SEWARD PENINSULA
Federal Subsistence
Regional Advisory Council

BLM

Caribou skull on the tundra, Seward Peninsula

Fisheries Meeting Materials

October 13–14, 2010

Nome

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DRAFT AGENDA
Seward Peninsula Subsistence Regional Advisory Council
October 13-14, 2010
Aurora Conference Room
Nome, Alaska

8:30 a.m. – 5:00 p.m. daily or until meeting is concluded

PUBLIC COMMENTS are welcomed for each agenda item. Please fill out the green comment form or be recognized by the Chair. Public testimony time limits may be given to provide opportunity for all to testify and to keep on schedule.

PLEASE NOTE the meeting times each day, the order of business, and the agenda are estimated and are subject to change without notice. Contact any Office of Subsistence Management staff present at the meeting for the current agenda and meeting schedule.

AREA CONCERNS: The Regional Council arranges its meetings to hear and understand the subsistence or related concerns of the area where they meet. Please feel free to share your subsistence concerns and knowledge during the meeting. The agenda is an outline for the meeting and is open to the area's subsistence concerns, whether it is listed or not.

1. **Call to Order** *(Weaver Ivanoff, Chair)*
2. **Roll Call and Establish Quorum** *(Peter Buck, Secretary)* 4
3. **Welcome and Introductions** *(Weaver Ivanoff, Chair)*
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6. **Council Member Reports**
7. **2011-2013 Federal Subsistence Fisheries Proposals for Council Review** *(Council)*

Presentation Procedures

1. Introduction of proposals and analyses
2. Alaska Department of Fish and Game comments
3. Federal, State, and Tribal agency comments
4. Interagency Staff Committee comments
5. Fish and Game Advisory Committee comments
6. Summary of written public comments
7. Public testimony
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8. Fisheries Resource Monitoring Program

A. Review and Make Recommendations on Priority Information Needs for 2012 Fisheries Resource Monitoring Program *(Helen Armstrong)*

9. Council Business

A. Identify Issues for 2010 Annual Report *(Weaver Ivanoff, Chair)*

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B. National Park Service

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13. Adjourn

- If you have any questions regarding this agenda or need additional information, please contact Alex Nick, toll free at 1-800-621-5804 ext. 257 or 543-1037; or fax your comments at 907-543-4413.
- Teleconferencing is available upon request. You must call Alex Nick at 1-800-621-5804 ext 257, 907-543-1037 or the Office of Subsistence Management, at 1-800-478-1456, 786-3888 or 786-3676, at least 72 hours prior to the meeting to receive this service. Please state which agenda topic interests you and whether you wish to testify regarding it.
- The U.S. Fish and Wildlife is committed to providing access to this meeting for all participants. Please direct all requests for sign language interpreting, Computer Aided Real-time Translation (CART) or other accommodation needs to Alex Nick no later than Wednesday, October 6, 2010. Call 1-800-621-5804 ext 257, fax 907-543-4413, or email alex_nick@fws.gov
- If you need alternative formats or services because of a disability, please contact the Diversity and Civil Rights Manager at (907)786-3328 (Voice), via e-mail at douglas_mills@fws.gov, or via Alaska Relay (dial 7-1-1 from anywhere in Alaska or 1-800-770-8255 from out-of-state) for hearing impaired individuals with your request by close of business Wednesday, October 6, 2010.

REGION 7—Seward Peninsula Regional Advisory Council

Seat	Year Appointed *Term Expires*	Member Name & Community
1	2007 *2010*	Anthony M. Keyes, Jr. Wales
2	1995 *2010*	Peter G. Buck White Mountain
3	*2010*	Vacant
4	*2010*	Vacant
5	2008 *2011*	Ralph W. Ivanoff chair Unalakleet
6	2005 *2011*	Peter P. Martin Sr. Stebbins
7	2008 *2011*	Fred D. Eningowuk Shishmaref
8	1994 *2012*	Elmer Kakaruk Seetot Jr. Brevig Mission
9	2005 *2012*	Michael Howard Quinn vice-chair Nome
10	*2012*	Vacant

DRAFT

Seward Peninsula Subsistence Regional Advisory Council
Minutes
March 9-10, 2010 Meeting
Aurora Inn
Nome, Alaska

Call to Order
Council Chair Weaver Ivanoff called the meeting to order at 9:45 a.m. on March 9, 2010.

Roll Call
Roll by Alex Nick, Council Coordinator

Members Present:
R. Weaver Ivanoff, Michael Quinn, Peter G. Buck, Anthony M. Keyes, Elmer K. Seetot Jr., Fred Eningowuk, and Peter Martin Sr. (excused absence the first morning)

Meeting Participants:
Alex Nick, Cole Brown, Karen Hyer, David Jenkins, and Helen Armstrong, Office of Subsistence Management; Mike Sloan; George Pappas, Alaska Department of Fish and Game; Fred Tocktoo, Ken Adkisson, and Dianne McKinley, National Park Service; Art Ivanoff, Southern Norton Sound Fish and Game Advisory Committee; Rose Fosdick, Kawerak, Inc.; and Tom Sparks, Bureau of Land Management

Welcome Remarks
Mr. Ivanoff welcomed everyone to Nome.

Review and Adopt Draft Agenda
The Chair noted the meeting workload and referred everyone to the agenda handed out by staff rather than the agenda in the workbook. The Council adopted the agenda provided at the meeting.

Mr. Nick reminded the Council that the quorum needs to remain throughout the meeting because if a quorum is not present, the Council cannot take any action.

Review and Approve Draft Minutes from October 1, 2009 Meeting
Ms. Fosdick with Kawerak, Inc. pointed out needed corrections on page 12 of the Council meeting work book.

Motion
Mr. Quinn moved, seconded by Mr. Buck to approve and adopt the minutes from October 1, 2009 as corrected. The motion carried.

Fisheries Closure Review
Ms. Hyer (OSM) presented the fisheries closure updates. The Federal public waters of the Unalakleet River (upriver from Chiroskey River) were closed from July 1 through July 31 for all users. The Bureau of Land Management currently manages fisheries in the area. Previously, the National Park Service managed fisheries in the area. The Federal Subsistence Board adopted proposal FP09-14 in January 2009 and the closure became effective in April 2009. The purpose of this review is to align regulations to continue closure, and the Office of Subsistence Management's preliminary recommendation is status quo. Next summer the Fisheries Resource Monitoring Program will establish a floating weir in the river to

monitor salmon escapements. Until salmon escapements increase, the Office of Subsistence Management recommends that the river continue to be closed.

Ms. Hyer also pointed out the closure that occurred last April; additional information is on page 208 of the Council's workbook.

Call for Fisheries Proposals
Ms. Hyer informed the Council the deadline to submit fisheries proposals is on March 24, 2010.

North Pacific Fishery Management Council
Tribal organizations from the Nome area and other areas have requested additional seats on the North Pacific Fishery Management Council (NPFMC) to represent tribal interests.
Ms. Armstrong (OSM) informed the Council that it may write a letter to the Federal Subsistence Board and ask the Board to write a letter on behalf of the Council. This topic also could be one of the Council's 2010 Annual Report to the Federal Subsistence Board. She suggested that the Annual Report would be the best mechanism to address the Council's concern on this issue.
Ms. Armstrong explained the Council correspondence policy. After discussion by the Council, Ms. Armstrong and Mr. Nick agreed to work together on the draft letter; Ms. Armstrong assured Council that she will make certain this request will go forward.

Motion
Mr. Quinn moved, seconded by Mr. Eningowuk, that the Council submit a letter to the Federal Subsistence Board supporting this request to add tribal representative seats on the North Pacific Fishery Management Council. The motion carried.

Update on Salmon Bycatch in the Bering Sea/ Aleutian Islands Pollock Fishery
Ms. Hyer updated the Council on salmon bycatch in the Bering Sea. She referred to a letter from the Federal Subsistence Board that was submitted before February 16, 2010 deadline for comments on the Environmental Impact Statement. The letter addressed the Federal Subsistence Board's and the Regional Advisory Council's concern about and recommendations on hard cap figures for Chinook salmon. The Office of Subsistence Management and the Regional Advisory Councils recommended a hard cap of 29,000. This figure was much lower than the 60,000 hard cap and the incentive plan agreement of 47,000 fish. A fisheries management plan was developed by the North Pacific Fisheries Council on Chinook bycatch and it is up for review and comments by April 19, 2010. Last year's bycatch cap was 12,000, down from 129,000 in 2007 and 23,000 in 2008. The Office of Subsistence Management is available to assist the Council draft a letter regarding Chinook bycatch.

Motion
Mr. Quinn moved, seconded by Mr. Buck, to submit a letter regarding bycatch to the North Pacific Fishery Management Council. This Council's responsibility is to represent subsistence users in this region. The Chair suggested that Council members present at this meeting should sign the letter. Ms. Hyer said if that is what Council wishes to do, it can. The motion carried.

Yukon River Deferred Fisheries Proposals FP09-12 and FP09-13
Ms. Hyer presented a summary of the OSM analysis of these proposals. Proposal 12 would reduce the maximum gillnet mesh size to 7.5 inches and Proposal 13 would reduce the depth of gillnets to 35 meshes or less for commercial and subsistence fishing in Federal public waters on the Yukon River. The community of Stebbins has a positive customary and traditional use determination for Yukon salmon fisheries. These two proposals were considered by the Federal Subsistence Board in its December 2007 meeting but were not adopted. The proposals were resubmitted in 2008. The Federal Subsistence Board met in January 2009, and at that time, the Alaska Department of Fish and Game requested to delay

adoption of these proposals until the Alaska Board of Fisheries could consider the issues of gear selectivity during its 2009 and 2010 meetings. The Alaska Board of Fisheries then adopted a similar proposal to reduce mesh size to 7.5 inches in the Yukon River and allowed a one-year phase in for gear change. The Office of Subsistence Management's preliminary conclusion on the mesh size reduction was to modify the Council's proposed regulatory changes. The modified regulation would establish the 7.5 inch mesh limit for gillnets used for subsistence fishing in the Federal public waters with a one-year phase in.

Motion
Mr. Quinn moved, seconded by Mr. Keyes, to oppose proposals FP09-12 and FP09-13.
The Council noted that these proposals have been opposed by the lower Yukon River subsistence users and commercial fisherman, and that the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council recently opposed these proposals. Subsistence fisherman from the Seward Peninsula communities of Stebbins, St. Michael, and Unalakleet harvest salmon in the lower Yukon. The motion carried.

Federal Wildlife Proposals
Statewide Proposals
Proposal WP10-01: Ms. Armstrong presented a summary of the OSM analysis of proposal WP10-01. The proposal requests a definition for "drawing permit" be added to the Federal subsistence regulations. Existing Federal subsistence regulations do not include a definition for drawing permit, and because this term is used in the hunting regulations, the Office of Subsistence Management felt definition is needed to be provided for clarification. This is a housekeeping proposal. The OSM preliminary conclusion was to support proposal WP10-01 with modification to clarify that drawing permits are based on a random drawing for all similarly situated Federally qualified subsistence users.

Motion
Mr. Quinn moved, seconded by Mr. Martin, to support WP10-01. The motion carried.

Motion
Mr. Quinn moved, seconded by Mr. Buck to reconsider proposal WP10-01. The motion carried.

Motion
Mr. Quinn moved, seconded by Mr. Seetot, to support proposal WP10-01 with the modification to clarify that drawing permits are based on a random drawing for all similarly situated Federally qualified subsistence users. The motion carried.

Proposal WP10-02 (deferred): Ms. Armstrong said that when the Federal Subsistence Board deferred this proposal it voted to form a working group to develop a method of tracking brown bear claws made into handicrafts for sale. The Board directed that the working group would include representatives from all interested Subsistence Regional Advisory Councils and Federal and State staff. An initial scoping meeting was held in January 2009 and a draft charge was developed at that time. A briefing on the status of the working group was provided to all Regional Advisory Councils during their winter 2009 meeting cycle. The working group held only one meeting in June 2009; participants from the Councils posed a number of questions directed at whether or not tracking bear claws is a problem for subsistence users and whether, in fact, regulations need to be changed. These questions prompted the Federal and State staff to conduct further research. Agency staff met twice during the summer of 2009 to compare notes and follow up on research questions. The working group attempted to meet again during summer of 2009 but it was not possible to hold a meeting during that time. The working group will meet sometime during the summer or fall of 2010. Council action was not needed for this proposal.

Proposal WP10-03: Ms. Armstrong provided a summary of the OSM analysis of proposal WP10-03. The proposal requested the addition of a general provision in Federal subsistence regulations to allow the harvest of fish and wildlife by participants in a cultural or educational program. The proposal would clarify the application process and simplify Federal regulations. Adoption of this proposal would not change how the Office of Subsistence Management currently issues harvest permits. Most requests for permits come from cultural camps sponsored by the Native nonprofit organizations. The OSM preliminary conclusion was to support the proposal with modification.

Motion
Mr. Buck moved, seconded by Mr. Keyes, to support proposal WP10-03 with the OSM modification. The motion carried.

Proposal WP10-04: The Council felt this proposal does not contain anything relevant to the region even though it is labeled as a statewide proposal. The proposed action would not affect the Seward Peninsula region.

Motion
Mr. Quinn moved, seconded by Mr. Buck, to take no action on proposal WP10-04. The motion carried.

Proposal WP10-05: Ms. Armstrong provided a summary of the OSM analysis of proposal WP10-05. She informed the Council that the wording of the general Federal subsistence regulations concerning accumulations of harvest limits dates back to 1990 and 1994 and it should be updated. While the Federal Subsistence Board has addressed a number of area specific proposals concerning the accumulation of harvest limits over the years, this part of the general regulations has not been updated to reflect changes to unit and area specific regulations. Proposal WP10-05 addresses these inconsistencies. The proposed wording is more general, which is more appropriate in general regulations. Proposal WP10-05 does not affect fish and wildlife populations or subsistence uses or other uses. The proposed changes retain the general prohibition of accumulation of Federal and State harvest limits and point to unit and area specific regulations for details and exceptions. The OSM preliminary conclusion was to support proposal WP10-05.

Motion
Mr. Quinn moved, seconded by Mr. Buck to support proposal WP10-05. The Council agreed with simplifying and clarifying wording for accumulations of harvest limits. The motion carried.

Regional Proposals
WP10-72: Ms. Brown (OSM) presented a summary of the OSM analysis of proposal WP10-72. The proponent requests the Federal Subsistence Board to reopen the season for coyotes and allow harvest of coyotes on Federal public lands under State regulations. The proponent stated that closure is not needed due to the limited amount of coyotes within Unit 22. Rescinding the closure of the Federal public lands to harvesting coyotes would allow individuals to harvest coyotes on Federal public lands. The OSM preliminary conclusion was to support the proposal.

Motion
Mr. Quinn moved, seconded by Mr. Buck, to support proposal WP10-72. Closure is not needed due to the limited number of coyotes in Unit 22. Rescinding hunting and trapping closures for coyote in Unit 22 would allow Unit 22 residents to hunt or trap a coyote opportunistically under the State regulations. The motion carried.

Proposal WP10-74: Ms. Brown presented a summary of the OSM analysis of WP10-74. The proponent requested that the current closure of Federal public lands to the take of muskoxen except by Federally qualified subsistence users be rescinded to allow harvest of muskoxen under Federal and State regulations on Federal public lands in Unit 22E. The proponent stated that there would be minimal impact to the population due to current harvest quotas while allowing for more harvest opportunity. In 2008, the population composition for Unit 22E was comprised of 19 percent mature males (four years or older), 37 percent mature cows (three years or older), and ten percent yearlings. The proportion of yearlings, two-year old, and three-year old animals surveyed in 2008 was similar to the results in 2005. In 2005, the Alaska Board of Game established a Tier I subsistence registration hunt, previously Tier II hunt in Unit 22E, as proposed by the Seward Peninsula Muskox Cooperative Group. In addition to the Federal and State registration hunts, the State administers a drawing hunt in Unit 22E for bulls only, which for the period of 2004 to 2008 had a hunter success rate of 80 percent with an average of nine male muskoxen taken. Harvest quotas are rarely met for Unit 22E. The OSM preliminary conclusion was to support WP10-74.

Motion
Mr. Quinn moved, seconded by Mr. Buck, to support WP10-74. The Council discussed what removal of the closure would do, including effects on the customary and traditional use determinations for Unit 22E. The Council discussed who would hunt in 22E after closure restriction is removed. There is a harvestable surplus of muskoxen to allow for both Federal and State harvest opportunity. The motion passed.

Proposal WP10-75: Ms. Brown presented a summary of the OSM analysis of the proposal which was submitted by the Seward Peninsula Subsistence Regional Advisory Council. The proponent requested the regulation allowing cow harvest during part of the season be rescinded so cows can be harvested during season of August 1-15, not only for the period from January 1-March 15 in Unit 22E. Muskoxen in the Arctic National Wildlife Refuge reach reproduction age between two to five years with 60 percent successfully reproducing at age three years of age. From 2004 to 2007 the annual average hunter success rate for cow harvest was approximately 21 percent. Harvest quotas are rarely met in this area and there's harvestable quota for cow muskoxen.

Motion
Mr. Quinn moved, seconded by Mr. Eningowuk, to support WP10-75. The Council noted that the muskox population is increasing in Unit 22E and there is a harvestable surplus of cow muskoxen in Unit 22E. The Council expects minimal impact on the muskoxen population because the harvest has been quite low. The motion carried.

Proposal WP10-77: Ms. Brown presented a summary of the OSM analysis of the Proposal WP10-77 which was submitted by the National Park Service. The proponent requested the Federal hunt area for muskoxen within Unit 22D remainder be aligned with the State hunt areas by establishing a Kougarok, Kuzitrin, and Pilgrim river drainage hunt area, and requested the current Federal hunt area of Unit 22D remainder be separated into two hunt areas to align with the State regulations. Currently, the entire Federally designated area is closed when harvest quotas are met. For Unit 22D, the Seward Peninsula muskoxen census results for 1992 to 2007 have shown a stable population trend since 1998. The OSM preliminary conclusion was to support proposal WP10-75 with modification to clarify language because Kuzitrin River drainage encompasses the Kougarok and Pilgrim rivers.

Motion
Mr. Quinn moved, seconded by Mr. Buck, to support WP10-77. This proposal would align Federal and State hunt areas in Unit 22D remainder, which would allow flexibility in Federal management and would allow Federally qualified users an opportunity to hunt in Unit 22D consistent with the opportunity already provided by the State. The motion carried.

Proposal WP10-78: Ms. Brown presented a summary of the OSM analysis of proposal WP10-78. This proposal was submitted by the Native Village of Wales and requested that the harvest limit of one muskoxen and one bull moose for the Kingikmiut Dance Festival harvest be increased to three muskoxen in addition to one bull moose to occur within the regularly established season in Unit 22E. The proponent stated since the reestablishment of the festival in 2002 the date has settled into a later summer/early fall period. The dates of the festival are meant to be flexible and can be rescheduled to follow a successful hunt. The proponent states the change of harvest season would allow taking moose and muskoxen for fresh meat just prior to the festival thus reducing the need for storage. Additional muskoxen would help ensure the community and guests are supplied with subsistence resources for the festival in accordance with traditional and customary hospitality. As discussed before, muskoxen censuses have shown an increase in population since 1998. This proposal would allow Native Village of Wales to take a bull moose and up to three muskoxen early in the season to celebrate the festival in the fall or during optimal winter months when traveling conditions would make it safer for the hunter. The timing of the hunt is not tied to a scheduled festival date which would allow flexible opportunity for scheduling the festival.

Motion
Mr. Keyes moved, seconded by Mr. Quinn, to support proposal WP10-78. Extending the moose and muskox harvest seasons and increasing the harvest limit for the Kingikiut Dance Festival would allow for enough meat for the festival. The motion carried.

Proposal WP10-79: Ms. Brown presented a summary of the OSM analysis for proposal WP10-70. The proponent requested the current harvest limit of one bull moose be changed to one antlered bull to help eliminate the inadvertent harvest of cow moose, and the harvest season be increased by three months to include January through March to provide more harvest opportunity and flexibility for Federally qualified subsistence users. The State regulation allows for an additional month of harvest of antlered bulls through January 31; however, Federal public lands are closed and individuals are not able to harvest under the State regulations on the Federal public lands. Federally qualified subsistence users are unable to take advantage of the extra month of hunting opportunity. There are approximately 587 moose in this area. Increasing the harvest season by three months to include January through March may not provide a significant amount of additional opportunity to harvest a mature bull moose; however, the immature bulls may cast their antlers later which would provide a small opportunity and flexibility for harvest of an immature bull during that time. The OSM conclusion is to support the proposal.

Motion
Mr. Keyes moved, seconded by Mr. Eningowuk to support WP10-79. It is important to educate people about this change in the hunting season, and the change of season should help eliminate the inadvertent harvest of cow moose. This change should provide additional harvest opportunity. The motion carried.

Proposal WP10-80: Ms. Brown presented a summary of the analysis for proposal WP10-80. The proponent requested the current winter season be shifted due to short daylight and inclement weather making it very difficult to take advantage of the harvest opportunity for moose in Unit 22A remainder. In 2006, a spring survey was completed for the central portion of Unit 22A including the Unalakleet area; the survey counted 137 adults and a ratio of 20 calves to 100 adults. In 2007, the spring survey counted 82 adults and found 18 calves to 100 adults. In 2008, the moose census estimated 339 moose within Unit 22A with 21 calves to 100 adults. From 2000 to 2008 an average of 13 moose per year were reported taken by residents in Unit 22A. The southern portion of Unit 22A includes harvest of moose by residents of St. Michael and Stebbins, but much of the moose harvest tickets are not reported from these areas. If the proposal is adopted, residents of Stebbins and St. Michael could harvest moose when the weather and daylight are more favorable, giving more flexibility to Federally qualified subsistence users while having minimal impact on the population. The OSM preliminary conclusion is to support proposal WP10-80.

Motion
Mr. Martin moved, seconded by Mr. Buck, to support WP10-80. The lack of daylight and inclement weather makes it difficult to take advantage of the winter moose season. The season shift to a late date would provide a better opportunity to subsistence users for harvesting moose. The motion carried.

Proposal WP10-81: Ms. Brown presented a summary of the OSM analysis for proposal WP10-81. Wolves have been an important subsistence resource in Unit 22. Based on data from sealing certificates and anecdotal information from observations by agency staff, reindeer herders, and other local residents, the wolf population in Unit 22 is increasing. Caribou are the main prey of wolves in Unit 22 and locations of wolves are closely aligned to the movements of caribou. Wolf density is thought to be regulated more by prey abundance than by harvest by humans. At its November 2009 meeting, the Alaska Board of Game rejected a proposal from the Defenders of Wildlife to shorten the wolf hunting season and reduce the harvest limit from 20 to 10 wolves in Unit 22.

Ms. Fosdick (Kawerak, Inc.) stated Kawerak supports all the proposed regulatory changes and especially supports a proposal to request harvest for ceremonial gatherings such as for dance festivals and celebrations of cultural events. However, Kawerak, does not support of proposal WP10-81. For three generations, people in the area have been impacted by the resource harvest regulations that are imposed by the State and Federal governments. People of the region have been very law abiding citizens. This Council should support people from this region and support subsistence rights. The Natural Resource Conservation Service, Bureau of Land Management, and Reindeer Herders Association have been studying vegetation use on certain reindeer ranges in the Seward Peninsula. This year the Bureau of Land Management with University of Alaska Reindeer Research Program will construct "enclosures" in which areas are excluded from any grazing by any animals to find out what grows within undisturbed areas.

Motion
Mr. Quinn moved, seconded by Mr. Keyes, to support WP10-81. There are a lot of wolves in Unit 22 and the wolf population appears to be increasing. Wolves are an important subsistence resource in Unit 22. There is no need to limit the harvest of wolves. The motion failed.

Proposal WP10-73: Ms. Armstrong presented a summary of the OSM analysis for proposal WP10-73. The proposal requested the extension of the positive customary and traditional use determination for muskoxen in all of Unit 22D to include residents of Units 22B west, 22C, and 22E. The Council wants all rural residents of Units 22B west, 22C, 22D, and 22E to have an opportunity to harvest muskoxen anywhere within Unit 22D, including residents of St. Lawrence Island. The eight factors were not presented because the Council had already provided its recommendation to the Board that the residents of Unit 22 have customarily and traditionally used muskoxen. This discussion focused on the question of where customary and traditional use is being proposed. Adopting this proposal would eliminate the possibility of accidental harvest on Federal public lands and it would also make the customary and traditional use determination consistent with other unit or subunit customary and traditional use determinations in the state. The OSM preliminary conclusion is to support proposal WP10-73 with modification to add all residents of Unit 22B, with no distinction between east and west, to the customary and traditional use determination for Unit 22D.

Motion
Mr. Seetot moved, seconded by Mr. Buck, to support proposal WP10-73 with the OSM modification. Adopting this proposal with the OSM recommended modification would recognize the customary and traditional uses of the residents of Unit 22B, 22C, and 22E for muskoxen in all of Unit 22D. It also would eliminate the division in customary and traditional use determination areas. The Council

recognized the importance of allowing others to come into traditional use areas to hunt muskoxen. The motion carried.

Proposal WP10-76: Ms. Armstrong presented a summary of the OSM analysis for WP10-76. The proposal requests the addition of Unit 22 to the list of the areas from which the skin, hide, pelt, or fur, including claws of brown bears harvested under Federal subsistence regulations can be used to make handicrafts for sale. The proposal would not change the Federal subsistence harvest limit for brown bear in Unit 22 of one bear per year and, therefore, would not affect the bear population or non-subsistence users. The proposal would allow increased use of brown bears already harvested under Federal subsistence regulations, which is currently very low according to the information provided. The OSM preliminary conclusion is to support WP10-76.

Mr. George Pappas (ADF&G) reported that there were approximately 150 cases of problems with brown bear parts. The Council needed some proof of problems. These comments were also provided to the Alaska Board of Game. This proposal is region specific and the comments will be taken to the Brown Bear Claw Handicraft Working Group.

Motion
Mr. Quinn moved, seconded by Mr. Buck, to support WP10-76. This proposal would allow subsistence users to more fully use brown bears harvested under Federal subsistence management regulations. The Council recognized that the Brown Bear Handicraft Working Group is still working on this issue, but supported this proposal. The Council noted that the subsistence users in Unit 22 should be able to use brown bear parts for handicrafts. The Council also recognized that there are very few brown bears harvested in Unit 22 under Federal subsistence management regulations. The motion carried.

Agency/Organizations Reports
Office of Subsistence Management
Ms. Armstrong updated the Council about Special Assistant to the Secretary Mr. Pat Pourchot's letter regarding the Secretarial review of the Federal Subsistence Management Program.

National Park Service
Mr. Adkisson updated the Council on projects being conducted this year within Bering Land Bridge Preserve. Some that specifically relate to wildlife and others relate to cultural resource management and various other management concerns. Mr. Adkisson encouraged Council members Seetot, Keyes, and Eningowuk to look through the materials he provided. Much of the information has been presented to the IRA councils but Council members should look through the information. If Council members have any questions, they should contact the National Park Service Office. The information provided in the materials will be presented several more times to the communities in the near future.

