department) Division of Subsistence studies in the region indicate that fish contribute as much as 85% to the total pounds of fish and wildlife harvested in a community, and salmon contribute as much as 53% to the total annual harvest of wild foods harvested for subsistence (Simon et al. 2007:1). Residents of the Kuskokwim Area harvest 5 species of Pacific salmon for subsistence purposes: king *Oncorhynchus tshawytscha*, chum *O. keta*, coho *O. kisutch*, pink *O. gorbuscha*, and sockeye *O. nerka* salmon (appendices A and B). Drift gillnetting, set gillnetting, and hook and line fishing are the primary methods used when harvesting salmon, although additional gear types are allowed as specified in 5 AAC 01.270.

SUBSISTENCE SALMON HARVEST MONITORING PROGRAM

The department has been estimating Kuskokwim Area subsistence salmon harvests annually by postseason subsistence harvest survey since 1960: by the Division of Commercial Fisheries in 1960–1987, by the Division of Subsistence in 1988–2007, and by the Division of Commercial Fisheries since 2008 (Carroll and Hamazaki 2012a, 2012b). The purpose of the survey is to collect data about the number and species of salmon harvested by area residents. The postseason subsistence harvest survey for the majority of communities was designed based on a stratified random survey methodology (Scheaffer et al. 1999). From 1989 to 2010, each household was classified into three strata based on the household's recent 2-year history of participation in the subsistence fishery. In 2011, the above household classification was expanded into 5 strata based on a household's most recent 2 known years of participation within the past 5 years of the subsistence fishery. These data are analyzed to provide an estimate of the number of salmon harvested for subsistence purposes. This information has been used by the department, the U.S. Fish and

Wildlife Service (USFWS), the board, and the Federal Subsistence Board to manage customary and traditional uses of salmon and to provide reasonable opportunity for continued customary and traditional (C&T) uses of salmon throughout the area.

In the Kuskokwim Area, there are 38 communities, 28 of which are surveyed each year on a voluntary basis (Figure 1). The north Kuskokwim Bay communities of Kwigillingok, Kongiganak, and Kipnuk are not located on the Kuskokwim River, but many subsistence salmon fishing households from these communities have traveled to the Kuskokwim River to fish. Except in 2000 and 2004, only the community of Kongiganak (92 households in 2010, Carroll and Hamazaki 2012a) has participated in the voluntary ADF&G harvest survey. The communities of Quinhagak, Goodnews Bay, and Platinum, located in south Kuskokwim Bay, comprise 7% of the total Kuskokwim Area households (Carroll and Hamazaki 2012b). Subsistence users from Bering Sea coastal communities have chosen to not participate in the department study for most years. These include the communities of Mekoryuk (on Nunivak Island), Newtok, Tununak, Toksook Bay, Nightmute, and Chefornak (Carroll and Hamazaki 2012a, 2012b).

In 2008, the responsibility for estimating the subsistence salmon harvest in the Kuskokwim Area was returned to the Division of Commercial Fisheries. Upon this transition, the Division of Commercial Fisheries reviewed the archived data from 1990 to 2007 and developed estimated harvests from reported harvests that were stratified and expanded to represent total annual harvests from some nonsurveyed households and some communities, based on their historical harvest patterns. The resulting estimates of harvest reported in each community were similar to the original estimates originally produced by the Division of Subsistence, and the analysis indicated that the change in methodology would not unduly bias or affect the accuracy of the results, compared with previous results (Carroll and Hamazaki 2012b Hamazaki 2011). However, after expanding reported harvest estimates to represent the total harvest for those communities considered, including some households and communities that were not surveyed, the new estimates tended to be higher than the original estimates. The difference was attributed to adopting a different stratified random sampling design from that used during 1988–2007; the new design was thought to better represent household fishing patterns within a community, and the department used a new statistical approach for estimating harvest from some unsurveyed or underrepresented communities based on each community's historical harvest patterns (Hamazaki 2011).

It is important to note that there are still some communities for which there have been no previous estimates of subsistence salmon harvests from which to develop models of recent harvests using this new method; thus, the data used in this report to revisit previous ANS findings on Kuskokwim Area salmon stocks is not without limitations. In short, the data included in this report represent the best available information to revisit historical subsistence salmon harvests in the Kuskokwim Area, although there is likely additional subsistence salmon harvest not represented here.

The new harvest enumeration method is thought to provide a more complete estimation of subsistence salmon harvests by species than previous methods because of the use of statistical techniques to model subsistence salmon harvest for some uncontacted communities based on prior years' harvest estimates. The resulting revised, expanded harvest estimates now produced by the Division of Commercial Fisheries tend to be higher than those previously published by the Division of Subsistence. The current ANS findings, adopted by the board in 2001, are therefore based on estimates that, after revision of harvest estimation methods, appear to have been too low and that cannot now be directly compared to estimates calculated by the new method.

BACKGROUND OF ANS DETERMINATION

Under AS 16.05.258(a), the board is charged with identifying fish stocks, or portions of stocks, that "are customarily taken or used for subsistence" (a "C&T" finding). If a portion of these stocks can be harvested consistent with sustained yield principles, the board "shall determine the amount of the harvestable portion that is reasonably necessary for subsistence uses" [AS 16.05.258(b)]. This is called the amount reasonably necessary for subsistence, or an "ANS finding."

In 1987, the board found that salmon in the Kuskokwim Area are customarily and traditionally taken or used for subsistence. In 1993, the board revisited C&T uses of salmon in the Kuskokwim Area, reaffirmed the 1987 C&T finding, and identified the ANS for subsistence for all salmon, combined, to be 192,000–242,000 salmon.

In 2001, the board again revisited the C&T finding of Kuskokwim Area salmon and made species-specific salmon C&T findings and corresponding species-specific ANS findings for the Kuskokwim River drainage (Appendix C). However, for the remainder of the Kuskokwim Area—that is, for all parts of the area except the Kuskokwim River drainage—the board maintained a C&T finding for salmon as a group, rather than making species-specific findings (Appendix D). The board set the ANS based upon the harvest history in the Kuskokwim Area during the years 1990–1999 (5 AAC 01.286). Division of Subsistence provided options for determining the ANS to the board in 2001, and the board chose to utilize the low harvest and the average harvest over the 10-year period to determine the ANS for each salmon species in the Kuskokwim River drainage (except pink salmon, due to the fact that subsistence harvests of pink salmon had not typically been documented as part of the postseason household survey program; Table 1). The board also chose, at this time, to determine the ANS for salmon as a group for the remainder of the Kuskokwim Area (Table 2).

Table 1.–Estimated subsistence salmon harvests in the Kuskokwim River drainage (1990–1999) used for ANS determination in 2001.

	Low	Average	High	ANS
King salmon	64,795	82,762	96,436	64,500– 83,000
Chum salmon	39,970	75,143	126,508	39,500– 75,500
Sockeye salmon	27,791	39,204	52,984	27,500–39,500
Coho salmon	24,864	34,803	50,370	24,500 –35,000

Source Customary and Traditional Use Eight Criteria Worksheet (ADF&G Division of Subsistence, 2001; see Appendix C).

Table 2.–Estimated subsistence harvests in the remainder of the Kuskokwim Area (1990–1999) used for ANS determination in 2001.

	Low	Average	High	ANS
King salmon	3,535	4,511	6,699	n/a
Chum salmon	1,006	3,004	4,961	n/a
Sockeye salmon	823	2,073	3,420	n/a
Coho salmon	1,682	3,416	5,922	n/a
Total	7,046	13,004	21,002	7,500–13,500

Source Customary and Traditional Use Eight Criteria Worksheet (ADF&G Division of Subsistence, 2001; see Appendix C).

The Kuskokwim River drainage includes communities along the drainage as well as Kipnuk, Kwingillingok, and Kongiganak in North Kuskokwim Bay. The remainder of the Kuskokwim Area includes communities in South Kuskokwim Bay (Quinhagak, Goodnews Bay, and Platinum) and along the Bering Sea Coast (Mekoryuk, Newtok, Nightmute, Toksook Bay, Tununak, and Chefornak).

ANS OPTIONS IN 2013

Following are options for the board to consider should it choose to update its 2001 actions and adopt ANS ranges in regulation during its January 2013 meeting. The department submitted and supports reviewing the ANS ranges for salmon in the Kuskokwim Area due to Division of Commercial Fisheries' revised historical harvest estimates resulting from a new harvest estimation method applied to historical data originally collected by the Division of Subsistence. In 2001, the board set the ANS for subsistence findings based upon the low and average harvests in the Kuskokwim Area. The board may use a similar method, or it could use low to high harvest, or it could choose a different method when making new findings. The options presented below were developed using data resulting from the Kuskokwim Area postseason subsistence salmon harvest monitoring program (tables 3–6).

KUSKOKWIM RIVER DRAINAGE, OPTION A: RANGE BASED UPON LOW AND AVERAGE HARVESTS, 1990 –1999.

Option A is based upon the low and average harvests in the Kuskokwim River drainage 1990–1999 (Table 3). In 2001, the board set the ANS for subsistence findings in codified regulations based upon the low and average harvests on the Kuskokwim River drainage during the years 1990–1999. Option A uses the same logic as the board's ANS determination in 2001, yet, as Table 3 shows, it is based on the new harvest estimates produced by the Division of Commercial Fisheries in 2008 and therefore shows higher ANS ranges than the findings in the 2001, particularly for king salmon.

Table 3.–Low and average subsistence salmon harvests in the Kuskokwim River drainage, 1990–1999 (Option A).

Salmon species	Low	Average	High	Revised ANS	Current ANS
King salmon	72,775	89,016	109,778	72,800–89,000	64,500–83,000
Chum salmon	37,366	80,931	153,825	37,400–80,900	39,500–75,500
Sockeye salmon	30,905	42,438	51,616	30,900–42,400	27,500–39,500
Coho salmon	24,623	37,609	57,560	24,600–37,600	24,500–35,000

Source T. Hamazaki, Biometrician III, ADF&G Division of Commercial Fisheries, Anchorage, personal communication, September 24, 2012.

KUSKOKWIM RIVER DRAINAGE, OPTION B: RANGE BASED UPON LOW AND AVERAGE HARVESTS, 2000–2009.

Option B is based upon the low and average harvests in the Kuskokwim River drainage during 2000–2009; these harvest estimates are of more recent years (Table 4). This option excludes subsistence harvest estimates in 2010, when fishers made more efforts to meet their harvest goals due to a below-average king salmon run, and in 2011, when subsistence fishing was restricted and the harvest estimates did not meet the lower range of ANS.

Option B includes an ANS option for pink salmon based on the harvest data between 2005 and 2009. In 2001, the board was unable to determine ANS options for pink salmon due to lack of data. The department began collecting subsistence pink salmon harvest data in 2005, and there may now be enough information to establish an ANS. However, it should be understood that the harvest of pink salmon is likely incidental to harvest of other salmon species. Hence, the pink salmon harvest is not a

directed harvest for subsistence use. Currently, pink salmon are not actively managed in the Kuskokwim Area.

Table 4.–Low and average subsistence salmon harvests in the Kuskokwim River drainage, 2000–2009 (Option B).

	Low	Average	High	Revised ANS	Current ANS
King salmon	67,228	84,182	98,099	67,200 –84,200	64,500–83,000
Chum salmon	41,217	64,128	89,500	41,200–64,100	39,500–75,500
Sockeye salmon	32,237	43,253	58,732	32,200–43,300	27,500–39,500
Coho salmon	29,559	38,766	48,898	29,600–38,800	24,500–35,000
Pink salmon	517	1,269	1,989	500–1,300	n/a

Source T. Hamazaki, Biometrician III, ADF&G Division of Commercial Fisheries, Anchorage, personal communication, September 24, 2012 for king salmon, chum salmon, sockeye salmon, and coho salmon; and November 15, 2012 for pink salmon.

KUSKOKWIM RIVER DRAINAGE, OPTION C: RANGE BASED UPON LOW AND AVERAGE HARVESTS, 1990–2009.

Option C is based upon the low and average harvests in the Kuskokwim River drainage over the 20-year period 1990–2009 (Table 5). This option excludes 2010, when fishers made more efforts to meet their harvest goals due to a below-average king salmon run, and 2011, when subsistence fishing was restricted and the harvest estimates did not meet the lower range of ANS. Like Option B, Option C includes an ANS option for pink salmon based on the harvest data from 2005 through 2009. However, it should be understood that the harvest of pink salmon is likely incidental to harvest of other salmon species. Hence, the pink salmon harvest is not a directed harvest for subsistence use. Currently, pink salmon are not actively managed in the Kuskokwim Area. Note that the highest harvest for king, chum, and coho salmon was in 1990 (Table 5).

Table 5.–Low and average harvests in the Kuskokwim River drainage, 1990–2009 (Option C).

Salmon species	Low	Average	High	Revised ANS	Current ANS
King salmon	67,228	86,599	109,778	67,200–86,600	64,500–83,000
Chum salmon	37,366	72,529	153,825	37,400–72,500	39,500–75,500
Sockeye salmon	30,905	42,846	58,732	30,900–42,800	27,500–39,500
Coho salmon	24,623	38,187	57,560	24,600–38,200	24,500–35,000
Pink salmon	517	1,269	1,989	500–1,300	n/a

Source T. Hamazaki, Biometrician III, ADF&G Division of Commercial Fisheries, Anchorage, personal communication, September 24, 2012 for king salmon, chum salmon, sockeye salmon, and coho salmon; and November 15, 2012 for pink salmon.

Note n/a = not applicable because currently there is no ANS for pink salmon.

SOUTH KUSKOKWIM BAY, OPTIONS D, E, AND F: RANGE BASED UPON LOW AND AVERAGE HARVESTS.

In 2001, the board determined ANS options for all species of salmon for the remainder of the Kuskokwim Area, which consists of communities in South Kuskokwim Bay (e.g., Quinhagak, Goodnews Bay, and Platinum) and along the Bering Sea Coast (Table 6). As described earlier, Bering Sea coastal communities have chosen not to participate in the postseason harvest surveys for most years; therefore, a

time series of subsistence harvest data for the Bering Sea Coast subarea is lacking. Salmon fisheries are intensively managed in the South Kuskokwim Bay subarea and harvest data in the South Kuskokwim Bay communities are available from 1990 to 2011. Under subsistence law (5 AAC 99.010), the department suggests considering ANS options for the South Kuskokwim Bay subarea separately.

Table 6.–Low and average harvests in South Kuskokwim Bay (Quinhagak, Goodnews Bay, and Platinum; options D, E, and F).

Years	Low	Average	High	ANS Options	Current ANS
Option D: 1990–1999	6,939	11,312	16,975	6,900 –11,300	n/a
Option E: 2000–2009	8,973	11,593	16,220	9,000 –11,600	n/a
Option F: 1990–2009	6,939	11,286	16,975	6,900 –11,300	n/a

Source T. Hamazaki, Biometrician III, ADF&G Division of Commercial Fisheries, Anchorage, personal communication, September 24, 2012 for king salmon, chum salmon, sockeye salmon, and coho salmon; and November 15, 2012 for pink salmon.

BERING SEA COAST, OPTION G: RANGE BASED UPON LOW AND HIGH HARVESTS IN 2011.

Option G is based upon subsistence salmon harvest data collected for the 2011 fishing season by Wolfe et al. 2012. Sponsored by the Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative,[1] the project documented subsistence salmon harvests by six coastal Bering Sea communities: Cherfornak, Mekoryuk, Newtok, Nightmute, Toksook Bay, and Tununak. These communities typically choose not to participate in the department's annual salmon harvest monitoring program; therefore, this project provides the only available subsistence harvest data for the region. Since there is only a single year of harvest data, there is not enough information to understand harvest trends and variations. To develop an ANS range based on a single year's data, the 95% confidence limit of ±7.07% was applied to the six communities' estimated total salmon harvest of 13,446 salmon (± 951 salmon). Salmon harvested in this area are likely a mixture of local spawning stocks and salmon migrating farther north to the Yukon River and the Norton Sound-Port Clarence Area.

Table 7.–Estimated salmon harvest, with 95% confidence limit, for the Bering Sea Coast (Mekoryuk, Newtok, Nightmute, Toksook Bay, Tununak, and Cherfornak), 2011 (Option G).

Year	Low	Estimated	High	ANS	Current ANS
2011	12,495	13,446	14,397	12,500 –14,400	n/a

Source Wolfe et al. 2012:20

OPTION H: NO ACTION

Option H is to maintain status quo by keeping the current amounts reasonably necessary for subsistence.

1. The Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative is "the largest example of co-management of research funding addressing salmon within the Pacific Rim." (http://www.aykssi.org, accessed December 7, 2012). Signatory organizations are ADF&G; the Association of Village Council Presidents; Bering Sea Fishermen's Association; Kawerak, Inc.; NOAA Fisheries; Tanana Chiefs Conference; and the U.S. Fish and Wildlife Service.

Figure 1.–Kuskokwim Area.

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APPENDIX A: HISTORICAL SUBSISTENCE HARVEST ESTIMATES FOR ALL SPECIES OF SALMON IN THE KUSKOKWIM RIVER DRAINAGE, 1990–2011

Year	King	Chum	Sockeye	Coho	Pink	Total
1990	109,778	153,825	45,897	57,560	–	367,060
1991	74,820	87,237	47,370	39,252	–	248,679
1992	82,648	116,373	43,486	52,305	–	294,811
1993	87,674	59,797	51,616	28,485	–	227,572
1994	103,343	76,937	42,362	36,609	–	259,251
1995	102,110	70,977	30,905	36,828	–	240,819
1996	96,415	100,900	40,589	43,199	–	281,103
1997	79,382	37,366	38,745	29,817	–	185,309
1998	81,219	61,652	36,052	24,623	–	203,545
1999	72,775	44,242	47,360	27,409	–	191,786
2000	70,833	59,369	48,766	45,911	–	224,878
2001	78,009	56,005	53,245	31,089	–	218,349
2002	80,983	86,406	32,272	42,617	–	242,278
2003	67,228	41,217	32,237	33,291	–	173,973
2004	97,110	64,899	40,405	48,898	–	251,312
2005	85,097	58,020	41,517	33,351	1,516	219,500
2006	90,094	89,500	43,143	41,272	1,989	265,998
2007	96,139	73,561	47,272	35,212	1,306	253,490
2008	98,099	68,678	58,732	46,461	1,015	272,985
2009	78,225	43,621	34,943	29,559	517	186,865
2010	66,053	46,143	38,130	32,094	435	182,855
2011	58,836	49,717	40,207	29,583	713	179,055
10-year average (1990–1999)	89,016	80,931	42,438	37,609	–	249,994
10-year average (2000–2009)	84,182	64,128	43,253	38,766	–	230,328
5-year average (2005–2009)	89,531	66,676	45,121	37,171	1,269	239,768
Historical average (1990–2011)	84,403	70,293	42,511	37,519	–	234,726

Source T. Hamazaki, Biometrician III, ADF&G Division of Commercial Fisheries, Anchorage, personal communication, September 24, 2012 for king salmon, chum salmon, sockeye salmon, and coho salmon; and November 15, 2012 for pink salmon.

Note Dash (–) indicates no pink salmon harvests collected; pink salmon harvests were not collected until 2005.

APPENDIX B: HISTORICAL SUBSISTENCE SALMON HARVEST ESTIMATES FOR ALL SPECIES OF SALMON IN THE SOUTH KUSKOKWIM BAY (QUINHAGAK, GOODNEWS BAY, AND PLATINUM), 1990–2011.

Year	King, chum, sockeye, and coho	Pink	Total
1990	16,330	–	16,330
1991	14,379	–	14,379
1992	16,975	–	16,975
1993	10,712	–	10,712
1994	11,338	–	11,338
1995	8,079	–	8,079
1996	8,152	–	8,152
1997	6,939	–	6,939
1998	10,120	–	10,120
1999	10,098	–	10,098
2000	8,973	–	8,973
2001	9,582	–	9,582
2002	9,429	–	9,429
2003	9,007	–	9,007
2004	12,887	–	12,887
2005	11,118	50	11,168
2006	15,560	173	15,733
2007	12,885	37	12,922
2008	15,886	334	16,220
2009	9,978	26	10,004
2010	9,925	232	10,157
2011	9,058	29	9,087
10-year average (1990–1999)	11,312	–	11,312
10-year average (2000–2009)	11,531	–	11,593
5-year average (2005–2009)	13,085	124	13,209
Historical average (1990–2011)	11,246	–	11,286

Source T. Hamazaki, Biometrician III, ADF&G Division of Commercial Fisheries, Anchorage, personal communication, September 24, 2012 for king salmon, chum salmon, sockeye salmon, and coho salmon; and November 15, 2012 for pink salmon.

Note Dash (–) indicates no pink salmon harvests collected; pink salmon harvests were not collected until 2005.

APPENDIX C: CUSTOMARY AND TRADITIONAL USE EIGHT CRITERIA WORKSHEET, KUSKOKWIM RIVER DRAINAGE, PREPARED BY ADF&G DIVISION OF SUBSISTENCE, JANUARY 2001

RC412

CUSTOMARY AND TRADITIONAL USE EIGHT CRITERIA WORKSHEET

Prepared by the Division of Subsistence
Alaska Department of Fish and Game
January 2001

KUSKOKWIM RIVER DRAINAGE:
CHINOOK SALMON
CHUM SALMON
SOCKEYE SALMON
COHO SLMON
PINK SALMON

In 1987 and again in 1993 the Board of Fisheries heard a report from the Division of Subsistence and made a finding that there are customary and traditional uses of Kuskokwim Area salmon. In 1993, the board also identified the amounts necessary for subsistence for all salmon to be 192,000 – 242,000.

1. **A long term (1 generation or more), consistent pattern of taking, use, and reliance on the fish stock or game population that has been established over a reasonable period of time, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.**

The use of salmon for subsistence by people living in the Kuskokwim Area predates recorded history. Records and journals written by early explorers, traders, and missionaries who came into contact with local residents in the 1800s and early 1900s describes the use of salmon and indicates that salmon were an important subsistence resource for many of the area inhabitants (Zagoskin 1847; Nelson 1899, Spurr 1950, Oswalt 1963, Hinkleman & Vitt 1985, Bendell 1987). Reports prepared by federal fisheries management staff occasionally described the subsistence fishery during the period from the 1920s to statehood (Bower 1923, Pennoyer, Middleton and Morris 1965, U.S. Department of Interior 1931, 1939 and 1940). The Department of Fish and Game has collected subsistence salmon harvest information for most Kuskokwim Area communities since 1960 (Walker and Brown 198, Alaska Department of Fish ad Game 1989 – 2000). Descriptions of the harvest and use of salmon in the 1980s are provided in Charnley 1984, Stickney 1984, Wolfe et al. 1984, Stokes 1985, Kari 1985, Andrews and Coffing 1986, Andrews and Peterson 1983 and Coffing 1991.

2. A use pattern recurring in specific seasons of the year.

Customarily, salmon were harvested from the time they first arrived in spring until freeze-up in fall. Harvest timing is directly related to run timing of the salmon, which varies along the length of the Kuskokwim. Peak times for harvesting chinook salmon are June 5 through July 5, however, in some years it is mid-July before chinook salmon reach some subsistence fishing areas used by Nikolai residents (Stokes 1995). Sockeye and chum salmon are harvested primarily from June 10 through July 25 and most coho salmon are taken from August 1 through September 15. Some level of coho fishing effort harvests continues well through October in several communities located along Kuskokwim Bay, as well those communities located along the Kuskokwim River drainage. Except for closures related to commercial salmon fishing periods, subsistence salmon fishing in the Kuskokwim Area is open continually.

3. A use pattern consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost.

Salmon were customarily harvested with traps, weirs, spears, seines, dipnets, as well as set and drift gill nets made of seal skin or willow bark. Near the turn of the century, fishwheels were introduced by miners and readily adopted by local fishermen along the middle and upper Kuskokwim River drainage. Today, set and drift gillnets are the most common type of gear used to harvest salmon throughout most of the Kuskokwim Area. Fishwheels continue to be used by some families in the middle and upper Kuskokwim drainage. Spears are used in portions of the Kuskokwim Area including the Kanektok River drainage. Some families who do not have boats or nets rely on rod and reel gear for catching salmon for their family. When residents of Nikolai were notified in 1967 that their customary use of fish traps to take salmon was illegal, people adopted the use of rod and reel gear for harvesting chinook salmon along the Salmon Fork and the Little Tonzona rivers. Rod and reel gear is the most efficient gear in this area for taking chinook salmon.

4. The area in which the noncommercial long term and consistent pattern of taking, use, and reliance upon the fish stock or game population has been established.

Subsistence salmon fishing areas are usually reasonably accessible from a family's community or salmon fishing camp. As local people have done for generations, many families return to summer fishing camps along the river where they base their salmon fishing and processing activities. Many of these camps have been used for generations, however, relocation of fishing camps due to erosion or changes in the river channel are common (Coffing 1991). Some fishcamps are located relatively close to a family's permanent residence while others are located many miles away. Residents of some communities located away from good fishing waters move to fishing camps along the Kuskokwim River or its tributaries during the summer fishing season. For example, residents of three communities located along the Johnson River, west of Bethel, move to fishing sites located along the Kuskokwim River. Residents of Nikolai move to remote fishing sites 130 miles from their community to take chinook salmon near the confluence of the North and South forks of the Kuskokwim River, along the Salmon River, and along the Little Tonzona River. Salmon are also harvested near where people are camped while involved in other subsistence activities such as berry picking and moose hunting.

6. The means of handling, preparing, preserving, and storing fish or game which has been traditionally used by past generations, but not excluding recent technological advances where appropriate.

Most of the chinook, sockeye, and chum salmon are processed by drying and smoking. Many households own or share a smokehouse and other necessary processing equipment and facilities. Coho salmon are also dried, however, because of unfavorable drying weather during August and September when coho are available, drying and smoking is difficult. Freezing is another common way of preserving salmon. Household freezing capacity is usually limited, therefore, this method is used primarily for coho salmon. Chinook, sockeye, and coho are also preserved by salting and canning. During the fishing season, fresh salmon are a common and frequent food at many meals. Dried salmon is eaten daily throughout most of the year and is a preferred source of lightweight high-energy food which is taken along on most hunting, trapping, and fishing trips.

8. A use pattern which includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.

Knowledge and skills associated with subsistence salmon fishing are taught by involving young or less experienced individuals in all aspects of salmon fishing, equipment repair and maintenance, and processing. Elder family members often oversee salmon production activities and direct younger family members who cooperatively share in production tasks. Children are often involved in the activities and learn the skills necessary for becoming successful fishers and processors by assisting experienced adults. Men are the primary harvesters while females are the primary processors.

7. A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving.

Households, family groups consisting of related individuals, and complex networks of extended families share fishing camps as well as harvesting and processing responsibilities. Family members unable to actively participate in harvest or production activities provide assistance in the form of fishing gear, gasoline, processing equipment, or other necessary items. Distribution of salmon generally occurs along the same kinship lines which serve to affiliate salmon production groups. Salmon are also shared with friends, elders, and relatives living in other communities.

8. A pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.

Households harvesting salmon for subsistence tend to harvest a wide variety of resources. Freshwater fish, waterfowl, small game, furbearers, and plants are also harvested by most communities. For many Kuskokwim Area communities, salmon represent more than half of the total amount (edible weight) of subsistence resources harvested. In some communities, 70 percent of the households are actively involved in harvesting and processing subsistence salmon.

Examples of per capita harvests of salmon in the Kuskokwim Area are: 613 pounds in Chuathbaluk (1982), 449 in Kwethluk (1986), 342 in Quinhagak (1982), 289 in Nunapitchuk (1983), 211 in Sleetmute (1982), 113 in Tununak (1986).

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KUSKOKWIM AREA SUBSISTENCE SALMON HARVESTS 1990 – 1999.

	District 1 (Lower River)			District 2 (Middle River)			Upper River (All Above District 2)		
	Minimum	Average	High	Minimum	Average	High	Minimum	Average	High
Chinook	52,795	69,207	78,956	7,181	9,357	12,754	3,082	4,197	4,750
Sockeye	21,671	30,733	42,883	2,183	3,315	5,089	3,121	5,156	7,445
Coho	18,979	26,725	43,362	2,010	2,926	4,448	2,976	5,153	7,112
Chum	32,790	58,001	93,743	3,916	10,304	19,132	2,297	6,837	13,633
ALL SPECIES	153,722	184,667	233,946	16,097	25,902	34,691	15,202	21,343	30,583

	District 2 and Upper River			District 4 (Quinhagak)			District 5 (Goodnews/Platinum)		
	Minimum	Average	High	Minimum	Average	High	Minimum	Average	High
Chinook	10,263	13,554	17,480	2,746	3,698	6,013	374	666	917
Sockeye	5,572	8,471	12,534	400	1,173	1,951	253	750	1,282
Coho	4,986	8,079	10,295	1,264	2,427	4,174	305	853	1,828
Chum	7,001	17,142	32,765	600	1,459	3,234	133	325	1,006
ALL SPECIES	31,299	47,245	65,274	5,853	8,757	15,372	1,404	2,594	4,176

	KUSKOKWIM RIVER			REMAINDER OF KUSKOKWIM AREA			TOTAL KUSKOKWIM AREA		
	Minimum	Average	High	Minimum	Average	High	Minimum	Average	High
Chinook	64,795	82,762	96,436	3,535	4,511	6,699	68,686	87,272	100,159
Sockeye	27,791	39,204	52,984	823	2,073	3,420	28,622	41,276	56,404
Coho	24,864	34,803	50,370	1,682	3,416	5,922	27,239	38,220	55,620
Chum	39,970	75,143	126,508	1,006	3,004	4,961	40,976	78,147	131,469
ALL SPECIES	188,476	231,912	293,554	7,588	13,003	20,968	198,466	244,915	314,522

APPENDIX D: CUSTOMARY AND TRADITIONAL USE EIGHT CRITERIA WORKSHEET, THE REMAINDER OF THE KUSKOKWIM AREA, PREPARED BY ADF&G DIVISION OF SUBSISTENCE, JANUARY 2001

CUSTOMARY AND TRADITIONAL USE EIGHT CRITERIA WORKSHEET

Prepared by the Division of Subsistence
Alaska Department of Fish and Game
January 2001

KUSKOKWIM AREA EXCLUDING THE KUSKOKWIM RIVER DRAINAGE: ALL SALMON (REMAINDER OF KUSKOKWIM AREA)

In 1987 and again in 1993 the Board of Fisheries heard a report from the Division of Subsistence and made a finding that there are customary and traditional uses of Kuskokwim Area salmon. In 1993, the board also identified the amounts necessary for subsistence for all salmon to be 192,000 – 242,000.

1. **A long term (1 generation or more), consistent pattern of taking, use, and reliance on the fish stock or game population that has been established over a reasonable period of time, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.**

The use of salmon for subsistence by people living in the Kuskokwim Area predates recorded history. Records and journals written by early explorers, traders, and missionaries who came into contact with local residents in the 1800s and early 1900s describes the use of salmon and indicates that salmon were an important subsistence resource for many of the area inhabitants (Zagoskin 1847; Nelson 1899, Spurr 1950, Oswalt 1963, Hinkleman & Vitt 1985, Bendell 1987). Reports prepared by federal fisheries management staff occasionally described the subsistence fishery during the period from the 1920s to statehood (Bower 1923, Pennoyer, Middleton and Morris 1965, U.S. Department of Interior 1931, 1939 and 1940). The Department of Fish and Game has collected subsistence salmon harvest information for most Kuskokwim Area communities since 1960 (Walker and Brown 198, Alaska Department of Fish ad Game 1989 – 2000). Descriptions of the harvest and use of salmon in the 1980s are provided in Charnley 1984, Stickney 1984, Wolfe et al. 1984, Stokes 1985, Kari 1985, Andrews and Coffing 1986, Andrews and Peterson 1983 and Coffing 1991.

2. A use pattern recurring in specific seasons of the year.

Customarily, salmon were harvested from the time they first arrived in spring until freeze-up in fall. Harvest timing is directly related to run timing of the salmon, which varies along the length of the Kuskokwim. Peak times for harvesting chinook salmon are June 5 through July 5, however, in some years it is mid-July before chinook salmon reach some subsistence fishing areas used by Nikolai residents (Stokes 1985). Sockeye and chum salmon are harvested primarily from June 10 through July 25 and most coho salmon are taken from August 1 through September 15. Some level of coho fishing effort harvests continues well through October in several communities located along Kuskokwim Bay, as well those communities located along the Kuskokwim River drainage. Except for closures related to commercial salmon fishing periods, subsistence salmon fishing in the Kuskokwim Area is open continually.

3. A use pattern consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost.

Salmon were customarily harvested with traps, weirs, spears, seines, dipnets, as well as set and drift gill nets made of seal skin or willow bark. Near the turn of the century, fishwheels were introduced by miners and readily adopted by local fishermen along the middle and upper Kuskokwim River drainage. Today, set and drift gillnets are the most common type of gear used to harvest salmon throughout most of the Kuskokwim Area. Fishwheels continue to be used by some families in the middle and upper Kuskokwim drainage. Spears are used in portions of the Kuskokwim Area including the Kanektok River drainage. Some families who do not have boats or nets rely on rod and reel gear for catching salmon for their family. When residents of Nikolai were notified in 1967 that their customary use of fish traps to take salmon was illegal, people adopted the use of rod and reel gear for harvesting chinook salmon along the Salmon Fork and the Little Tonzona rivers. Rod and reel gear is the most efficient gear in this area for taking chinook salmon.

4. The area in which the noncommercial long term and consistent pattern of taking, use, and reliance upon the fish stock or game population has been established.

Subsistence salmon fishing areas are usually reasonably accessible from a family's community or salmon fishing camp. As local people have done for generations, many families return to summer fishing camps along the river where they base their salmon fishing and processing activities. Many of these camps have been used for generations, however, relocation of fishing camps due to erosion or changes in the river channel are common (Coffing 1991). Some fishcamps are located relatively close to a family's permanent residence while others are located many miles away. Residents of some communities located away from good fishing waters move to fishing camps along the Kuskokwim River or its tributaries during the summer fishing season. For example, residents of three communities located along the Johnson River, west of Bethel, move to fishing sites located along the Kuskokwim River. Residents of Nikolai move to remote fishing sites 130 miles from their community to take chinook salmon near the confluence of the North and South forks of the Kuskokwim River, along the Salmon River, and along the Little Tonzona River. Salmon are also harvested near where people are camped while involved in other subsistence activities such as berry picking and moose hunting.

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Most of the chinook, sockeye, and chum salmon are processed by drying and smoking. Many households own or share a smokehouse and other necessary processing equipment and facilities. Coho salmon are also dried, however, because of unfavorable drying weather during August and September when coho are available, drying and smoking is difficult. Freezing is another common way of preserving salmon. Household freezing capacity is usually limited, therefore, this method is used primarily for coho salmon. Chinook, sockeye, and coho are also preserved by salting and canning. During the fishing season, fresh salmon are a common and frequent food at many meals. Dried salmon is eaten daily throughout most of the year and is a preferred source of lightweight high-energy food which is taken along on most hunting, trapping, and fishing trips.

6. A use pattern which includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.

Knowledge and skills associated with subsistence salmon fishing are taught by involving young or less experienced individuals in all aspects of salmon fishing, equipment repair and maintenance, and processing. Elder family members often oversee salmon production activities and direct younger family members who cooperatively share in production tasks. Children are often involved in the activities and learn the skills necessary for becoming successful fishers and processors by assisting experienced adults. Men are the primary harvesters while females are the primary processors.

7. A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving.

Households, family groups consisting of related individuals, and complex networks of extended families share fishing camps as well as harvesting and processing responsibilities. Family members unable to actively participate in harvest or production activities provide assistance in the form of fishing gear, gasoline, processing equipment, or other necessary items. Distribution of salmon generally occurs along the same kinship lines which serve to affiliate salmon production groups. Salmon are also shared with friends, elders, and relatives living in other communities.

8. A pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.

Households harvesting salmon for subsistence tend to harvest a wide variety of resources. Freshwater fish, waterfowl, small game, furbearers, and plants are also harvested by most communities. For many Kuskokwim Area communities, salmon represent more than half of the total amount (edible weight) of subsistence resources harvested. In some communities, 70 percent of the households are actively involved in harvesting and processing subsistence salmon.

Examples of per capita harvests of salmon in the Kuskokwim Area are: 613 pounds in Chuathbaluk (1982), 446 in Kwethluk (1986), 342 in Quinhagak (1982), 288 in Nunapitchuk (1983), 211 in Sleetmute (1982), 113 in Tununak (1986).

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KUSKOKWIM AREA SUBSISTENCE SALMON HARVESTS 1990 – 1999.

	District 1 (Lower River)			District 2 (Middle River)			Upper River (All Above District 2)		
	Minimum	Average	High	Minimum	Average	High	Minimum	Average	High
Chinook	52,795	69,207	78,956	7,181	9,357	12,754	3,082	4,197	4,750
Sockeye	21,671	30,733	42,883	2,183	3,315	5,089	3,121	5,156	7,445
Coho	18,979	26,725	43,362	2,010	2,926	4,448	2,976	5,153	7,112
Chum	32,790	58,001	93,743	3,916	10,304	19,132	2,297	6,837	13,633
ALL SPECIES	153,722	184,667	233,946	16,097	25,902	34,691	15,202	21,343	30,583

	District 2 and Upper River			District 4 (Quinhagak)			District 5 (Goodnews/Platinum)		
	Minimum	Average	High	Minimum	Average	High	Minimum	Average	High
Chinook	10,263	13,554	17,480	2,746	3,698	6,013	374	666	917
Sockeye	5,572	8,471	12,534	400	1,173	1,951	253	750	1,282
Coho	4,986	8,079	10,295	1,264	2,427	4,174	305	853	1,828
Chum	7,001	17,142	32,765	600	1,459	3,234	133	325	1,006
ALL SPECIES	31,299	47,245	65,274	5,853	8,757	15,372	1,404	2,594	4,176

	KUSKOKWIM RIVER			REMAINDER OF KUSKOKWIM AREA			TOTAL KUSKOKWIM AREA		
	Minimum	Average	High	Minimum	Average	High	Minimum	Average	High
Chinook	64,795	82,762	96,436	3,535	4,511	6,699	68,686	87,272	100,159
Sockeye	27,791	39,204	52,984	823	2,073	3,420	28,622	41,276	56,404
Coho	24,864	34,803	50,370	1,682	3,416	5,922	27,239	38,220	55,620
Chum	39,970	75,143	126,508	1,006	3,004	4,961	40,976	78,147	131,469
ALL SPECIES	188,476	231,912	293,554	7,588	13,003	20,968	198,466	244,915	314,522

12

KUSKOKWIM AREA

5 AAC 01.286 CUSTOMARY AND TRADITIONAL SUBSISTENCE USES OF FISH STOCKS. (a) The Alaska Board of Fisheries (board) finds that the following fish stocks are customarily and traditionally taken or used for subsistence:

(1) Salmon, halibut, Pacific cod and all other finfish except as specified in (2) of this section, in the Kuskokwim Area; and

(2) herring and herring roe, along the coast between the westernmost tip of the Nasknoat Peninsula; and the terminus of the Ishowik River, and along the coast of Nunivak Island.