Mr. Adkisson reported on brown bears and brown bear monitoring. This year the National Park Service staff's effort will be concentrated on the Gates of the Arctic National Parks. The protocol developed by the Park Service for monitoring brown bears will be completed as part of the Arctic network inventory and monitoring program. Park Service staff just came back from meeting with the Reindeer Herders Association and meeting with various land owners and agencies. The Park Service will work with the Reindeer Herders Association and other land management agencies regarding the enclosure projects and the range study. There are increasing reports and evidence that the Western Arctic caribou are staying on the Seward Peninsula year round. We need to know whether these animals are caribou, wild reindeer, or caribou interbred with reindeer.

Bureau of Land Management
Mr. Sparks reported that a moose survey was conducted in Unit 22A in November and some local residents were hired as observers. There were 447 animals counted: 131 bulls, 280 cows, and 34 calves. Mr. Geoff Beyersdorf was involved in the Unit 22B and 22C survey last week. He flew to Koyuk and counted muskox. The weir funding for Unalakleet River has been approved.

BLM is still involved in land transfers, but is winding down in the Bering Straits region. BLM closed out Stebbins Native Corporation land transfers this past fall. BLM gave the remaining 5,000 acres to Elim Native Corporation so their Alaska Native Claims Settlement Act land entitlement has been closed. That's eleven out seventeen land transfers. BLM is going to start a new land use plan that affects just the southern Norton Sound; the Unalakleet wild and scenic river plan will be included.

Alaska Department of Fish and Game
Ms. Bucknell (Kotzebue office) updated the Council regarding a list of Alaska Board of Fisheries actions she distributed as a handout at this meeting. She noted that State fish and game advisory committee members also complain about committee travel issues. There are Federal funds available for liaison between the Federal Subsistence Management Program and the State advisory committees. A portion of that funding pays for State advisory committee members to attend Regional Advisory Council meetings; for example, it paid for Mr. Ivanoff to attend this meeting.

Mr. Mr. Tony Gorn was not available to provide an update. The Chair suggested Mr. Gorn could provide a written update for the Council members.

Mr. Pappas provided summaries of the Alaska Department of Fish and Game comments on all of the Federal wildlife regulatory change proposals and those comments are on record.

Southern Norton Sound Fish and Game Advisory Committee
Mr. Art Ivanoff spoke of the Advisory Committee's concern about the lack of local representation on the North Pacific Fisheries Management Council; the Advisory Committee is looking for representatives whose agenda is to conserve and protect the resources we all depend on. He spoke about Senate Joint Resolution 29, a copy of which he gave to the Council members, and the AC's support for that resolution. Initially, the AC was concerned about the bycatch issue but that issue has evolved so that the concern is now the ecosystems we depend on. NPFMC plans to expand north of Saint Matthew Island. This is a significant concern for us and at some point the Federal Regional Advisory Councils need to take a position on the Northern Bering Sea research plan. The industry is expanding north and may impact our villages. Mr. Art Ivanoff said that 18 organizations have endorsed their position and that the Alaska Federation of Natives and the Alaska Intertribal Council have adopted resolutions calling for a moratorium on moving the line north of St. Matthew Island

Council Business
Fall 2010 Council Meeting Date
The Council discussed its fall 2010 meeting date and confirmed its next meeting will be held on October 13-14, 2010 in Nome

Winter 2011 Council Meeting Date
The Council realized that its winter 2011 meeting date will conflict with the Iditarod when hotels in Nome could be booked. Lodging reservations needs to be reserved well ahead of time. The winter 2011

Closing Comments

Mr. Seetot said that this was a productive meeting. The Port Clarence station signal was turned off about February 8th. President Obama closed down pretty much all of the 24 Coast Guard stations within the United States. Mr. Seetot believes the signals emitting from the tower interfere with the brain of the whales that emit electronic signals to figure out where they are. Beaver activity increased in the Brevig Mission area and the community is dealing with it, especially relating to water quality in the area; this is a new thing for the area residents. The Western Interior and the rest of the State have already dealt with this issue over the past years.

Mr. Keyes was thankful he made it to Nome. He said last year the Council members were stranded in Nome because of inclement weather usual at this time of the year; it was fun but he hopes it will not happen again. He appreciates all the sharing of information as a learning experience.

Mr. Buck shared that in the White Mountain area subsistence activities are governed by ice conditions during winter season. The ice has been thin the last couple of years and that affected subsistence. Referring to Mr. Keyes' discussion about trash and debris in the ocean, Mr. Buck noted that the community of White Mountain worked with different organizations to do a clean up project. White Mountain's cleanup project crew cleanup debris and trash from Fish River to the mouth and does water study at the same time. The community of Golovin also has a cleanup project that help keep beaches clean.

Mr. Eningowuk thanked the Council for supporting proposals submitted by Mr. Keyes and himself. He said that one is never too old to learn because he is still in a learning process. Last spring was the first time people were able to hunt with snow machines for 15 to 20 years time. That kind of reintroduced local hunting traditions community almost lost the past years. He enjoyed the Council meeting.

Mr. Quinn thanked everyone for attending the Council meeting because it's like giving Council a pat on the back, not only for the Council's accomplishments but also for Council making itself a good example. As for availability of the wildlife resources, the Council monitored resources well. Contentious issues have not emerged in this region that other areas has which are nobody's fault. It's just some things has worked out very well in the Seward Peninsula region. Overall Unit 22 is very good place to be a subsistence user. There are abundant resources within the region and the subsistence user needs to take little time and hopefully little money to take advantage of this opportunity. He thanked the Chair Weaver Ivanoff for professional management of the meeting and the experience he brings to it. Mr. Quinn is happy with the Council's accomplishments.

Mr. Martin wished everyone safe hunting this coming spring. He said there are going to be some issues relating to trawl fisheries in the Bering Seas. If everyone works together, things could work for the better.

Mr. Weaver Ivanoff thanked the Staff for preparing for and providing assistance throughout the meeting. The importance of staff support was noted during the subsistence review by Pat Pourchot and Mr. Elton. There are several management plans by different agencies in place and all try to intertwine or interact together so that it is done in a consistent fashion; however, subsistence resource management plans are missing. Management plans would make decision making easier. Things have changed in the last 50 years and issues are going to become more complicated. These are some of the reasons why some changes in ANILCA are being discussed in terms of Native preferences for subsistence use of resources. Council members have real obligations and responsibilities to the people they serve, both Natives and non-Native residents. Mr. Ivanoff expressed his support of subsistence management plans incorporating traditional ways that would eliminate the permit harvest system. He said tribal members should be including in the development of such plans.

Adjourn
Mr. Keyes moved, seconded by Mr. Eningowuk, to adjourn the meeting. The motion carried and the meeting adjourned at 12:00 p.m. on March 10, 2010.

"I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

_____
Alex Nick, DFO Date
USFWS Office of Subsistence Management

_____
Weaver Ivanoff Date
Seward Peninsula Subsistence Regional Advisory Council

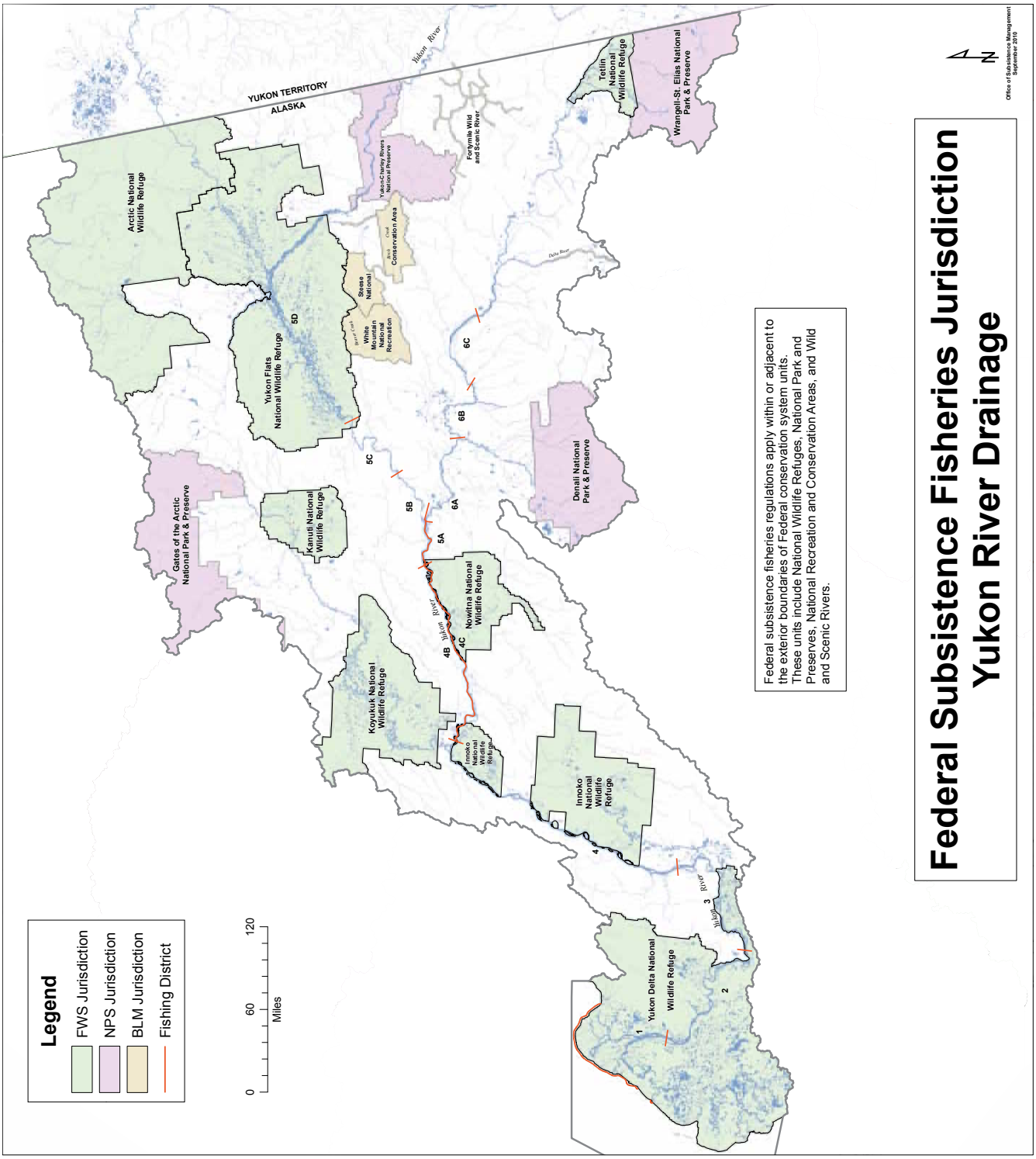
NOTE TO THE READER: For the analyses that follow, the extent of Federal public waters and the customary and traditional use determinations are provided below.

Extent of Federal Public Waters

The phrase "Federal public waters" is defined as those waters described under 50 CFR 100.3. Federal public waters in the Yukon River watershed includes all navigable and non-navigable waters located within and adjacent to the exterior boundaries of the Yukon Delta, Innoko, Kanuti, Koyukuk, Nowitna, Tetlin, and Yukon Flats National Wildlife Refuges (NWR); Yukon-Charley Rivers National Preserve; the Steese National Conservation Area; the White Mountains National Recreation Area; and those segments of the National Wild and Scenic River system, of the Yukon River drainage, located outside the boundaries of these Federal conservation units (i.e., portions of Beaver and Birch creeks and the Delta and Fortymile rivers). Additionally, those navigable and non-navigable waters of the Yukon River drainage, within or adjacent to the exterior boundaries of the Arctic NWR, the Denali National Preserve, the 1980 additions to the Denali National Park, the Gates of the Arctic National Park and Preserve and the Wrangell-St. Elias National Park and Preserve are within Federal jurisdiction for purposes of Federal subsistence fisheries management. Federal public waters include commercial fishing in the Yukon River for all of District 1 (except marine waters), all of District 2, part of District 3, parts of Subdistricts 4-A, 4-B and 4-C; most of Subdistrict 5-D; and part of Subdistrict 6-C (**See map of Yukon River Federal Subsistence Fisheries Jurisdiction)**.

Customary and Traditional Use Determinations

> *Residents of the Yukon River drainage and the community of Stebbins have a positive customary and traditional use determination for salmon, other than fall chum salmon.*
>
> *Residents of the Yukon River drainage and the communities of Chevak, Hooper Bay, Stebbins, and Scammon Bay have a positive customary and traditional use determination for fall chum salmon.*


Federal Subsistence Fisheries Jurisdiction
Yukon River Drainage
Federal subsistence fisheries regulations apply within or adjacent to the exterior boundaries of Federal conservation system units. These units include National Wildlife Refuges, National Park and Preserves, National Recreation and Conservation Areas, and Wild and Scenic Rivers.
Legend
FWS Jurisdiction
NPS Jurisdiction
BLM Jurisdiction
Fishing District
0
60
120
Miles
YUKON TERRITORY
ALASKA
Yukon River
Arctic National Wildlife Refuge
Yukon Flats National Wildlife Refuge
Gates of the Arctic National Park & Preserve
Kanuti National Wildlife Refuge
Koyukuk National Wildlife Refuge
Nowitna National Wildlife Refuge
Innoko National Wildlife Refuge
Innoko National Wildlife Refuge
Yukon Delta National Wildlife Refuge
Steese National Conservation Area
White Mountains National Recreation
Yukon-Charley Rivers National Preserve
Fortymile Wild and Scenic River
Tetlin National Wildlife Refuge
Wrangell-St. Elias National Park & Preserve
Donali National Park & Preserve
Delta River
1
2
3
4
4B
4C
5A
5B
5C
5D
6A
6B
6C
Office of Subsistence Management
September 2010

FP11-01 and 06 Executive Summary	
General Description	Proposal FP11-01 requests that all gillnets (subsistence and commercial) with greater than 6-inch stretch mesh be restricted to not more than 35 meshes in depth in Federal public waters of the Yukon River drainage. *Submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council* Proposal FP11-06 would restrict the depth of 7.5 inch stretch mesh gillnets to 20 meshes in depth in Yukon River Districts 4 and 5. *Submitted by the Mountain Village Working Group*
Proposed Regulation	*§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.* *(A) In the Yukon River drainage, the maximum gillnet size is 7.5 inch stretch mesh for subsistence salmon fishing in Federal public waters.* ***(B) (FP11-01): In the Yukon River drainage, all gillnets with greater than six-inch stretch mesh, may not be more than 35 meshes in depth in Federal public waters.*** ***(C) (FP11-06): In Yukon River Districts 4 and 5, gillnets with 7 ½ inch stretch mesh size may not be more than 20 meshes deep.*** *§___.27(i)(3)(xv) In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets, except as follows:* *(A) In Subdistrict 4-A upstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14, and chum salmon by drift gillnets after August 2;* *(B) In Subdistrict 4-A downstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14.* *(C) In the Yukon River mainstem, Subdistricts 4-B and 4-C, with a Federal subsistence fishing permit, you may take Chinook salmon during the last 18-hour period of the weekly regulatory opening(s) by drift gillnets no more than 150 feet long and no more than **20** meshes deep, from June 10 through July 14**. (Change from 35 to 20 meshes if FP11-06 is adopted)***
OSM Preliminary Conclusion	**Oppose** Proposals FP11-01 and 11-06.

continued on next page

FP11-01 and 06 Executive Summary *(continued)*	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	**Oppose** Proposals FP11-01 and 11-06.
Written Public Comments	**3 Support Proposal FP11-01** **4 Oppose Proposal FP11-01** **8 Oppose Proposal FP11-06**

DRAFT STAFF ANALYSIS
FP11-01 AND 06

ISSUES

Proposal FP11-01, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council, requests that all gillnets (subsistence and commercial) with greater than 6-inch stretch mesh be restricted to not more than 35 meshes in depth in Federal public waters of the Yukon River drainage. Proposal FP11-06 submitted by the Mountain Village Working Group would restrict the depth of 7.5 inch stretch mesh gillnets to 20 meshes in depth in Yukon River Districts 4 and 5.

The proponents are requesting changes in allowable gillnet specifications in the Yukon River salmon fishery to enhance the quantity and age/sex/ length/weight (hereafter referenced as "quality") of the Yukon River Chinook salmon run. FP11-01 specifically addresses a regulatory change that the proponent believes would enhance the quality of escapement. The proposal is based on the belief that the average length and weight of returning adult Chinook salmon is declining, and the existing allowable gillnets (deeper than 35 meshes) disproportionately harvest larger size female Chinook salmon over males. The stated purpose for FP11-06 is to increase the numerical escapement by decreasing the catch efficiency of gillnets in two upper Yukon River fishing districts.

DISCUSSION

The proponents' intent is to apply regulatory change for allowable fishing gear to users in Federal public waters. FP11-01 would apply to all Federal public waters of the Yukon River drainage while FP11-06 would only apply to the Federal public waters of Districts 4 and 5. Most of the commercial fishing and over half of the subsistence harvest in the Yukon River drainage takes place in Federal public waters (**see Federal Subsistence Fisheries Jurisdiction map**).

The Eastern Interior and Western Interior Alaska Subsistence Regional Advisory Councils have repeatedly expressed their concerns over the status of Yukon River Chinook salmon during recent public meetings. In doing so, they cite declining fish size, decreasing occurrence of 40+ pound Chinook salmon, extirpation of age-8 fish and reduced numbers of age-7 fish, decreasing percentage of female Chinook salmon, and the presence of more slender fish (EIRAC 2004, EIRAC 2005, EIRAC 2006, EIRAC 2007, WIRAC 2006, WIRAC 2007). Some fishermen have expressed their belief that the larger, stronger fish migrate in the deeper waters. A variety of net depths are utilized by fishermen in the Yukon River, with deeper mesh nets used to increase harvest efficiency (Holder 2007, pers. comm.).

This is the sixth time that a proposal to limit gillnet depth has been submitted to address continuing concerns about improving the quantity and quality of the run, including the declining average size of adult Yukon River Chinook salmon. Similar proposals have been submitted to the Alaska Board of Fisheries (BOF) by the Fairbanks Fish and Game Advisory Committee, the Eastern Interior Alaska Subsistence Regional Advisory Council and other State Advisory Committees. This is the first year that the Mountain Village Fisheries Working Group has submitted a proposal to the Board to limit gillnet depth to increase the number of fish escaping to the spawning grounds.

Existing Federal Regulations

Yukon-Northern Area—Salmon

§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.

In the Yukon River drainage, you may not take salmon for subsistence fishing using gillnets with stretched mesh larger than 7.5 inches. (This regulation is effective March 1, 2011.)

(xv) In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets, except as follows:

(A) In Subdistrict 4A upstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14, and chum salmon by drift gillnets after August 2;

(B) In Subdistrict 4A downstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14.

(C) In the Yukon River mainstem, Subdistricts 4B and 4C, with a Federal subsistence fishing permit, you may take Chinook salmon during the weekly subsistence fishing opening(s) by drift gillnets no more than 150 feet long and no more than 35 meshes deep, from June 10 through July 14.

Proposed Federal Regulations

Yukon-Northern Area—Salmon

§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.

(A) In the Yukon River drainage, the maximum gillnet size is 7.5 inch stretch mesh for subsistence salmon fishing in Federal public waters.

(B) ***(FP11-01): In the Yukon River drainage, all gillnets with greater than six-inch stretch mesh, may not be more than 35 meshes in depth in Federal public waters.***

(C) ***(FP11-06): In Yukon River Districts 4 and 5, gillnets with 7 ½ inch stretch mesh size may not be more than 20 meshes deep.***

§___.27(i)(3)(xv) In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets, except as follows:

(A) In Subdistrict 4-A upstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14, and chum salmon by drift gillnets after August 2;

(B) In Subdistrict 4-A downstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14.

> *(C) In the Yukon River mainstem, Subdistricts 4-B and 4-C, with a Federal subsistence fishing permit, you may take Chinook salmon during the last 18-hour period of the weekly regulatory opening(s) by drift gillnets no more than 150 feet long and no more than **20** meshes deep, from June 10 through July 14**. (Change from 35 to 20 meshes if FP11-06 is adopted)***

Existing State Regulations

Commercial gillnets greater than 6-inch mesh may not be more than 45 meshes in depth in Districts 1–3, and no more than 60 meshes in depth in Districts 4–6. In 2010, the BOF established a maximum mesh size of 7.5 inch stretch mesh for all gillnets used for commercial and subsistence salmon fishing on a river-wide basis. This regulation takes affect for the 2011 salmon fisheries. There is no restriction on the depth of gillnets used to harvest salmon for subsistence purposes. However, during times when it is deemed necessary to conserve Chinook salmon, the Alaska Department of Fish and Game (ADF&G) has the authority, by Emergency Order, to place limitations on gillnet depth for commercial fishermen and State-managed subsistence fishermen [5 AAC 01.220 (n)(1)(B)].

Pertinent commercial fishing gear regulations:

> *5 AAC.05 331. Gillnet specifications and operations.*
>
> *(f) Gillnets with greater than six-inch mesh may not be more than 60 meshes in depth. Gillnets with six-inch or smaller mesh may not be more than 70 meshes in depth. Beginning January 1, 1996, this subsection only applies in Districts 4–6.*
>
> *(g) Beginning January 1, 1996, in the Districts 1–3, (1) gillnets with greater than six-inch mesh may not be more than 45 meshes in depth; (2) gillnets with six-inch or smaller mesh may not be more than 50 meshes in depth.*

Recent Regulatory History

State of Alaska Regulatory History

The Alaska Board of Fisheries (BOF) meets every three years to consider and take action on Arctic-Yukon-Kuskokwim fisheries proposals. The BOF met in January 2010 to consider regulatory changes to Yukon River Chinook salmon management that would address long standing concerns about the effect of size selective gillnet fisheries and gillnet depth on the quality of escapement and productivity of Yukon River Chinook salmon. A study was presented on the effects of a size selective gillnet fishery operating on a hypothetical Chinook salmon population over a period of 200 years with an additional 200 years of stock rebuilding employing mesh size reductions and reduced exploitation. In addition to reducing mesh size, the authors recommended that spawning escapements be maintained well above levels that would produce maximum sustained yield (MSY) to maintain the genetic resiliency of the population and increase productivity (Bromaghin et al. 2008).

Regulatory proposals to reduce exploitation, gill net mesh size and depth as well as other actions were considered by the BOF to address long standing conservation concerns about decreasing size and productivity of Yukon River Chinook salmon. Proposal 89 which would have restricted gill net depth to 35 meshes for nets greater than 6.0-inch stretch mesh was proposed by the Eastern Interior Regional Advisory Council (Council). The BOF did not adopt the proposal due to lack of direct evidence linking mesh depth to quality (size and sex ratios) of Chinook salmon harvests. Proposal 90 also submitted by the Council requested a prohibition of gill nets > 6.0-inch stretch mesh for the Yukon River commercial

and subsistence fisheries. Based on the available scientific information, the BOF amended the proposal and adopted regulations that limit the maximum gill net mesh size for Yukon River commercial and subsistence fisheries to 7.5-inch stretch mesh. The mesh size restriction will become effective in 2011 allowing a one year phase-in period for fishermen (ADF&G 2010a).

In addition, the BOF adopted a regulation that gives ADF&G managers emergency order authority to sequentially close fisheries to allow pulses (large numbers of migrating fish) to migrate upstream with little or no exploitation (not fished) through all fisheries to their spawning grounds. Fishermen and ADF&G managers reported that this strategy had worked well during recent years to increase the quantity and quality of Chinook salmon reaching spawning streams. Managers would reduce or close scheduled fishing periods based on either preseason projections or inseason assessments of run strength (ADF&G 2010a).

Federal Regulatory History

Concerns about diminished quality of escapement of Yukon River Chinook salmon have been discussed and proposed regulations considered by the Federal Subsistence Board (Board) since 2003. In April 2010, the Board adopted a maximum gillnet mesh size of 7.5 inch stretch mesh for subsistence fisheries in Federal public waters of the Yukon River drainage; effective in 2011. This action paralleled similar regulatory changes adopted by the BOF (FSB 2010). .

The Board considered reducing the depth of nets when it considered FP08-13 during its December 2007 meeting and again by considering FP09-13 in April 2010. The Board unanimously rejected the proposal in 2007 because substantial evidence was lacking to support a change in net depth and because passage of the proposal would have been detrimental to the satisfaction of subsistence uses. The Board took no action on the proposal in 2010 given that three Yukon Regional Advisory Councils had taken no action on the proposal (FSB 2010).

In March 2003, the Western Interior Alaska Subsistence Regional Advisory Council submitted Proposal FP04-05 (OSM 2003), which requested the expansion of the drift gillnet fishery to Yukon River Subdistricts 4-B and 4-C. During deliberation at its fall 2003 meeting, this Council supported its proposal, with modification, to include the conservation measure of limiting nets used for subsistence salmon fishing to a maximum of 7-inch stretch mesh and no deeper than 35 meshes. The Eastern Interior Alaska and Yukon-Kuskokwim Delta Subsistence Regional Advisory Councils opposed the original proposal to expand the use of drift gillnets. This proposal and the Western Interior Alaska Subsistence Regional Advisory Council's recommendation to adopt with modification were considered but rejected by the Board in December 2003 due to concerns raised by ADF&G about increased exploitation of fully allocated salmon stocks.

In March 2004, two fisheries proposals relevant to this issue were submitted to the Board. FP05-03, from the Eastern Interior Alaska Subsistence Regional Advisory Council, requested that, within the Yukon River drainage, all gillnets greater than 6-inch mesh not be more than 35 meshes in depth. FP05-04, submitted by the Western Interior Alaska Subsistence Regional Advisory Council, requested expanding of the subsistence drift gillnet salmon fishery on the Yukon River to include Subdistricts 4-B and 4-C, as well as District 5 (OSM 2005).

At its Fall 2004 meeting, the Western Interior Alaska Subsistence Regional Advisory Council recommended that the proposal only apply to Subdistricts 4-B and 4-C; that it be limited to the harvest of Chinook salmon from June 10 through July 14 and the harvest of chum salmon after August 2; and that drift gillnets could only be used during the final 18 hours of the Federal subsistence fishing periods. This

Council reduced what it initially sought in its proposal to alleviate some of the concerns about increasing harvest levels on fully allocated salmon stocks expressed by Federal and State fisheries managers and the Eastern Interior Alaska Subsistence Regional Advisory Council.

In January 2005, the Board rejected FP05-03 but adopted FP05-04, with modification, to allow the harvest of only Chinook salmon (and not chum salmon) by drift gillnet in the Federal public waters of Subdistricts 4-B and 4-C during the final 18 hours of the weekly regulatory openings under a Federal subsistence fishing permit.

In March 2005, the Eastern Interior Alaska Subsistence Regional Advisory Council submitted Proposal FP06-04 (OSM 2006), which requested that all gillnets with greater than 6-inch mesh, be restricted to not more than 35 meshes in depth. The Council previously submitted a similar proposal to the BOF in November 2004 as an emergency petition, which was rejected because scientific evidence linking net depth to the size of fish harvested was lacking.