The department recommends repealing the above language and adopting the substitute language below:

Range based on low harvest and median harvest of last ten years: ← ☆

5 AAC 01.286 CUSTOMARY AND TRADITIONAL SUBSISTENCE USES OF FISH STOCKS AMOUNTS NECESSARY FOR SUBSISTENCE USES. (a) The Alaska Board of Fisheries (board) finds that the following fish stocks are customarily and traditionally taken or used for subsistence:

(1) Halibut, Pacific cod and all other finfish except as specified in (2) of this section, in the Kuskokwim Area; and

(2) Chinook salmon, chum salmon, sockeye salmon, coho salmon, and pink salmon in the Kuskokwim River drainage

(3) Salmon in the remainder of the Kuskokwim Area

(4) herring and herring roe, along the coast between the westernmost tip of the Nasknoat Peninsula; and the terminus of the Ishowik River, and along the coast of Nunivak Island.

(b) The Board finds that the following amounts are reasonably necessary for subsistence uses

(1) 64,500-83,000 chinook salmon in the Kuskowkim River drainage

(2) 39,500-75,500 chum salmon in Kuskowkim River drainage

(3) 27,500-39,500 sockeye salmon in the Kuskowkim River drainage

(4) 24,500- 35,000 coho salmon in the Kuskowkim River drainage

(5) 7,500- 13,500 salmon in the remainder of the Kuskokwim Area

U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Federal Subsistence Board

1101 E Tudor Rd, MS 121
Anchorage Alaska 99503

Forest Service

Federal Waters Within the Boundaries of the Yukon Delta National Wildlife Refuge

2014 Kuskokwim Area Salmon Fishery News Release
2014 Kuskokwim Area Outlooks and Pre-season Management Strategy

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Issued at: Bethel, Alaska
May 6, 2014

This is an announcement from the U.S. Fish & Wildlife Service for subsistence fishermen in the Kuskokwim Area.

Kuskokwim River

State and Federal fishery management staff will continue to follow guidelines outlined in the ***Kuskokwim River Salmon Management Plan 5 ACC 07.365,*** to the extent possible, to meet escapement goals, provide for subsistence use, and allow commercial fishing on available harvestable surpluses under State management. The U.S. Fish and Wildlife Service intends on following the trajectory of decisions for the 2014 fishing season made in public meetings with tribes, the Kuskokwim Salmon Management Working Group, the public, and the Alaska Department of Fish & Game.

Federal Special Actions

The Federal Subsistence Board adopted Federal Special Action FSA14-03 at its April 17, 2014 meeting. The action closed the Kuskokwim Chinook salmon fishery with the exception of Federally qualified users with customary and traditional determinations. The Board also adopted a Section 804 Analysis to determine who would be qualified to fish for a harvestable surplus of Chinook salmon. A harvest allocation of not more than 1,000 Chinook by USFWS permit only may take place in the middle of June. No further allocation is projected beyond the 1,000 Chinook for the remainder of the season. Permit information will be made available in late May to Kuskokwim area residents who qualified under the 804 Analysis adopted by the Federal Subsistence Board.

As a result of this action, the State of Alaska will be managing the Chinook salmon fishery outside the boundaries of the Yukon Delta National Wildlife Refuge as well as the dipnet fishery within the boundary of the refuge. ADF&G will manage the chum, sockeye, and coho fishery beginning at some point in July in all of the Kuskokwim Drainage.

Kuskokwim River Chinook Forecast

Since 2010, the Kuskokwim River has experienced poor Chinook salmon returns and 2013 was the lowest return on record. The 2014 Chinook salmon forecast is for a return of 94,000 fish (range of 71,000–117,000). The drainage-wide escapement goal is 65,000–120,000. If the 2014 return is within the forecast there may be sufficient numbers of Chinook salmon to meet escapement goals and provide for very limited Chinook salmon subsistence harvest. The majority of escapement goals were not met in 2013 and all weir assessment projects had the lowest passages on record. Given consecutive years of low Chinook salmon returns and non-achievement of escapement goals, significant conservation measures are warranted.

Kuskokwim River Salmon Outlook

The Alaska Department of Fish & Game will manage the salmon fishery beyond the Chinook season. Broad expectations are developed based on parent-year escapements and recent year trends for sockeye, chum, and coho salmon abundance which are expected to be similar to 2013. The abundance of chum, sockeye, and coho salmon are expected to be large enough to meet escapement goals, amounts reasonably necessary for subsistence uses, and for non-subsistence uses. Anticipated available surpluses for commercial harvest range from 5,000 to 20,000 sockeye; 100,000 to 200,000 chum; and 80,000 to 140,000 coho salmon. Conservation measures to protect Chinook salmon may limit commercial harvest of chum and sockeye salmon to levels below the available surpluses. Markets and processing capacity are expected to be similar to last year.

Kuskokwim River Subsistence Salmon Fishing Restrictions

The season will begin with a Special Action to limit the Chinook salmon fishery to Federally qualified users within the boundary of the Yukon Delta National Wildlife Refuge. Subsistence salmon fishing on the Kuskokwim River in 2014 will be closed early in the season. Closures will start in the lowest sections of the river and move to upstream sections based on the migratory timing of Chinook salmon. During the salmon fishing closures, the use of set gillnets with 4-inch or less size not exceeding 60 feet in length and 45 meshes in depth is allowed for the harvest of non-salmon species. Set gillnet is defined as a gillnet that has been intentionally set, staked, anchored, or otherwise fixed.

The following are actions expected to take place:

Kuskokwim River within the Yukon Delta National Wildlife Refuge (Federal Special Action)

Effective 12:01 a.m., Tuesday, May 20, 2014 Federal public waters in that portion of the Kuskokwim River drainage that are within and adjacent to the exterior boundaries of the Yukon Delta National Wildlife Refuge are closed to the harvest of Chinook salmon except by the residents of the Kuskokwim River drainage and the villages of Chefornak, Kipnuk, Kwigillingok and Kongiganek.

Kuskokwim River Mouth to Tuluksak: Sections 1 and 2 (Federal Special Action)

Effective 12:01 a.m., Tuesday, May 20, 2014 Chinook fishing with hook and line gear is closed and fishing is restricted to the use of set gillnets with 4-inch or less mesh size not exceeding 60-feet in length in salmon conservation sections 1 and 2. This area is defined as, that portion of the Kuskokwim River and its tributaries upstream from a line from Apokak Slough to the southernmost tip of Eek Island to Popokamiut, to a line

between ADF&G regulatory markers located approximately half a mile upstream of the Tuluksak River mouth. This section includes the slough (locally known as Utak Slough) on the northwest side of the Kuskokwim River adjacent to the Tuluksak River mouth. Excluded waters are non-salmon spawning tributaries: those portions of Kinak, Kialik, Tagayarak, Johnson and Gweek rivers more than 100 yards upstream from the mouth of these rivers, are open with any mesh size gillnet and are not affected by these closures.

Tuluksak to Chuathbaluk: Section 3 (Federal Special Action to the Aniak River and State Emergency Order upriver of)

Effective 12:01 a.m., Tuesday, May 27, 2014 Chinook salmon fishing with hook and line gear is closed and fishing is restricted to the use of set gillnets with 4-inch or less mesh size not exceeding 60-feet in length in salmon conservation Section 3. Additionally, a fish wheel used to take fish must be equipped with a livebox that contains no less than 45 cubic feet of water volume while in operation. The livebox must be checked at least once every six hours while in operation and all Chinook salmon must be returned to the water alive.

This area is defined as that portion of the Kuskokwim River and its tributaries upstream from a line between ADF&G regulatory markers located approximately half a mile upstream of the Tuluksak River mouth to the refuge boundary on the East bank of the Aniak River at its confluence with the Kuskokwim, (State closures through Chuathbaluk are expected in this area). This section does NOT include the slough (locally known as Utak Slough) on the northwest side of the Kuskokwim River adjacent to the Tuluksak River mouth. Excluded waters are non-salmon spawning tributaries: the Whitefish Lake drainage near Aniak and those portions of Discovery, Birch, and Swift creeks more than 100 yards upstream from the mouth of these rivers, are open with any mesh size gillnet and are not affected by these closures.

Dip Nets

A newly adopted regulation by both the State of Alaska and the U.S. Fish & Wildlife Service allows for the use of dip nets to harvest non-salmon species and salmon other than Chinook salmon. Qualified Alaska residents are allowed to fish under State Law using this gear type because the Special Action limiting fishing to Federally Qualified Users is intended for Chinook salmon conservation and gear types that are intended to harvest Chinook salmon or have a high likelihood of harvesting Chinook salmon. The State of Alaska and the USFWS intend to provide dip net harvest opportunity beginning in mid-June during times when salmon fishing with gillnets is closed. Dip net opportunity will be based on the abundance of chum and sockeye salmon with the first fishing periods in Sections 1 and 2. As the salmon migrate upstream fishing periods will open in the upriver sections. When fishing periods are open to dip nets, all Chinook salmon must be immediately returned to the water, unharmed.

The specifications of a legal dip net from §100.25 (a) *Definitions* is a *bag-shaped net supported on all sides by a rigid frame; the maximum straight-line distance between any two points on the net frame, as measured through the net opening, may not exceed 5 feet; the depth of the bag must be at least one-half of the greatest straight-line distance, as measured through the net opening; no portion of the bag may be constructed of webbing that exceeds a stretched measurement of 4.5 inches; the frame must be attached to a single rigid handle and be operated by hand.*

The new Federal Regulations reads as follows; ***§100.27(e)(4)(ix) You may only take salmon by gillnet, beach seine, fish wheel, or rod and reel subject to the restrictions set out in this section, except that you may also take salmon by spear in the Kanektok, and Arolik River drainages, and in the drainage of Goodnews Bay. You may also take salmon by dip net in the Kuskokwim River drainage, with the provision that all Chinook salmon caught with a dip net must be released immediately to the water.***

Six Inch Gillnet Mesh Size Restrictions

The Service intends to provide opportunity to harvest chum and sockeye salmon with gillnets restricted to 6-inch or less mesh size. Fishing periods will be based on Chinook, chum, and sockeye salmon abundance. Fishing periods will likely be limited in time to reduce incidental harvest of Chinook. These periods will likely be initiated during the last week of June in the lowest sections of the river and open in the upriver sections based on salmon migratory timing. Fishing periods could occur prior to the last week of June if run assessment indicates a sufficient abundance to achieve Chinook escapement goals. The duration and frequency of fishing periods will be increased or decreased based on inseason run assessment. Additionally, gillnets may be restricted to 25 fathoms in length during these periods to reduce incidental harvest of Chinook.

Once the majority of Chinook have passed through the fishery, which is anticipated to occur in mid-July, salmon fishing restrictions will expire and subsistence fishing regulations will be as specified in 5 AAC 01.260-270.

Inseason Assessment and Research

Inseason indicators of salmon run strength include the Bethel Test Fishery, subsistence catch reports, commercial catch statistics, aerial surveys, weirs, and additional tributary escapement monitoring projects operated by an assortment of partnerships between State, Federal, and Tribal organizations. Staff from Orutsararmiut Native Council will survey Bethel Area subsistence fishermen to assess salmon run timing and abundance.

Further announcements will be made from the Yukon Delta National Wildlife Refuge office and through local radio stations. News releases will be faxed to area villages.

For additional information concerning this news release:

USFWS: Brian McCaffery 907-543-1014

-end-

DISTRIBUTION:

Tim Towarak, Chair, Federal Subsistence Board
Members, Yukon Kuskokwim Delta Federal Subsistence Regional Advisory Council
Gene Peltola, Jr., Assistant Regional Director, Office of Subsistence Management, USFWS
Ryan Noel, Acting Special Agent in Charge, LE Division, USFWS
Myron Naneng, President, Association of Village Council Presidents
Cora Campbell, Commissioner, Alaska Department of Fish & Game
Sgt. Mark Agnew, Alaska Bureau of Wildlife Investigation
Delta Discovery
Tundra Drums
KYUK Radio

U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Federal Subsistence Board

1101 E Tudor Rd, MS 121
Anchorage Alaska 99503

Forest Service

SUBSISTENCE FISHING

SPECIAL ACTION

Under Authority of	**50 CFR Part 100.10 and .19** **36 CFR Part 242.10 and .19**		
Special Action No.:	3-KS-01-14	Issued at:	Bethel, Alaska May 16, 2014
Effective Date:	May 20, 2014 12:01 a.m.		
Expiration Date:	July 18, 2014 11:59 p.m. unless superseded by subsequent Special Action		

EXPLANATION:

Federal public waters of the Kuskokwim River will be closed to fishing for king salmon to non-Federally qualified users to provide for escapement.

REGULATION
50 CFR 100.27(e)(4)(ii) is amended to add:

Federal public waters in that portion of the Kuskokwim River drainage that are within and adjacent to the exterior boundaries of the Yukon Delta National Wildlife Refuge are closed to the harvest of Chinook salmon except by the residents of the Kuskokwim River drainage and the villages of Chefornak, Kipnuk, Kwigillingok and Kongiganek. Based on observed run strength, and in consideration of conservation concerns and escapement goals, the Yukon Delta National Wildlife Refuge Manager may open portions of the drainage to the take of Chinook salmon.

JUSTIFICATION

Biological

Since 2010, the Kuskokwim River has suffered from poor king salmon returns. 2013 was the lowest return on record. The 2014 State of Alaska king salmon forecast is for a return of 94,000 Chinook (range of 71,000–117,000). The drainage-wide escapement goal is 65,000–120,000. If

the 2014 return is within the forecast, then there will be enough fish to meet escapement goals and perhaps provide for a very limited king salmon subsistence harvest.

The majority of tributary escapement goals on rivers within the Kuskokwim drainage were not met in 2013 and all weir assessment projects had the lowest Chinook counts on record. Given consecutive years of low king salmon returns and a forecast that indicates a return barely adequate to meet escapement needs, it will be necessary to impose strict conservation measures. .

In addition to the anticipated closure to Chinook harvest for non-subsistence users on Federal public lands, severe chinook harvest restrictions to subsistence users are expected to be in place for the 2014 season with little harvestable surplus available.

FEDERAL SUBSISTENCE BOARD

By delegation to:

Brian J. McCaffery, Acting Refuge Manager
Yukon Delta National Wildlife Refuge

DISTRIBUTION:

Tim Towarak, Chair, Federal Subsistence Board
Members, Yukon Kuskokwim Delta Regional Advisory Council
Gene Peltola, Jr., Assistant Regional Director, Subsistence Division, USFWS
Jim Hjelmgren, Chief of Refuge Law Enforcement
Ryan Noel, Acting Special Agent in Charge, LE Division, USFWS
Myron Naneng, President, Association of Village Council Presidents
Cora Campbell, Commissioner, Alaska Department of Fish & Game
Sgt. Mark Agnew, Alaska Bureau of Wildlife Investigation
Delta Discovery
Tundra Drums
KYUK Radio

Henry Hunter, Sr., Chairperson
Myron P. Naneng Sr., President
Phone: (907) 543-7300
Fax: (907) 543-3369
Web: www.avcp.org

AVCP

Association of Village Council Presidents
Administration
Pouch 219, Bethel, AK 99559

The Voice of the Region

PRESS RELEASE

Akiachak
Akiak
Alakanuk
Andreafsky
Aniak
Atmautluak
Bethel
Bill Moore's Sl.
Chefornak
Chevak
Chuathbaluk
Chuloonawick
Crooked Creek
Eek
Emmonak
Georgetown
Goodnews Bay
Hamilton
Hooper Bay
Lower Kalskag
Upper Kalskag
Kasigluk
Kipnuk
Kongiganak
Kotlik
Kwethluk
Kwigillingok
Lime Village
Marshall
Mekoryuk
Mtn. Village
Napaimiut
Napakiak
Napaskiak
Newtok
Nightmute
Nunakauyak
Nunam Iqua
Nunapitchuk
Ohogamiut
Oscarville
Paimiut
Pilot Station
Pitka's Point
Platinum
Quinhagak
Red Devil
Russian Mission
Scammon Bay
Sleetmute
St. Mary's
Stony River
Tuluksak
Tuntutuliak
Tununak
Umkumiut

January 14, 2015 -On October 14, AVCP distributed requests to our Kuskokwim River tribal communities for letters of support for five chosen steering committee members to work together on the initial development of the Kuskokwim River Inter-tribal Fish Commission (KRITFC). Building an understanding between each other for our tribal communities' unique goals, interests, and concerns is a priority for developing an effective working relationship and creation of the inter-tribal commission. Additional input received from our tribal members prompted us to expand the number of steering committee members to twelve representatives.

The twelve steering committee members include: 1) Willard Church of Quinhagak, 2) James Charles of Tuntutuliak, 3) Fritz Charles of Tuntutuliak, 4) Jacob Black of Napakiak, 5) Greg Roczicka of Bethel, 6) Robert Nick of Nunapitchuk, 7) James Nicori of Kwethluk, 8) Mike Williams of Akiak, 9) Robert Aloysius of Kalskag, 10) Wayne Morgan of Aniak, 11) Mark Leary of Napaimute, and 12) Evelyn Thomas of Crooked Creek. The Tanana Chiefs Conference (TCC) will also identify a number of steering committee representatives from Upper Kuskokwim River tribal governments.

The two primary priorities of the KRITFC Steering Committee include the development of an organizational framework to guide the structure and operation of the KRITFC and the creation of a salmon management plan for the Kuskokwim River Drainage.

The first steering committee meeting will be held in Bethel at the Cultural Center on February 5 and 6, 2015. The second meeting will also be held in Bethel at the Cultural Center on February 23 and 24, 2015. All steering committee meetings will be open to anyone who wishes to participate, and all AVCP tribes in the Kuskokwim River Drainage may appoint a representative to the steering committee. Once the Steering Committee has made its recommendations, AVCP will organize a meeting of all the tribes in the Kuskokwim River Drainage to meet, review, and take actions on the recommendations.

Quyana to our tribes for the input we have received.

Any questions related to this press release should be directed to Kevin Bartley at kbartley@avcp.org or you may call him at (907)543-7342.

Authorized for release:

Myron P. Naneng, Sr.
President

Testimony received at meeting 1/15/2015

January 15, 2015

To: Kuskokwim Subsistance Salmon Panel:

My name is Beverly Hoffman, a lifetime resident of the Kuskokwim I have been a member of the Kuskokwim River Salmon Management Working Group since 1999 and have been co-chair through some good years and bad.

I am 63 years, Growing up on the Kuskokwim, I knew the salmon returned and we would get our food for the summer and the winter. I have had a smoke house with my family all of my adult life.

Being on the working group my education of the cycles of salmon species, the importance of habitat, the importance of escapement grew, concerns of over fishing, acidity in the ocean affecting salmon population and more information started to accumulate in my computer files. Historical knowledge is important but understanding the biology is important for all of us who depend on the salmon.

The first year I was on the working group we were introduced to fishing on the window schedule. This was hard. It was the beginning of the end of commercial fishing targeting our Kings.

In 2012 the state and fed management used the working group to tell our people there would be restrictions. It was a very emotional time; we were very divided up and down the river. State and Federal Managers used our voices but didn't use our wisdom. The final decision was always up to federal and state managers. We didn't make escapement.

In 2013 we opened on the lower river with no restrictions and it was already to late for upriver subsistence and escapement when managers realized it was a bad decision. Many working group members questioned why would the Kuskokwim be the only river with a good forecast when the rest of the state predicted low numbers.

In 2014 another emotional year. Fish and politics became intertwined. How many meetings were there where people of the river were divided. Management was divided. While most people concentrated on other species there were those who used the 4 inch mesh to get their usual King numbers. There were almost two hundred white fish nets going 24/ 7 from Napakiak up to Tuluksak. I took pictures of at least 8 crossing the mouth of the Kwethluk. With our sacrifice some tributaries made escapement and some didn't. The Kwethluk was one that did not.

So as managers continue to have their differences, some of my people think tribal control is the answer, tier II proposals are in the works and you are here to listen then come up with hopefully a good plan.

received at
meeting 1/15/2015

These are my thoughts:

We have to open up with restrictions until we are sure the Kings are returning in strong numbers.

Using 4 inch mesh set nets to give folks the opportunity to get fresh fish for dinner is good but they were also used to target Kings. A schedule needs to be implemented.

Continue to distribute test fish Kings to communities for sharing. Community feeds?

Continue to promote processing other species, many of us in the last three years processed mostly chum and reds in our smoke house successfully. Ban 8 inch mesh nets.

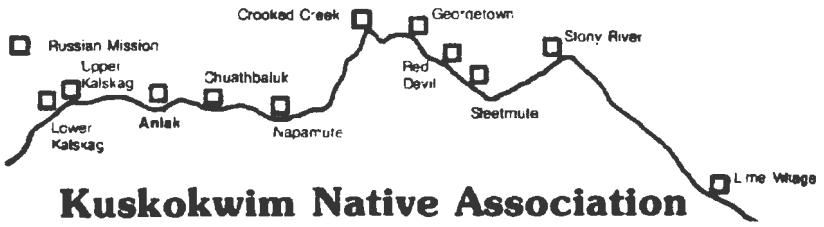
Implement a plan for fair allocation of Kings before a Tier II is implemented. Last year Father Alexander talked about at least 15 Kings per household. What would this look like village-to-village? Could it be less while we are rebuilding. Should there be subsistence permits? Who can come back to fish?

Work together. The working group has many tribal members. We have been working on salmon issues for almost 3 decades. We might not be all sanctioned by our tribal organization but at last count we had 19 members affiliated with a tribe. It's going to be a while before something else is in place. The working group should have all members approved by their tribe.

Restrictions need to be fair. If we are restricted in river, there should be the same restrictions in the bay. The Kings caught out on the coast are headed to spawning grounds on the Kuskokwim and on the Yukon. Continue to work on reducing by-catch on the high seas.

And like our state game biologists and our Federal Fish Managers, at least our head regional fish biologists should reside on the Kuskokwim. Thank you.

Burney Hoffman



Kuskokwim Native Association

To: Kuskokwim Subsistence Salmon Panel
Panel Members

January 14, 2015

From: Kuskokwim Native Association (KNA)
Director of Fisheries

Subject: Community Harvest Trends for Kuskokwim Chinook

Dear Panel Members:

The Alaska Department of Fish and Game, Board of Fish has tasked this group with developing possible solutions (both long and short term) to address the equitability of Chinook salmon harvest on the Kuskokwim River. Inherent in that task is the acknowledgement that a problem exists, i.e. that Chinook harvest patterns have changed, and become inequitable for some communities on the Kuskokwim River. To assist with your determination I present this simple analysis of Chinook salmon harvest reported to ADF&G between 1990 and 2011.

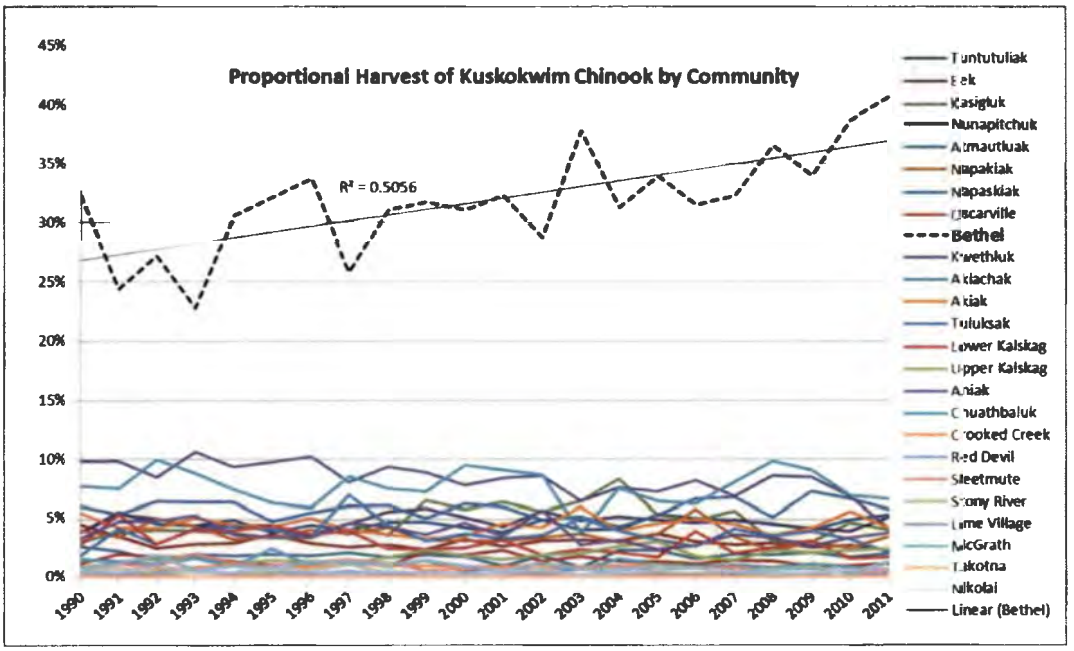


Figure 1. Community harvest trends of Chinook salmon as a proportion (percent) of the total Chinook harvest for the Kuskokwim River.

Growing population trends in Bethel are clearly impacting fishing opportunities for smaller villages; particularly those further up river and will continue to do so as the population continues to increase. If future allocation is based even in part on a per capita basis (either through a Tier II or other permit system) Bethel's allocation will continue to increase (as its population does) at the expense of the smaller villages. If the current trend continues Bethel alone could account for more than half of the total Chinook harvest on the Kuskokwim in less than a decade, figure 1.

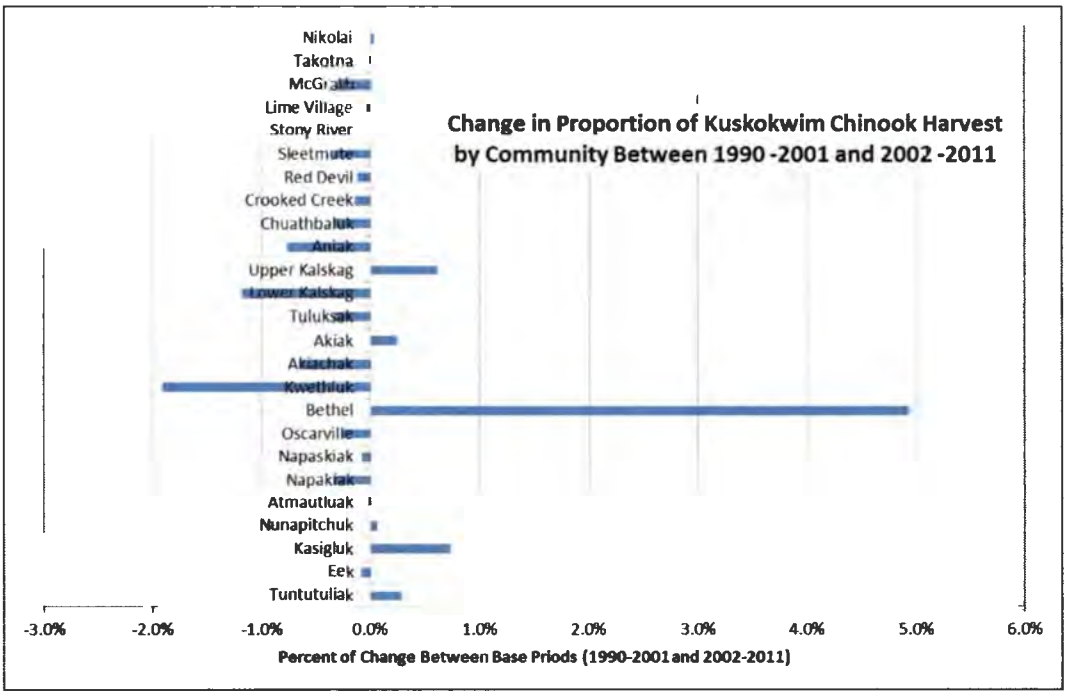


Figure 2. Decadal changes in community harvest of Chinook salmon as a proportion (percent) of the total Chinook harvest for the Kuskokwim River.

The rate of change in the proportion of harvest between Bethel and other communities appears to be approximately 5% per decade, figure2. This analysis does not include the most recent years when restrictions were in place, which in all likelihood compounded the problem. Furthermore, it has been proposed that the new escapement goal of 65,000 – 120,000 Chinook will further contribute to the problem by reducing densities of fish in the mid and upper river, relative to historic levels. In addition to this surveyed data I have heard numerous reports from local fishers that for decades Chinook abundance (and consequently harvest opportunity) in the mid and upper river for has been declining, long before this recent period of low abundance.

KNA is a regional non-profit native organization created to serve 12 villages along the middle and upper Kuskokwim River, and is a cooperator with ADF&G Commercial Fisheries Division on several salmon monitoring projects.

Thank you for your thoughtful consideration, sincerely:

KNA Director of Fisheries
Dan Gillikin
dgillikin@knafish.org

Testimony by Mike Rearden to Kuskokwim Salmon Subsistence Panel, Bethel. Alaska . January 15, 2015

I'm retired...so these comments are my own. I've got some broad concerns about how this Kuskokwim issue has been addressed and where it is going...Continuing to fight about fish every summer is not healthy for the people and does not contribute to successful management of the fish. Acceptable solutions must be found.

The primary mission of this panel is to consider how to insure equitable distribution of salmon on the Kuskokwim River. It is a complicated process intertwined with commercial fishing interests, management protocols, the so-called downriver/upriver conflict, difficulties in assessing run strength and composition and complexities of overlapping federal/state management laws.

I spent a career dealing with conservation management issues on the delta. Waterfowl , salmon, and moose conservation issues in particular took a huge amount of my and my staff's time. Managing fish or game is easy. Managing people, and getting the majority of users to agree on a course of action is very difficult. It requires a high level of commitment to communicating, listening and finding common ground. I believe thats why there seems to be reluctance to address the allocation issue. It takes a lot of effort.

Residents of the Kuskokwim are very dependent upon salmon . They have a larger stake in successful conservation than anyone, but currently I see a lot of denial—some residents don't believe the numbers , and many others think it will be better next year. I think we will all be better off if we prepare for many years of reduced King salmon numbers. I saw the same reaction on the Yukon 15 years ago. Their king fishery still has not recovered.

Working with the villages is going to difficult. Fish and game fisheries managers don't live in this community...they come here to work in the summer. Relationships are developed in the local store, at basketball game or camp with them on the river. This isn't a reflection on the individual managers, but it is a poor reflection on the Department. It is disrespectful for an agency to manage people 's resources from afar.

It is not the working groups responsibility to do all of the groundwork for for the department. Their volunteer efforts are very difficult already. I Think the fisheries managers time would be far better spent traveling to villages to understand the residents viewpoints and needs and ultimately would contribute to resolution of this issue.

Without this most basic work being done, I'm concerned that actual agreement on conservation and allocation will be difficult to obtain. If some clear course of action toward insuring equitable allocation, such as Tier II or community allocations, isn't followed very soon, I suspect that it may require legal challenges to accomplish it. It appears that all legal requirements for demanding a Tier II are present...it people don't want that, then alternatives better be found.

Ironically, one of the driving forces for statehood was to have local (state) control of Alaska's fisheries, but now the Department, and to some extent the Board, don't seem to be concerned that the Federal government took over fisheries management last summer. An insider confided in me that some state managers would prefer the federal government manage Kings on the Kuskokwim because it is such a tough job. Those that wrote the state's constitution would surly

be offended if that is true. What is being done to insure that Kuskokwim King salmon are managed by the state in future seasons?

I have no objection to how the federal managers did last summer. In fact, they actively worked with local residents and made the tough management decisions needed to conserve King salmon. Frankly after the Department's dismal management in 2013 , and after requests from several tribes, they had no choice but to take over management.

Nevertheless, I believe the department is much better prepared to manage the fishery than USFWS. I've been immersed in this problem myself—the state maintains decades of fishery records, operates the test fishery, and staffs experts trained to manage fish. Furthermore, ADF&Gs authority encompasses the whole river...whereas the federal management only encompasses the river within the boundaries of the Yukon Delta NWR—essentially from the mouth of the river to Aniak. I think that a seamless management scheme for the entire river, by one agency will have a better chance of success and less confusion for local residents.

However, there will have to be changes before people will have confidence that this will work. Clearly, some very clear mandates must be established to insure that residents of the mid-river and upper river get an equitable share of surplus fish. This will require changes in management actions that will affect lower river subsistence fishermen and the commercial fishery. This may mean establishing a tier II system, or village quotas or something else. It may require a major rework of the states overall management strategy as it appears that managing for a drainage-wide escapement goal may insure that mid-river and upriver residents will never again get the opportunity to catch the number of kings they customarily use (Molyneaux). As a panel, that is your charge.

In summary:

Its going to take a lot of groundwork and interaction with local residents to find an equitable solution to the allocation issues on the Kuskokwim.

Dual management of the fish in the river will not contribute to seamless, equitable management

There is a clear pattern of allocation and to some extent conservation problems with ADF&G management of king salmon on the Kuskokwim.

Under depressed runs, ADF&G management plans and actions have not provided for an equitable distribution of the available surplus.

The existing drainage-wide ANS provides no incentive to ensure an equitable distribution of the available surplus. There is no benchmark by which to assess success in providing equitable distribution. There is a need to establish a nested ANS for two or more subregions of the watershed.

Some people support implementation of a Tier II system—as required by regulation—unless another equally or more effective tool to ensure equitable distribution in times of low abundance can be developed and implemented in a timely way.

The state BOF should work very closely with the federal subsistence board , state managers should work very closely with federal managers to regain state management that meets the requirements of federal law, yet will provide seamless fisheries management for the entire Kuskokwim.

Minutes
Stony Holitna Fish & Game Advisory Committee
Teleconference
December 16, 2014 / 11 a.m.

BOF issues take up most of these minutes –
BOG issues are highlighted in Blue & Comments listed in the Template following the Minutes
Boxed portions of minutes are germane to the BOF Kuskokwim Subsistence Salmon Panel Jan.15 &16, 2014

Call to Order
The chairman, Doug Carney, called the meeting to order at 11:15 a.m.

Roll Call & Quorum
SHAC members present were
Rick Breckheimer & Fred Bobby - Lime Village
David Bobby – Stony River
Doug Carney & Susan Hubbard - Sleetmute
Barb Carlson & John Zeller – Red Devil
Absent was
Charlie Gusty from Stony River.

Others Attending -
Holly Carroll, Boards Support
Doug Molineaux, Fisheries Biologist
Aaron Tiernan, ADF&G Region V assist. Area fisheries Biologist
Jim Simon, ADF&G Subsistence Division
Hiroko Ikuta, AD&FG Subsistence Division

Members' Concerns

- Lime Village fishermen were prevented from fishing for sockeyes, due to the restrictions on fishing Chinook. Lime Village has a very negligible chinook run, and that species is in poor condition by the time they reach Lime, so are neither targeted or desirable.
  Rick said that when he has had a net set, and caught Chinook, he moves the net.

- BOF & BOG Proposals for 2016 will have to be put in before May 1, so we will need to have a regular meeting after the planned moose count in March,

Approval of Agenda –
The agenda was approved unanimously

The reading & approval of minutes from SHAC Jan. 15, 2014 meeting was deferred till the next SHAC meeting.

SHAC Chair, Doug Carney
BOG proposals that concern us are -

- BOG cycle change from 2-years to 3 years.
- Proposal 139 – the reauthorization of tag fee exemption for brown bear in GMU 19, and other units

- Most of the meeting will deal with fisheries issues, so Barb will handle the majority of the rest of things today.

Vice Chair, Barb Carlson

- Gave an overview of the 2014 preliminary Kuskokwim Salmon Season Summary for Chinook.
- Problem to address – Upriver villages a 63% lower harvest than in most years – much higher loss than downriver villages.

- For a possibly needed SHAC proposal she gave a synopsis of probable components to include. This proposal would have the aim of providing a reasonable opportunity for harvest of chinook in the upper river Kusko villages, at times when there is a harvestable surplus available.
  Components discussed were –1 -a nested ANS for sections of the river /
  2 -an in-river run goal, (this includes escapement, ANS, & sufficient fish to provide a reasonable opportunity for success.)
  3 – Some sort of permit system, (household, community, Tier II)

Doug Molineaux Presentation & Discussion – SHAC members all had hard copies of Doug's presentation. There are graphs and explanations that Doug explained and answered questions about. Included were -

- Graphs were used to illustrate the problem - that in the last 5 years, villages above Bethel had a larger decrease in harvest compared to Bethel and villages below Bethel.
- **Defined what ANS,"reasonable opportunity", & in river goals mean in this context.**
- Defined a **"Nested ANS"** as being part of a larger ANS that already exists, (on the Kusko River)
- How nested ANS would aid upriver village chinook harvest – provides a defined number & a measureable outcome at season's end, to judge the success of management tools that had been used
- **In- river goal** provides an "in-season guide" to judge management decisions/ how to set that goal. (escapement/ANS/enough fish to ensure a reasonable opportunity for success)

Discussion,Questions & Answers

- Rick/Doug M. - Reasonable Opportunity is set by BOF
- John/Doug M. -There is no long term/5-year forecast – only one issued in the spring - for the coming summer.
- Federal control was from Aniak to the mouth of the Kusko.

- Fred/Aaaron -(Down river has larger villages & boats, and cheaper fuel) Why doesn't the ADF&G limit net size? Ans. –If approved, proposal 272 will allow limits to be put on the length of any net.
- **Fred -Lime Villagers are prevented from fishing for reds – don't fish for kings**. Reds are the important runs for human use in Lime. Kings are in poor condition & not wanted. I caught 50% less reds in 2014, due to restrictions – not the Red run health.
- The Red run was early, overlapped with King run, so restrictions affected Red fishing ability more than in a normal year.
- Rick – When I set a net, if I'm catching kings – I move it. I don't want them – are poor quality.

Doug Molineaux – on Escapement

- The entire escapement goal range is below the median King escapement from 1976 thru 2013.
- Due to the low escapement goal - a directed commercial chum fishery is more likely to be opened & will result in a higher incidental King catch. (No directed chum opening in 2014)

This will cause a lower King escapement and lowering the abundance of Kings passing above the commercial fishing districts below Bethel

Lower abundance = Less reasonable opportunity for subsistence Chinook harvest above Bethel – and a minimum effect on subsistence King catch opportunity below Bethel, (which occurs prior to a commercial Chum opening.)

OPEN COMMERCIAL CHUM = POOR SUBSISTENCE KING

More discussion, questions & answers / RE: Doug's talk, potential SHAC proposal, Lime Village fishery

DRAFT BOF Proposal for nested ANS with in-river goals for Chinook. (2015-16/due April 10))
Barb – How to arrive at nested ANS #s, and what areas in which to apply them must be determined by user input, and interaction between ADF&G subsistence division and BOF

Options for arriving at an in-river goal –

- Combining escapement/ANS/enough fish to ensure a reasonable opportunity for success)
- Use the historical average King salmon escapement +/- 30% + ANS range

Qptions for monitoring the in-river goal –

- Bethel test fishery
- Upriver test fishery above the Aniak. (The subsistence Chinook fishery below Aniak is under federal control.)
-

Possible types of permits to limit Chinook catch in times of shortage – (household, community, Tier II)

- Under state regs – household & community permits can be used at the same time / in same community.
- Can have household with no community permits
- Tier II

Discussion & preferences –
David – household
Rick & Fred support a SHAC proposal and getting rid of unreasonable regs affecting Lime fishing
Susan – household
Barb – Hard to believe it, but many people don't realize the effect on the Lime Red harvest.
Fred Lime is only 70 miles from Stony, and Stony gets **good** Kings. As late as 1970s -Kings used to go up creek in Lime
Doug M. - a pocket of Kings spawn on the Stony in tributaries just below Two Lakes.