During its January 2006 meeting, the Board heard public testimony and discussed FP06-04. In particular, the Board discussed the need for a coordinated effort to address the issues (declining quality of escapement and selectivity of gill nets) raised by the proposal. The Board voted to reject the proposal. Board members noted conflicting recommendations from the three affected Councils and that the information and evidence presented was not definitive or conclusive. However, the Board made a commitment to keep the Yukon River Chinook salmon size issue on the forefront and to look for processes and solutions to ultimately bring the issue to resolution (FSB 2006).

In March 2006, the Eastern Interior Alaska Subsistence Regional Advisory Council submitted four proposals, FP07-01 to -04, to address the issue of declining Chinook salmon size. These proposals were deferred by the Board early in the regulatory process, before analyses had been conducted. At the time it deferred these four proposals, the Board endorsed the Yukon River Drainage Fisheries Association (YRDFA)-led process as a means of addressing the issue of declining salmon size. The YRDFA-led Salmon Size Working Group held four meetings in late 2006 and early 2007, with no consensus attained. Since this Working Group requires consensus to endorse an action, no recommendation was made to the Board.

In March 2007, the Eastern Interior Alaska Subsistence Regional Advisory Council submitted FP08-13 that proposed restricting gill net depth to 35 meshes for mesh > 6-inch stretch mesh and FP08-14 that proposed a maximum mesh size of 7.5-inch stretch mesh. At the same time the Council requested that the Board approve withdrawal of its four proposals submitted in 2006. The Board granted the request and considered proposals FP08-13 and 14 in December 2007. The Board rejected proposal FP08-14 to restrict gillnet mesh size. The Board also rejected FP08-13, which requested a net depth restriction, because substantial evidence was lacking to support a change in net depth and because passage of the proposal would have resulted in substantial cost to subsistence users.

Current Events Involving Species

See current events section for F11-03.

Declining Salmon Size and Depth of Gillnets

During the 2007 regulatory cycle, the Board heard public testimony and was provided an analysis of available information regarding the declining size of Yukon River Chinook salmon. The staff reported that there was reliable, documented evidence from adequate long-term data that Pacific salmon, in general,

and Yukon River Chinook salmon, in particular, were decreasing in size, and some possible causes of the decline may be related to harvest methods (OSM 2007).

The analysis reported that the scientific literature on the connection between mesh depth and harvest of larger fish was limited; particularly for spawning salmon migrations in rivers. Gillnets are known to be highly selective with respect to fish size (mesh size selectivity) and the catch is also biased in favor of active, fast swimming fish (Côté and Perrow 2006). A few studies described migrating Chinook salmon vertical distribution. Karlsson et al.(1996) employed data storage tags to study the depth distribution of Baltic salmon (*Salmo salar L.*) in the Gulf of Bothnia. Depth data registered on the tags indicated that most salmon migrated at a few meters depth. Candy and Quinn (1999) did observe that Chinook salmon that migrated in deep water (>200 m) were significantly larger than fish that remained nearer the surface (87 cm vs. 77 cm) in upper Johnstone Strait, BC. Fukuwaka et al. (2008) reported that bias in size composition of gillnet catches of chum salmon in the central Bering Sea may be caused by differences in encounter probability among mesh sizes, variability in fish swimming speed based on fish size, mesh visibility influencing fish behavior, and diel vertical distribution of migration. However, these observations were made for salmon migrating in the ocean environment, not rivers, and thus may not be applicable to Chinook salmon migratory behavior in the Yukon River.

Studies that describe the swimming depth of migrating salmon in rivers are also limited. As part of a basin-wide telemetry study on Yukon River Chinook salmon in 2002-2004 (Eiler et al. 2006), 137 fish were tagged with radio-archival tags. In addition to transmitting a radio signal for locating and identifying the fish, the tags also recorded body temperature and depth every 3 minutes during their upriver migration. The tagged fish were predominantly 6-year-olds (62%) and averaged 815 mm in length, ranging from 560 to 1,060 mm. **Figure 1** shows swimming depth and water temperature by hours for a fish recovered in a spawning area in the Salcha River (Tanana River drainage). This pattern was typical for the fish in the sample (Eiler et al. in prep). The investigators believed that the differences in swimming depth observed for the tagged fish suggest migrating Chinook salmon follow submerged channels generally swimming near the bottom. Changing channel depths along selected migration routes could account for the wide variation in swimming depth observed in tagged fish. Migration depths of approximately 27 meters to less than 1 meter were recorded. Swimming depths decreased substantially as the fish migrated upriver. The upper river is generally shallower than the lower River.

Observations at the ADF&G sonar site in the Kenai River confirmed that most Chinook salmon migrated offshore and were bottom-oriented (Burwen and Bosch 1998). Although vertical distribution for different Chinook salmon size classes was not specifically addressed in this study, smaller sockeye salmon migrating near the river bank were contrasted with the larger Chinook salmon migrating farther offshore in deeper water.

Hughes (2004) proposed an explanation for anecdotal observations by biologists that larger Chinook salmon run farther offshore in deeper, higher velocity water than smaller fish such as sockeye or smaller Chinook salmon. He noted that ADF&G sonar biologists have used this criterion when determining whether an acoustical target may be a sockeye or a larger Chinook salmon. His work evaluated the effect of increased resistance (wave drag) on swimming fish from generation of surface waves. Wave drag appears to increase with increasing size of fish; therefore, a larger fish would need to swim deeper than a smaller fish to have an equivlaent surface wave drag. He applied wave drag calculations to fish size (girth) and submersion depth data to predict Chinook and sockeye salmon migration corridors in the Nushagak River. The author assumed that all fish swim near the river bottom where water velocity is reduced. Prediction of lateral distribution of each species was improved by including wave drag verses traditional models based largely on water velocity alone. Although there was a significant difference

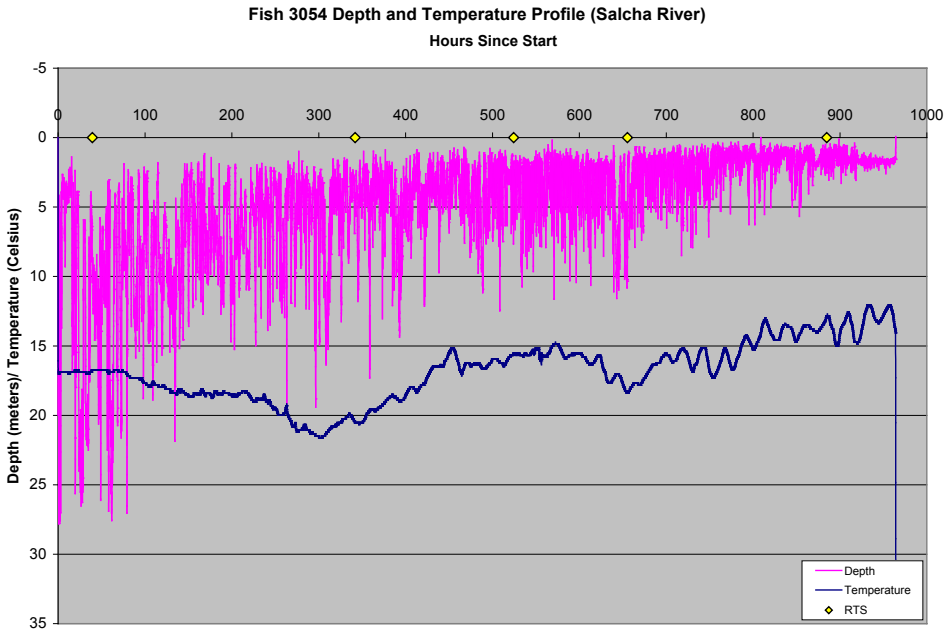


Figure 1. Depth and temperature recordings from an archival tag placed in a Yukon River Chinook salmon near Russian Mission and tracked upriver to the Salcha River, characteristic of the pattern seen for other similarly tagged Chinook salmon in this study. Temperature in C° (lower data) and depth in meters (upper data) by hours since deployment. Data provided by Eiler in prep.

between optimum depths of migration corridors for Chinook compared to sockeye salmon, wave drag was greatest at depths less than 3 m (10 ft) and becomes negligible at greater than 4 m (13 ft). At these depths[1], size selectivity in either 35 mesh or 45 mesh gillnets would not be affected; although the deeper nets may be harder to use in shallower water. However, reducing the depth of 7.5 inch gillnets to 20 meshes (11 ft) may provide some benefit to select for smaller sized fish. Reducing mesh depth from 45 meshes to 20 meshes would also reduce the efficiency of the net.

Pfisterer (2002) reported fish passage levels at the Pilot Station sonar on the Yukon River decline sharply as a function of the distance offshore. From 1995-2001, 90% of the detected fish passage occurred from directly in front of the sonar out to 90 m - 190 m offshore from the south bank and out to 50 m-70 m on the north bank. Gillnets were fished in three zones: north bank, south bank near shore (5 m-10 m from shore) and south bank offshore (approximately 50 m-70 m from shore).

The south bank drifts were conducted on or close to the bottom. The maximum depth was approximately 5 m for the south bank near shore drifts and 8 m in depth for south bank offshore drifts (**Table 2**). Because the north bank is much steeper, at 50 m from the bank only a third to half of the length of net was on the bottom. The 8.5 in mesh net was 43 meshes deep; the 7.5 in mesh net was 48 meshes deep. For Chinook catches from 1995-2007 in all meshes, the percentage of large Chinook (≥655 mm) were only slightly higher in the offshore relative to near shore. No clear difference in size of fish caught in relation to the water depth of the fishing zones described was observed. However, gillnet fishing appears to affect fish

[1] Depth (D) of gillnets formula: $D = (2Ns)\ (\sqrt{(1-E^2)}$ where N = number of meshes, s = bar length and E = hanging ratio. (e.g. for 8.5" stretch mesh, 45 meshes with .5 hanging ratio, D = 27.7 ft, for 35 meshes D = 21.6 ft)

behavior and distribution. Fish were observed on side scanning sonar moving offshore when gillnets were fished and moving back inshore after fishing ends (Pfisterer 2008, pers. comm.).

Table 2. Percent of Chinook salmon caught from 1995-2007 in all meshes by zone in gillnet apportionment sampling at Pilot Station sonar. Percents are not adjusted for fishing effort (Pfisterer 2008, pers. comm.).

Percent of Chinook catch from 1995-2007 in all meshes by Zone

Bank	Zone	Water Depth	≥ 655 mm Fork Length	< 655 mm Fork Length
South	Off shore	5-8 m	84.43%	15.57%
South	Near shore	1-5 m	81.83%	18.17%
North	Off shore	1-14 m	74.38%	25.62%
	Total		80.64%	19.36%

The catch for a net with a mesh size that is selective for larger salmon (e.g. 7.5 in stretch mesh) can be reduced by decreasing its exposure to fish. Exposure can be defined as the exposure area (depth x length) of the net and the time the net is fished. Hypothetically, reducing 50 fathom long, 45 meshes deep gillnets by 10 meshes in depth or 11 fathoms of length would reduce the exposure area of gillnets by about 22%; while reducing 6 hour fishing periods by 1.5 hours decreases exposure by 25%. However, estimating the effect of reducing net exposure is difficult. Although a decrease in catch efficiency might be expected by decreasing exposure (net area or fishing time) of gillnets, Minns and Hurley (1988) in their studies of gillnet efficiency found that these relationships are more complex and often non-linear. Observed variations were related to differences in activity patterns and net saturation among species; leading the authors to conclude the results of gillnet catch per unit effort data must be evaluated species by species.

Studies of gillnet catch bias for salmon have focused on mesh size selectivity; studies evaluating fishing time and net area (length and/or depth of nets) bias for gillnets were not found in available published literature. Quantitative analyses of mesh depth effects for Yukon River salmon have not been undertaken, and comparisons between existing 28 mesh and 45 mesh depth gillnets from long term ADF&G assessment projects have not been conducted because bottom depth, current velocity, and varying mesh sizes would confound analyses.

Effects of the Proposal

Adoption of FP11-01 would reduce the depth of gillnets greater than six inch stretch mesh to no more than 35 meshes in depth throughout Federal public waters of the Yukon River drainage where most commercial fishing and over half of the subsistence harvest takes place. Adoption of FP11-06 would reduce gillnet depth in Federal public waters of Districts 4 and 5 of the Yukon River. Reducing depth of gillnets would likely result in reduced fishing efficiency of gear for commercial and subsistence fishermen in those areas where it is mandated; however, outside of Federal public waters State regulations would apply resulting in a confusing and uneven application of gear restrictions. There are no quantifiable data available to predict what effect this reduction would have on the harvest of the larger and older-aged female Chinook salmon. No new information supporting decreasing size selectivity of gillnets by reducing mesh depth has been identified since the Board last considered and rejected this proposal. A study conducted by National Marine Fisheries Service and ADF&G researchers employing radio tagged Chinook salmon in the Yukon will attempt to address differences in swimming depth with size of tagged fish (Eiler et al. in prep); however, this study will not be completed until the Spring 2011.

If adopted, either proposal would pose an additional burden on some, if not all, affected users, since they would have to modify existing gillnets. If modification includes cutting the nets, there would likely be an increase in maintenance time and costs, because once a net has been cut down in size (i.e. from 45 meshes to 35 or 20 meshes in depth), it may become more susceptible to tearing on snags (Rearden 2004, pers. comm.). Adoption of the proposal would also likely increase the need to relocate to other fishing sites because the reduced depth of nets would reduce effectiveness of gear used at traditional fishing sites or drifts.

Adoption of either proposal would expand the differences between Federal and State subsistence regulations. Commercial and subsistence users fishing in State-managed waters under State regulations would still be permitted to use deeper gillnets.

OSM PRELIMINARY CONCLUSION

Oppose Proposals FP11-01 and 11-06.

Justification

Reduction of the depth of gillnets used in the commercial and subsistence fisheries to harvest Chinook salmon in the Federal waters of the Yukon River drainage would likely reduce gear efficiency but may not influence the size, sex or age of fish harvested. Local knowledge suggests that deeper gillnets may catch larger fish, but this observation has not been addressed in scientific studies. Reduced fishing efficiency and the costs of replacing or altering gear to comply with the proposed regulation would adversely affect some subsistence and commercial fishermen without reasonable confidence that the proposed change would effectively address the concerns raised by the proponents. Other means are available to reduce fishing efficiency including time and area restrictions. Under Federal regulations other uses would be curtailed to provide for subsistence use. No additional information was identified by the proponent or available from other sources since the Board considered and rejected a similar proposal during the 2008 regulatory cycle. In addition, implementing this proposal at this time when many fishermen are currently in the costly process of converting gill net gear to comply with the recently adopted State and Federal mesh size restrictions would increase costs and time for fishermen.

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Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposals FP11-01 and FP11-06: Yukon River gillnet depth restrictions.

Introduction: The Eastern Interior Regional Advisory Council submitted proposal FP11-01 to limit all gillnets (state commercial, state subsistence, and federal subsistence fisheries gear) with a stretched mesh size greater than six inches to a maximum of 35 meshes in depth in the Yukon River where federal subsistence regulations apply. Stanislaus Sheppard of the Mountain Village Working Group submitted proposal FP11-06 to limit gillnets with a stretched mesh size of 7.5 inches to a maximum depth of 20 meshes for federal subsistence fishing in districts 4 and 5 of the Yukon River. The proponents are concerned that deeper gillnets select for older and larger Chinook salmon, which are believed to migrate in deep water. Proposal FP11-06 was also submitted to allow more salmon to escape to the spawning grounds and did not differentiate between species or sizes of salmon.

The Federal Subsistence Board previously reviewed similar proposals to restrict gillnet depth in the Yukon River fisheries (FP05-03, FP06-04, FP09-13) and took no action or opposed those proposals. The Alaska Board of Fisheries unanimously opposed a proposal to restrict subsistence and commercial gillnets to 35 meshes in depth in the Yukon Area during its meeting January 26—31, 2010, after thorough review in an open public process that included numerous oral and written reports. The Alaska Board of Fisheries adopted a maximum mesh size of 7.5 inches for subsistence and commercial gillnets effective in 2011 in the Yukon Area. The Federal Subsistence Board took no action on deferred proposal FP09-13 to limit mesh depth at the April 13—14, 2010, meeting after adopting deferred proposal FP09-12, which paralleled the Alaska Board restriction of a maximum mesh size of 7.5 inches. The change in mesh size effectively reduces the maximum depth of commercial gillnets in districts 1—3 by approximately three feet compared to the depth of an 8.5-inch mesh gillnet (commensurate with the current gillnet commercial fishery). Most subsistence fishermen will likely use their commercial gillnets for commercial fishing.

Data from a recent radio-tagging project on Yukon River Chinook salmon indicate that Chinook salmon utilize the entire depth of the water column during migration. (John Eiler, National Marine Fisheries Service Auke Bay Laboratory, Juneau; personal comm. 2009). Even if net depth restrictions could alter harvest in a specific location, fishermen could compensate for a reduced net depth by fishing in shallower locations, where a shallower net would not impede harvest of larger and more valuable Chinook salmon. There are insufficient data to demonstrate that gillnet depth restrictions would effectively alter size and age composition of the harvest.

Impact on Subsistence Users: If FP11-01 and FP11-06 are adopted, harvest of Chinook and other salmon species in federally-regulated subsistence fisheries on the Yukon River could be negatively impacted. These fishermen would potentially need to fish longer hours to harvest the same number of fish with less efficient nets. Modification of existing nets or purchase of new nets might be necessary in order to comply with gear type restrictions that differ between the federal and state fisheries. If federal regulations regarding allowable gear types are not the same

as state regulations, it will create a conflicting patchwork of waters under differing state and federal regulations and might be difficult for subsistence users to know the boundaries for each.

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. Since 2001, subsistence harvest levels have reached the amounts reasonably necessary for subsistence use within state regulations, except for 2002, 2008, and 2009. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The agreed-to escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005 being the three highest spawning escapement estimates on record. However, the escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on the Canadian-origin stock by Alaskan fishermen has decreased from an average of about 55% (1989–1998) to an average of about 44% from 2004—2008 (Howard et al. 2009). Although the subsistence harvest remains stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60% from an average of 100,000 annually (1989–1998) to the recent 5-year average (2005–2009) of nearly 23,000 fish. It is not possible to determine if size-selective harvests, variations in environment, or a combination of factors are causing a decrease in harvest of age-7 fish or decreasing size trends of older fish (JTC SSS 2006). Decreasing size of Chinook salmon has been anecdotally noted across much of the state in recent years. However, increasing the number of larger and older Chinook salmon in spawning escapements through mesh size regulations should provide better future production potential.

Opportunity Provided by State: Salmon may be harvested under state regulations throughout the majority of the Yukon River watershed, including a liberal subsistence fishery. Gear types allowed are gillnets, beach seines, hook and line attached to a rod or pole, hand lines, and fish wheels. Although all gear types are not used or allowed in all portions of the Yukon River drainage, drift and set gillnets and fish wheels harvest the majority of fish taken for subsistence uses. Under state regulations, subsistence is the priority consumptive use. Therefore, state subsistence fishing opportunity is directly linked to abundance and is not restricted unless run size is inadequate to meet escapement needs. When the Yukon River Chinook salmon run is below average, state subsistence fishing periods may be conducted based on a schedule implemented chronologically throughout the Alaska portion of the drainage, which is consistent with migratory timing as the salmon run progresses upstream. Federal regulations under Special Actions to restrict federally-eligible users have been rare and mirrored in-state, in-season actions necessary to meet escapement goals, except where state and federal regulations differ in subdistricts 4-B and 4-C. Amounts reasonably necessary for subsistence Chinook salmon (5AAC 01.236 (b)), as determined by the Alaska Board of Fisheries, were met in the Yukon River drainage for six of the last nine years.

Jurisdictional Issues: A large percentage of the lands along the Yukon River are state or private lands on which subsistence users must use gear types consistent with state regulations. Detailed maps are needed that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply, so that fishermen can know whether they are on state or private lands (including state-owned submerged lands and shorelands) where they must comply with state laws and regulations. The Federal Subsistence Board does not have authority to apply

gear restrictions, such as gillnet mesh size and depth regulations, to state-regulated commercial and subsistence fisheries.

Recommendation: Oppose proposals FP11-01 and FP11-06.

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WRITTEN PUBLIC COMMENTS

FP11-01

Support Proposal FP11-01. I agree with the Eastern Interior RAC that limiting the depth of nets is the next logical step in the effort to take pressure off of the largest Chinook salmon, especially the females. Net depth is a critical factor in one's ability to catch king salmon. This fact is routinely displayed at popular driftnet spots, such and the upriver end of subdistrict 4-a, where the fishermen with the deepest nets harvest the most fish, and basically rule the river until they decide to go home. Establishing a maximum net depth would level the playing field among fishermen in these combat fishing situations.

Many, if not most, of the fishermen on the Yukon will purchase new nets soon in order to comply with the 7.5 mesh size limit approved by the Alaska Board of Fisheries and the Federal Subsistence Board. If federal and State authorities act now to set a limit on the depth of nets, that action would greatly lessen the changes of fishermen purchasing new nets that comply with the mesh size restriction but do not comply with a depth restriction that goes into effect after the fishermen purchase the net.

Setting a net depth restriction makes good biological sense for the Yukon River king run as a whole by giving the large Canada-bound fish and the spawning females a greater chance to escape to spawning grounds. It also makes sense in terms of fairness among fishermen up and down the river.

Tim Bodony, Galena

Support Proposal FP11-01. We may need these restrictions at some point to prevent fishermen from targeting the next large group of kings, now that we pretty much depleted the older kings.

The situation we see in villages and what their residents are facing today is very troublesome. How can we expect them to provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river are enjoying, we have to understand that this river and the people who live along this great river are one and the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we need to understand the changes we see around us today – climate changes, water temperatures increasingly warmer, and changes in the fish itself or the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. Nobody believes this will offer any good benefit to anyone. I encourage the Federal Subsistence Board to look at the good that came when people along the Yukon River worked together, set aside their differences, and sought a common goal. Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing sort of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

Support Proposal FP11-01. This proposal is sensible because it is a conservation measure. We have been going through so many restrictions and closures in Y-5 (not allowed to drift net) that it would be wise to preserve what few large Chinooks are left in the river for the future generations. Y-5 is usually hit the hardest by ADF&G but we have been in conservation mode for the longest of all districts.

Commercial fisheries are killing the future of fish. The effective methods used by all other districts could be considered the culprit for destroying a once viable food source. Once all the fish are gone we will all suffer for a few privileged groups that have depleted the Chinook stock at an alarming rate. Looking at the last Tanana-Rampart-Manley Fish and Game Advisory Committee's last publications one would conclude that all the large Chinooks are not even making it to the Y-5 district.

Genetic codes that are very valuable to the fisheries are not getting to the spawning ground to ensure a viable fishing future on the Yukon River. With large egg-laden females making it, the odds increase for more in return for the future. We need to think long term. These walls of death are dangerous to the future of all resource users. Why gamble with our children's and grandchildren's futures? This measure should be endorsed by all fishermen with the promise of a sustained yield for everyone. With serious inflation affecting all groups of people along the river, it would not be wise to wipe out our food source. We don't know the future of the economy, but we can all agree that serious hardships will be here forever it the Chinooks are no longer available to feed our residents of the Yukon River.

If ADF&G does right or wrong they still have jobs to feed themselves. We will have nothing if wrong choices are made. ADF&G needs to consider the people that will be hurt by their decisions. We can only hope ADF&G does the right thing for the people of this river and great land we live off of. ADF&G should try harder to understand what is going on in the ocean environments also. Too many times we hear "We don't know." Our future food source is in hands of very few and we can only pray that the have the wisdom to do the right thing.

James E. Roberts, Tanana Tribal Council

Oppose Proposal FP11-01. Leave our fish net mesh and depth sizes alone. We cannot all afford to buy new nets every time the laws change.

These proposals affect all of our lives in this area. If there is not enough fish, cut out commercial fishing for at least two years. Then, if there is still not enough fish, cut down the number of catch or limit the fishing openings for the subsistence users. Don't start by limiting the people that catch the least amount. Limit the people who catch the most. If there is not enough fish, then limit the users in the lower Yukon. They have been getting State aide for the fishing disasters for a few years now. Please use some common sense and not pass these proposals (1-9). These will make criminals out of all of us.

Letter Signed by Thirty-seven Residents of Galena

Oppose Proposal FP11-01. The Yukon River is warmer and the salmon swim deeper to stay cool. The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose Proposal FP11-01. The adoption of a maximum mesh size of 7.5 inches by the Alaska Board of Fisheries is already going to be a hardship on subsistence fishermen. At this point in time we have

no credible way to quantify the benefit of that gear reduction, particularly on the spawning grounds in Canada. If we introduce a second type of net reduction at the same time, we will further complicate knowing which gear reduction is giving us what benefit. As a result of this uncertainty, we may be asking subsistence fishermen to bear more of the burden of conservation than is necessary.

That only bigger salmon swim in deeper water is antidotal at best. The best fishing water depths vary greatly up and down the Yukon River. The archival radio tags deployed during the Chinook salmon radio telemetry project showed this. The differences in the depths of fish waters in the lower river (wider and deeper channels) and the upper river (narrower and shallower channels) may unfairly place more conservation on the lower river than the upper river by shallowing the fish net depths to 35 meshes.

Richard Burnham, Kaltag

Oppose Proposal FP11-01. The people of Koyukuk rely on Chinook salmon and other fish in subdistrict 4A. The main means of fishing is by set net, drift net, and fish wheels. The new State regulation for our area is 7½ inch mesh size and we use 35 meshes in depth. If we go with a small mesh size and depth, it would affect our catch.

Koyukuk Tribal Council

FP11-06

Oppose Proposal FP11-06. You are going to tell us to cut our nets in half and with a warmer river the fish swim deeper so how can we even catch a fish with a short net? The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose Proposal FP11-06. This individual must have it in for residents of districts 4 and 5. The impact this proposal and other proposals like this would have on traditional and customary harvest will be devastating for the village residents and cause additional problems outside of what they are already dealing with.

The situation we see in villages and what residents are facing today is very troublesome. How they provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river enjoy, we must understand that this river and the people who live along this great river are one and the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we must understand the changes we see around us today: climate changes, water temperatures increasing, and changes in the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. I encourage the Federal Subsistence Board to look at the good that came when

people along the Yukon River worked together, set aside their differences, and sought a common goal. Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing short of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

Oppose Proposal FP11-06. We already have a 7½ inch mesh restriction on the entire Yukon and to target districts 4 and 5 with a mesh restriction of 20 mesh is targeting only one group of fishers. The average depth of the river in these areas is 20 feet. With a rocky substrate and an average depth 20 feet from shore is 6 to 10 feet, so this proposal has no sound scientific reasoning and contradicts proposals 11-04 and 11-05 by the same working group. If mesh restriction is to be applied, it should be river wide as an extreme conservation method.

Don and Jan Woodruff, Eagle

Oppose Proposal FP11-06. It is my belief the Mountain Village Working Group has never fished in the districts 4, 5, or 6 and, therefore, has no idea of our subsistence life style. I notice that they didn't take any measures to reduce their take of subsistence catch fish, but did make proposals affecting Yukon River fishing districts 4, 5, and 6. I live on the Yukon River in District 4 and have always fished this district. As you know, it was our district that submitted proposal to reduce take of Chinook salmon last year (2009) which helped get Chinook salmon pat the border in record number at Eagle, Alaska. I ask the Federal Subsistence Board to reject this proposal as it attempts to regulate subsistence fishing in our District 4.