Read/ Discuss / Vote on support of –

- Proposal to change BOG cycle from 2 to 3 years (2015/due Dec.26) **- Opposed Unanimously**
- **Proposal 139 – Support Unanimously** -Reauthorize no Brn Bear tag requirement for GMU 19 – & others.(Due Jan.30,2015 –Central/Southwest Region BOG meeting)

Comments on proposals 271 & 272 for March, 2015 BOF/statewide meeting/ACR (due March 3)

Proposal 271 — Supported Unanimously / 4" mesh must be used for set nets – not drifting
Closes the loophole in State regs - that allowed people to drift with, target, & catch Kings

This is <u>not</u> allowed below Aniak, which is operating under federal regulation

<u>Proposal 272 – Supported Unanimously</u> / Lists gear types and methods of operation to be used in Kusko King fisheries (A good list of tools & would provide ADF&G ability to limit length of any net at its discretion.)

<u>There is unanimous SHAC member Support</u> -
<u>for a potential SHAC proposal, authored by Barb Carlson, which was discussed previously– in this meeting. Whether or not this proposal has life will be dependent on whether or not the **Kusko Salmon Panel, (a BOF subcommittee)**, generates a proposal that meets the needs of SHAC villages.</u>

<u>Adjourn at 1 p.m</u>

BOG or BOF	Proposal Number	Proposal Description	
Supports or Opposes?	Number Support	Number Oppose	Comments/Discussion (list Pros and Cons)/Amendments to Proposal
BOG		BOG CYCLE CHANGE	
OPPOSE	0	7-Unan.	SHAC doesn't want to see public input reduced /If a proposal is not approved, SHAC doesn't want to wait 3 years rather than 2, for another chance to remedy issue.
BOG	139	Reauthorize the current resident tag exemptions for brown bear in Unit 19and others..	
SUPPORT	7- Unan.	0	Brown bear are targets of opportunity & SHAC area folks want to help reduce hunting competition due to Brn. Bear predation

BOG or BOF	Proposal Number	Proposal Description	
Supports or Opposes?	Number Support	Number Oppose	Comments/Discussion (list Pros and Cons)/Amendments to Proposal
BOF	271	4inch mesh gear not allowed for Drifting – only set nets to be allowed	
SUPPORT	7-Unan.	0	Closes the loophole in State regs - that allowed people to drift with, target, & catch Kings This is <u>not</u> allowed below Aniak, which is operating under federal regulation.

BOG or BOF	Proposal Number	Proposal Description	
Supports or Opposes?	Number Support	Number Oppose	Comments/Discussion (list Pros and Cons)/Amendments to Proposal
			It would be best to have the same regs both above & below, to discourage possible abuse / targeting of Kings.
BOF	272	List of Gear types & methods of operation for Kusko Chinook fishery	
SUPPORT	7- Unan.	0	This is a good list of tools & would provide ADF&G the ability to limit length of any net at its discretion. Down river has larger villages & boats, and cheaper fuel Why doesn't the ADF&G limit net size? If approved, proposal 272 will allow limits to be put on the length of any net.

To be attached to Stony Holitna A.C. (SHAC) Minutes & Comments / Dec. 16 Teleconference

And directed to BOF meetings:

- Jan. 15 & 16, 2015 **BOF** Kuskokwim Subsistence Salmon Panel meeting in Bethel
- March 17 – 20, 2015 **BOF** Statewide Meeting in Anchorage

In regard to 2014 Chinook salmon fishing closures on the Kuskokwim River and its tributaries –

In the minutes from the Dec.16 SHAC Teleconference, there was much discussion about the poor quality of Chinook by the time they reach Lime Village, on the Stony River.
Also made clear is that local residents fish for Sockeye, and do not target or take Chinook due to their poor condition.

What was not written in the minutes, but is well known to folks in that part of the state is that **there is no store, post office, scheduled air service, or school in Lime Village.**
The people of Lime depend heavily on their ability to take Sockeye salmon, as a primary source of protein.

Lime is one Village that should no longer be prevented from fishing for Sockeye, as they were in 2014 - only because they might inadvertently catch one of the few Chinook that are in poor shape, and unwanted.

Submitted by Doug Carney, Chairman
Stony Holitna F & G Advisory Committee

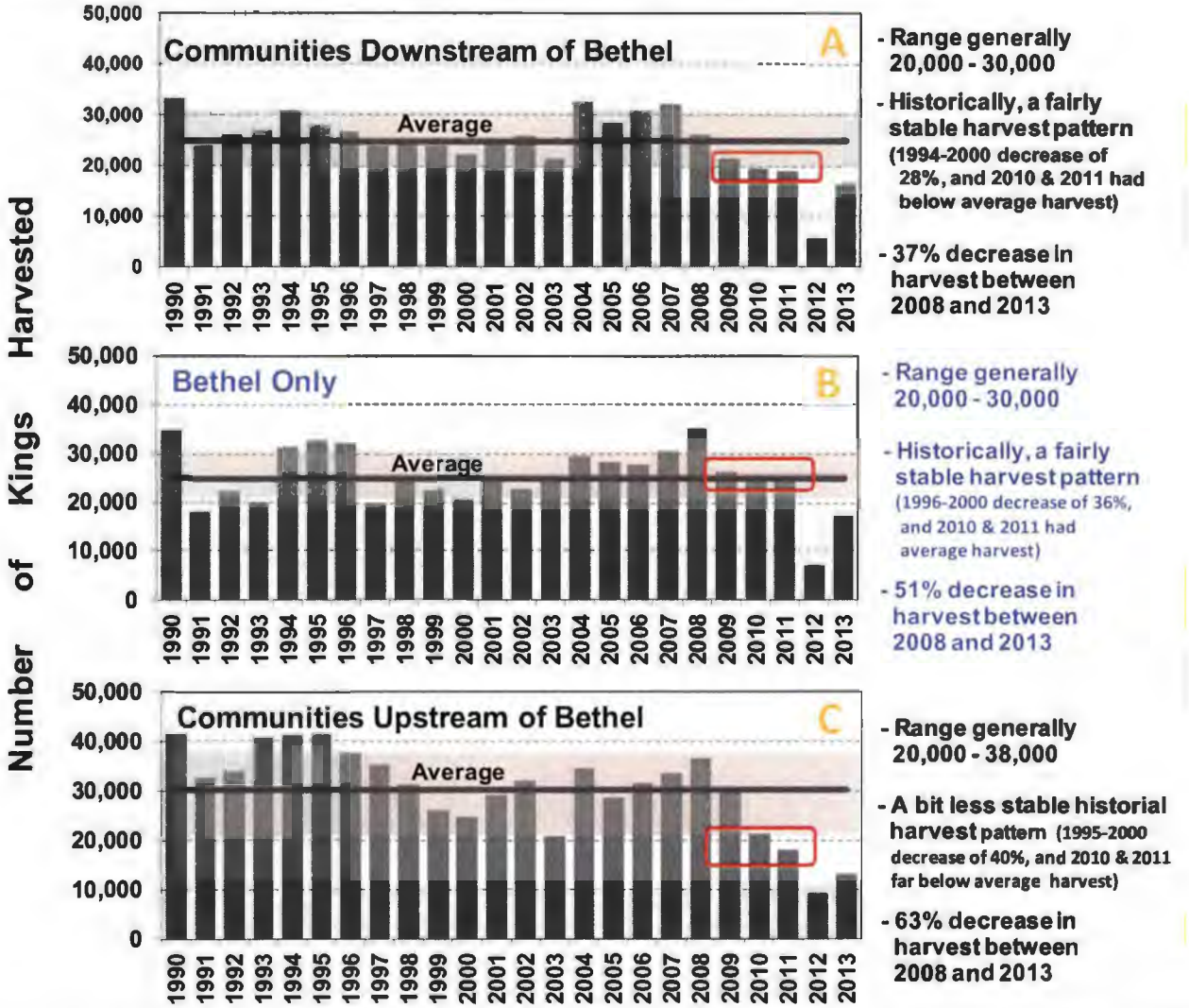
Alaska Board of Fisheries

Stony-Holitna Advisory Committee Teleconference

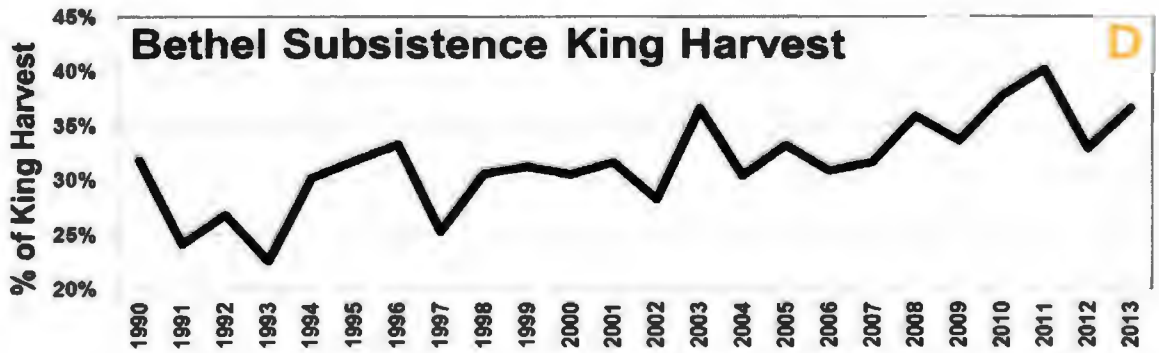
December ____, 2014

I. Issue: need for better assurances in providing adequate king salmon ***subsistence harvest opportunity*** in middle and upper Kuskokwim River communities.

Subsistence Harvest of King Salmon in the Kuskokwim River



Residents in Bethel are taking an increasing percentage of the annual harvest, which can mask shortfalls elsewhere.

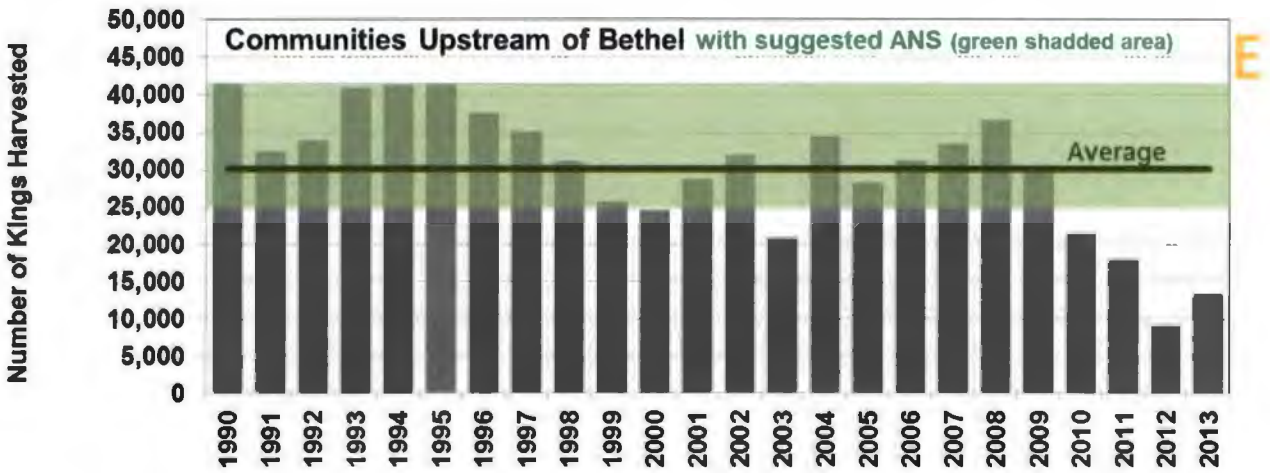


II. Possible *Avenues to Provide Better Subsistence Harvest Opportunity Assurances to M-U Kuskokwim Communities* :

A. *First step,* establish a "**Nested Amount Necessary for Subsistence (ANS)**" for kings upstream of Bethel.

1. Definitions:
   a. An ***Amount Necessary for Subsistence (ANS)*** (AS 16.05.285(b)) requires the BOF to "determine the amount of harvestable portion of each fish stock with a customary and traditional use that is reasonably necessary for subsistence use. An ANS is NOT a guaranteed number of fish for subsistence harvest. It is a tool for evaluating subsistence regulations to determine if **reasonable opportunities** are being provided for subsistence use.
   b. ***Reasonable Opportunity*** is an opportunity that allows a subsistence user to participate in a fishery that provides a normally diligent participant with a reasonable expectation of success of taking of fish (AS 16.05.258(f)).
   c. An ANS is ***"nested"*** when it is part of a larger ANS. *It is "nested" within that larger ANS.* ~~A nested ANS for the upper Kuskokwim River would be part of the current ANS that covers the entire Kuskokwim River.~~ *The current ANS, for the entire Kuskokwim River is 67,200 to 109,800 king salmon. So, a nested ANS would be some fraction of that range specifically identified as "reasonable opportunity" for the middle-upper river.*
2. Why a nested ANS for Kuskokwim River communities upstream from Bethel?
   a. Bethel is the point in the river where early season salmon passage is first assessed formally by ADF&G via the Bethel Test Fishery.
   b. Provides a formal target for managers to aim for.
   c. Also provides a measurable outcome for evaluating the success of management actions.

   Example:

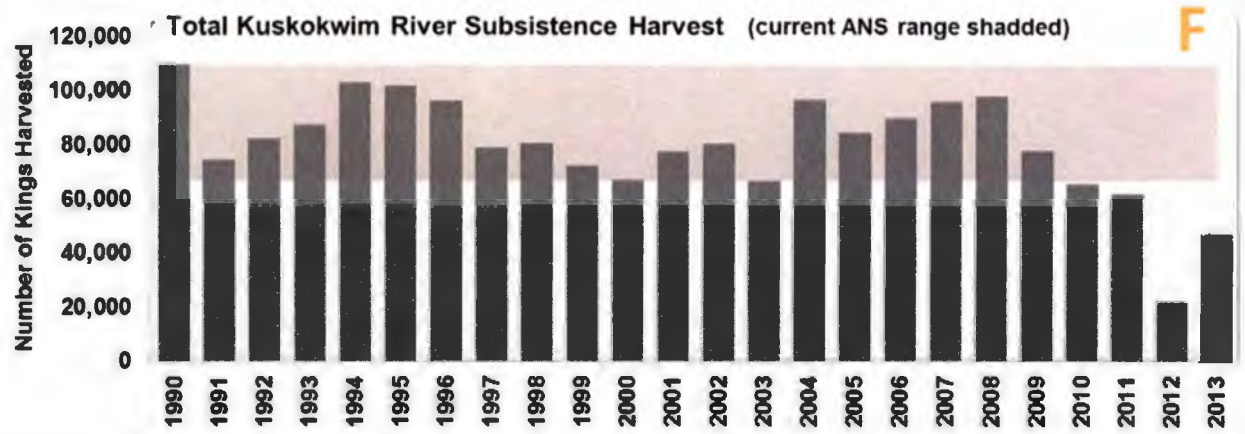


B. *Second step,* establish an **Inriver Run Goal** for Kuskokwim River king salmon.

1. ~~What is an ***Inriver Run Goal***?~~ *An Inriver Run Goal is a* specific management objective for salmon stocks that are subject to harvest upstream of a point where escapement is estimated; the inriver run goal is set in regulation by the BOF and is comprised of the escapement goal plus a specific allocation to inriver fisheries.
2. Why? Provides a measurable guide to managers as to how many king salmon are needed to pass upstream of Bethel in order to provide an opportunity for subsistence harvest comparable to historical levels and in line with what is necessary to achieve the nested ANS.
3. How could an Inriver run goal be set? One approach is to use the historical average king salmon escapement +/- 30%, plus the nested ANS range. *May also want to add half of the average Bethel harvest too.*

III. Additional Notes:

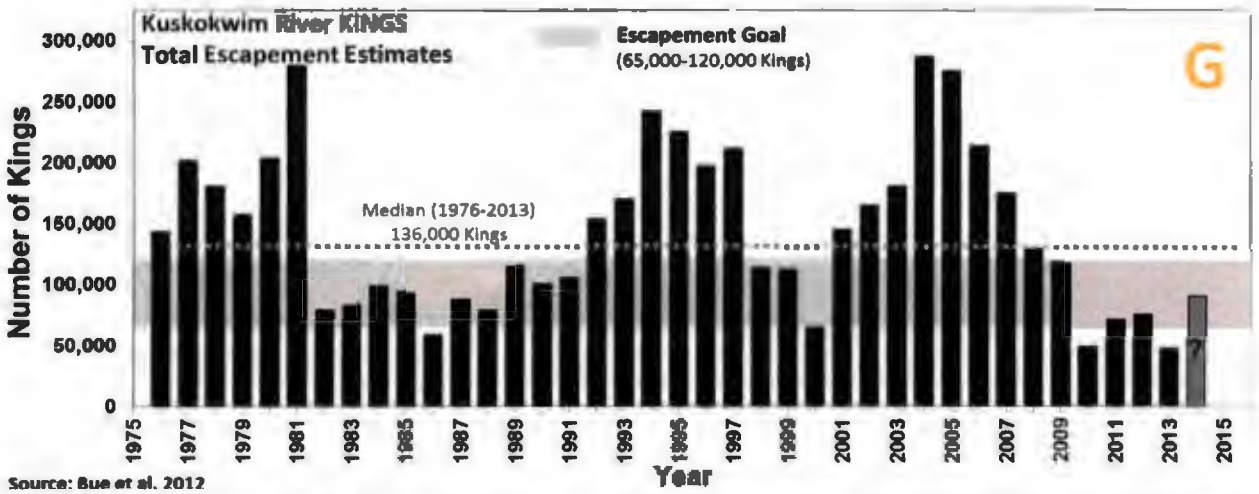
1. Current Amount Necessary for Subsistence (ANS) for king salmon is 67,200 to 109,800 fish for the entire Kuskokwim River drainage.



Graph F corrected 12/11/2014; changed lower end of ANS from 67,000 to 67,200.

B. Subsistence harvest opportunity in communities upstream of Bethel is further at risk because of king salmon commercial harvest occurring in the lower river (District 1).

1. Because of the new drainage wide king salmon escapement goal, there is a greater likelihood of increasing commercial king salmon harvest in the lower river, whether it is incidental or directed harvest.
2. The new goal is 65,000 to 120,000 king salmon, which is well below the historical average escapement of 145,000 kings (median is 136,000).



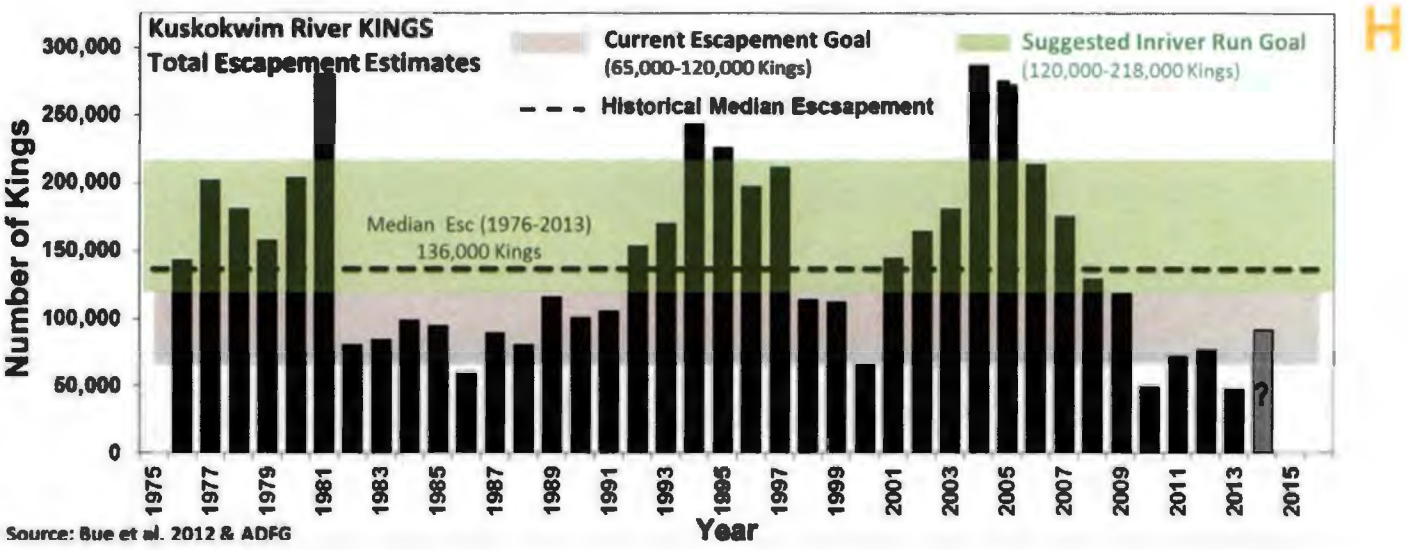
Source: Bue et al. 2012

3. If escapement is managed to within this new goal, as would happen if commercial king harvest is liberalized, then average abundance of king salmon passing upstream of Bethel will diminish from historical levels. This in turn will reduce the subsistence catch per hour (catch rate) upstream of Bethel; i.e., subsistence fishers will have to fish longer to get their normal harvest of kings.
4. Subsistence harvest in Bethel and communities downstream of Bethel, however, are likely to be minimally affected if there is an increase in commercial king catches because they have access to harvest early in the season before the date when management action typically occur and before the date when commercial fishing begins.
5. As a consequence, the current drainage wide ANS levels for the Kuskowkim River may be achieved, but the dominance of the Bethel and lower river harvest will mask underperformance in the middle and upper river if the drainage wide ANS is the only formal measure of performance.

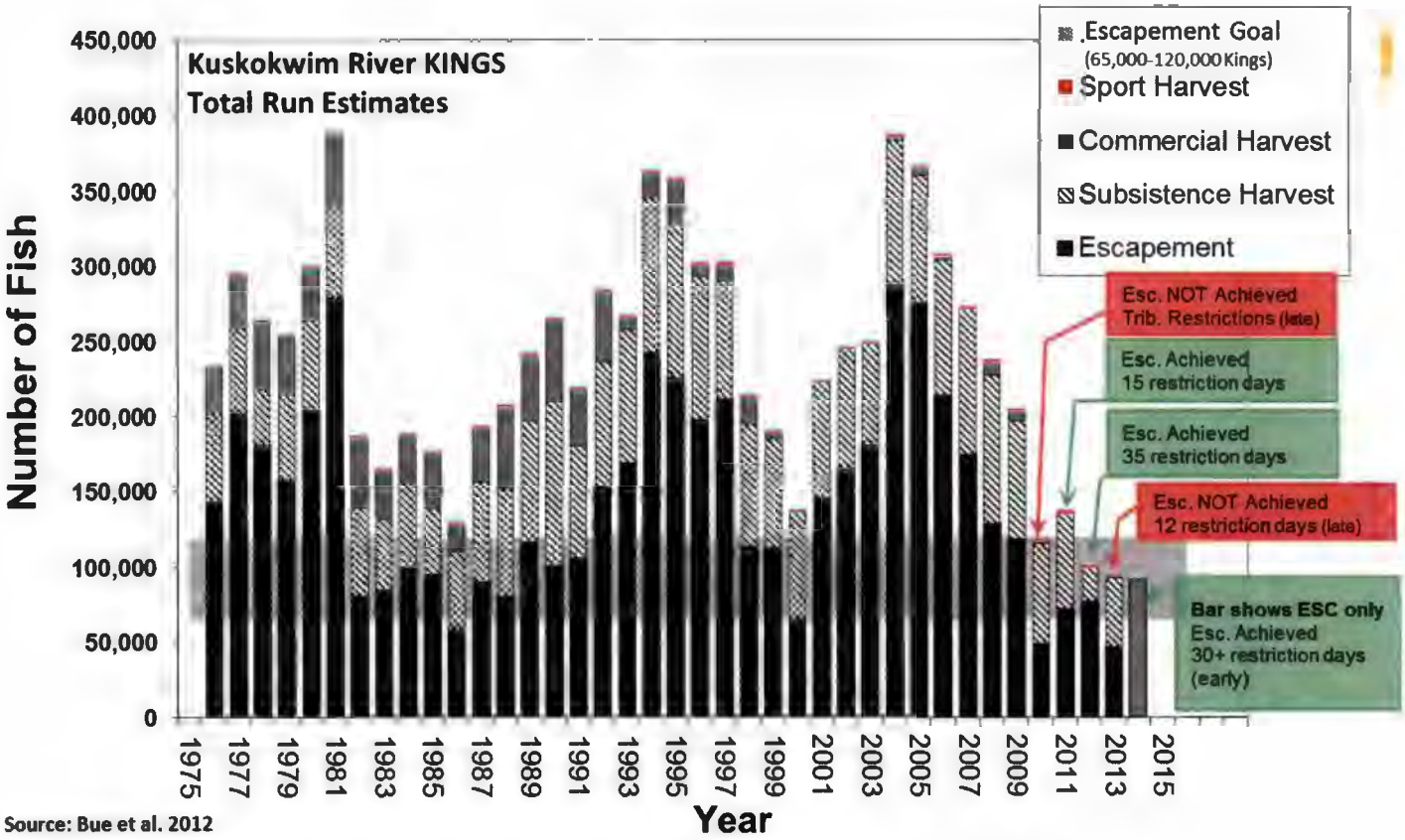
C. Suggested Changes:

1. Establish an independent or nested king salmon ANS for communities upstream of Bethel.
   a. Following conventions similar to those used by the BOF to revise the ANS in 2013, the ANS range for communities upstream of Bethel should be 25,000 to 41,500.
   b. This excludes 2010-2013 when the drainage wide ANS was not achieved and it excludes the remaining lowest year (2003) and highest year (1995).

2. Establish an Inriver Run Goal of 120,000 to 218,000 kings, which is the historical median escapement +/- about 30%, plus the proposed ANS for communities upstream of Bethel.
   a. This Inriver Run Goal differs from the standard definition of an Inriver Run Goal that just adds subsistence harvest on top of the escapement goal – and this difference will be a point of debate.
   b. This Inriver Run Goal would result in a level of escapement that ranges from the upper end of the current escapement goal, to well above the current goal.
   c. This Inriver Run Goal provides a level of subsistence harvest opportunity upstream of Bethel consistent with historical opportunity. The level of annual escapements that would result also provided decades of sustainable subsistence and commercial fisheries in the Kuskokwim River.



D. Who is affected:
   1. Subsistence fishers in Bethel and communities downstream of Bethel
      a. During years of low king salmon abundance, there will be a higher likelihood of fishing restrictions in order to pass sufficient numbers of king salmon upstream to allow for harvest opportunity in the middle-upper Kuskokwim River consistent with the proposed nested ANS. During periods of average king salmon abundance, the Bethel and lower river communities could require a delay in the opening of the king salmon subsistence fishing season in order to pass king salmon upstream.
   2. Subsistence fishers in communities upstream of Bethel will be allowed subsistence harvest opportunity for king salmon consistent with historical opportunity.
   3. Commercial fishers in District 1 (lower Kuskokwim River) will likely be precluded from establishing a directed king salmon commercial fishery, and the opening date of the directed chum salmon commercial fishery likely will continue to be set in a manner to minimize the incidental catch of king salmon.
   4. Escapements will likely occur that are higher than the current drainage wide escapement goal and current tributary goals; however, they are likely to be consistent with the historical range of escapements that provided sustainable fisheries for decades.



Source: Bue et al. 2012

Kuskokwim Subsistence Salmon Panel Guidelines for public comment:
January 15, 2015 Public listening session

The panel is seeking comments on potential changes to Kuskokwim River subsistence salmon fishery management. While encouraging all public comment, the panel is seeking to develop specific solutions to address the following aspects of subsistence salmon fisheries management:

1. Is there currently an unequitable distribution of harvest opportunities for subsistence salmon along the Kuskokwim River drainage; if so, what options are there to address this?

2. What gear modifications will allow subsistence harvest of other salmon, and of non-salmon, during times of low king salmon abundance? use 8" for Kings, Smaller Kings can go thru 6" for Reds & Chums.

3. What options exist for the development and implementation of community subsistence salmon permits, other subsistence salmon permits, or subsistence salmon harvest records? Being a native allready gave me a permit to fish, none other needed

4. What options exist for the development and implementation of a Tier I or Tier II program for king salmon? None. not a good Idea

Bethel Advisory Committee meeting 1/13/15

Initial recommendations to BOF Chinook Subsistence Panel (1/15-16/15)

1. As long as current depleted King run conditions continue, maintain 4" or less mesh restrictions in 2015 with up to 2 openings per week, until the Kusko Salmon Mgmt Working Group and the area manager determines that 75% of the King run has passed the Bethel Test Fishery.

2. 4" or less mesh, fish wheels, beach seines or dip nets only beginning May 15, 2015 (or potential of dip net/beach seine only openings).

3. When limited to 4" or less mesh/60' setnet; Only 1 net per household allowed & net must be attached to the bank. (Potential amendment of BOF Proposal #271)

4. Alternate days of fishing (windows) when gear liberalization is implemented following the 75% BTF passage trigger point referenced above.

5. Do not support pursuit of Tier II fishery - maintain closures/restrictions until a Tier I status can be achieved. If above not deemed realistic or necessary maintain current

6. Look further into Tier I permit system with customary/traditional use criteria conditions incorporated, potential harvest limits, and/or length of years included in eligibility score; and further exploration of community harvest permit potential

7. No nets or fish wheels allowed in salmon spawning tributaries; or, within 1 mile of tributary mouth

8. No commercial sale/purchase of Kings including Districts 4 & 5 (Quinhagak/Goodnews)

9. Continue pursuit of equitable test fish distribution.

10. Further investigation/pursuit of potential enhancement projects

A Common Site in 2014: King Salmon Damaged by 4" Set Nets

Deadly Gear: My Thoughts on the Use of 4" Mesh Nets:

Yesterday you heard a lot of testimony in opposition to the use of 4" nets – how they damage and kill King Salmon. Nobody knows how many Kings were lost during the 2014 fishing season. In the lower River many hit the hundreds of set nets – there were 140 documented 4" set nets in the 9 miles between the lower end of Church Slough and Napaskiak (see ONC in-season subsistence reports) on the incoming tide, some drown only to be ripped out on the outgoing tide, others sat in those nets struggling for hours to get free, damaging themselves in their drive to get home to spawn.

Today I would like to tell you about my experience with these nets in 2014.

In 2012 people were allowed to drift or set with 4" nets during the restrictions. My friends in the Lower River who took advantage of this opportunity using the "new style 4" mesh nets" told me that type of gear was "deadly".

Last year I found out for myself. Knowing that the use of 4" nets was going to be allowed I called Donaldson's in Anchorage to order a new net. The first question they asked was, "Do you want it hung for salmon?"

I asked them what that meant. They told me:

- Single strand mono-filament
- Heavier lead line
- Regular salmon net cork line

Like any good fisherman that wants to catch fish – my intention was to target Reds and Chum – and for their gear to last I said yes. I think the 60' net was $265 with postage.

THESE ARE NOT THE LIGHT LITTLE 4" WHITEFISH NETS OF OUR FATHERS & GRANDFATHERS. THEY ARE MADE TO TARGET SALMON.

With my brand new 4" net I set out to abide by the conservation measures. I used the net as a set net at first, but good eddies in the Middle Kuskokwim are few and far between. The two that are close to Napaimute to be economically feasible (price of gas) are both shallow – 3' to 5' deep at normal water levels – last year was low water in June. I wasn't catching anything but my net was getting dirtier and dirtier.

So one day I decided to drift it to clean it – because we were in State water we were allowed to drift. In Federal water from Aniak on down you could only use 4" as set nets. As I was drifting it I caught 5 large Kings – I was so amazed that I kept them. In a regular year 5 Kings in a long drift with a 50 fathom 6" net would be a good drift!

In the day after that discovery I kept drifting that little net using a little 14' boat with an old 15hp for better control – even thought of going back to rowing.

Like my friends told me: that net was deadly! I could fish with that net the rest of my life and be happy. It was easy to throw, easy to drift, easy to pull in. Whenever a fish hit the net I would let it loose from the boat and run out to check it.

If it was a King I would let it go – I released 60 Kings from that little net and they were all medium to large something we haven't seen upriver in many years. There were very few small/jack Kings – they were getting caught in the 100's of 4" set nets downriver.

Chums and Reds were carefully hauled in and kept – we caught about 80 Reds and Chums.

In one drift I sank that deadly little net. I physically shook out 12 large Kings – there were a handful more that got out on their own. I quit and went back home. Practically in tears I told my wife, "I can't do this anymore. This isn't what subsistence is about – catching and letting go. I'm going to start keeping some."

I was getting firsthand reports from friends down river that had multiple 4" set nets that had caught over 80 Kings and counting. One of them even testified in a KRSMWG meeting. As long as it was legal to keep Kings caught in 4" People were going to keep doing it.

My oldest daughter was sitting at the kitchen table listening to my ranting. She told me, "You can't do that – you'll be a hypocrite!" So I told her to come with me and see how it is.

We went back out to drift. A few minutes into our first drift – 40' out a bunch of corks went down and bobbed hard. We went out to check. My daughter is 24 years old and she never seen that before in her life growing up in the Middle River. There was a 60lb size King stuck in the net. She was in awe. I held it loosely in the water asking her, "You still want to let it go? You still want to let it go?" She quietly said, "You have to." I shook it loose. It faded away into the water.

One of many large Kings released from a "new style 4" net" in 2014

In each drift that deadly little net would grab everything that was swimming in the River: Suckers, Whitefish, Sheefish, Chums, Reds, and of course Kings. We couldn't let all of the Kings go – some were too injured. Some of them would fight hard pull that small net out of the water and wrap the lead line over the cork line. The only way to get them out of the net was to bring them in the boat. Once onboard they would beat themselves bloody to get free while I tried to untangle them as fast as possible. Letting them go would be like shooting an animal, wounding it, then turning your back on it. I can't do that.

So with all that said, I'm not sure what the answer is.

- Making 4" set net only will lead to saturation of the River with set nets which is burden in the Middle and Upper River where set net sites are very few. Meanwhile many Kings in the Lower River will be caught and kept. An unknown number will be lost – damaged or killed outright. I think it is substantial but there's no way to prove it other than some of the testimonies given yesterday.

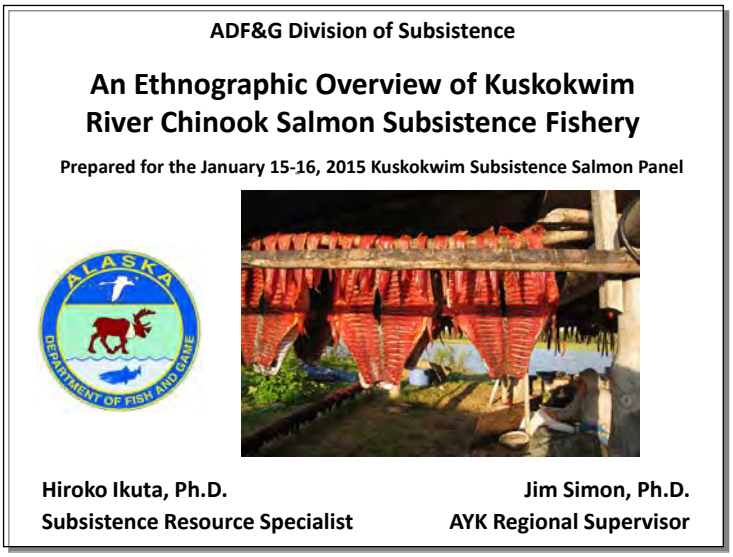
- Allowing for 4" to be drifted allows for a conservation-minded fisher to release Kings almost immediately without harm in most cases. Some will have to be kept because they are just too wounded.

- Completely banning the use of 4" nets in the main-stem Kuskokwim and all anadromous streams or only allowing windows of opportunity for 4" nets might have to be considered.

- Requiring 4" nets used as set nets to be checked every 6 hrs. – like the requirement for fish wheels

Thank you for your consideration.

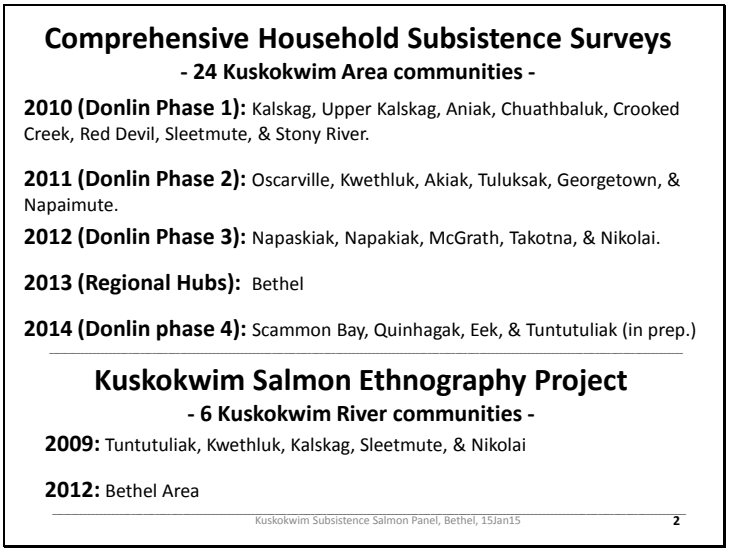
Slide 1



Hi, my name is Jim Simon. I am the regional supervisor for the Division of Subsistence for the Arctic-Yukon-Kuskokwim regions. With me is Dr. Hiroko Ikuta, who is the lead Subsistence Resource Specialist for the Kuskokwim River. We would like to give a short presentation about the Kuskokwim River Chinook salmon subsistence fishery based on the results of our division's research during the past 5 years.

The Kuskokwim River supports the state's largest subsistence king salmon fishery. About half of all the subsistence king salmon harvested in Alaska are taken from the Kuskokwim River each year. Since 1988, ADF&G has conducted annual post-season household surveys to estimate the number of subsistence salmon harvested from the Kuskokwim River. Since 2008, these surveys have been administered by the Division of Commercial Fisheries, which has provided the opportunity for the Subsistence Division staff to conduct long overdue comprehensive subsistence research and focused studies in the Kuskokwim region.

Slide 2



The Division of Subsistence has conducted various studies on subsistence salmon fishing in Kuskokwim communities. Between 2010 and 2014, we conducted comprehensive subsistence surveys in 23 Kuskokwim area communities, listed here, funded by Donlin Gold. In addition, in 2013, we conducted a comprehensive subsistence survey in Bethel with funds from the state legislature. Each of these 24 community research projects was conducted in partnership with tribal and local governments and community members. The purpose of this research was to document each community's harvest and use patterns of subsistence resources, harvest and use areas, and local traditional knowledge. Survey topics included harvest amounts, sharing patterns, observations of harvest trends, and local concerns and comments.