Fred Huntington Sr., Second Chief, Louden Tribal Council

Oppose Proposal FP11-06. There is no scientific basis for this proposal's effectiveness as a conservation tool and that it may unnecessarily hinder set gillnet fishers within districts 4 and 5.

Mike McDougall and Sonja Sager, Eagle

Oppose Proposal FP11-06. As referenced in my opposition to FP11-01, I am against any proposed changes to the depth of nets in any district on the Yukon River.

Richard Burnham, Kaltag

Oppose Proposal FP11-06. We are against changing the fish net sizes!!! We know that the commercial fishermen use a lot bigger size nets than we do. So any net size changing should be done by the commercial fishermen first!!!

Letter Signed by Thirty-seven Residents of Galena

Oppose Proposal FP11-06. This proposal will put a hardship on the users if approved.

Koyukuk Tribal Council

FP11-02 Executive Summary	
General Description	Proposal FP11-02 requests that Federal Public waters of the Yukon River be closed to subsistence and commercial fishing from the river mouth to the Canadian border during the first pulse and second pulse if necessary of the Chinook salmon run. These rolling closures would correspond to the periods of the Chinook salmon migration when stocks returning to Canadian waters constitute the majority of the run. No harvest on these stocks would be allowed for at least 12 years or until such time as this stock's abundance and escapement quality (age/sex/length) is restored to a level that provides sustained yields to support historic commercial and subsistence fisheries. *Submitted by Jack Reakoff*
Proposed Regulation	**Yukon-Northern Area—Salmon** *§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.* *(A) In the Yukon River drainage, you may not take salmon for subsistence fishing using gillnets with stretched mesh larger than 7.5 inches. (This regulation is effective April 1, 2011.)* ***(B) Federal Public waters of the Yukon River will be closed to the taking of Chinook salmon by all users sequentially from the river mouth to the Canadian border during the first pulse (or second if the first is missed) of Chinook salmon, using statistical area closures to provide greater protection, without negatively impacting conservation of other stocks. This regulation will be in place for at least 12 years, or until such time that Chinook salmon stock abundance and quality is restored to a level that provides sustained yields for normal commercial and subsistence fisheries.***
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	**Oppose**
Written Public Comments	**1 Support** **5 Oppose**

DRAFT STAFF ANALYSIS
FP11-02

ISSUES

Proposal FP11-02, submitted by Jack Reakoff, requests that Federal Public waters of the Yukon River be closed to subsistence and commercial fishing from the river mouth to the Canadian border during the first pulse and second pulse if necessary of the Chinook salmon run. These rolling closures would correspond to the periods of the Chinook salmon migration when stocks returning to Canadian waters constitute the majority of the run. No harvest on these stocks would be allowed for at least 12 years or until such time as this stock's abundance and escapement quality (age/sex/length) is restored to a level that provides sustained yields to support historic commercial and subsistence fisheries.

DISCUSSION

The proponent submitted this proposal to address longstanding concerns expressed by Yukon River fishers, Regional Advisory Councils and others regarding diminished quality and quantity of escapement for Yukon River Chinook salmon that spawn in Canada. The Eastern and Western Interior Regional Advisory Councils submitted a joint resolution in February 2010 asking Yukon fisheries managers to prohibit fishing on these stocks for at least two cycles (12 years) to restore these stocks to historic levels (EIRAC and WIRAC 2010). The Yukon-Kuskokwim Delta Regional Advisory Council also submitted a similar resolution (YK Delta RAC 2010). These stocks make up approximately 50% of the total Yukon River Chinook salmon run (Howard et al. 2009).

Existing Federal Regulations

Yukon-Northern Area—Salmon

§___.27(i)(3)(ii) For the Yukon River drainage, Federal subsistence fishing schedules, openings, closings, and fishing methods are the same as those issued for the subsistence taking of fish under Alaska Statutes (AS 16.05.060), unless superseded by a Federal Special Action.

(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.

(A) In the Yukon River drainage, you may not take salmon for subsistence fishing using gillnets with stretched mesh larger than 7.5 inches. (This regulation is effective April 1, 2011.)

Proposed Federal Regulations

Yukon-Northern Area—Salmon

§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.

(A) In the Yukon River drainage, you may not take salmon for subsistence fishing using gillnets with stretched mesh larger than 7.5 inches. (This regulation is effective April 1, 2011.)

(B) Federal Public waters of the Yukon River will be closed to the taking of Chinook salmon by all users sequentially from the river mouth to the Canadian border during the first pulse (or second if the first is missed) of Chinook salmon, using statistical area closures to provide greater protection, without negatively impacting conservation of other stocks. This regulation will be in place for at least 12 years, or until such time that Chinook salmon stock abundance and quality is restored to a level that provides sustained yields for normal commercial and subsistence fisheries.

Existing State Regulations

In 2010, the Alaska Board of Fisheries (BOF) established a maximum mesh size of 7.5 inch stretch mesh for all gillnets used for commercial and subsistence salmon fishing throughout the Yukon River drainage in Alaska. This regulation takes affect beginning in 2011. The Alaska Department of Fish and Game (ADF&G) also has the authority to close and immediately reopen the State subsistence fishery with mesh size restrictions based on the need to conserve Chinook or chum salmon. In 2010, the BOF also adopted regulations authorizing State managers to use emergency order authority when necessary for conservation to establish fisheries closures intended to pass pulses of Chinook salmon through Alaskan fisheries to upper river spawning areas with little or no harvest.

Alaskan salmon fisheries are managed under a number of legal mandates and policies providing for sustained yield. The Alaska Constitution (Article VIII, Sec(2)) directs the Alaska legislature to provide for the use and conservation of all natural resources for the maximum benefit of its people. AS 16.05.020(2) requires the Commissioner of the ADF&G to manage, protect, maintain, improve and extend the fish, game and aquatic plant resources of the State in the interest of the economy and general well-being of its citizens. In addition, Sec(4) of Article VIII requires that fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle subject to preferences among beneficial uses.

The principles of providing sustained yield (harvest) for the maximum benefit of its citizens and also ensuring conservation are addressed in Alaska's Mixed-Stock Salmon Policy (5AAC 39.220), Sustainable Salmon Fisheries Policy (5 AAC 39.222) and Escapement Goal Policy (5AAC 39.223). The reality of implementing often conflicting mandates to harvest and sustain becomes the challenge of the BOF that has responsibility for conservation as well as allocating often limited fisheries resources among beneficial uses and ADF&G that is charged to conserve and sustain the fish resources and carry out allocation plans established by the BOF. These interrelated responsibilities are often addressed through development of a regulatory fisheries management plan for a specific fishery. A management plan for salmon will address the level at which the population will be sustained as well as how surplus production will be allocated among users. The default for most salmon fisheries applies management and sets escapement goals which attempt to achieve maximum sustained yield. However, the BOF can adopt optimal yield plans to achieve other biological or social benefits for the public. Escapements under an optimal yield plan termed optimal escapement goals (OEG) might be set above or below levels needed to produce Maximum Sustained Yield (MSY). For example, an OEG goal was set for the Yukon River fall chum salmon management plan (5AAC 01.249) that allows continued subsistence fishing during poor run years that will result in escapements below those needed to produce MSY. An agency, organization or individual would have to propose and justify setting an OEG goal or a proposed change to an established goal to the BOF.

State managers can establish and alter subsistence fishing periods termed "windows" for Yukon River Districts and Sub Districts and shift these periods chronologically up the river in order to allow

subsistence fishing opportunity while segments of the spawning migration are subjected to little harvest exploitation.

5 AAC 01.210. Fishing seasons and periods

(a) Unless restricted in this section, or in 5 AAC 01.220 - 5 AAC 01.249, salmon may be taken in the Yukon-Northern Area at any time.

(b) When there are no commercial salmon fishing periods, the subsistence fishery in the Yukon River drainage will be based on a schedule implemented chronologically, consistent with migratory timing as the salmon run progresses upstream. The commissioner may alter fishing periods by emergency order, if the commissioner determines that preseason or inseason run indicators indicate it is necessary for conservation purposes. The fishing periods for subsistence salmon fishing in the Yukon River drainage will be established by emergency order as follows:

(1) Coastal District, Koyukuk River, Kantishna River, and Subdistrict 5-D: seven days per week;

(2) Districts 1–3: two 36-hour fishing periods per week;

(3) District 4, and Subdistricts 5-A, 5-B, and 5-C: two 48-hour fishing periods per week;

(4) District 6: two 42-hour fishing periods per week; and

(5) Old Minto Area: five days per week.

(c) When there are commercial salmon fishing periods, in the following locations, in addition to subsistence fishing periods opened by emergency order, salmon may be taken for subsistence during commercial salmon fishing periods, except that salmon may not be taken for subsistence during the 24 hours immediately before the opening of the commercial salmon fishing season:

(1) District 4, excluding the Koyukuk River drainage: from June 15 through September 30, salmon may be taken for two 48-hour fishing periods per week, established by emergency order;

(2) District 5, excluding the Tozitna River drainage and Subdistrict 5-D;

(3) District 6, except

(A) the Kantishna River drainage and that portion of the Tanana River drainage upstream of the mouth of the Salcha River;

(B) in Old Minto Area, salmon may be taken from 6:00 p.m. Friday until 6:00 p.m. Wednesday.

(d) During the commercial salmon fishing season when the department announces a commercial fishing closure that will last longer than five days, salmon may not be taken for subsistence during the following periods in the following districts:

(1) in District 4, excluding the Koyukuk River drainage, salmon may not be taken

(A) in Subdistrict 4-A, from 6:00 p.m. Sunday until 6:00 p.m. Tuesday;

(B) in Subdistricts 4-B and 4-C, from 6:00 p.m. Friday until 6:00 p.m. Sunday;

(2) in District 5, excluding the Tozitna River drainage and Subdistrict 5-D, salmon may not be taken from 6:00 p.m. Sunday until 6:00 p.m. Tuesday.

(e) In Districts 1, 2, and 3, excluding the Innoko River drainage, salmon may not be taken for subsistence during the 24 hours immediately before the opening of the commercial salmon fishing season, and

(1) in Districts 1, 2, and 3,

(A) after the opening of the commercial salmon fishing season through July 15, salmon may not be taken for subsistence for 18 hours immediately before, during, and for 12 hours after each commercial salmon fishing period;

(B) after July 15, salmon may not be taken for subsistence for 12 hours immediately before, during, and for 12 hours after each commercial salmon fishing period;

(2) repealed 5/19/2010.

(f) Repealed 5/19/2010.

(g) The commissioner may establish, by emergency order, additional subsistence salmon fishing periods in Subdistricts 4-B and 4-C and Districts 5 and 6 to compensate for any lost fishing opportunities due to reductions in commercial salmon fishing time.

(h) Except as provided in 5 AAC 01.225, and except as may be provided by the terms of a subsistence fishing permit, there is no closed season on fish other than salmon.

Regulatory History

State Fisheries

The BOF meets every three years to consider and take action on Arctic-Yukon-Kuskokwim fisheries proposals. The BOF met in January 2010 to consider regulatory changes to Yukon River Chinook salmon management that would address long standing concerns about the effect of size selective gillnet fisheries on the quality of escapement and productivity of Yukon River Chinook salmon. A study was presented on the effects of a size selective gillnet fishery operating on a hypothetical Chinook salmon population over a period of 200 years with an additional 200 years of stock rebuilding employing mesh size reductions and reduced exploitation. In addition to reducing mesh size, the authors recommended that spawning escapements be maintained well above levels that would produce maximum sustained yield (MSY) to maintain the genetic resiliency of the population and increase productivity of this species (Bromaghin et al. 2008).

Regulatory proposals to reduce exploitation, gill net mesh size and depth as well as other actions were considered by the BOF to address longstanding conservation concerns about decreasing trends in size and productivity of Yukon River Chinook salmon. Proposal 90 submitted by the Eastern Interior Regional Advisory Council requested a prohibition of gill nets > 6.0-inch stretch mesh for the Yukon River commercial and subsistence fisheries. Based on the available scientific information, the BOF amended the proposal and adopted regulations that limit the maximum gill net mesh size for Yukon River commercial and subsistence fisheries to 7.5-inch stretch mesh. The mesh size restriction will become effective in 2011 allowing a one year phase-in period for fishermen (ADF&G 2010a).

In addition, the BOF adopted a regulation that gives ADF&G managers emergency order authority to sequentially close fisheries to allow pulses (large numbers of migrating fish) to migrate with little or no exploitation (not fished) through all inriver fisheries to their spawning grounds. Fishermen and ADF&G managers reported that this strategy had worked well during recent years to increase the numbers and quality (larger, older female fish) reaching spawning areas. Managers would reduce or close scheduled fishing periods based on either preseason projections or inseason assessments of run strength (ADF&G 2010a).

Federal Subsistence Fisheries

Concerns about diminished quality and quantity of escapement of Yukon River Chinook salmon have been discussed and proposed regulations considered since 2003 (OSM 2010a). In April 2010, the Federal Subsistence Board (Board) adopted a maximum gillnet mesh size limit of 7.5 inch stretch mesh for subsistence fisheries in Federal public waters of the Yukon River. This action paralleled similar regulatory changes adopted by the BOF. During its deliberations and discussions, Board members recognized that reduction of mesh size alone may not be sufficient to prevent or reverse long term genetic declines in the size and age at maturity of Chinook salmon (FSB 2010). State and Federal fisheries managers told the Board that in addition to restrictions on commercial fisheries the use of the current subsistence windows (**Table 1**) could be adjusted preseason if run outlooks or inseason if run strength indicators suggested that restriction of subsistence fisheries was necessary to ensure escapements. Reducing the length of or closing scheduled subsistence fishing periods (windows) timed to protect segments of the Chinook salmon run could provide adequate escapement without unnecessarily closing subsistence fisheries (FSB 2010).

Table 1. 2010 Yukon River subsistence "windows" fishing schedule (ADF&G 2010b).

Area	Fishing Periods	Schedule Begins	Days
Coastal District	7 days/ wk	All Season	M/T/W/Th/F/Sa/Su — 24 hrs
District Y-1	Two 36 hr/wk	June 7	M 8 pm–W 8 am Th 8 pm–Sa 8 am
District Y-2	Two 36 hr/wk	June 9	W 8 pm–F 8 am Su 8 pm–T 8 am
District Y-3	Two 36 hr/wk	June 13	W 8 pm–F 8 am Su 8 pm–T 8 am
Subdistrict Y-4A	Two 48 hr/wk	June 16	Su 6 pm–T 6 pm W 6 pm–F 6 pm
Subdistricts Y-4B, C	Two 48 hr/wk	June 23	Su 6 pm–T 6 pm W 6 pm–F 6 pm
Koyukuk & Innoko R.	7 days/ wk	All Season	M/T/W/Th/F/Sa/Su — 24 hrs
Subdistricts Y-5A, B, C	Two 48 hr/wk	June 29	T 6 pm–Th 6 pm F 6 pm–Su 6 pm
Subdistrict Y-5D	7 days/ wk	All Season	M/T/W/Th/F/Sa/Su — 24 hrs
District Y-6	Two 42 hr/wk	All Season	M 6 pm–W noon F 6 pm–Su 6 noon
Old Minto Area	5 days/ wk	All Season	F 6 pm–W 6 pm

Current Events Involving Species

Prior to the 2010 fishing season, the Yukon River Drainage Fisheries Association (YRDFA) organized a series of regional teleconferences and an in-person meeting to give managers and stakeholders the opportunity to share information, provide input and discuss management options. This cooperative effort was intended to identify options and practical management strategies that would result in meeting escapement goals. This input was used to develop a preseason management strategy. A consensus among participating fishermen was developed recommending that managers reduce the length of scheduled fishing periods for each fishing district timed to pass additional Chinook salmon upriver to meet escapement objectives (YRDFA 2010).

The preseason management plan for 2010 established preseason run projections based on spawner recruitment analysis of the upper river stock group (Canadian origin stocks) and sibling relationships. In addition, a more conservative estimate of the run projection was developed by analysis of past performance of the preseason projections compared to observed run assessments. Fisheries managers determined that an adequate run size was anticipated that would allow for normal subsistence fisheries in Alaska to meet escapements in Alaskan spawning tributaries and deliver border escapement and Canadian harvest shares based on the more conservative performance based projection (ADF&G 2010b). If inseason run indicators suggest that the 2010 run was below the conservative performance based projection, managers would be prepared to reduce fishing time during scheduled fisheries periods or closing scheduled fishing periods (**Table 1**) sequentially as the fish migrate upriver. These actions would be similar to the "pulse protection" implemented during the 2009 fishing season, but admittedly not in time to completely protect the first pulse in all fishing districts (ADF&G 2010b).

Postseason assessment of the 2010 Chinook salmon fishing season are ongoing; however, by August fisheries managers expressed concern that Canadian-origin stock abundance would be inadequate to meet treaty commitments and agreed spawning goals. The passage of Chinook salmon at Eagle sonar near the US/Canadian border was projected to be less than the 42,500 established as the lower end of the range needed for escapement. Managers in Alaska expressed their regrets to their Canadian counterparts (Fleener 2010) stating that the 2010 run was poor and well below preseason projections. The complexity of this mixed stock fishery and the long migration can allow for substantial harvests in the lower river prior to a reliable inseason run assessment resulting in unforeseen inseason restrictions with most impacts absorbed in upper river fisheries including those in Canada. Unless the preseason projection justifies closures at the beginning of the run such as occurred in 2009, salmon fishing in the lower river occurs concurrently with run assessment at least through the first quarter to half of the run. Managers are mandated to provide opportunity for subsistence use when possible, and therefore could not justify closures preseason. Inseason stock assessment suggested that the Canadian stock timing may have been later than typically observed. However, as the run progressed the later half of the run was much weaker than anticipated. Managers waited until the third quarter point of the run before initiating commercial fisheries in the lower river directed at summer chum salmon. While approximately 10,000 Chinook salmon were harvested incidentally; most were male and about 84% were age-5 or younger fish. Based on historic genetic proportions of harvest in the chum salmon fishery, approximately 25% of the Chinook salmon harvested would have likely been Canadian-origin stocks. Managers requested voluntary restrictions on Chinook salmon harvest beginning July 14th. High water and debris are thought to have limited harvest opportunities in upper river districts through much of the run.

Because of the recent trends of reduced production and the large degree of uncertainty associated with run projections and inseason assessment, managers are committed to developing a more conservative approach for next season and requesting a cooperative effort with fishermen and the Yukon River Panel

to develop the specifics. Steps to improve run assessment are also in progress and should improve assessment in the future.

Biological Background

An understanding of historic Yukon River Chinook salmon fisheries provides a context for evaluating potential benefits and limitations of implementing proposed changes in fishing schedules.

Commercial and Subsistence Harvests

Indigenous people living in the Yukon River drainage have depended upon fishery resources, including Chinook salmon for thousands of years. This reliance was reflected in the aboriginal way of life and annual patterns of movement, which brought people together where fish were abundant. In the mid-1880s, aboriginal fishermen increased their harvest for sale or trade to prospectors in the Canadian Yukon. The first recorded commercial harvest of salmon in the U.S. portion of the Yukon River drainage occurred in 1903; however, commercially harvested salmon were not exported from the lower river until 1918 (Pennoyer et al. 1965).

Figure 1 illustrates trends in reported Chinook salmon total harvests from the early 1900's through 2009 (JTC 2010). Larger commercial harvests of Chinook salmon (up to 105,000 fish) in Alaska occurred from 1919 to 1921 using drift gillnets, set gillnets, and fish wheels. Commercial fishing for export was prohibited inside the Yukon River in 1921, and from 1924–1931 the fishery was closed in the entire Yukon Area, including coastal waters to protect subsistence fisheries. Commercial fishing was allowed again in 1931 and was managed by the Federal government using various harvest quotas until statehood.

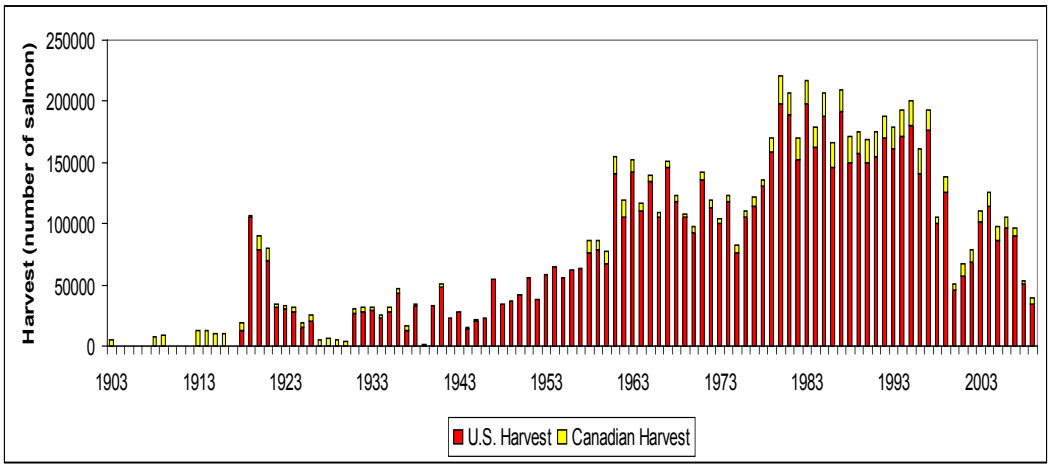

Figure 1. Reported Yukon River Chinook salmon total harvests 1910 - 2009 (JTC 2010). Harvest data prior to 1960 is not complete and may underestimate actual harvest levels.

In 1960, the State of Alaska assumed management responsibility for the fisheries, and ADF&G initiated regulation of the commercial and subsistence harvest by imposing restrictions on gear, fishing areas, and fishing time, but did not restrict the allowable harvest for subsistence. Harvests reported prior to 1960 in **Figure 1** are incomplete and likely underestimate actual harvest levels. Reported harvests increased significantly in the 1980s through mid 1990s (**Figure 2**) as commercial fisheries in Alaska expanded in response to larger runs and greater demand in international markets. Improved subsistence survey

methodologies during this time may have more accurately portrayed the true harvest resulting in a higher subsistence harvest estimate (JTC 2010).

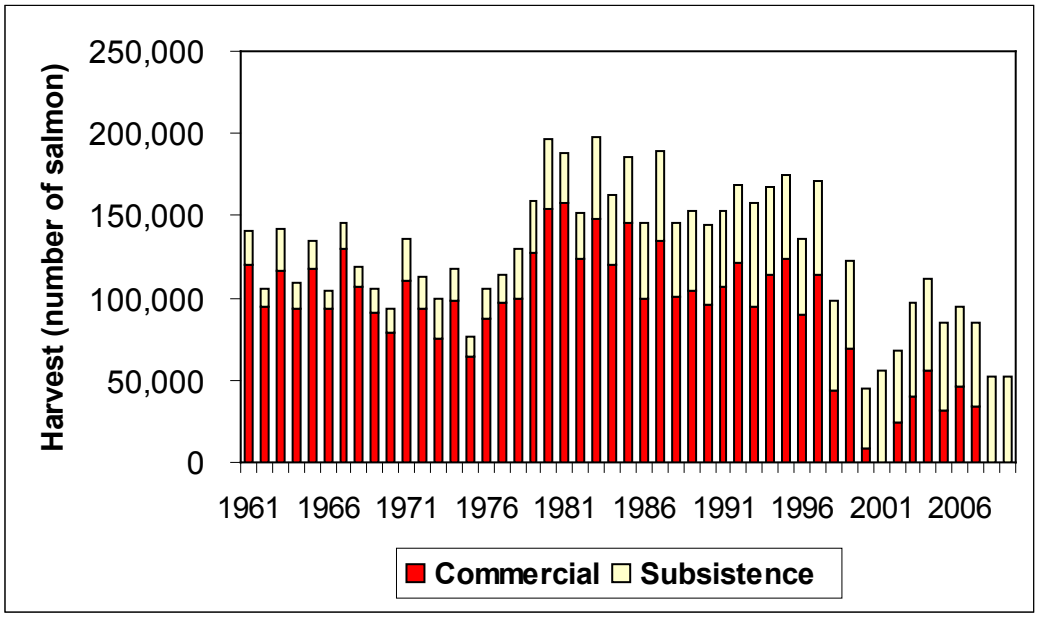

Figure 2. Chinook salmon commercial and subsistence harvests in Alaska from 1961-2009. Since 2008 and 2009 subsistence harvest data are unavailable, the average 2002-2008 subsistence harvest was substituted in the stacked bar graphic (Hayes 2008 pers. comm., JTC 2010).

Commercial harvests of Chinook salmon in Alaskan portion of the Yukon River have declined in recent years due to poor runs, and were closed in 2001, 2008 and 2009 (**Figure 2**). The 2007 commercial harvest of 33,634 Chinook salmon was below the recent 5-year average harvest of 39,715 and considerably less than the 1989–1998 average harvest of 100,695 salmon (JTC 20 10).

Subsistence Harvests

Subsistence Chinook salmon fishing in the Yukon River usually begins in late May in the lower river and continues through mid-July; timing of fishing is later as stocks migrate through middle and upper river fisheries. Fishing opportunities in May in the lower river are highly dependent upon ice conditions and throughout the river due to water levels and related debris. Fishing activities are usually supported from a fish camp or a home community. Extended family groups, representing two or more households, often work together to harvest, cut, and preserve salmon. Some households from tributary communities travel to the mainstem Yukon River to harvest fish (JTC 2010).

In 2009, concerns about a weak Chinook salmon run and not meeting Canadian treaty obligations for two consecutive years were raised. Conservation concerns for the upper river stock group that spawn in Canadian tributaries prompted development of a modified subsistence salmon fishing schedule that closed two fishing periods in the lower river fisheries to protect the first pulse of Chinook salmon; similar measures were implemented in upriver fisheries. Based on inseason reports, it appears that most subsistence fishing households were unable to harvest sufficient numbers. Closures to protect the first pulse were reported by fishermen to have contributed to higher abundance and improved quality

of salmon in upriver areas. Generally, surveyed households in the lower and in some middle river communities had better harvests than the upper mainstem and tributary communities. The Canadian border passage objective was achieved and Alaska spawning escapement goals were generally considered to have been met in 2009 (JTC 2010).

The primary method for estimating subsistence harvest is voluntary participation in an annual harvest survey conducted by ADF&G. In 2009, 1,272 households were surveyed. Preliminary results from the survey estimate that 1,551 households fished from 33 communities. The preliminary 2009 estimated subsistence Chinook salmon harvest is 33,000 fish which was the lowest estimate since 1982. The recent five year average subsistence harvest (2004–2008) was 51,611 Chinook salmon (JTC 2010).

Exploitation Rates

Evenson (2008) provided revised estimates of exploitation rates for Yukon River Canadian origin Chinook salmon stocks which comprise in most years about 50% of the Alaskan harvest (**Figure 3**). Her estimates were based on historic harvest apportionment data in conjunction with border passage estimates for 2005–2007 based on sonar, border passage estimates for 2002–2004 based on radio telemetry, and expansions of a combined aerial survey count index of spawning Chinook salmon in the Big Salmon, Little Salmon, and Nisutlin River drainages for 1982–2001. The average run size for Canadian origin stocks for 1982–2007 was 133,559 Chinook salmon, and ranged from 52,843 in 2000 to 182,504 in 1996. The average exploitation rate on these stocks was 68% during 1982–1999, and 49% during 2000–2007. The decrease in exploitation during recent years reflects more conservative fishery management since the low runs in 2000–2002. In addition, a marked decline in run size has been observed since 1998 suggesting decreased production of these stocks.

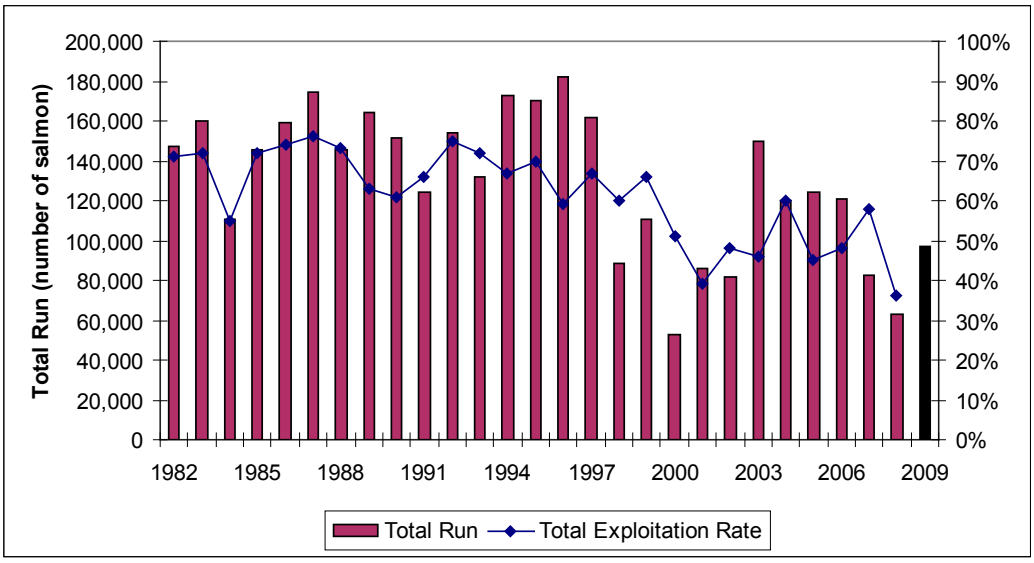

Figure 3. Total run and exploitation rates of Canadian-origin Yukon River Chinook salmon, 1982-2009. 2009 data are preliminary (black bar). Data from Evenson 2008 and Howard et al. 2009.

Escapement

The Yukon Panel approved the Joint Technical Committee (JTC) recommendation of a minimum interim management escapement goal (IMEG) for Canadian-origin Chinook salmon of 45,000 for 2008 and 2009,

based on passage estimates from a sonar project located downstream of the U.S./Canadian border near the village of Eagle (JTC 2010). The JTC is currently studying how to transition from the historic mark-recapture based goal to one based on sonar passage estimates. For the years in which mark-recapture and Eagle sonar estimates are available, 2005–2007, border escapement estimates derived from mark-recapture data have been less than those derived from the Eagle sonar program (JTC 2008). In 2007, the sonar passage estimate of approximately 41,200 Chinook salmon was more than two times greater than the mark recapture estimate. The JTC has recommended using the Eagle sonar project as the primary assessment of border passage in future years.

The JTC set an interim escapement goal range of 33,000–43,000 for Yukon River Canadian-origin Chinook salmon in 1987 based on mark recapture estimates of Chinook salmon passage into Canada. Based on revised estimates (JTC 2010), the minimum escapement goal of 45,000 established for 2008 and 2009 would have been met eleven times and the current escapement range (for 2010 only) recently set by the US/Canada Yukon Panel of 42,500–55,000 would have been met sixteen times (**Figure 4**).

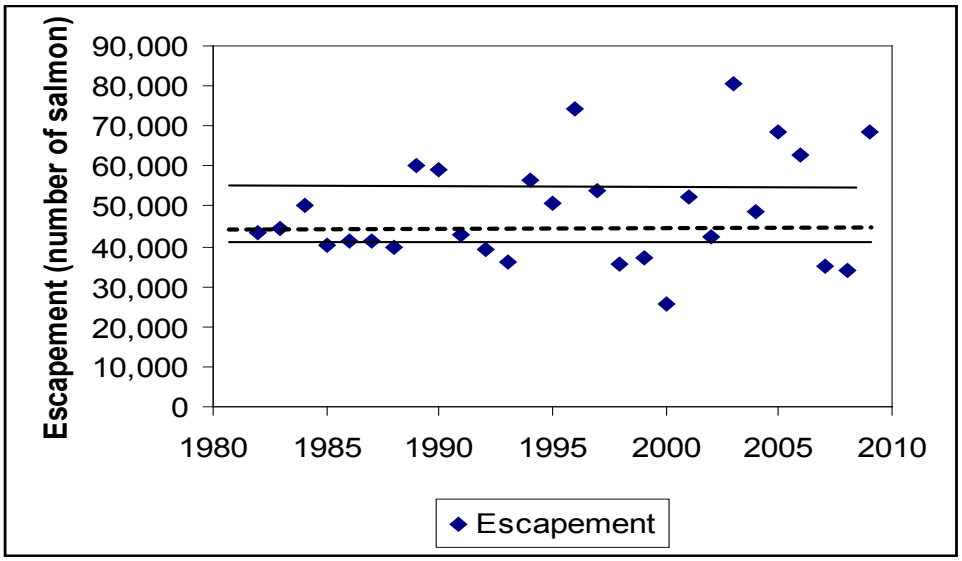

Figure 4. Escapement of Yukon River Canadian-origin Chinook salmon, 1982-2009. 2007 data are preliminary. Interim minimum escapement goals of 45,000 set by JTC for 2008 - 2009 (black dashed line) and 42,500-55,000 for 2010 (solid lines). Data from Evenson 2008 and Howard et al. 2009.

Tanana River tributaries support the largest production of Yukon River Chinook salmon in Alaska and based on radio tagging data, approximately 20% of the total production (Eiler et al. 2004). The two major spawning tributaries of the Tanana River are the Chena and Salcha rivers. Biological escapement goals (BEG) are 2,800–5,700 for the Chena River and 3,300–6,500 for the Salcha River. Escapements for these systems (**Figures 5 and 6**) frequently exceed the upper range of the BEG. The upper end of the BEG for the Chena and Salcha river stocks equals 1.6 times the escapement that would produce maximum sustained yield (MSY) (ADF&G 2004).

Fecundity

There is large variation in the numbers of eggs per female in Chinook salmon; larger females tend to produce more or larger eggs (increased survival) than smaller females. Both of these reproductive strategies can increase productivity of the stock (Groot and Margolis 1991, Healy and Heard 1984). Data

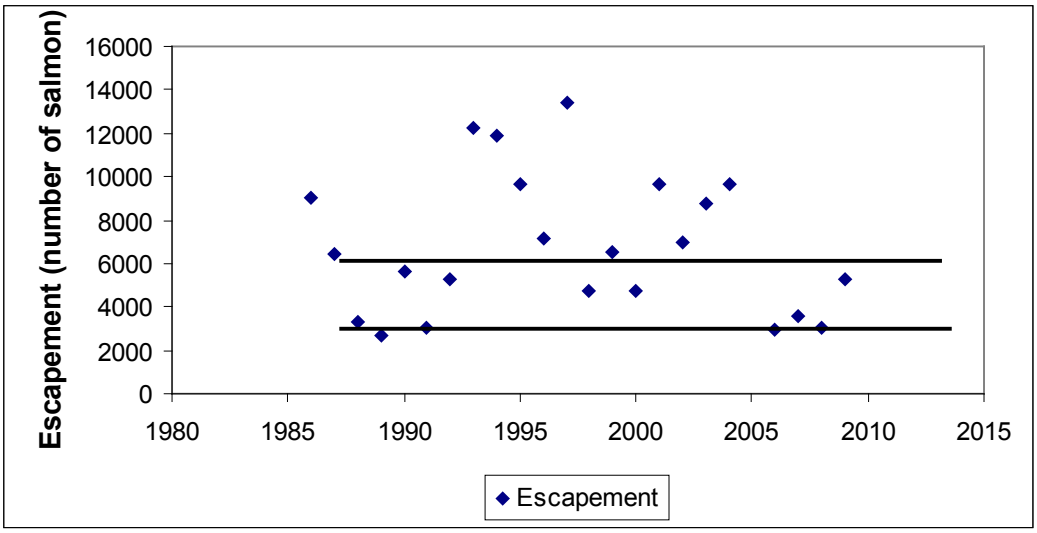

Figure 5. Chinook salmon escapement for the Chena River 1986 - 2009. Biological Escapement Goal (BEG) range = 2,800–5,700 (black bars). Data from JTC 2008 and JTC 2010.

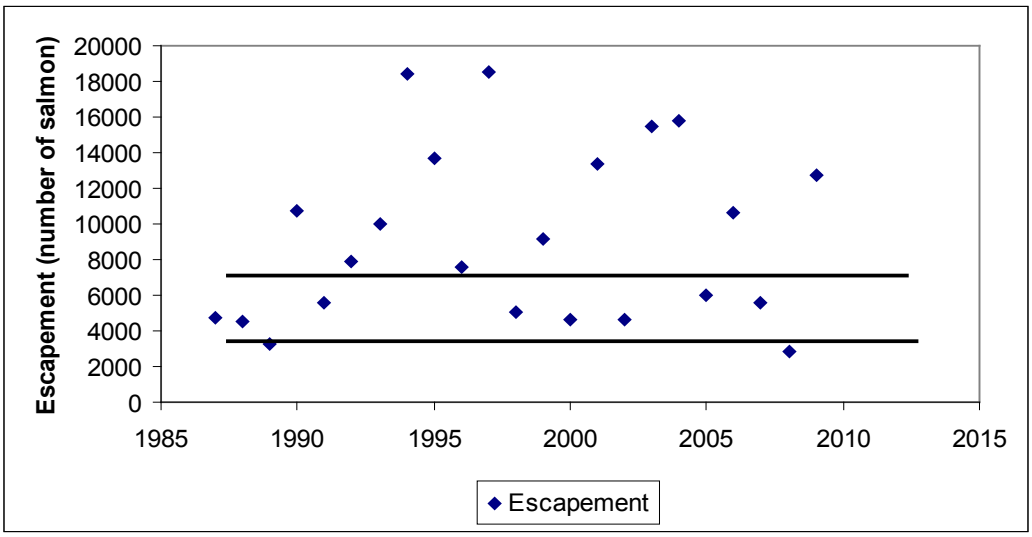

Figure 6. Chinook salmon escapement for the Salcha River 1987–2009. Biological Escapement Goal (BEG) range = 3,300 – 6,500 (black bars). Data from JTC 2010.

describing fecundity (eggs per female) of Yukon River Chinook salmon are limited. Bromaghin et al. (in prep.) described the fecundity of Yukon River Chinook salmon sampled in 2008. Females were sampled from the catches of lower river test fisheries operated by ADF&G and genetic tissue samples provided information about the likely destination of each fish. Fecundity estimates obtained in 2008 were compared with historical estimates (Skaugstad and McCracken 1991; Jasper and Evenson 2006). Variability in fecundity suggests that spawner counts may not serve as a good predictor of future production. The study revealed broad patterns in the relationship between fecundity and length among sub-basins of the Yukon River drainage; the most relevant finding was that small fish from the middle and upper portions of the

drainage have markedly fewer eggs than small fish from lower portions of the drainage. For example, a 750 mm fish from the Lower stock group has an estimated mean fecundity approximately 29% and 52% greater than a fish of the same size originating from the middle and upper stock groups, respectively. Similar comparisons for larger fish (900 mm) showed that the lower stock group had 5% and 20% greater fecundity than the middle and upper stock groups, respectively**.** These results suggest that fish reproducing in the middle and upper reaches of the drainage may have a lower reproductive potential than do lower-river populations. The authors suggest that the productivity of middle and upper river spawning fish may be more dependent on their size composition.

Stock Timing and Composition

Monitoring of stock composition of Yukon River Chinook salmon in Alaska fisheries has identified three stock groupings from 1981 through 2003 using scale pattern analysis (JTC 1997) and since 2004 using genetic markers (JTC 2010). Lower and middle river stock groups spawn in Alaska and an upper stock group spawns in Canada. Stocks spawning in tributaries below the Tanana River and in the lower Koyukuk River are assigned to the lower river stock group. Tanana River, upper Koyukuk River and Alaskan tributaries upstream of the Tanana River have been assigned to the middle river stock group. Historical percentages by stock group are presented in **Table 2**. Alaskan fisheries take 82% (1981–2008 average) of the total upper stock group harvest (JTC 2010).

Table 2. Percentage (Average 1981–2008) of stock groups in Yukon River harvests (JTC 2010).

	Lower	Middle	Upper
Total Harvest	21.0	23.1	55.9
Alaskan Harvest	23.4	25.6	51.0

Analysis of stock groups harvested in Alaskan fisheries employing scale pattern analysis suggested a somewhat earlier but highly overlapped timing of upper river stocks and the middle river stock group; the lower river stock group although present throughout the run had a later entry pattern (JTC 1997). Genetic marker sampling of Alaskan fisheries (2005–2007) has shown a decreasing contribution of upper river stocks during the fishing season; however, more specific stock markers suggest differences in stock timing and entry patterns for stocks in both Alaska and Canada. Since 70–80% of the entire run spawn in the Tanana River in Alaska and Canadian spawning areas, considerable overlap of Alaskan and Canadian stocks occur (JTC 2010).

Spawning distribution using radio tagging data (2002–2004) indicated that most Canadian fish spawned in large tributaries including the Stewart, Pelly, Big Salmon and Teslin rivers, with smaller numbers returning to the Klondike, White, Tatchun, Nordenskiold, Little Salmon and Takhini rivers. Differences in stock timing were observed **(Figure 7)**. Stocks returning to the lower reaches of the Canadian main stem river, including the Klondike, Stewart, and White rivers, were primarily early run fish, while fish traveling further upriver, particularly Teslin River and upper headwater stocks, exhibited a later and more protracted run timing. The scientists who conducted this reserach (Eiler et al. in review) discussed the ecological implications and potential management application of observed run timing of Yukon River Chinook salmon stocks. They concluded that the short duration of the Yukon River run, combined with temporal similarities and extensive overlap in lower river passage, limits the usefulness of stock timing information for managing harvests compared to river systems with more protracted returns. In addition, delays in river entry resulting from varying environmental conditions in the marine and estuarine areas, which often compress the overall run timing, may further complicate management by increasing the overlap in timing of component stocks.

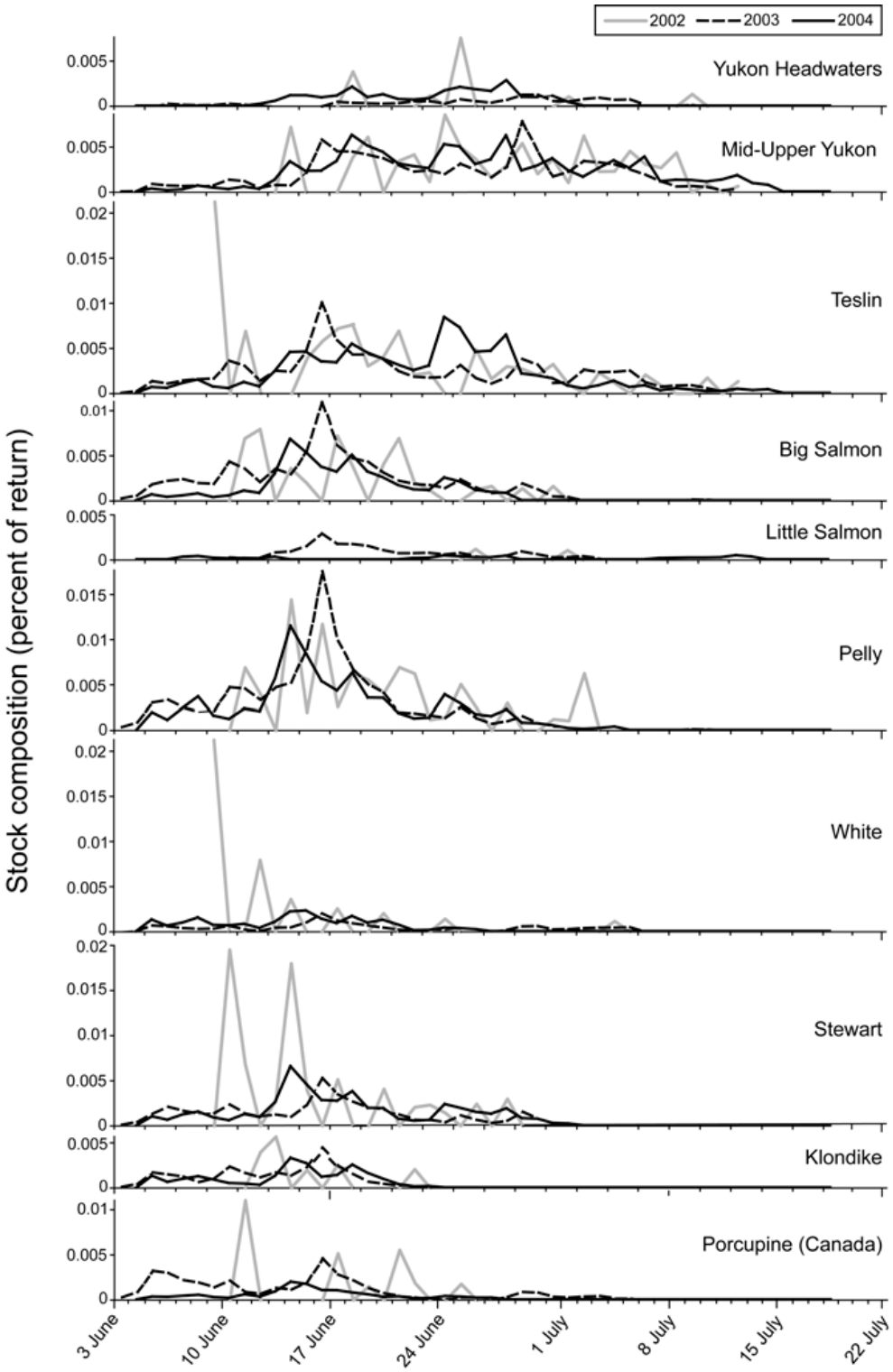

Figure 7. Lower river run timing (Russian Mission) of major Chinook salmon stocks returning to Canadian spawning areas (2002-2004) based on composition estimates for the returns derived from radio-tagged fish weighted by catch per unit effort at the tagging site and adjusted for harvest of tagged fish. The mid-upper Yukon stock group represents fish that remained in mainstem areas. Data from Eiler et al. (in review).

Declining Yukon Chinook Salmon Size

The JTC of the Yukon River US/Canada Panel examined length-at-age over time in six Yukon River locations using a combination of commercial fisheries (unrestricted mesh size), test fishing and escapement data. The data sets available at the time of the analysis were: the District 1 commercial fishery (1962, 1964–1968 and 1979–1997), Big Eddy test fishery (1979–1997), Andreafsky River escapement (1981–1997), Salcha River escapement (1982–1997), Canadian border fish wheel (1974–1996), and Canadian commercial fishery (1975–1996). The data analysis concluded that no substantial change in Chinook salmon size had occurred over the period examined. However, the report noted that the data time series was more limited than the inter-generational reports of fishermen that suggested size had decreased; and that although the length–at-age analysis did not indicate substantial change, a shift in the composition of catches by age and/or sex could account for perceived changes in the size of fish (JTC 1997).

Other studies have provided evidence that Yukon River Chinook salmon have decreased in size over time. Decline in average weight from 1973–1993 in District 1 commercial fisheries was reported by Bigler et al. (1996); and the abundance of large (≥900 mm) Chinook salmon in some (4 of 7) spawning stocks was reported by Hyer and Schleusner (2005). These studies were limited by relatively short time series and Bigler et al. (1996) included average fish weight data from both commercial unrestricted (> 8 inch stretch mesh) and small mesh (≤ 6 inch stretch mesh) commercial openings. Hamazaki (2010) analyzed scale age data for lower river unrestricted mesh commercial fisheries available from 1962 through 2007 **(Figure 8)**. This data represents a sampling of the older, larger Chinook salmon in the run that have a higher selectivity associated with large mesh gill nets used in the commercial fishery but provides the longest time series of available data on size of Yukon River Chinook salmon. The reported decadal fluctuations in size of the larger, older fish suggested a response to changing environmental conditions. A gradual decrease in size of age 7 fish was shown over time. However, observational data can not confirm what the causes of declines in size might be. Subtle changes in heritable characteristics like size or age-at-maturity of salmon would likely be masked by highly variable environmental responses.

Gillnet Mesh Size Selectivity

Growing concerns about long-term genetic affects of size selective fishing have been expressed in the recent scientific literature. A number of peer reviewed articles have strongly encouraged managers to address negative impacts of harvest selectivity on animal populations (Allendorf et al. 2008, Anderson et al. 2008, Dunlop et al. 2009, and Enberg et al. 2009). Fisheries biologists have been reporting a disturbing trend in other salmon stocks and species. The fish have been getting smaller and/or the age at maturity has changed. These patterns have been observed in Chinook salmon (Bigler et al. 1996, Hyer and Schleusner 2005), chum salmon (Ishida et al. 1993, Helle and Hoffman 1995, Kaev 1999), sockeye salmon (Kendall et al. 2009, Pyper et al. 1999, Holt and Peterman 2004) and pink salmon (Azumaya and Ishida 2000, Wertheimer et al. 2004).

Other researchers have proposed that decreased size at maturity and increased age at maturity observed in Pacific salmon during recent decades may be explained by environmental factors affecting growth rates although fisheries effects cannot be dismissed (Hillborn and Minte-Vera 2008, Morita and Fukuwaka 2007). Howard et al. (2009) compared differences between more recent (1997– 2001) and historic (1982–1991) age class composition for three Yukon River and two other Bering Sea Chinook salmon stocks harvested with either variable or small mesh (≤6 inch stretch mesh) gill nets. Variable patterns were observed among age classes except age-7, where all stocks showed declines suggesting that environmental factors play some role in explaining declines in size of older fish.

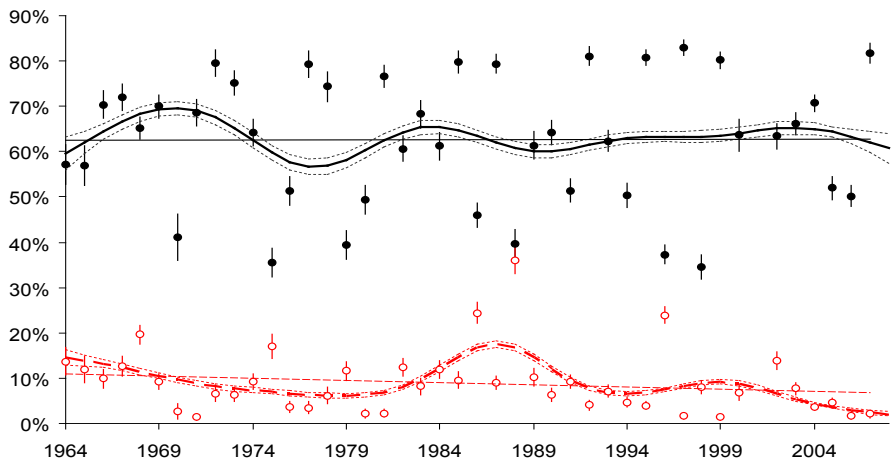

Figure 8. Trends in Chinook salmon harvested in unrestricted District Y-1 commercial fisheries from 1962-2007. The upper trend line shows age 6 fish and in the red lower trend line are age 7 fish. Data from Hamazaki 2010.

Myers et al. (2010) compared ocean growth from scale analysis of immature Chinook salmon in the Bering Sea with ocean temperature regime shifts **(Figure 9)**. When the Pacific Decadal Oscillation (PDO) warms Chinook salmon growth in the marine environment increases allowing fish to return earlier to spawn and in greater abundance (increased marine survival). Although marine growth rate is increased, because returning spawners spent less time growing, their size at return is decreased. Conversely during cooling periods growth slows and Chinook salmon remain in the ocean longer; fish return older, at a larger size and in lesser abundance.

Available information confirms that gillnet mesh size is selective for size of fish harvested (Bromaghin 2005); and size (length and weight) of Chinook salmon is a heritable trait (Hard 2004, Hard et al. 2008). Since larger fish are selectively harvested by larger mesh gillnets and larger Chinook salmon are predominately female and more fecund than younger, smaller fish; reducing the mesh size should increase the reproductive potential of stocks.

Bromaghin et al. (2008) developed a population model for the Yukon River to evaluate effects of size selective gillnet fishing on a hypothetical Chinook salmon population over a period of 200 years. This work showed that in addition to mesh size selectivity, exploitation rate exerted the greatest control on the population. Nearly all simulations with fishing displayed a consistent rate of decline in mean length and age at maturity after 50 years of size selective fishing (large mesh gillnets — 8.5 inch) with a leveling and stabilization after 100 years. Trends in length and age were similar and decreased by about one quarter to one third in the simulations. The population age structure shifted from primarily age-6 to age-4 and 5 and removal of age-7 and 8 fish for most simulations. Average fecundity declined from approximately 8,900 eggs per female in the controls to < 6,000 for most simulations with fishing.

Alternative stock rebuilding scenarios to address declines in size and age were also evaluated on a subset of the original simulations. Each of these simulations was extended for an additional 200 years while applying alternative management actions. The authors concluded that size-selective gillnet fisheries

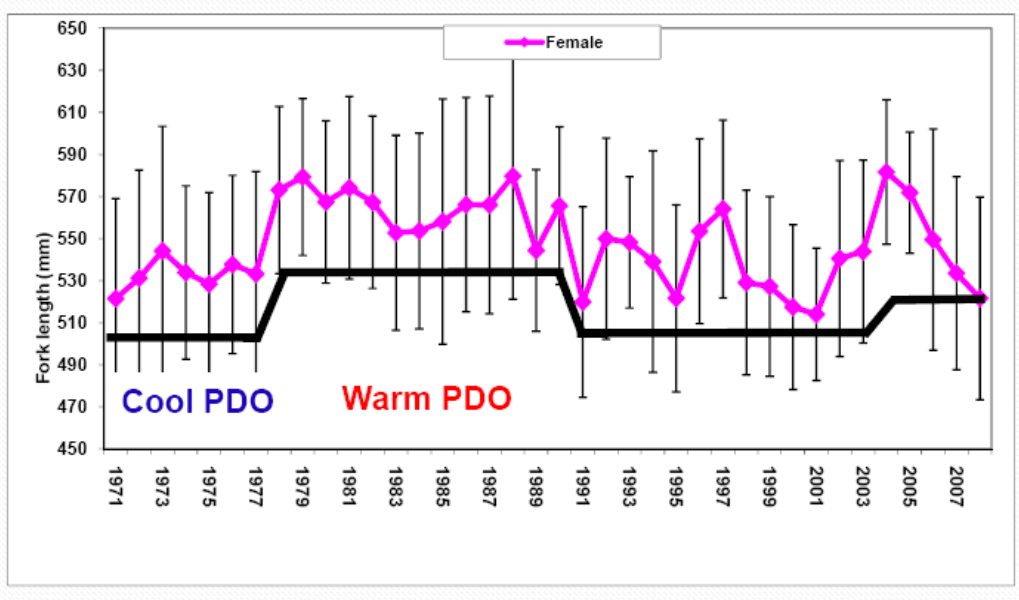

Figure 9. Comparison of ocean temperature regime shifts and trends in growth of immature Chinook salmon in the Bering Sea (Meyers et al. 2010).

targeting the largest and most fecund fish have the potential to rapidly (< 10 generations) reduce fish size and age at maturation, as well as decreasing fecundity and population productivity. They recommend that fisheries managers should take steps to reduce or eliminate gear selection for larger and more fecund individuals to maintain genetic diversity and population productivity. However, the study also demonstrated that failure to address selective pressure of fishing gear could diminish the resiliency of a population to a level where reducing mesh size alone would not be sufficient to reverse trends caused by size selective fishing. In addition to reducing mesh size, they recommend that spawning escapements be maintained well above levels that would produce MSY to maintain the resiliency of the population to both fishery and natural selective forces.