In 2009, we initiated an ethnographic research project to document customary and traditional use patterns of subsistence salmon fishing along the Kuskokwim drainage. An ethnography project goes beyond a formal survey to get more in-depth information from interviewing subject matter experts and observing and participating in subsistence activities. This project focused on 5 Kuskokwim River communities: Tuntutuliak, Kwethluk, Kalskag, Sleetmute and Nikolai. In addition, a follow-up study was conducted in the Bethel area in 2012, in response to the very low returns of king salmon, which resulted in subsistence fishing closures and restrictions. The results of this ethnographic research are published as Technical Paper 382, and we have a few bound copies of that report here, if you would like one.

The data summarized in this presentation represent some of the research results from these studies. In total, in the past 5 years, Division of Subsistence has conducted household surveys in 1,349 Kuskokwim households, visited more than 18 fish camps, and conducted ethnographic interviews with 194 Kuskokwim residents. Dozens of individuals contributed to the collection, analysis, and interpretation of the data reported here, and we refer interested individuals to the ADF&G website to access the technical reports detailing these research results. http://www.adfg.alaska.gov/sf/publications/

Slide 3

Research Ethics

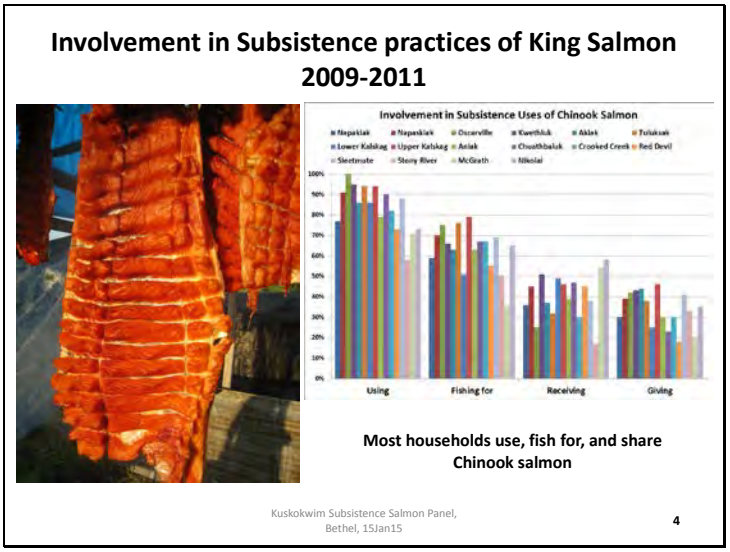
- Communities decide whether to participate in the research or not.
- Participation is voluntary.
- All individual and household information is confidential.
- Data are analyzed according to standard statewide Division of Subsistence procedures.
- All interviews are conducted only with the informed consent of participants.
- Communities have the opportunity to review data before finalization and publication.

Photo courtesy of Jim Magdanz

The division of subsistence maintains and adheres to strict research ethics in our protocols:

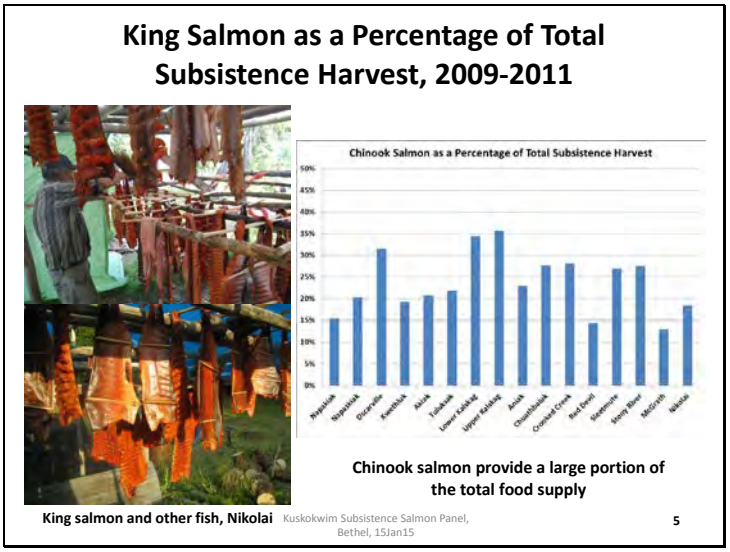
- We consult with proposed study communities to receive research approval prior to conducting any research.
- Participation is voluntary.
- All individual and household information is confidential.
- Data are analyzed according to standard statewide Division of Subsistence procedures.
- All interviews are conducted only with the informed consent of participants.
- Communities have the opportunity to review data before finalization and publication.

Slide 4



This slide shows how households in 16 Kuskokwim River communities reported their own involvement in some of the practices involved in the harvest and use of wild resources, including how resources are shared and distributed. This set of four column graphs, from left to right, represent the percentage of the community's households that USE king salmon, FISH FOR king salmon, RECEIVE king salmon from others, and GIVE king salmon to others. From around 60% to 100% of households in these 16 communities used king salmon. Fewer households tend to actually fish for king salmon than use king salmon, about 35% to almost 80% of households. The data for households receiving and giving away king salmon demonstrate customary and traditional patterns of sharing king salmon with friends and family, and with those community members who are unable to fish for themselves.

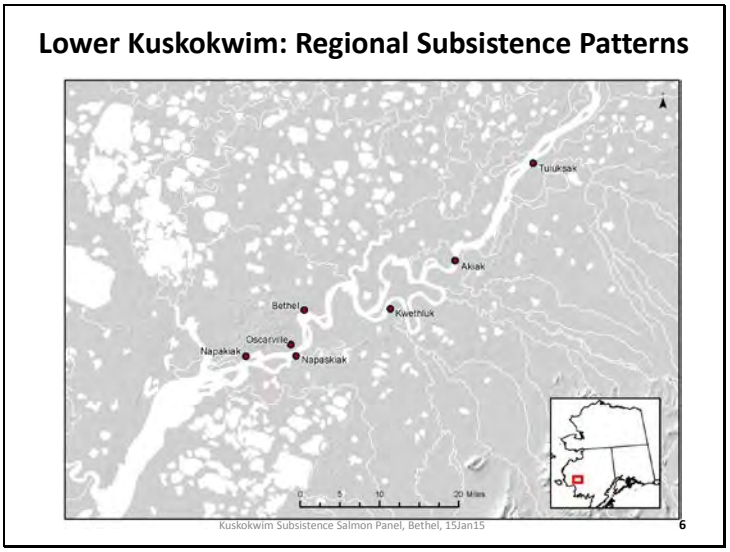
Slide 5



As this slide shows, king salmon provide a large portion of the total subsistence food supply in Kuskokwim River communities. King salmon make up between 13% and 36% of the total subsistence food harvests in the 16 Kuskokwim communities shown here, arranged from downstream at Napakiak on the left and going upstream to the right to Nikolai.

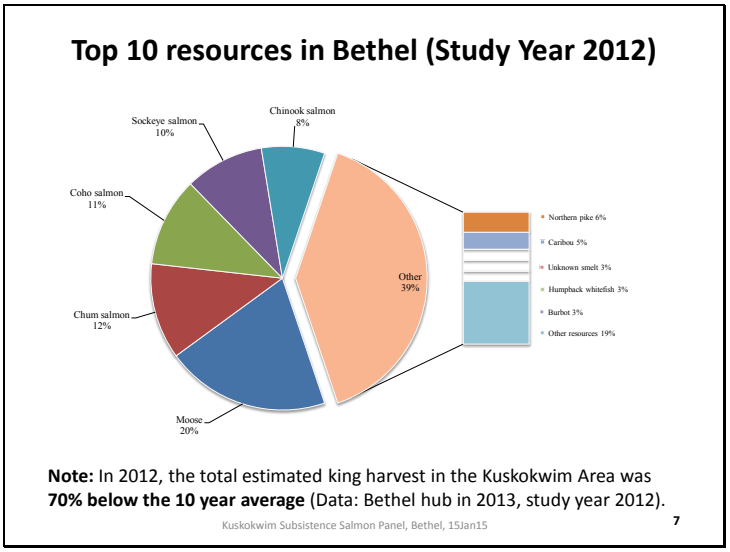
In the following slides, we will describe regional subsistence patterns in more detail for the Lower, Central, and Upper Kuskokwim River regions.

Slide 6



This map shows the Lower Kuskokwim communities where we conducted comprehensive subsistence surveys in the past 4 years. In 2011, we conducted comprehensive subsistence surveys in Oscarville, Kwethluk, Akiak, and Tuluksak. In 2012, we surveyed households in Napakiak and Napaskiak. In 2013, we conducted a comprehensive subsistence survey in 446 Bethel households, the largest survey effort in a single community in our division's history statewide.

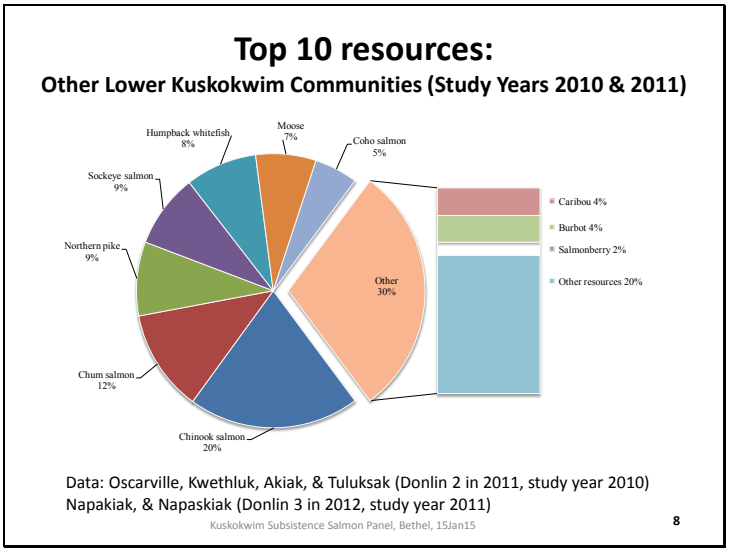
Slide 7



This pie chart shows the harvest of the top 10 resources ranked by estimated edible pounds for Bethel in 2012. The top 5 resources harvested by edible weight were moose at 20%, chum salmon at 12%, coho salmon at 11%, sockeye salmon at 10%, and king salmon at 8% of the estimated total subsistence harvest by Bethel residents. It is important to keep in mind that king salmon harvest in Bethel was particularly low in 2012 due to the impact of declining king salmon abundance and subsistence fishing restrictions during the king salmon fishing season. In 2012, the total estimated king salmon harvest in the Kuskokwim Area was 70% below the 10-year average king salmon harvest for the region.

It is also important to note that a comprehensive subsistence survey presents harvest data for only a single year. Depending on various factors, such as weather, abundance of species, and regulatory restrictions, harvests of some species in the study year may be lower or higher than usual. However, when combined with other community studies, we gain a better understanding of customary and traditional harvest and use patterns throughout the Kuskokwim drainage.

Slide 8



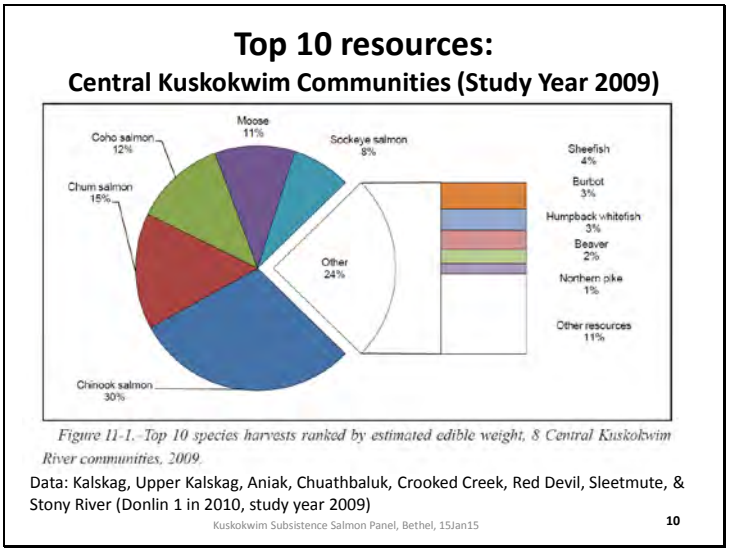
This pie chart shows the top 10 resources harvested by edible weight in other Lower Kuskokwim communities in 2010 and 2011. In these communities, the five most heavily harvested resources were king salmon at 20%, chum salmon at 12%, and northern pike, sockeye salmon, and humpback whitefish in relatively similar proportions, each from 8 to 9% of the total subsistence harvest. Like people in Bethel, people living in other Lower Kuskokwim communities rely on salmon and moose, yet they tend to harvest more non-salmon fish species, such as Northern pike and humpback whitefish, than people living in Bethel.

We feel that these data from other communities in this presentation are more representative of historical data than the 2012 Bethel data because of fewer restrictions to king salmon fishing in period 2009-2011.

Slide 9

This map shows the 10 Central Kuskokwim communities in which we conducted comprehensive subsistence surveys in the past 5 years. In 2010, we conducted comprehensive household subsistence surveys in Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, Crooked Creek, Red Devil, Sleetmute, and Stony River. In 2011, we surveyed households associated with the communities of Napaimute and Georgetown.

Slide 10

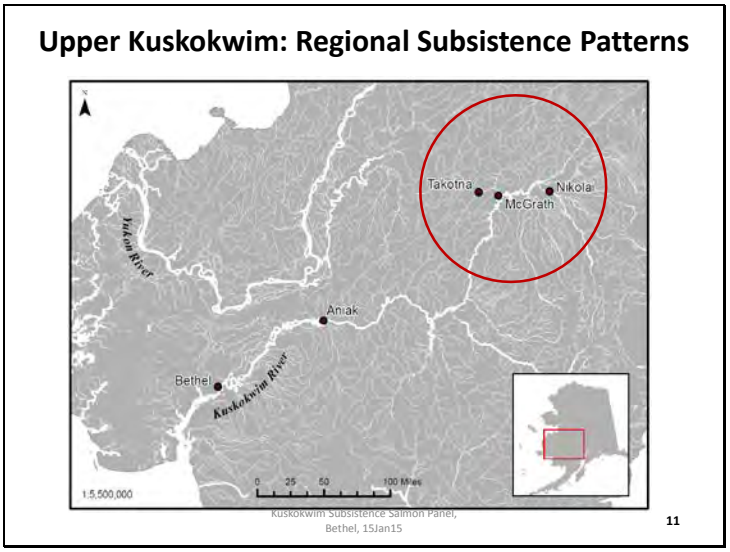


This pie chart shows the top 10 resources harvested by edible weight in the Central Kuskokwim River region in 2009. The 5 most heavily harvested resources were king salmon at 30% of the total subsistence harvest, chum salmon providing 15%, coho salmon at 12%, moose at 11%, and sockeye salmon at 8% of the total subsistence harvest.

These results do not include data from Napaimute and Georgetown. Many community and tribal members in these communities live in other parts of Alaska. Some community members harvested in Napaimute and Georgetown regions, but we do not include the data here due to statutory requirements associated with confidentiality.

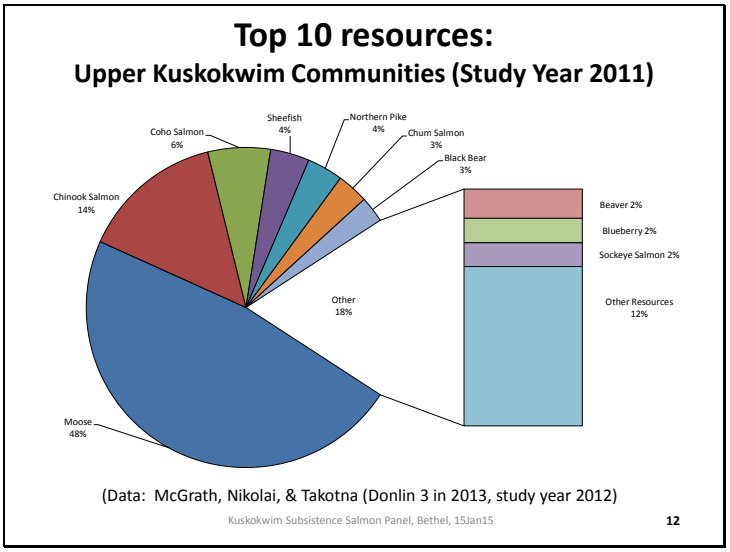
Like people in Lower Kuskokwim communities, residents of Central Kuskokwim River communities heavily rely on salmon and moose. These data demonstrate that, proportionally, king salmon harvests make up a greater portion of the total annual subsistence harvest than in Lower Kuskokwim River communities, 30% compared to 20%.

Slide 11



This map shows the communities of the Upper Kuskokwim region. In 2012, we conducted comprehensive household subsistence surveys in McGrath, Takotna, and Nikolai.

Slide 12



This pie chart shows the top 10 resources harvested by edible weight in Upper Kuskokwim communities in 2011. The top 5 resources mostly heavily harvested were moose at 45%, king salmon at 14%, coho salmon at 6%, and sheefish and northern pike both at 4% of the total subsistence harvest.

People in Upper Kuskokwim Communities are more dependent on moose than those in Lower and Central Kuskokwim communities. Yet, king salmon, ranked as the second most harvested resource, demonstrating its importance to the overall subsistence economy of the Upper Kuskokwim region.

Slide 13

- In the next several slides, we will discuss the results of our ethnographic study of subsistence salmon fishing along the Kuskokwim River, in the communities of Tuntutuliak, Kwethluk, Kalskag, Sleetmute, and Nikolai.
- Long-term residents have described changes in salmon fishing over their lifetimes, and fishing gear is one area in which many people have observed the most changes. Elders remember fishing during a time when gear was made by hand. Gear differed along the river according to locally available materials, river conditions, target species, and different traditions that people follow.
- Historically, people in lower river used set gillnets made of sinew, seal skin, or bark, fish traps, dip nets, and spears. People in middle river used fish wheels, drift gillnets made of willow bark, and spears. People in upriver communities used fish wheels, fences, and traps.
- Currently, the most common salmon fishing gear type is drift gillnets in the lower and middle river, set gillnets in all regions, and rod and reel in the middle and upriver areas. Such transitions in cultural practices involving salmon fishing gear occurred slowly. Elders recall the period of seal skin fishing nets overlapping with the use of twine nets, and then manufactured nets overlapping with handmade twine nets. Some people cut manufactured nets in half and shared costs with others because they couldn't afford a full-length net.
- Some fishers noted that regulations changing legal net specifications were a major hardship because people tend to use the same net for many years as part of the economy and efficiency of subsistence effort. Any regulations that drastically change gear are potentially a major problem for people's fishing opportunity. When the fish fence was banned in the 1960s, for example, according to local people in Nikolai, it took about 10 years for residents to transition to other forms of fishing for king salmon.
- Fishers also said that while contemporary technology has made fishing easier and more efficient, it has also made subsistence fishing more expensive. Cash income became important for participation in subsistence salmon fishing opportunities.

Slide 14

Kuskokwim subsistence users prepare and preserve salmon in many different ways, often using every possible part of the fish, including heads, hearts, and eggs. Preservation methods include freezing, salting, drying, smoking, and fermenting. Many preservation methods of the past continue to strongly influence how people along the river process and prepare their salmon today. However, some methods, like preserving salmon skins for boots and other clothing, are no longer practiced regularly. Subsistence salmon fishing, processing, and preparing king salmon, continue to be key elements of Kuskokwim River Yup'ik and Athabascan culture and identity and passing knowledge and experience from one generation to the next, especially at fish camp.