The simulation as shown in **Figure 10** may best represent general trends most similar to the Yukon River Chinook salmon stock status at this time where although the average size of fish has declined; larger, older salmon (age-7) are still present in the population, age-6 fish remain the dominant age class, total exploitation has been reduced to under 50% on major stocks in recent years and escapements have been maintained at or above target levels. Tanana River tributary escapements (**Figures 5 and 6**) have been consistently within and often above the range which represents from 80–160% of escapement at MSY (ADF&G 2004). The Yukon River Panel has the responsibility for establishing escapement goals for the Canadian origin stocks based on technical recommendations from the JTC; the interim escapement goal for Canadian-origin Chinook salmon was >45,000 for 2008 and 2009 and a range of 42,500–55,000 for 2010.

Escapement Quality

Table 3 provides the percent of female Chinook salmon in samples from a number of Yukon River escapement assessment projects (2001–2009). The female contribution varied among projects and among years for the same project. For some projects for the years reported, females comprised less than 30% of samples and in a few cases were less than 20 %.

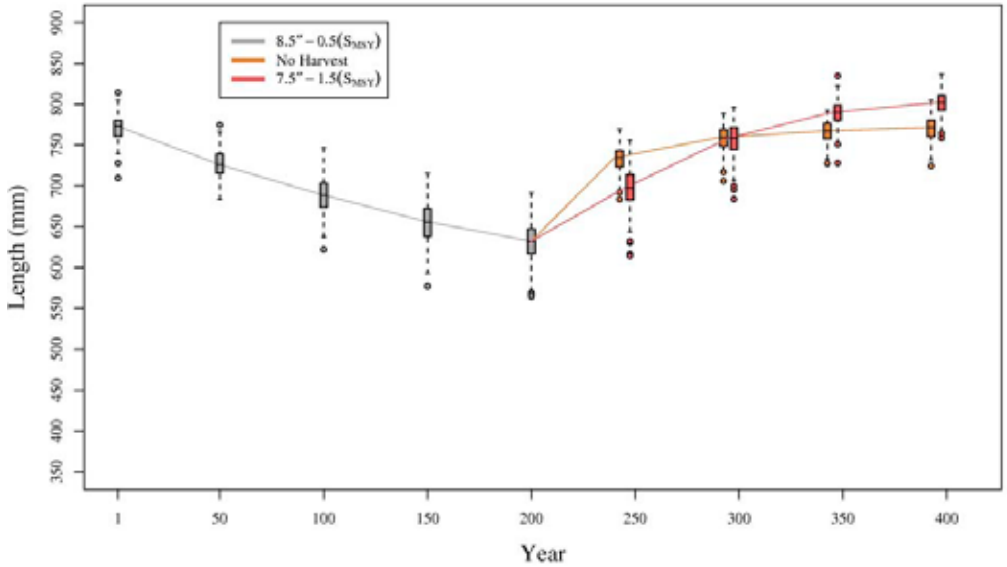

Figure 10. Box-plots of mean length observed in a low productivity (α=0.5), moderate exploitation (0.50), high management precision (±15%) with high escapement simulation (1.50SMSY) and two extended simulations under alternative fishing scenarios, with an unchanged escapement goal of 1.50(SMSY) and a no-fishing scenario. In the extended simulation with fishing, mesh size was reduced from 8.5 in to 7.5 in and the exploitation rate was held constant at γ = 0.50 (Bromaghin et al. 2008).

Low (< 30%) and high (>50%) percentages of females in Chinook salmon escapements must be interpreted with other biological data to objectively evaluate the status of a stock. Carefully controlled studies attempting to document or predict optimum sex ratios for spawning Chinook salmon are challenging because male and female maturation rates are different and vary among races and stocks (Groot and Margolis 1991). Because males mature earlier, sex ratios may be 1:1 at the egg or alevin stage for a brood year but may be highly skewed in subsequent returns and escapements due to differences in abundance and survival affecting the brood years making up a run. Of greatest importance is not the percentage of females in the spawning escapement, but whether the number of females in the spawning escapement is adequate to utilize available spawning habitat. Habitat based spawning objectives are being evaluated for application to Yukon River Chinook salmon stocks (JTC 2010).

Environmental factors can also influence sex ratios. Olson et al. (2004) evaluated sex ratios of juvenile and adult Chinook salmon in two tributaries of the Kuskokwim and one tributary (Gisasa River) of the Yukon River. Skewed sex-ratios with low proportions of females returning to spawn had been observed in these systems. This study examined sex ratio bias during early juvenile development and in adults during ocean migration. A number of environmentally and human induced conditions can influence gender of developing embryos, including temperature, pH, exogenous sex steroids, and various pollutants. Olson et al. (2004) found that 1) adult genetic and anatomic sex ratios are similar and skewed toward males, 2) juvenile sex ratios were not male biased, and 3) average age-at-maturation for males was less than that for females. The authors suggested that differential marine survival between sexes may best explain the male biased sex ratios observed, but that sex-biased harvest was also a possible cause.

Table 3. Percent of female Chinook salmon in Yukon River escapement projects (JTC 2010 and Beaudreault et al. 2010).

Location	2001	2002	2003	2004	2005	2006	2007	2008	2009
Chena River	31.5	27.0	34.0	47.0	NA	33.5	28.5	29.0	NA
Salcha River	37.0	34.4	42.2	62.5	54.8	43.9	35.7	33.8	NA
Tozitna River	23.8	14.1	18.2	17.3	30.0	11.6	25.7	9.0	19.6
Henshaw Creek	42.4	31.4	40.6	23.6	40.7	NA	32.1	27.7	NA
Gisasa River	49.2	20.7	38.1	30.1	34.0	28.2	39.0	16.2	29.3
Andreafsky River	NA	21.1	45.3	37.3	50.2	42.6	44.7	34.8	NA
Anvik River (a)									52.3
Big Salmon R. (b)									53.0
Blind Creek (b)									43.0

NA= Data not available. a: Chinooks ASL opportunistically collected during chum salmon sampling. b: partial carcass survey.

The relative contribution of the stocks included in **Table 3** provides a useful perspective for interpreting the data. Radio telemetry studies of Yukon River Chinook conducted by Eiler et al. (2004) documented the stock composition for the 2002 run above Russian Mission. Radio tags were placed in 751 migrating adult Chinook salmon captured in the lower river near the villages of Marshall and Russian Mission. Two hundred seventy (270) of these tagged Chinook salmon were recaptured in fisheries and 481 were tracked to upriver spawning grounds. Stock composition estimates, based on the distribution of tagged fish, weighted for abundance, and adjusted for harvests, indicated that the run was composed primarily of Tanana River (20.9%) and upper Yukon basin fish (66.0%) including those spawned in Canada (53.4%). Fish returning to the Chena (5.2%), Salcha (10.8%) and Goodpaster (2.8%) rivers were the dominant Tanana River stocks. Relatively small numbers returned to the Tozitna (1.2%), Melozitna (0.1%), Nowitna (0.2%), Gisasa (0.3%), Kateel (0.1%), or upper Koyukuk rivers (1.1%). No tags were reported in fish entering Henshaw Creek, a tributary of the Koyukuk River. The Andreafsky River accounted for 6.3% and the Anvik and Nulato Rivers 4.8%. in the lower portion of the drainage.

Although the upper river spawning group on average contributes 50% of the total Chinook salmon production of the Yukon River, historic data on the age, sex and length of spawning stocks in the Canadian portion of the drainage has been lacking. Chinook salmon have been reported in over 110 spawning streams in Canadian reaches of the Yukon River (von Finster 2006). This is particularly troubling given continuing conservation efforts and severe restrictions on fisheries to achieve border target spawning levels for these stocks. Without this basic information, the quality of escapement associated with the upper river stock group and the effectiveness of conservation measures taken to improve the quality of escapement cannot be determined or evaluated.

In recent years, ASL sampling has been initiated at the Big Salmon sonar project and the Blind Creek weir; a carcass survey of the upper Klondike River is proposed beginning in 2010. Monitoring ASL data from migrating salmon can be problematic given known gear biases of gillnets and fishwheels. Although preliminary and incomplete, ASL samples collected for the upper river stock group in recent years suggests that the quality of escapement may be better than anticipated; however, until quality of escapement is adequately monitored for these stocks, stock productivity can not be fully evaluated. The US/Canada Panel has asked its JTC to evaluate methods for consideration of quality of escapement parameters when establishing escapement goals (JTC 2010). Increased sampling at the Eagle sonar site is being attempted to provide more accurate estimates of the age-class composition of escapements

into Canada and exploitation rates for each age class. ADF&G is committed to examine the feasibility of formulating escapement goals that consider the quality of escapement based on sex ratios or on the presence of older aged Chinook salmon rather than just total numbers (ADF&G 2007).

Understanding Escapement Goals

Under Alaska's Escapement Goal Policy, sustaining healthy, productive salmon populations is based on establishing escapement goals and managing fisheries to annually meet these goals. Ideally, goal ranges are set for salmon stocks with long time series of escapement and harvest data so that brood tables can be constructed and spawner recruitment relationships evaluated. This level of data and analysis has met the scientific defensibility criteria currently required under regulation. There has been disagreement among fisheries experts concerning the application of spawner recruit models to estimate maximum sustained yield (MSY) as the basis for setting escapement goals (Larkin 1977). Other fisheries biologists acknowledge that development of MSY approaches to fisheries management are not perfect but offer a defensible starting point particularly for species like Pacific salmon whose life history may be better suited to this approach than fish with longer lives with multiple spawning events (Hillborn and Walters 1992).

There is general agreement that collection of reliable salmon population data including the basic population structure (age, sex, size), abundance and temporal and spatial distribution are needed. In order to accomplish this task, both the harvest and the escapement must be routinely monitored and analyzed. A commitment to obtaining this information is necessary as a starting point to managing highly exploited salmon fisheries (Knudsen 2000). In the short term, this information allows run reconstruction and estimates of exploitation; and in the longer term, the opportunity to consider applying production models and potential for evaluating the adequacy of escapement goals.

There is general agreement that the modeling of biological information is a useful approach to testing ideas about salmon populations. The spawner recruit models as well as habitat suitability models can increase understanding about salmon biology and are currently being evaluated and compared for Alaskan salmon populations (Sagalkin, 2001). However, factors that drive the salmon production system are very complex, result from interacting biological and physical influences and are often not under the control of fisheries managers (Hartman et al. 2000, Cederholm et al. 2000).

Effects of the Proposal

Adoption of this proposal would affect Federally qualified subsistence users in Federal public waters. Most of the lower river fishing districts (Districts 1, 2 and 3), the main stem Yukon River above the Tanana River (District 5), and approximately 30% of the remainder of middle and upper fishing districts occur in Federal public waters. Fishing areas outside of Federal public waters would not be affected, resulting in a fragmented application of conservation measures intended to pass upper river stocks to their spawning grounds.

Implementing the proposal under State jurisdiction would require regulatory change to the State Yukon River Chinook salmon management plan. Current State management is based on achieving sustained yields for the maximum benefit of Alaskan citizens and is generally achieved by managing salmon populations to achieve fixed escapement goal ranges that bracket escapements producing MSY. Under the Sustainable Salmon Policy, the BOF can adopt management plans that consider other biological or allocative (social/cultural) considerations by establishing an optimal yield management plan with an OEG. Examples of optimal yield management include managing wildlife populations for trophy hunts or managing fisheries to increase catch rates in sport fisheries.

Establishing a fishing moratorium for at least twelve years to protect the first pulse of the Yukon River Chinook salmon run where a large proportion of the upper river stock group may be represented has multiple implications. During years when adequate numbers of salmon may be available to provide for escapement and normal harvest levels, subsistence and commercial fishing opportunities would be curtailed resulting in higher escapements. Since the proposal would not allow harvest on much of the upper river stock group, that stock group would pass through to the spawning grounds with an unaltered age, sex, and size composition. However, this action could result in lowered productivity (return per spawner) due to density dependent effects (exceeding carrying capacity). There is debate among fisheries experts about establishing and managing salmon populations based on return per spawner models. However, in this situation key ASL data needed to evaluate the effects of taking this action are not being collected for the upper river stock group.

Available data also suggest that migration timing of Canadian stocks varies; lower, middle and upper stock groups in Canada enter the river throughout the run (June-mid July) and timing appears to be earlier for lower Canadian stocks than those traveling further upriver. Protecting just the first pulse of Chinook salmon entering the Yukon River would not provide the same level of conservation to all Canadian stock groups. By reducing exploitation on stocks throughout the run during years of poor run strength, managers could provide needed conservation for all Canadian stock groups.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP11-02.

Justification

The proposed action is intended to provide for conservation and improve the quality of escapement for an important Yukon River Chinook salmon stock group. The upper river stock group contributes 50% to the overall production of Chinook salmon in the Yukon River and a large portion of the Alaskan harvest. Over the last decade, fisheries managers have responded to an apparent decline in productivity of this stock group by reducing exploitation. In 2010, Federal and State regulatory boards restricted gear effective in 2011 to improve the quality of escapement of future runs. In 2009, the preseason projection indicated that escapement goals could not be reached without limiting subsistence harvests. In that situation, harvest was prohibited on the first pulse of Chinook salmon. Escapement goals throughout the drainage were met and the quality of escapements was reported to have improved over past years. However, subsistence harvests were reduced in Alaska and traditional processing practices in the lower and middle river were altered as fishermen generally prefer to harvest early in the run when weather and drying time are more favorable.

Although the available biological information supports continued efforts to rebuild and conserve Chinook salmon stocks originating in the upper Yukon, migration timing through Alaskan fisheries appears to vary among upper Yukon stock groups. Significant numbers of upper Yukon Chinook salmon are migrating through lower Yukon fisheries through the end of June and early July. Prohibiting harvest on the first pulse of Chinook salmon may not adequately address concerns for all upper Yukon stocks. Rather, reducing exploitation during years when runs are poor from June through mid-July in conjunction with adequate monitoring of upper Yukon stock escapements is needed.

Restricting harvest on upper river stock groups can be accomplished under the existing regulatory management framework. When run projections indicate that escapement shortfalls on upriver stocks are likely, the preseason management plan can call for reduced harvest on earlier migrating stocks. When preseason projections indicate that the run can accommodate escapement and subsistence fisheries, the

normal subsistence fishing schedule can be initiated. However, when inseason indicators determine that conservation measures are needed to achieve escapement goals, fisheries managers can respond by reducing fishing time or not opening fishing periods to increase escapement. However, this approach must be supported with reliable monitoring of escapements for key upper Yukon River stocks to determine the effect of management actions.

Inclusion of State waters would require a modification of current State regulation. Applying this very restrictive action over a minimum of twelve years on Federal public waters would create a fragmented management response. Subsistence fishermen in Federal public waters would not be allowed to harvest early migrating fish during years when a harvestable surplus was available.

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Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP11-02: Establish a new Yukon River Chinook salmon fisheries management plan for all fisheries in order to protect the first pulse of returning salmon**.**

Introduction: Jack Reakoff submitted this proposal to establish a 12-year management plan to prohibit harvest of Chinook salmon in sequentially rolling statistical area closures during the first pulse of returning salmon (or the second pulse if the first pulse does not materialize) in waters claimed under federal jurisdiction from the mouth of the Yukon River to the Canadian border. The proponent indicates this "first pulse protection plan" will provide greater protection of the Chinook salmon stocks without negatively impacting conservation of other stocks. The proposal requests the pulse protection plan be implemented for at least 12 years or until such time that Chinook salmon stock abundance and quality are restored to a level that provides sustained yields from normal commercial and subsistence fisheries. Note that approximately half of Yukon River Chinook salmon spawn in Alaska and do not migrate the full 1,900 miles of river.

Impact on Subsistence Users: If adopted, federal subsistence users would be required to forgo harvest of Chinook salmon during the first or second pulse of Chinook salmon returning to the Yukon River in waters claimed under federal jurisdiction through the year 2022 unless stock status and conditions improve before that time. The proponent anticipates federal subsistence users who fish in federal-claimed waters will likely see a reduction in harvest during enactment of this fisheries management plan. If federal regulations differ from state regulations, fishing for Chinook salmon may be more liberal in waters not claimed under federal jurisdiction. This would increase the responsibility of subsistence users to identify the applicability of differing subsistence laws and regulations based on land ownership and claimed federal jurisdiction.

Opportunity Provided by State: Salmon may be harvested under State of Alaska regulations throughout the majority of the Yukon River watershed, including in a liberal subsistence fishery. Gear types allowed are gillnet, beach seine, hook and line attached to a rod or pole, hand line, and fish wheel. Although all gear types are not used or allowed in all portions of the Yukon River drainage, drift and set gillnets and fish wheels harvest the majority of fish taken for subsistence uses. Under state regulations, subsistence is the priority consumptive use. Therefore, state subsistence fishing opportunity is directly linked to abundance and is not restricted unless run size is inadequate to meet escapement needs. When the Yukon River Chinook salmon run is below average, the state subsistence fishing periods may be conducted based on a schedule implemented chronologically throughout the Alaska portion of the drainage, which is consistent with migratory timing as the salmon run progresses upstream. Federal regulations under Special Actions to restrict federally-eligible users have been rare and mirrored the state in-season actions necessary to meet escapement goals, except where state and federal regulations differ in subdistricts 4-B and 4-C. Amounts reasonably necessary for subsistence (ANS) for Chinook salmon (5AAC 01.236 (b)), as determined by the Alaska Board of Fisheries, have been met in the Yukon River drainage for six of the last nine years (below ANS in 2002, 2008, and 2009).

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. Since 2001, subsistence fishing time in the Yukon Area has been limited by a windows schedule, which was further restricted in 2008 and 2009 because of conservation concerns for Chinook salmon. Subsistence harvest levels for Chinook salmon have been within the amounts reasonably necessary for subsistence (ANS) ranges since 2001, except for 2002, 2008, and 2009. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005 being the three highest spawning escapement estimates on record. The escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on Canadian-origin stock by Alaskan fishermen decreased from an average of about 55% (1989–1998) to an average of about 44% from 2004 through 2008 (Howard et al. 2009). Although the subsistence harvest continues to remain stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60%, from an average of 100,000 annually (1989–1998) to the recent 5-year average (2005–2009) of nearly 23,000 fish. Considering all salmon species together, the overall total subsistence salmon harvest in the Yukon Area has declined by approximately 30% since 1990 (Fall et al. 2009:39). Specifically, fall chum salmon harvests have fallen within ANS ranges only three times since 2001 (Fall et al. 2009:43).

It is not possible to determine whether size-selective harvests, variations in environment, or a combination of factors are causing a decrease in harvest of age-7 fish or decreasing size trends of older fish (JTC SSS 2006). Decreasing size of Chinook salmon has been anecdotally noted across much of the state in recent years. However, increasing the number of larger and older Chinook salmon in spawning escapements through mesh size regulations should provide for better future production potential. The Alaska Board of Fisheries adopted a maximum mesh size of 7.5 inches for subsistence and commercial gillnets effective in 2011 in the Yukon Area. The Federal Subsistence Board took no action on deferred proposal FP09-13 to limit mesh depth at the April 13—14, 2010, meeting after adopting deferred proposal FP09-12 parallel to the Alaska Board restriction to a maximum net mesh size restriction of 7.5 inches.

Jurisdiction Issues: A large percentage of the lands along the Yukon River are state or private lands on which subsistence users must use gear types consistent with state regulations. If this proposal is adopted, detailed maps are needed that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply, so that fishermen know when they are on state or private lands (including state-owned submerged lands and shorelands) where they must comply with state laws and regulations.

Other Issues: It is not necessary to prohibit harvest of all Chinook salmon during the first pulse by regulation for a 12-year period if a harvestable surplus is available. A management strategy of fisheries closures during the first pulse poses a hardship to subsistence users and would likely increase exploitation on other stocks or stock groupings. As part of preseason planning with public involvement, this type of action can be taken by managers through emergency order authority as a conservation measure to meet escapement goals and Yukon River Treaty commitments. However, managers and fishermen need flexibility in order to adjust this management strategy. For example, given the variation in stock specific run timing, it may be

better biologically to distribute subsistence closures over the first two pulses rather than singling out the first pulse throughout the river.

Recommendation: Oppose.

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WRITTEN PUBLIC COMMENTS

Support Proposal FP11-02. The future of the Yukon River king stock is very much in question. Federal and State managers understand that subsistence and commercial fishermen on the Yukon have become very effective in their methods and means of harvesting fish and could easily destroy this fishery. To limit the damage that we could render on the fishery, managers can either limit our opportunity or gear. Efforts to regulate gear are underway. Windows have been effective, but are no longer effective given the declining health of the stock and increasing efficiency of fishermen. More drastic measures are in order. The closure of all fishing during the first pulse of kings in 2009 was a real success story. Proposal FP11-02 would ensure the benefits of getting so many fish to Canadian spawning grounds are perpetuated for two life cycles and should constitute a solid foundation upon which the future of the Yukon River king stock can be built.

Opponents of this proposal will argue that fishing closures of this magnitude would unjustly deny them the ability to feed their families or make a living. Thinking only of short term needs will continue to threaten the long term health of the Yukon River king stock. There are other things to eat. In 2009 I only harvested summer and fall chum, which is what we have been eating for the past year. I would happily exchange recipes with any Yukon River fisherman who doubts that chum salmon are anything other than dog food.

Tim Bodony, Galena

Oppose Proposal FP11-02. This proposal would make all the subsistence users break the law. By the time the salmon are coming along, we are eager to get a few for our family.

Thirty-seven Residents of Galena

Oppose Proposal FP11-02. If you are going to restrict the subsistence fisherman from the first and second pulse for 12 years, then you had better restrict the commercial fish industry from stealing the salmon that are headed to the Yukon River but never make it because they get caught in pollock nets and are wasted.

The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose FP11-02. A full closure on the first or second pulse may hurt the fishing families at a time where there is limited fishing already. Before a full closure is implemented on the first pulse, we might consider a five to six days' closure of the first pulse and possibly a three to four day closure of the second pulse as an alternative course of action. More discussions are needed.

The situation we see in villages and what residents are facing today is very troublesome. How they provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river enjoy, we must understand that this river and the people who live along this great river are one and

the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we must understand the changes we see around us today: climate changes, water temperatures increasing, and changes in the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. I encourage the Federal Subsistence Board to look at the good that came when people along the Yukon River worked together, set aside their differences, and sought a common goal. Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing short of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

Oppose Proposal FP11-02. The protection of the first pulse during the 2009 season had some very good and even unintended benefits (increased Koyukuk River king salmon escapements). This, however, came at a very high cost to subsistence fishermen. I believe that pulse protection or even partial pulse protection during expected low returns is a good tool for manager. To mandate a large number of years of full pulse protection, however is just too much of a burden for subsistence fishermen to bear.

Richard Burnham, Kaltag

Oppose Proposal FP11-02. Last year Koyukuk supported closing the harvest of the first pulse of Chinook salmon. We support the closure when the Chinook salmon population is real low and the population needs to be protected. However, we do not support closing the harvest of the first pulse for twelve years.

Koyukuk Tribal Council

FP11-03 Executive Summary	
General Description	Proposal FP11-03 requests that Federal public waters of Yukon River Subdistrict 5-D be further subdivided into three Subdistricts to provide managers additional flexibility to more precisely regulate harvest while conserving the Chinook salmon run that spawns in the upper Yukon River. *Submitted by Andrew Firmin*
Proposed Regulation	*(ii) For the Yukon River drainage, Federal subsistence fishing schedules, openings, closings,* ***boundaries,*** *and fishing methods are the same as those issued for the subsistence taking of fish under Alaska Statutes (AS 16.05.060), unless superseded by* ***regulations in this part or by*** *a Federal Special Action.* ***(xxii) In the Yukon River drainage District 5:*** ***(A) Sub-district 5E consists of the Yukon River drainage from ADF&G regulatory markers located approximately two miles downstream from Waldron Creek upstream to the Hadweenzic River.*** ***(B) Sub-district 5F consists of the Yukon River drainage from Hadweenzic River upstream to 22 Mile Slough.*** ***(C) Sub-district 5G consists of the Yukon River drainage from 22 Mile Slough upstream to the United States-Canada border.***
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	**Oppose**
Written Public Comments	**1 Support**

DRAFT STAFF ANALYSIS
FP11-03

ISSUES

Proposal FP11-03, submitted by Andrew Firmin from Fort Yukon, requests that Federal public waters of Yukon River Subdistrict 5-D be further subdivided into three Subdistricts to provide managers additional flexibility to more precisely regulate harvest while conserving the Chinook salmon run that spawns in the upper Yukon River.

DISCUSSION

The proponent submitted this proposal to address the difficulty of establishing fishing closures timed to provide for the conservation of salmon as well as provide opportunity for subsistence use within this long (400-500 river miles) subdistrict. The proponent states that current boundaries do not allow managers to provide subsistence users an adequate opportunity to meet their harvest needs. Since all of Sub-district 5D is currently open to subsistence fishing 7 days a week, 24 hours a day, this proposal would only have affect when it was necessary to reduce subsistence fishing time in order to conserve salmon. The intent of this proposal is to provide managers with a more precise "tool" to regulate harvest while protecting portions of the salmon run.

Existing Federal Regulations

Although, Federal management boundaries for subsistence fisheries in the Yukon-Northern Area are an adoption of existing State commercial fisheries boundaries[1] (**Map 1**), the Federal Subsistence Board has the latitude to modify boundaries in Federal public waters. The relevant regulatory clause for the Yukon River is as follows:

> *(ii) For the Yukon River drainage, Federal subsistence fishing schedules, openings, closings and fishing methods are the same as those issued for the subsistence taking of fish under Alaska Statutes (AS 16.05.060), unless superseded by a Federal Special Action.*

Proposed Federal Regulations

The proponent submitted the proposal to change existing State fishing boundaries in District 5 (See **Attachment A**). The proposed Federal regulation could accomplish this by adding "boundaries" to the existing Federal regulation with exceptions for District 5 **(Map 2)**.

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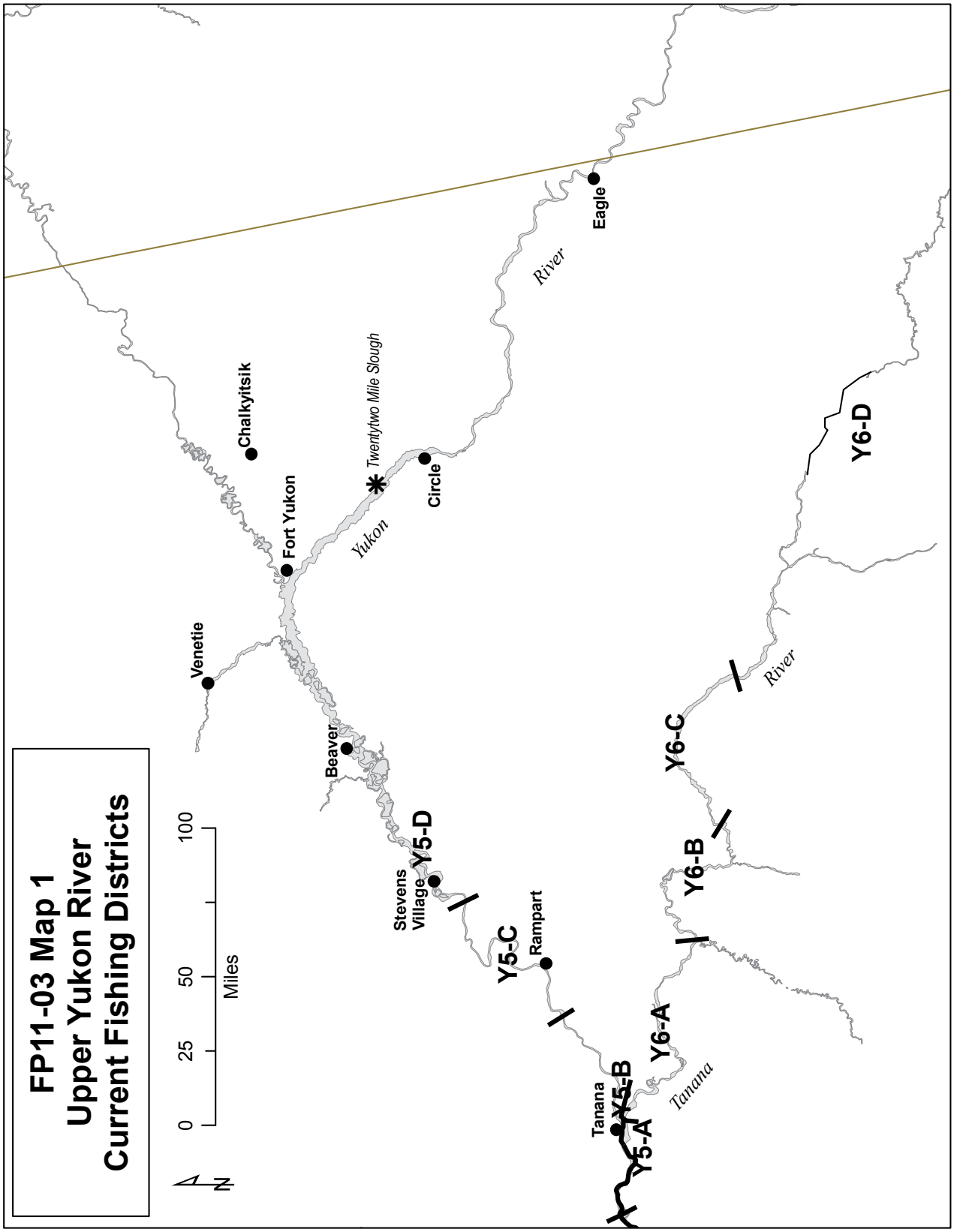
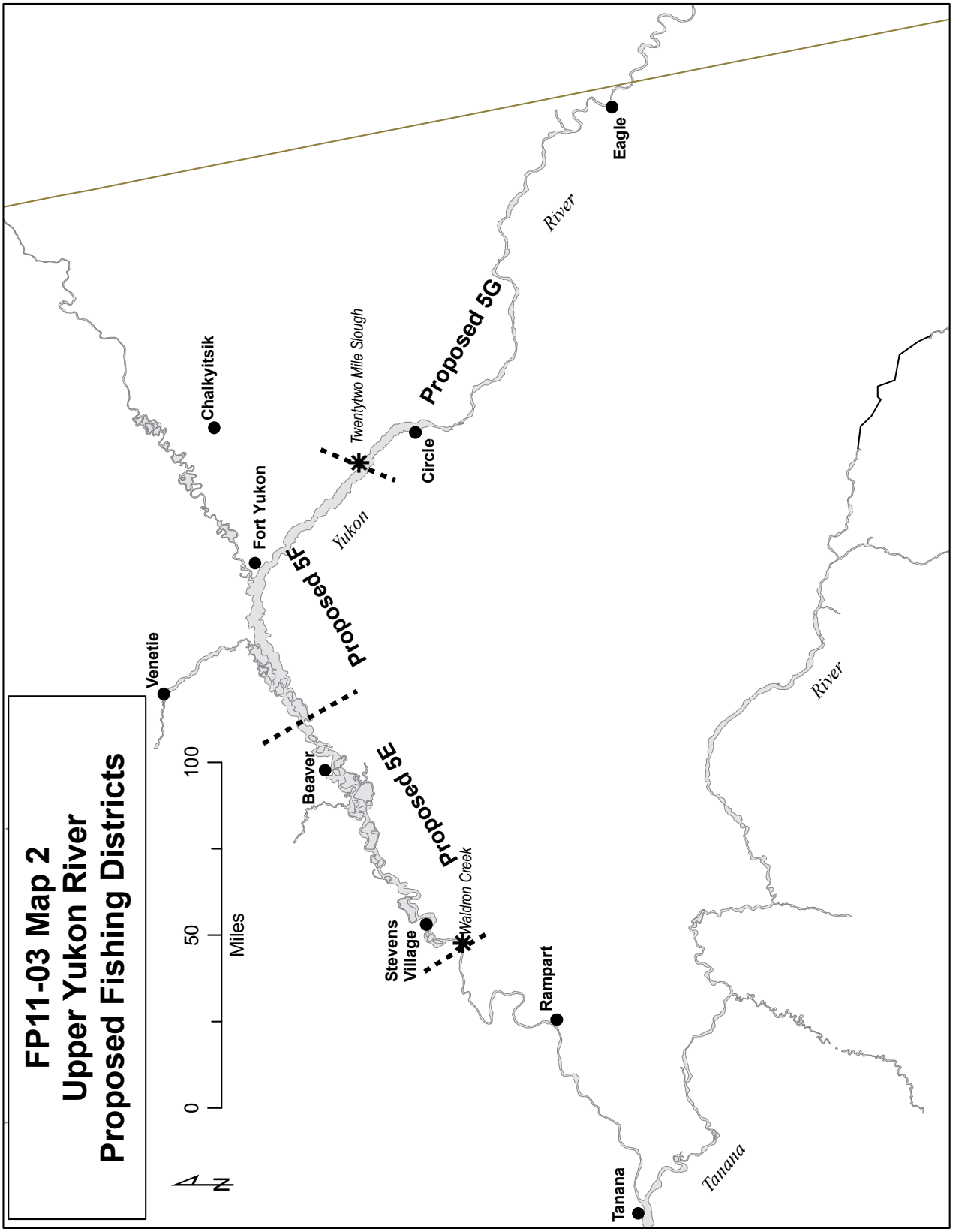
[1] *CFR 50 § 100.4 Definitions.*

ANILCA means the Alaska National Interest Lands Conservation Act, Public Law 96487, 94 Stat. 2371, (codified, as amended, in scattered sections of 16 U.S.C. and 43 U.S.C.) Area, District, Subdistrict, and Section mean one of the geographical areas defined in the codified Alaska Department of Fish and Game regulations found in Title 5 of the Alaska Administrative Code.

CFR 50 **§** *100.14 Relationship to State procedures and regulations.*

(a) State fish and game regulations apply to public lands and such laws are hereby adopted and made a part of the regulations in this part to the extent they are not inconsistent with, or superseded by, the regulations in this part.


FP11-03 Map 1
Upper Yukon River
Current Fishing Districts
0
25
50
100
Miles
N
Venetie
Beaver
Fort Yukon
Chalkyitsik
Yukon
Twentytwo Mile Slough
Circle
River
Eagle
Stevens Village
Y5-D
Y5-C
Rampart
Tanana
Y5-B
Y5-A
Y6-A
Tanana
Y6-B
Y6-C
River
Y6-D


FP11-03 Map 2
Upper Yukon River
Proposed Fishing Districts
0
50
100
Miles
N
Venetie
Chalkyitsik
Fort Yukon
Beaver
Stevens Village
Rampart
Tanana
Circle
Eagle
Yukon
River
Tanana
River
Twentytwo Mile Slough
Waldron Creek
Proposed 5F
Proposed 5E
Proposed 5G

(ii) For the Yukon River drainage, Federal subsistence fishing schedules, openings, closings, ***boundaries,*** *and fishing methods are the same as those issued for the subsistence taking of fish under Alaska Statutes (AS 16.05.060), unless superseded by* ***regulations in this part or by*** *a Federal Special Action.*

(xxii) In the Yukon River drainage District 5:

(A) Sub-district 5E consists of the Yukon River drainage from ADF&G regulatory markers located approximately two miles downstream from Waldron Creek upstream to the Hadweenzic River.

(B) Sub-district 5F consists of the Yukon River drainage from Hadweenzic River upstream to 22 Mile Slough.

(C) Sub-district 5G consists of the Yukon River drainage from 22 Mile Slough upstream to the United States-Canada border.

Existing State Regulations

5 AAC 05.200. Fishing districts and subdistricts

(e) District 5 consists of that portion of the Yukon River drainage (excluding the Tanana River drainage) from the western edge of the mouth of Illinois Creek to the United States-Canada border, and includes the Illinois Creek drainage.

(1) Subdistrict 5-A consists of the Yukon River drainage from a point opposite the westernmost edge of Illinois Creek upstream along the south bank of the river to the easternmost edge of the Tanana River mouth and includes the following islands: Second, Corbusier, Sixmile, Deet'laa', Swanson, Blind, Basco, Sword, Leonard, Still, Tanana and Mission;

(2) Subdistrict 5-B consists of the Yukon River drainage from the westernmost edge of Illinois Creek upstream along the north bank of the river to a point opposite the easternmost edge of the Tanana River mouth upstream along both banks of the Yukon River to the westernmost tip of Garnet Island and includes the following islands: Willow I, II, and III, Steamboat, Grant, Darvin, Little Joker, Station, Tozitna, Circle, Bull, and Long;

(3) Subdistrict 5-C consists of the Yukon River drainage upstream from the westernmost tip of Garnet Island to ADF&G regulatory markers located approximately two miles downstream from Waldron Creek;

(4) Subdistrict 5-D consists of the Yukon River drainage from ADF&G regulatory markers located approximately two miles downstream from Waldron Creek upstream to the United States-Canada border.

Regulatory History

State Fisheries

The Alaska Board of Fisheries (BOF) meets every three years to consider and take action on Arctic-Yukon-Kuskokwim fisheries proposals. The BOF met in January 2010 to consider regulatory changes to Yukon River Chinook salmon management that would address long standing concerns about the effect of size selective gillnet fisheries on the quality of escapement and productivity of Yukon River Chinook salmon. In addition to adopting mesh size restrictions, the BOF adopted a regulation giving ADF&G managers emergency order authority to sequentially close fisheries to allow pulses (large numbers of migrating fish) to migrate with little or no exploitation through all districts to their spawning grounds. Fishers reported that this strategy worked well during 2009 to increase the numbers and quality of salmon reaching spawning streams (ADF&G 2010a). Managers could reduce or close scheduled fisheries windows based on either preseason projections or inseason assessments of run strength (ADF&G 2010b).

During the 2009 fishing season, managers divided District 5 D into a lower and upper section to more effectively schedule period closures to conserve fall chum salmon migrating to spawning streams. The following descriptions were used in 2009 in a fisheries news release (ADF&G 2009):

> ***Lower Subdistrict 5-D*** *(Includes that portion of the Yukon River from 2 miles below Waldron Creek to 22-Mile Slough including the Porcupine River and the communities of Stevens Village, Beaver, Venetie, Chalkyitsik, Birch Creek, and Fort Yukon)**:** Subsistence fishing will close at 8:00 p.m. Sunday, September 6. Subsistence salmon fishing will then reopen at 8:00 a.m. Wednesday, September 9 and close at 8:00 p.m. Sunday, September 13. The second subsistence period will open at 8:00 am Wednesday, September 16 and will close at 8:00 p.m. Sunday, September 20. On Wednesday, September, 23 the subsistence fishery will return to the 7 day per week schedule. Statistical District 033454*
>
> ***Upper Subdistrict 5-D*** *(Includes that portion of the Yukon River from 22 Mile Slough below Circle to the US/Canada Border above Eagle)**:** Subsistence salmon fishing is currently open 7 days a week, 24 hours a day. However, fishermen in this area should anticipate similar reduced fishing times to be implemented next week. Statistical District 033455*
>
> *Subsistence fishermen are reminded that a fishing permit is required for all species of fish in that portion of Subdistrict 5-D from approximately 2 miles downstream of Waldron Creek upstream to the Dall River and from the upstream mouth of 22-Mile Slough to the US/Canada Border. Subsistence fishermen in all other areas of Subdistrict 5-D are encouraged to fill out their subsistence salmon catch calendars.*

Federal Subsistence Fisheries

See staff analysis for FP11-02 (OSM 2010).

Current Events Involving Species

See staff analysis for FP11-02 (OSM 2010).

Biological Background

An understanding of historic Yukon River Chinook salmon fisheries provides the context for evaluating potential benefits and limitations of implementing the proposed regulatory change intended to benefit spawning escapements and management of subsistence fishing opportunity. Refer to the staff analysis for FP11-02 for an update on the stock status of Yukon River Chinook salmon (OSM 2010). Background information presented below addresses specific issues raised by proposal FP-03.

Yukon River District Boundaries

The Yukon River is the largest river in Alaska and the fifth largest drainage in North America. The river originates in British Columbia, Canada, within 30 miles of the Gulf of Alaska, and flows over 2,300 miles to its three major mouths within an expansive delta before emptying into the Bering Sea. The river drainage is approximately 330,000 square miles with 222,000 square miles in Alaska.

Excluding the Fairbanks North Star Borough (98,000 residents) approximately 23,000 rural residents reside in the Alaskan portion of the drainage (U.S. Census 2008); the majority of whom reside in 43 small communities located along the Bering Sea coast and major river systems. Most of these rural residents depend to varying degrees on fish and wildlife resources for subsistence uses.

Commercial salmon fishing is allowed along the entire 1,200 mile length of the mainstem Yukon River in Alaska, the lower 225 miles of the Tanana River, and the lower 12 miles of the Anvik River. The Yukon River drainage is divided into seven Districts and ten Subdistricts for regulatory and management purposes. The district boundaries were originally established in 1961 and redefined in 1962, 1974, 1978, 1994, and 1996. The Lower Yukon Area includes the Yukon River drainage from its mouths to Old Paradise Village, river mile (rm) 301 (Districts 1, 2 and 3). The Coastal District was established in 1994, and redefined in 1996 and is open only to subsistence fishing. The Upper Yukon Management Area is that portion of the Yukon River Drainage upstream of Old Paradise Village to the border with Canada (Districts 4, 5 and 6). The Districts and Subdistricts are further divided into 28 statistical areas for management and harvest reporting purposes. In addition to the U.S. fisheries, Aboriginal, commercial, sport, and domestic salmon fisheries occur in the Canadian portion of the drainage (Hayes et al. 2008).

District 5 extends from the confluence of the Tanana River to the Canadian border and is the most upriver and longest district [approximately 460 river miles (rm)] including about 38% of the Alaskan portion of the main stem river (Hayes et al. 2008). Chinook salmon migrating through this District are primarily upper river stocks that spawn in nearly one hundred tributaries (Milligan 2010) and streams in Canada producing about 50% of the Yukon River run and supporting a large portion of the U.S. harvest. Chinook salmon harvested in this subdistrict also originate in the Sheenjak and Chandalar rivers in Alaska. Commercial fisheries in this District are relatively small averaging less than 20 active permit holders in recent years; historically the most participation in the commercial fisheries occurred in the mid-1970's (35-52 permit holders). Both Chinook and fall chum salmon were targeted by fishermen in Subdistricts 5-A, 5-B and 5-C (Hayes et al. 2008, JTC 2010).

The upper portion of the District (5-D), from Waldron Creek upstream to the Canadian border, has supported only a minor portion of the commercial fishery. Fishermen generally reside in nine communities and are primarily subsistence fishermen (**Table 1**). The subsistence fishing schedule for this Subdistrict allows fishing 24 hours per day, seven days per week. Migrating salmon disperse as the fish move upriver and the pulses observed in the lower Districts become less distinct in 5-D. This dispersion challenges managers to conserve pulses in this very large Subdistrict (394 rm).

Table 1. Summary of demographic information for Yukon River subdistrict 5-D communities.

Key Locations	River Mile (1)	Statistical Area (1)	Households (2)	FP11-03
Waldron Cr. [a]	830	033454	-	Boundary
Stevens Village	847	033454	79	5-E
Birch Creek	888	033454	10	5-E
Beaver	932	033454	33	5-E
Hadweenzic R.	952	033454	-	Boundary
Venetie [b]	982	033454	205	5-F
Fort Yukon	1002	033454	198	5-F
Chalkyitsik [c]	1002	033454	86	5-F
22 Mile slough	1024	033455	-	Boundary
Circle	1061	033455	34	5-G
Central [d]	1061	033455	48	5-G
Charley River	1124	033455	-	5-G
Eagle	1213	033455	68	5-G
U.S. Border	1224	033455	-	Boundary

a: Subdistrict 5-D lower boundary marker- 2 rm downstream of Waldron Creek b: Venetie (43 rm) Chandalar R.,c: Chalkyitsik (82 rm) Porcupine/Black R., and d: Central (36 m) Steese Hwy. References: (1) Hayes et al. 2008, (2) 2008 Census

Implementation

If the Board were to adopt the proposal as Federal regulations and redefine this Subdistrict's boundaries, State and Federal regulations would not be aligned and could result in increased regulatory complexity.

The intent of the proposal is to provide managers enhanced capability to manage subsistence fisheries in Subdistrict 5-D thereby conserving upper river Chinook salmon spawning stocks. Other options are available to address the positive intent of this proposal. In the short term, both State and Federal managers could consider the benefit of modifying existing boundaries of Subdistrict 5-D. During the 2009 fisheries season, managers used emergency order authority during the fall chum salmon fishing season to divide the Subdistrict into an upper and lower Subdistrict. Managers potentially could agree that dividing this extensive subdistrict into three areas has merit and work with District 5 fishermen to define boundaries to address the concerns raised in this proposal. These changes could be implemented by State emergency order and Federal special actions for future fishing seasons if needed. Another longer term option would be for the proponent to submit the proposal to the BOF for the next regulatory cycle for this area. If adopted as State regulation, the boundaries would be recognized in Federal regulation.

Recent Chinook salmon subsistence harvests for the proposed Subdistricts in FP11-03 are compared in **Figure 1**. Affected communities for each subdistrice are broken out in **Table 1** above.

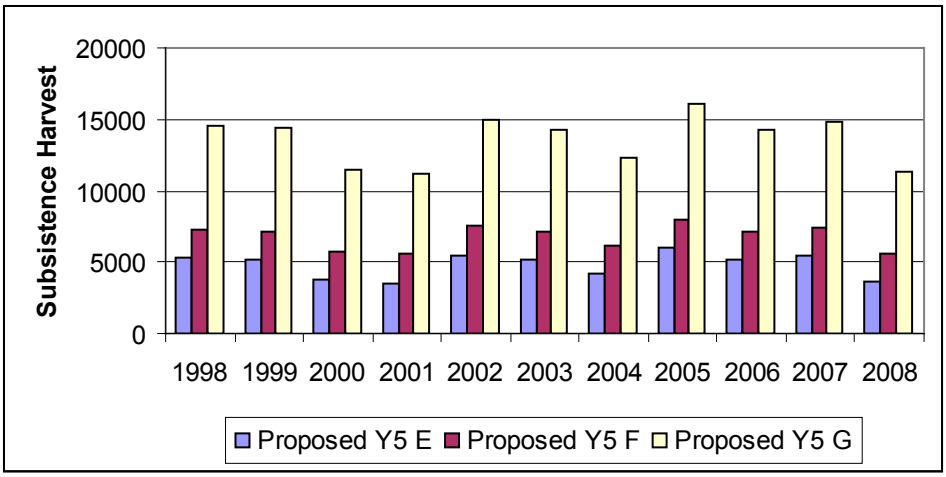


Figure 1. Subsistence harvests (1998-2008) in Yukon River Subdistrict 5-D combined by revised Subdistrict boundaries as requested in FP11-03. (Source Busher et al. 2008)

Effects of the Proposal

Adoption of this proposal would affect Federally qualified subsistence users in Federal public waters in Subdistrict 5-D; however, portions of the river in this Subdistrict near the communities of Central and Eagle are not Federal public waters. Consequently subsistence fishing near the communities would be addressed under State subsistence fishing regulations. Federal regulations defining boundaries for this Subdistrict would be inconsistent with State fishing regulations. Fishing areas outside of Federal public waters would not be affected resulting in a fragmented application of conservation measures intended to pass upper river stocks to their spawning grounds.

Implementing the proposal outside of Federal public waters would require regulatory change to the State regulations defining fishing districts and Subdistricts for the Yukon management area. Unless the State regulatory boundaries are changed, this inconsistency would cause confusion for fishermen and managers. However, other options are available to address the positive benefits of this proposal. State and Federal managers could agreed to subdivide this subdistrict by working with the fishermen during preseason planning meetings when conservation measures are necessary to conserve Chinook salmon migration through Subdistrict 5-D. In addition, the proponent could submit the proposal during the next open BOF regulatory cycle for the AYK Region.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP11-03.

Justification

The proposed action is intended to provide improved management and conservation for an important Yukon River Chinook salmon stock group. If the Board adopted this change in fishing boundaries, State and Federal management boundaries would not be consistent. The analysis describes other available options to achieve the beneficial effects intended by this proposal that avoid creating an unnecessary and potentially confusing situation where State and Federal regulatory boundary descriptions for Subdistrict 5-D would not align.

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Attachment A

Yukon-Northern Area

FP11-03

Submitted by: Andrew Firmin

This proposal suggests a change to (check all that apply):

Harvest season □ Harvest limit □
Method and means of harvest □ Customary and traditional use determination □

1. What regulation do you wish to change? In reference to State Regulations: 5AAC05.200(e)(4), Sub district 5D consists of the Yukon River drainage from ADF&G regulatory markers located approximately two miles downstream from Waldron Creek upstream to the United States-Canada border.

2. How should the new regulation read?
5AAC05.200 (e)(4)(i) Sub-district 5E consists of the Yukon River drainage from ADF&G regulatory markers located approximately two miles downstream from WaldronCreek upstream to the Hadweenzic River.

5AAC05.200 (e)(4)(ii) Sub-district 5F consists of the Yukon River drainage from Hadweenzic River upstream to 22 Mile Slough.

5AAC05.200 (e)(4)(iii) Sub-district 5G consists of the Yukon River drainage from 22 Mile Slough upstream to the United States-Canada border.

3. Why should this regulation change be made? This is the largest subdistrict on the Yukon River and it is a 400-500 mile stretch. It is very difficult to effectively manage a sub-district this large for the benefit of fish populations as well as user groups. The current system does not allow subsistence users to adequately meet their harvest needs.

4. What impact will this change have on fishpopulations? This area of the Yukon River has no commercial interests and historically do not harvest many fish. Since all of Sub-district 5D is currently open to subsistence fishing 7 days a week, 24 hours a day, this proposal would only have affect when it was necessary to reduce subsistence fishing time in order to conserve salmon. The intent of this proposal would be to give managers a finer tool to more precisely regulate harvest while protecting portions of the salmon run.

5. How will this change affect subsistence uses? It will allow for better management of openers and closures so a sufficient amount of fish is harvested as well as meet escapement goals. (i.e. Fishermen in Eagle will just see the last salmon of the first pulse go by while the second pulse already passed Stevens Village due to the length of the subdistrict).

6. How will this change affect other uses, i.e., sport/recreational and commercial? Under normal situations there would be no affect, but in times of conservation it would be anticipated that other uses would be restricted prior to taking subsistence management actions inseason.

Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP11-03: Further subdivide Upper Yukon River Area Subdistrict 5-D.

Introduction: Andrew Firmin submitted this proposal to further subdivide Yukon River Area fisheries Subdistrict 5-D into three new subdistricts, 5-E, 5-F, and 5-G, for the purpose of improving management efficiency of the federal subsistence fishery. The proposal was also submitted as a proposal to the Alaska Board of Fisheries. The intent of the proposal is to give management a "finer tool" to more precisely regulate harvest while protecting portions of the salmon runs. The proponent indicates adoption of this proposal will enhance fisheries managers' abilities to manage a large stretch of the Yukon River for the benefit of fish populations as well as user groups during times when it is necessary to reduce subsistence fishing time for conservation purposes. The proponent indicates the size of Subdistrict 5-D (approximately 400 miles in length) is too large to effectively manage if pulses of fish require protection. In 2008 and 2009, Subdistrict 5-D was divided into two sections when subsistence fishing time was restricted in order to meet escapement goals. This proposal would define three new subdistricts as follows:

> 5AAC05.200 (e)(4)(i) Subdistrict 5E consists of the Yukon River drainage from ADF&G regulatory markers located approximately two miles downstream from Waldron Creek upstream to the Hadweenzic River.
>
> 5AAC05.200 (e)(4)(ii) Subdistrict 5F consists of the Yukon River drainage from Hadweenzic River upstream to 22 Mile Slough.
>
> 5AAC05.200 (e)(4)(iii) Subdistrict 5G consists of the Yukon River drainage from 22 Mile Slough upstream to the United States—Canada border.

Impact on Subsistence Users: The proposal would establish three new subdistricts in which the federal subsistence fisheries could be sequentially opened or closed for conservation purposes as pulses of salmon migrate through this section of the Yukon River. Federal subsistence users could benefit from sequential closures due to increased opportunities to harvest fish when salmon pulses are present. Federal subsistence users within the proposed subdistricts could benefit from more precise and succinct area closures. Adoption of this proposal has the potential to more evenly distribute federal subsistence harvest within Subdistrict 5-D during salmon runs that require reduced exploitation for conservation purposes.