One reason for the extreme importance of king salmon to subsistence economies along the Kuskokwim River drainage is their early arrival. The early arrival of king salmon helps fill gaps in winter and spring food supplies and provide fresh food for immediate consumption. However, more importantly, the early arrival of king salmon is significant because traditional and preferred methods of preservation works best at this time of year, when king salmon can be more easily dried and preserved for winter use. Subsistence fishing at the end of the king salmon run, or for other species of salmon that arrive after king salmon, are more difficult to process and preserve because the weather later in the summer is wetter and prone to more insects, which makes it more difficult to preserve fish properly to keep them from spoiling.

Some people believe, up and down the river, that treatment of the salmon during preparation, preservation, and use relates directly to the future abundance of salmon and one's future success in harvest. For example, a major self-limiting factor affecting subsistence harvest levels along the Kuskokwim River relates to traditional concepts of conservation and the role of human behavior in ecosystem functions, such as the avoidance of waste by taking only what you need. Fishers told us, when you process fish, you are expected to treat the fish with respect, do not fight over fish, keep your fish camp clean, process the salmon in a timely manner, and do not waste them. If you do not do this, the salmon will not return.

Slide 15

Going to fish camp is an important part of subsistence activities for some families, though other families prefer to fish in town. Subsistence fishing is related to social and kinship structure in many Kuskokwim communities. Fishing is a massive project that requires human resources, knowledge, skills, and capital. All generations including children and elders have roles to achieve the production. Tasks include maintaining gear, gathering and cutting wood, gutting and washing fish, and carrying fish and hanging them in smoke house. It requires boat, net, motor, money to buy gas and maintain gear, smokehouse, wood for smoking, racks, and cutting area.

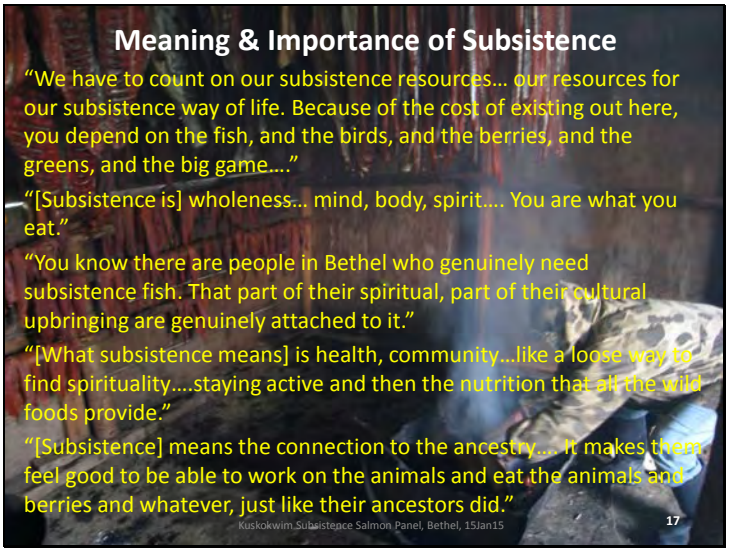
Some people said that they prefer to fish at fish camp because they can be away from daily life in town and enjoy quality time as a family. Fish camp is a place where it is easier to make a good quality smoke fish. Fishers told us that fishing at fish camp is an important part of cultural and family traditions.

Other people prefer to fish from town because it is more convenient. If in town, people who are employed and elders who cannot easily travel can participate in fishing and processing. When fish are not abundant and there are more restrictive regulations, fishing in town is more efficient than going to fish camp.

Slide 16

The Kuskokwim residents who shared their knowledge with us communicated strongly that, for them, king salmon are not only food but king salmon are also part of their traditions, identities, physical and spiritual well-being, survival, and nutrition—all of which are intimately interconnected. Instead of going through each point list here, in the next slide, we would like to let some of these people speak for themselves, and share with you their own words about subsistence.

Slide 17



"We have to count on our subsistence resources…our resources for our subsistence way of life. Because of the cost of existing out here, you depend on the fish, and the birds, and the berries, and the greens, and the big game…."

"[Subsistence is] wholeness…mind, body, spirit…. You are what you eat."

"You know there are people in Bethel who genuinely need subsistence fish. That part of their spiritual, part of their cultural upbringing are genuinely attached to it."

"[What subsistence means] is health, community…like a loose way to find spirituality…staying active and then the nutrition that all the wild foods provide."

"[Subsistence] means the connection to the ancestry…. It makes them feel good to be able to work on the animals and eat the animals and berries and whatever, just like their ancestors did."

Slide 18

Many of the subsistence users we spoke to mentioned that subsistence fishing is an important time for families to work together. They feel pride in being able to provide fish for themselves and their families. It is a way to pass traditional knowledge, skills, and values on to younger generations. Children watch and help in every aspect of salmon fishing – checking set nets, drifting nets, cutting fish, and preserving fish. These are important skills for children to have, and teaching them those skills is an important investment in the future of Kuskokwim River communities.

Many elders expressed their concerns about the effect of the decline in time spent at fish camp to Alaska Native identity and cultural continuity due to such things as regulations, like fishing windows, poor king salmon returns, increased costs associated with fishing due to increases in fuel cost and usage related to fishing windows, and the need to stay close to town to work or care for family members. These thoughts and the other data summarized here are all important considerations when contemplating regulatory and management approaches to equitably distribute subsistence king salmon fishing opportunities during times when there are not enough king salmon for all subsistence uses.

Slide 19


Questions?
Kuskokw m Subs stence Salmon Pane ,
Bethel, 15Jan15
19

Submitted by ADF&G at the request of Board Member Kluberton

Alaska Board of Fisheries
Kuskokwim Subsistence Salmon Panel

January 16, 2015

Panel Meeting Synopsis

Bethel, Alaska

Chair Kluberton opened the meeting at 9:10 a.m., and welcomed everyone, then gave an overview of the background of the formation of the panel, and topics to frame the day's discussions.

Ray Collins gave the invocation.

Panel overview:

- At the Board of Fisheries' October 2014 work session, the board accepted an agenda change request (ACR) that proposed subdividing the Kuskokwim River Chinook salmon amount reasonably necessary for subsistence (ANS), adoption of a Tier II system, or other management measures.
- Recognizing the weight of this request, the board formed the Kuskokwim Subsistence Salmon Panel and appointed three members: Tom Kluberton, Fritz Johnson, and Orville Huntington.
- The ACR is now a proposal focusing on management measures that can be implemented for the 2015 subsistence fishing season (vs allocation). The ACR will be considered by the board at the March 17–20, 2015 statewide shellfish meeting in Anchorage.
- In anticipation of the new proposal, and further proposals related to subsistence fishery management on the Kuskokwim River expected at the Arctic-Yukon-Kuskokwim (AYK) Finfish board meeting in January 2016, the mission of the panel is to seek public input on how to ensure an equitable distribution of subsistence salmon resources throughout the Kuskokwim River drainage and potential tools for equitable distribution in times of low abundance.
- This meeting is the first of what the panel anticipates to be a series of meetings leading up to the January 2016 AYK in-cycle meeting with several milestones for proposed solutions and board action in between.

The panel then heard agency reports:

- Jim Simon, ADF&G Division of Subsistence, gave "An Ethnographic Overview of Kuskokwim River Chinook Salmon Subsistence Fishery".
    - Household surveys: results of surveys in Kuskokwim River drainage: harvests, uses, patterns, cultural and traditional knowledge.

The panel took a break from agency reports to hear Mary Sattler's testimony.

The panel then resumed agency reports.

- Aaron Tiernan, ADF&G Division of Commercial Fisheries gave "Overview of the Kuskokwim River Chinook Salmon Subsistence Fishery": maps, total run, escapement, subsistence harvest, speed/timing, management.

The panel heard Grant Fairbanks' testimony.

The panel broke for lunch from 12:15 p.m. to 1:30 p.m. and came back to focus on potential solutions/tools.

- The following list is in no particular order or ranking: it is numbered only so it is easier to refer to the potential tools.
- Also, the list may not be a complete list: there may be other potential tools/solutions that panel brought forth.

1) Division of Commercial Fisheries:
    a. Looking into holding the pre-season meetings in Bethel.
    b. Looking into attending village meetings.
    c. Looking into sonar locations.
2) AVCP:
    a. Working with North Pacific Fishery Management Council to reduce bycatch.
    b. Will request villages to adopt a moratorium for summer 2015.
    c. With Tanana Chiefs, planning steering committee meeting in early February for Inter-Tribal Fish Commission for a March or early April meeting.
    d. AVCP villages developing own management plan in March 2015.
3) Time:
    a. Open with restrictions such as 4-inch only two days of the week to allow harvest of non-salmon species; as setnets (Proposal 271), not drifting.
    b. Close the fishery:
        i. In May; May 1.
        ii. Right after ice goes out; but if fishing is allowed, limit it to 6-inch, 25 fathom length, 45 meshes.
        iii. Until fish are in the river.
        iv. From May to June 30.
        v. From May 15 through June 30.
        vi. Until after the peak of the run.
        vii. Before the ice goes out.
    c. Alternate days of fishing (windows) when gear liberalization (6-inch gillnets) is implemented following a 75% Bethel test fish passage trigger point.
    d. Rolling closures, either on 4-inch or 6-inch gear.
    e. After Chinook salmon have passed, open with 6-inch gear for chums, sockeye salmon.
4) Gear:
    a. Nets:
        i. More shallow depth on 4-inch net: up to 25 or 30 [meshes].
        ii. Limit depth on 6-inch gear.
        iii. Prohibit 4-inch mesh in the refuge or along the entire river.
        iv. Allow drifting with 4-inch mesh.

v. Eliminate 4-inch mesh: allow only 6-inch mesh on the entire river, 45 meshes, 25 fathoms long (concern that 4-inch mesh is killing Chinook salmon).
vi. Allow only 4-inch set nets.
vii. Allow only one 4-inch net per household.
viii. No nets across or in spawning tributaries.
ix. Only allow 4-inch nets in nonsalmon streams.
x. Maintain 4-inch or less mesh restrictions in 2015 with up to 2 openings per week, until the Kuskokwim River Subsistence Salmon Working Group and the area manager determines that 75% of the Chinook salmon run has passed the Bethel test fishery.
xi. 4-inch or less mesh, fish wheels, beach seines or dip nets only beginning May 15, 2015 (or potential of dip net/beach seine only openings – no retention of Chinook salmon with this gear).
xii. 4-inch mesh 29 meshes set nets.
xiii. Proposals 271 and 272.

b. Fishwheels:
i. Community village fish wheel permit in middle and upper river.
ii. Operate fishwheels during times of Chinook salmon closure.
iii. Attendance and livebox not necessary until Chinook have passed/not running in the area.
iv. Use livebox to use for village distribution at the end of the run (if small harvestable surplus of Chinook salmon available).

c. No nets, fishwheels, wood cutting or jet boat traffic on spawning grounds.
i. No nets or fishwheels within one mile of tributary mouth.

5) Allow beach seining and dip nets (require release of Chinook salmon).
a. Extended openings with dip nets to allow fishing during better conditions (tide, timing).

6) Other management solutions
a. Assessment:
i. Install weir on Salmon River.
ii. Put sonar in the right place: ask local people.

b. Delay the coho salmon commercial opening.

c. Nested ANS incorporated into inriver goal:
i. Divide ANS between different portions of the river: 1) downriver of Bethel; 2) Bethel; 3) upriver of Bethel.
ii. Use Bethel Test Fishery to assess the in river goal.
iii. Inriver goal would be set by adding ANS onto escapement goal.
iv. Harvest above test fishery incorporated into inriver goal.

d. Permit system:
i. Free (no cost) household permit, allotment (limit) attached to the permit, one Chinook per household; permits available only locally.
ii. Personal limits that are the same for everybody.
iii. Tier I: Incorporating customary and traditional use criteria and patterns of use (e.g., smokehouse); potential harvest limits and/or length of years included in eligibility score.

iv. Tier II.
    1. Need framework devised and ready for implementation; need drop dead number on when to implement.
v. Further exploration of community harvest permit potential, especially in relation to fish wheels and distribution from live boxes.

e. No commercial sale in districts 4 and 5.
f. Further investigation/pursuit of potential enhancement projects.

7) Outreach/Communications:
    a. Increase education, like with the moose moratorium.
    b. Hold meetings with state and federal, agencies, fish commissions.
    c. Managers living in the area year round.
    d. Make sure test fish continue to be distributed equitably (through ONC).
8) Water quality, crowding:
    a. Monitor hovercraft emissions.
    b. Work with Alaska Department of Natural Resources where jet boats operate.

Chair Kluberton asked board members Johnson and Huntington for ideas of a board-generated proposal to generate at the March 2015 board meeting.

- Member Huntington is interested in working on fish wheel proposals for the long term, if he is still on the board. He is working on a proposal for the Yukon fishwheels, to help them not catch Chinook salmon. For the short term, he wants to stop the abuse of the 4-inch mesh, and allow them to be used only when there is no Chinook salmon. We have to conserve Chinook salmon for future generations.
- Member Johnson is interested in time and area closures, windows for escapement, and interested in options for the choke point areas. He thinks we could use the tools (windows and dip nets) that we have before writing a lot more regulations. He is also interested in community outreach, especially the elder exchange idea. The department needs to make a commitment to windows of escapement.

Chair Kluberton also explained a general timeframe for future panel activities:

- After the board's March 2015 meeting, the panel members should individually build a list of longer-term ideas over summer 2015.
- Potential for board members for pre-season meeting, tentatively scheduled for March 25-27, 2015 in Bethel.
- Potential for board members to make trips to Kuskokwim River villages over the summer.
- Panel to reconvene in fall begin to look at ideas to write into board-generated proposals at the October workseesion for the regular cycle Arctic-Yukon-Kuskokwim meeting in January 2016.

Chair Kluberton also echoed Member Huntington's earlier advice of not relying on the board or the panel to solve the problems, and encouraged people to put in their own proposals.

Chair Kluberton asked if the panel was OK with several ideas:

- Using 4-inch nets only as set nets, and that the time they are used be limited. Majority of panel members were in agreement (Robert Aloysius disagreed, stating 4-inch mesh should not be used at all).
- Allowing fish wheels to operate when Chinook salmon retention is closed to subsistence as long as they are attended and all Chinook salmon are returned to the river. There were no objections.
- Considering the following items for the agenda for a potential fall meeting: a nested ANS, an inriver goal, some sort of permit and household limit, and a Tier II framework. There were no objections.
- Send ideas of summer visit times and locations to be emailed to Glenn Haight. There were no objections.
- If state management is going off the rails, file an emergency petition.

Adjourned at 4:30.

Meeting Attendance

Panel Members
Robert Aloysius, At Large
Timothy Andrew, AVCP
Barbara Carlson, Stony-Holitna AC
James Charles, Lower Kuskokwim AC
Ray Collins, McGrath AC and Western Interior RAC
Grant Fairbanks, At Large
Dan Gillikin, Kuskokwim Native Association
Bev Hoffman, At Large
Nick Kameroff, Central Kuskokwim AC
Mark Leary, Kuskokwim River Salmon Management Working Group
Robert Lekander, Bethel AC
Myron Naneng, AVCP
Art Nelson, Bering Sea Fishermen's Association
Greg Roczicka, ONC
Mary Sattler, At Large, Kuskokwim River Salmon Management Working Group

Board of Fisheries
Tom Kluberton, Panel Chair, (Vice Chair Board of Fisheries)
Orville Huntington, Board of Fisheries
Fritz Johnson, Board of Fisheries

ADF&G Staff
Lisa Olson, Division of Subsistence
Jim Simon, Division of Subsistence
Hiroko Ikuta, Division of Subsistence
Forrest Bowers, Division of Commercial Fisheries
Dan Bergstrom, Division of Commercial Fisheries
Aaron Tiernan, Division of Commercial Fisheries
Jennifer Yuhas, Division of Commercial Fisheries

Tom Taube, Division of Sport Fish
John Chythlook, Division of Sport Fish
Glenn Haight, Boards Support
Holly Carroll, Boards Support

Submitted by ADF&G at the request of Board Member Kluberton

Alaska Board of Fisheries
Kuskokwim Subsistence Salmon Panel
First Committee Meeting – January 15, 2015

Bethel, Alaska

Public Listening Session Draft Synopsis

Meeting called to order at 1:30 p.m.

Introductions of panel members and staff followed (see "Meeting Attendance", below)

Robert Aloysius gave the invocation.

Chair Kluberton gave an overview of the panel mission, and then the listening session started.

The listening session went until around 5:30, with a few breaks.

As a starting point for discussion, following is a listing of many of the issues and potential solutions that people shared with the panel.

- They are in no particular order or ranking: they are numbered only so it is easier to refer to them.
- Also, the list may not be a complete list: there may be other issues and solutions that panel members heard from the listening session, or that panel members may wish to bring forward from their own expertise.

Issues:

1. Fair restrictions, clear mandates for equitable distribution.
2. Weirs not good for salmon.
3. Dip nets not used/useful.
4. 4-inch mesh used improperly; good for setnet, not for drifting; bad for small king salmon/king salmon, injures king salmon and they die.
5. 6-inch mesh not good, injures king salmon and they die.
6. Harvest opportunity for lush (burbot), whitefish, chum, sockeye, coho.
7. Drainagewide ANS is not working.
8. Village residents come in to fish in Bethel.
9. Fishing for elders, people with no boats, no money.
10. Lack of confidence that state will conserve and manage fish properly.
11. Maximum sustained yield does not work for subsistence.
12. RFIDs on setnet buoys.
13. If kings are taken, we are stealing younger generation's food.
14. Not good to sit for a month without cutting fish; early closures not good.
15. Timing of harvest and bad weather/flies/maggots; June is drying month, July is fly/maggot month.

16. Regulations are too complex (federal, state) to understand and to maintain customary and traditional ways of life.
17. No jobs, gas money, money for boats, motors.
18. If village quotas, a few fisherman will get all the fish, for their gas money.
19. Oppose Tier II and permits.
20. People need to be engaged in development of plan.
21. Refuge has one information technician, used to be near 20.
22. Lack of understanding by managers of culture.
23. ADF&G managers not in touch with communities on a daily basis/.
24. ADF&G managers do not live in or visit all the area/drainage/communities.
25. Forecasts unreliable – how could Dept allow continual fishing in 2013?
26. Allowing many 4-inch nets to cork off river at choke points increased king mortality.

Possible Solutions

1. Village residents to review materials before season.
2. Managers living in area/managers visiting villages to see what people want.
3. Rolling closures/window openings (2 weeks on/1week off, 4 days, in June).
4. No weir in Tuluksak, Kwethluk.
5. Village quotas.
6. Tier II.
7. Permits.
8. Seamless management scheme.
9. Nested ANS.
10. State to work more closely with federal subsistence board, federal managers.
11. Limit sport and commercial fisheries; sport fishermen on gravel/spawning beds.
12. Put bycatch restrictions on the trawlers.
13. Elder Native biologists to work with ADF&G.
14. Use 8-inch or 7.5-inch mesh to catch allocation and stop fishing allocation is harvested.
15. Moratorium on fishing, or moratorium on 4-inch mesh.
16. Hold preseason meetings in area.
17. Open first part of June, shut down in July, small males in June, protect larger females in July.
18. Outreach program with ADF&G.
19. Refuge Information Technicians.
20. Improve cultural awareness & communications.
21. Opportunity provided for other species.
22. Start closed, protect kings until run size is known.
23. Impose restrictions in bay as well as in-river.
24. Make it a clear mandate to get fish into upper river.
25. Create working relationship between BoF and federal subsistence managers.

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