Opportunity Provided by State: Salmon may be harvested under state regulations throughout the majority of the Yukon River watershed, including a liberal subsistence fishery. Gear types allowed are gillnet, beach seine, hook and line attached to a rod or pole, hand line, and fish wheel. Although all gear types are not used or allowed in all portions of the Yukon River drainage, drift and set gillnets, and fish wheels harvest the majority of fish taken for subsistence uses. Under state regulations, subsistence is the priority consumptive use. Therefore, state subsistence fishing opportunity is directly linked to abundance and is not restricted unless run size is inadequate to meet escapement needs. When the Yukon River Chinook salmon run is below average, the state subsistence fishing periods may be conducted based on a schedule implemented chronologically throughout the Alaska portion of the drainage, which is consistent

with migratory timing as the salmon run progresses upstream. The regulatory schedule for Subdistrict 5-D allows subsistence fishing seven days per week. If the run is not large enough to meet escapement goals, Alaska Department of Fish and Game will restrict fishing time or close subsistence fishing. Amounts reasonably necessary for subsistence for Chinook salmon (5AAC 01.236 (b)), as determined by the Alaska Board of Fisheries, have been met in the Yukon River drainage for six of the last nine years.

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. Since 2001, subsistence fishing time in the Yukon Area has been limited by a windows schedule which was further restricted in 2008 and 2009 because of conservation concerns for Chinook salmon. Subsistence harvest levels for Chinook salmon have been within the amounts reasonably necessary for subsistence (ANS) ranges since 2001, except for 2002, 2008, and 2009. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005 being the three highest spawning escapement estimates on record. The escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on Canadian-origin stock by Alaskan fishermen decreased from an average of about 55% (1989–1998) to an average of about 44% from 2004 through 2008 (Howard et al. 2009). Although the subsistence harvest continues to remain stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60% from an average of 100,000 annually (1989–1998) to the recent 5-year average (2005–2009) of nearly 23,000 fish. Considering all salmon species together, the overall total subsistence salmon harvest in the Yukon Area has declined by approximately 30% since 1990 (Fall et al. 2009:39).

Jurisdiction Issues: The federal board does not have authority to establish regulatory boundaries for state-regulated commercial and subsistence fisheries. If the Federal Subsistence Board adopts fisheries subdistrict boundaries that are different from the existing boundaries authorized by the Alaska Board of Fisheries, subsistence users will be responsible for knowing where the claimed federal jurisdiction applies. Difficulty in enforcement may result.

A large percentage of the lands along the Yukon River are state or private lands on which subsistence users must use gear types consistent with state regulations. If this proposal is adopted, detailed maps are needed that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply, so that fishermen know when they are on state or private lands (including state-owned submerged lands and shorelands) where they must comply with state laws and regulations.

Other Issues: The Alaska Department of Fish and Game and the federally designated officials already have delegated or regulatory authority to close and open fisheries by area as necessary; i.e., open and close fishing areas such as requested in this proposal. As long as the state managers and designated federal officials continue the current cooperative consultation process for management, adoption of this proposal is not necessary to manage salmon runs through Subdistrict 5-D. If state resource managers determine that subdistricts are needed on a re-

occurring basis; a proposal to the Alaska Board of Fisheries to formalize further subdivision of Subdistrict 5-D could be developed.

Recommendation: Oppose.

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WRITTEN PUBLIC COMMENTS

Support FP11-03. This proposal will subdivide a district that is too large for monitoring properly and will allow better fishing schedules so village residents can meet their traditional and customary need.

The situation we see in villages and what residents are facing today is very troublesome. How they provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river enjoy, we must understand that this river and the people who live along this great river are one and the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we must understand the changes we see around us today: climate changes, water temperatures increasing, and changes in the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. I encourage the Federal Subsistence Board to look at the good that came when people along the Yukon River worked together, set aside their differences, and sought a common goal. Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing short of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

FP11-04 Executive Summary	
General Description	Proposal FP11-04 requests the use of fish wheels be prohibited for the harvest of salmon in Districts 4 and 5 of the Yukon Area, to allow more fish to escape to the spawning grounds. *Submitted by Stanislaus Sheppard of Mountain Village Working Group*
Proposed Regulation	*§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to the restrictions set forth in this section.* ***(A) Fish wheels may not be used in Yukon River Districts 4 and 5.***
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	**Oppose**
Written Public Comments	**12 Oppose**

DRAFT STAFF ANALYSIS
FP11-04

ISSUE

Proposal FP11-04, submitted by Stanislaus Sheppard, Mountain Village Working Group, requests the use of fish wheels be prohibited for the harvest of salmon in Districts 4 and 5 of the Yukon Area, to allow more fish to escape to the spawning grounds.

DISCUSSION

Current Federal and State regulations allow subsistence users to utilize fish wheels to harvest salmon in the mainstem Yukon River, from the mouth to the Canadian border. It should be noted that, if this proposal were adopted, Federally qualified users would still be able to utilize fish wheels to harvest salmon under State regulations in State waters in Districts 4 and 5, from just south of Anvik to the Canadian border (**Figure 1**). Fish wheels are also allowed in District 6, the Tanana River, but that area is not subject to this proposal.

Existing Federal Regulation

Yukon-Northern Area — Salmon

§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to the restrictions set forth in this section.

Proposed Federal Regulation

Yukon-Northern Area — Salmon

§___.27(i)(3)(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to the restrictions set forth in this section.

(A) Fish wheels may not be used in Yukon River Districts 4 and 5.

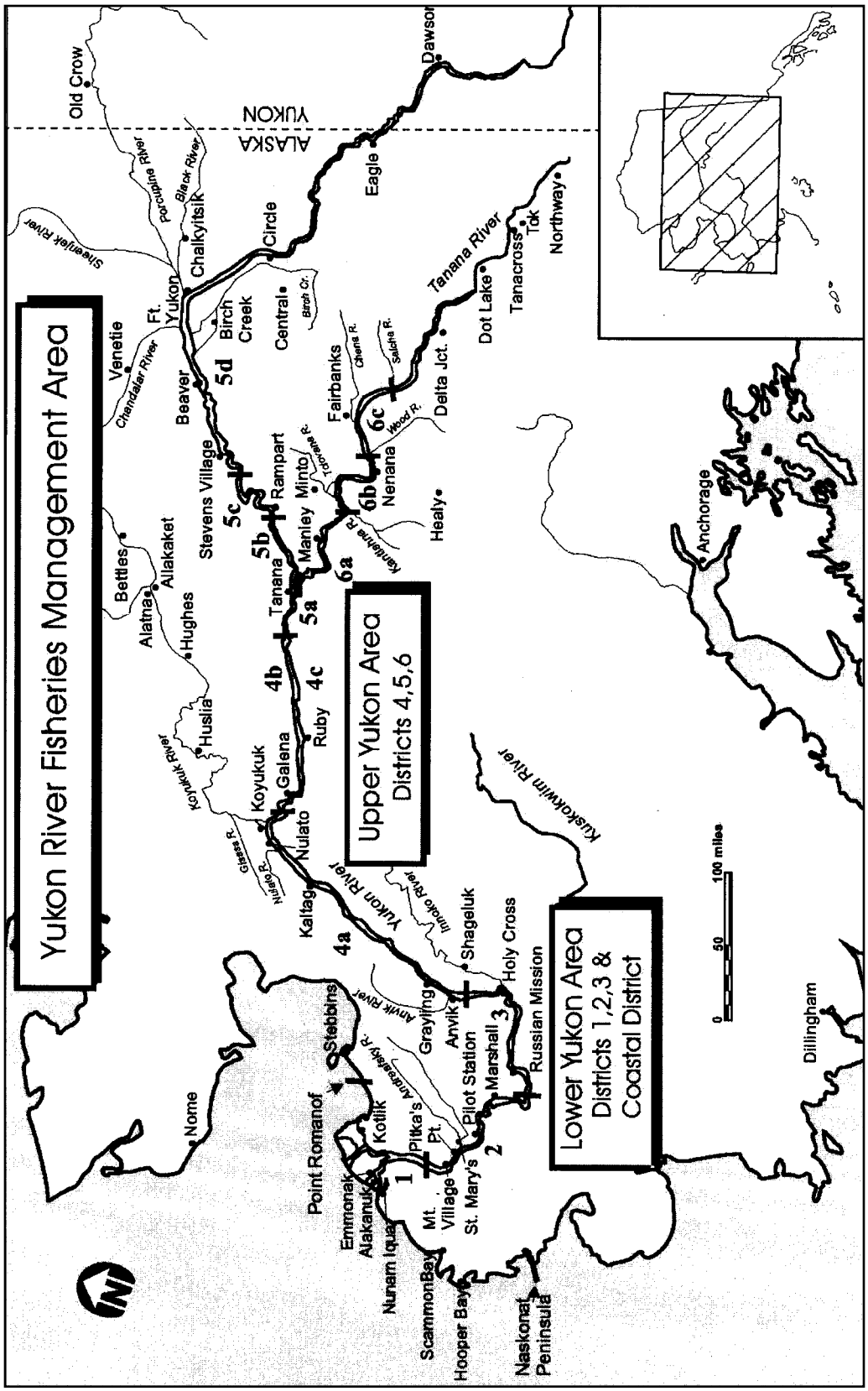
Relevant State Regulation

Yukon-Northern Area — Salmon (Subsistence)

5 AAC 01.220. LAWFUL GEAR AND GEAR SPECIFICATIONS. (a) Salmon may be taken only by gillnet, beach seine, a hook and line attached to a rod or pole, handline, or fish wheel, subject to the restrictions set out in this section, 5 AAC 01.210, and 5 AAC 01.225 – 5 AAC 01.249.

Extent of Federal Public Waters

For purposes of this discussion, the phrase "Federal public waters" is defined as those waters described under 36 CFR 242.3 and 50 CFR 100.3. The Federal public waters addressed by this proposal are those portions of the Yukon River located within, or adjacent to, the external boundaries of the Innoko, Nowitna, Koyukuk and Kanuti National Wildlife Refuges in District 4 and the Yukon Flats National



Map 1. Alaska portion of Yukon River Drainage showing fishing districts. (Busher et al. 2009).

Wildlife Refuge and Yukon-Charley Rivers National Preserve in District 5 **(see Federal Subsistence Fisheries Jurisdiction map)**.

Customary and Traditional Use Determinations

Yukon-Northern Area: Yukon River drainage–salmon other than fall chum salmon—Residents of the Yukon River drainage and the community of Stebbins.

Yukon-Northern Area: Yukon River drainage–Fall chum salmon—Residents of the Yukon River drainage and the communities of Stebbins, Scammon Bay, Hooper Bay, and Chevak.

Regulatory History

Fish wheels were recognized as a legitimate gear type early on under State management. In 1959, the newly-established State legislature adopted Title 16, a fish and game statute that distinctly defined the difference between sport and subsistence fishing. This statute, to be administered by the Alaska Board of Fish and Game, became effective in 1960. It defined fishing according to gear type; subsistence fishing was defined as a personal-use activity that relied on gillnets, seines, fish wheels and similar gear, while sport fishing implied a hook-and-line harvesting method. In accordance with this distinction, subsistence users were required to obtain a permit and to submit harvest records to the Alaska Department of Fish and Game, and separate subsistence regulations were included in the State's first-ever commercial fishing regulations booklets (Norris 2002). Fish wheels have been a legal gear type in the Yukon River in State regulation ever since.

In Federal regulations, fish wheels have been a legal gear type for the taking of salmon for subsistence purposes in the Yukon-Northern area, which includes the Yukon River, since the start of the Federal Subsistence Program in Alaska in 1990 (36 CFR 242.3 and 50 CFR 100.3, §___.24 (j)(xii) in 53 FR 27114, page 27150, dated June 29, 1990).

History of Fish Wheel Use in the Yukon River

Before the turn of the twentieth century, the primary salmon fishing gear types on the Yukon River were fish fences and associated fish traps, gillnets, and dip nets (Loyens 1966). Around 1910, people began to use the fish wheel almost exclusively in the middle and upper river areas, where they established large fish camps (Clark 1981; Wheeler 1987). By the late 1930s or early 1940s, fish wheels had "almost universally supplanted the aboriginal ways of catching salmon…" (Sulivan 1942:2).

Much of the effort to catch salmon during this period was to supply food for dogs. The years between 1900 and 1940 saw the peak of the sled dog era in the Yukon River drainage, which required substantial supplies of dried summer and fall chum for use as dog food (Anderson and Scott 2010). Fish wheels and gillnets proved essential for the expanded chum salmon harvest during this period. New modes of transportation, however, gradually replaced dog teams, and by the 1970s, dog populations had declined. Between 1991 and 2008, the number of dog sled teams continued to decline, which resulted in a decline in the harvest of salmon for dog food in the Yukon River drainage. In the early 1990s, David Andersen (1992) researched the use of salmon for dog food in seven communities along the Yukon River, including Fort Yukon, Huslia, Kaltag, Manley Hot Springs, Russian Mission, St. Mary's and Tanana, and recently conducted a similar study in these same seven communities (Anderson and Scott 2010). The intention was to document the changes in the use of salmon for dog food between 1991 and 2008. Some of the findings include the following:

- The number of mushing households declined from 95 to 42. (Kaltag, which had 11 mushing households in 1991, had no mushers or sled dogs in 2008, and was dropped from data tables in Anderson and Scott 2010).
- The number of sled dogs declined from 1,363 to 671.
- The total pounds of fish harvested for sled dog food declined from 1,211,907 to 492,465.
- The percentage of salmon fed to sled dogs declined from 86.7% to 71.7%, while the percentage of non-salmon fish fed to sled dogs increased from 13.3% to 28.3%.

A decline in sled dogs has meant a decline in the use of fish wheels in communities of the middle and upper Yukon River (Wolfe and Scott 2010:16). The predominant gear type for salmon subsistence fishing has become the gillnet. The current trend is for an increasing use of drift gillnets and a decreasing use of set gillnets (Wolfe and Scott 2010:17).

Based on Alaska Department of Fish and Game data from 2008, the Yukon River had a total of 68 fish wheels used for subsistence purposes, all on the Upper Yukon River (fishing districts Y4-6). As Busher et al. (2009) note, "Water conditions and fishing locations are more suitable for the operation of fish wheels in the Upper Yukon Area, which also contains a better supply of logs and young spruce trees used for the raft, axle and axle's stanchion, lead, and basket construction". Fish wheels are a legal gear type for subsistence fishing, and comprise 7% of the reported combined subsistence and personal use gear types on the Yukon River, with set gillnets comprising 48% and drift gillnets comprising 37% (Busher et al. 2009:11). In areas which require subsistence permits in District 5 (Yukon River) and in District 6 (Tanana River), the primary gear types are fish wheels (20%) and set gillnets (80%). It should be noted that the percentage use of gear types is not necessarily the same as the percent of harvest by gear type.

Biological Background

The stated intent of the proposal is to allow more Chinook and chum salmon to escape to the spawning grounds by prohibiting use of fish wheels for subsistence harvest in Districts 4 and 5. An understanding of the status of these stocks is helpful for evaluating the proposal.

Chinook salmon stock status is fully described in the staff analysis for Proposal FP11-02.

Summer chum spawn primarily in the lower and middle Yukon River drainage, up to and including the Tanana River. Total annual run estimates averaged 1.8 million summer chum during the 14-year period of 1995 and 1997–2009, ranging from a low of about 550,000 fish in 2000 and 2001, to almost 4.0 million fish in 1995 and 2006. Runs were poor to below average from 1998 through 2003, but have shown marked improvement, with estimated drainage-wide escapement exceeding 1.0 million summer chum annually since 2001. The escapement estimate of almost 4.0 million in 2006 was the largest on record (Bergstrom, et. al. 2009).

Fall chum salmon spawn primarily in the middle and upper Yukon River drainage, from and including the Tanana River upward. Total annual run estimates averaged 665,400 fall chums during the 14-year period of 1995 and 1997–2009. Runs were poor from 1998 through 2002, with the 2000 run one of the worst on record, followed closely by 1998 and 2001. There was steady improvement from 2003 to 2006, with the 2005 run the largest in 30 years and 2006 above average for an even-numbered year. Since 2006, the runs have been decreasing, with 684,000 fall chums in 2007, 615,000 in 2008 and a record low of 236,000 in

2009. The 2009 run was lower than the 300,000 fall chum salmon necessary to meet escapement goals in accordance with the Yukon River Drainage Fall Chum Salmon Management Plan (Borba, et. al. 2009).

Salmon Harvests

While subsistence harvest levels vary from year-to-year, harvest levels of the four major subsistence salmon species in the Yukon River had been trending upward, in general, from 1998 to 2007, as shown in **Table 1** (Busher et.al. 2009). Subsistence harvest levels of Chinook salmon declined in 2008 to approximately 43,700 fish and declined further in 2009 to approximately 33,000 fish (JTC 2010) due, in both years, to below average runs and resultant harvest restrictions.

Commercial harvests of Yukon River Chinook salmon have declined in recent years due to poor runs and resultant conservative management. Directed commercial fisheries did not occur in 2001, 2008 and 2009. The 2007 commercial harvest of 33,634 Chinook salmon was above the recent 5-year average harvest (2005–2009) of 23,000, but considerably less than the 1989–1998 average harvest of 100,700 salmon (Howard et al. 2009).

In 2008, a poor Chinook salmon run led managers to restrict commercial fishing, with the harvest 89% below the 5-year average. In 2009, there was no Chinook salmon commercial season and limited subsistence fishing. In January 2010, the U.S. Commerce Secretary declared a commercial fishery disaster for 2008 and 2009 for Yukon River Chinook salmon (USDOC 2010).

Effects of the Proposal

If this proposal were adopted, it would remove fish wheels as a legal gear type in Federal regulations in Districts 4 and 5. Eliminating the use of fish wheels in Federal regulations would not accomplish the proponent's objective — to allow more fish to escape to the spawning grounds — as Federally qualified subsistence users would still be able to utilize fish wheels to harvest salmon under State regulations.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP11-04.

Justification

Eliminating the use of fish wheels in Districts 4 and 5 in Federal regulations would not accomplish the proponent's objective — to allow more fish to escape to the spawning grounds — as Federally qualified users would still be able to utilize fish wheels to harvest salmon under State regulations. When run projections indicate that escapement shortfalls are likely, fisheries managers have the ability and authority to restrict harvest under the existing regulatory management framework, such as reducing fishing time or not opening fishing periods to increase escapement, as was done for Chinook salmon escapement into Canada in 2009.

Fish wheels comprise only 7% of the reported combined subsistence and personal use gear types on the Yukon River, with set gillnets comprising 48% and drift gillnets 37%. The use of fish wheels is on the decline in the Yukon River. Gillnets have become the predominant gear type for salmon subsistence fishing. The current trend is for an increasing use of drift gillnets and a decreasing use of set gillnets.

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ADF&G Comments on FP11-04
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Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP11-04: Prohibit use of fish wheels in districts 4 and 5 of the Yukon River.

Introduction: Stanislaus Sheppard of the Mountain Village Working Group submitted this proposal to prohibit use of fish wheels on the Yukon River in districts 4 and 5 where federal jurisdiction is claimed in order to increase fish escapement to the spawning grounds.

Subsistence fisheries on the Yukon River employ a number of gear types, including fish wheels, to harvest salmon at different times of year. The method and timing of the harvest are based on traditional and customary uses in different areas of the Yukon River drainage. Studies conducted by the department found that between 2003 and 2007, the average proportion of primary gear types used for subsistence salmon fishing in the Yukon River drainage were set gillnets (53%), drift gillnets (38%), and fish wheels (8%) (**Table 1**).

Table 1
Yukon Subsistence Salmon Fisheries, Primary Gear Types Used, 2003—2007

Year	Set Gillnet	Drift Gillnet	Fish Wheel	Hook & Line	Reference
2003	59%	28%	8%	5%	(Brown et al. 2005:56; TP 316)
2004	52%	41%	7%	<1%	(Fall et al. 2007a:51; TP 317)
2005	53%	39%	8%	<1%	(Fall et al. 2007b:39; TP 318)
2006	49%	43%	8%	<1%	(Fall et al. 2009a:49; TP 344)
2007	50%	41%	9%	<1%	(Fall et al. 2009b:48; TP 346)
5-year average	53%	38%	8%	<1%	

Impact on Subsistence Users: If adopted, federal subsistence users would be prohibited from using fish wheels in districts 4 and 5 on the Yukon River where federal jurisdiction is claimed. Fish wheels are a highly effective gear type for harvesting salmon in the upper Yukon River. Even though fish wheels comprise only 8% of the gear types used to harvest salmon, for some subsistence fishermen it is their only means of harvesting salmon. Prohibiting use of fish wheels as a gear type for federal subsistence users in these districts is expected to significantly reduce salmon harvest for some subsistence fishermen and may eliminate harvest for others.

Opportunity Provided by State: Salmon may be harvested under state regulations throughout the majority of the Yukon River watershed, including a liberal subsistence fishery. Salmon may be harvested under state subsistence regulations throughout Yukon River District 4 and subdistricts 5-A, 5-B, and 5-C during two 48-hour periods per week from June 15 through September 30, as established by emergency order. The subsistence fishery in Subdistrict 5-D is open 24 hours per day, seven days per week. The state subsistence fishery is open during commercial fishing periods but is closed during the 24 hours prior to a commercial fishing opening. The state subsistence fishing periods are normally linked to abundance or commercial

fishing periods and are conducted based on a schedule implemented chronologically, which is consistent with migratory timing as the salmon run progresses upstream.

Legal gear for the state subsistence salmon fishery in subdistricts 4-B and 4-C and District 5 includes fish wheels, hand lines, set gillnets, and beach seines. Drift gillnets may be used for subsistence fishing in Subdistrict 4-A to target Chinook salmon from June 10 through July 14, and chum salmon may be taken with drift gill nets after August 2. There are no household harvest limits for the state subsistence fisheries in districts 4 or 5. Amounts reasonably necessary for subsistence (ANS) (5AAC 01.236 (b)), as determined by the Alaska Board of Fisheries, have been met for Chinook salmon in the Yukon River drainage for six of the last nine years (below ANS in 2002, 2008, and 2009).

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. Subsistence harvest levels have reached the amounts reasonably necessary for subsistence, except for 2002, 2008, and 2009. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The agreed-to escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005 being the three highest spawning escapement estimates on record. However, the escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on the Canadian-origin stock by Alaskan fishermen has decreased from an average of about 55% (1989–1998) to an average of about 44% from 2004—2008 (Howard et al. 2009). Although the subsistence harvest continues to remain stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60%, from an average of 100,000 annually (1989–1998) to the recent five-year average (2005–2009) of nearly 23,000 fish.

Jurisdiction Issues: The department continues to request correction of the Yukon River map labeled "Federally Managed Waters" in the federal staff analysis. This label incorrectly implies the federal government manages more than federal subsistence fisheries. The State of Alaska manages the sustainability of fish, including subsistence, commercial, sport, and personal use fisheries, in all waters except where waters are closed to non-federally qualified subsistence users. The state also manages other uses of and public activities in these waters, which uses are not managed by the Federal Subsistence Board or federal land management agencies.

Recommendation: Oppose. We suggest that more information is needed on the size distribution of fish harvested in fish wheels and more investigation of the type of gear modifications that could be implemented and would be consistent with the gillnet mesh size actions taken by both the Federal Subsistence Board and Alaska Board of Fisheries for the entire Yukon River drainage. Such a research project would be appropriate to fund through the Fisheries Resource Monitoring Program.

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WRITTEN PUBLIC COMMENTS

Oppose Proposal FP11-04. You are going to tell us to cut our nets in half and with a warmer river the fish swim deeper so how can we even catch a fish with a short net? The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose Proposal FP11-04. All districts, with the exception of district 4 and 5, will be allowed to use fish wheels. This sounds like Mountain Village Working Group has something against the Upper Yukon Region. What will come next? Totally restrict these two districts so Mountain Village can enjoy fishing at the expense of others? This proposal is totally uncalled for.

The situation we see in villages and what residents are facing today is very troublesome. How they provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river enjoy, we must understand that this river and the people who live along this great river are one and the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we must understand the changes we see around us today: climate changes, water temperatures increasing, and changes in the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. I encourage the Federal Subsistence Board to look at the good that came when people along the Yukon River worked together, set aside their differences, and sought a common goal. Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing short of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

Oppose Proposal FP11-04. While it first appears to be a conservation method, this proposal targets only the upper Yukon River and states a blaming reason as to why fish wheels should not be used in districts 4 and 5. Traditionally, fish wheels have been used on the upper river, without conflict or over harvest, since steamboat days at the beginning of the last century. We are greatly opposed to this proposal. It has no scientific foundation.

Donald and Jan Woodruff, Eagle

Oppose Proposal FP11-04. It is my belief the Mountain Village Working Group has never fished in the districts 4, 5, or 6 and, therefore, has no idea of our subsistence life style. I notice that they didn't take any measures to reduce their take of subsistence catch fish, but did make proposals affecting Yukon River fishing districts 4, 5, and 6. I live on the Yukon River in District 4 and have always fished this district. As you know, it was our district that submitted proposal to reduce take of Chinook salmon last year (2009)

which helped get Chinook salmon pat the border in record number at Eagle, Alaska. I ask the Federal Subsistence Board to reject this proposal as it attempts to regulate subsistence fishing in our District 4.

Fred Huntington Sr., Second Chief, Louden Tribal Council

Oppose Proposal FP11-04. Fish wheels are the only method some fishermen can use. Some set net spots have four to five nits in them. There are few spots that fishermen in district Y-5 can catch fish with the set net method. These set net spots are very far away from communities and expensive to check. Y-5 does not have a commercial season so the number of fish taken is exaggerated. Fishermen in District 5 are not allowed to use drift net methods. Y-5 should be allowed to drift net like Y-1 and Y-2.

If you look at the quota system, Y-1 and Y-2 are the only districts that could enjoy commercial fishing and sales of fish. Y-1 and Y-2 have over 700 commercial fishermen and Y-5 has not sold fish for years. Y-5 doesn't have 700 commercial nets trying to sell off the future salmon stocks. Y-5 is not getting a fair amount of the quota. There is no where near 700 commercial fishermen in Y-5 trying to destroy the salmon stocks for money. When there are no fish left, what are we going to do? The salmon stocks are being wiped out in Y-1 and Y-2. The number of fish wheels in Y-5 is small and catch less fish that Y-1 and Y-2. Y-5 is also the longest district and gets less fish.

If we want more fish to escape to the spawning ground, ADF&G would make significant progress by closing commercial openings and close fishing on the first pulse that goes to Canada. Also, restrict the depth and mesh size. These would be the most effective methods to ensure future fishing Y-5 is not selling commercially and the residents are happy to get what they can, not exploit and sell of the future salmon runs. We catch so few Chinooks that they are cut and dried and used to feed our families for the winter. Y-1 and Y-2 wiped out so many salmon that there is nothing left. These fish are sold and leave Y-1 and Y-2 to feed urban residents.

Fish wheels are multiple family operations and feed whole communities. It would have a severe impact on the disabled and elders who can't fish. There are few net spots in Y-5 and many people will not get enough fish without fish wheels. If Y-1 and Y-2 want to take away fish wheels, we should take away drift nets to be fair. Or better yet have equal distribution offish in each district. Or let all districts sell fish commercially.

James E. Roberts, Tanana Tribal Council

Oppose Proposal FP11-04. There is no scientific evidence that fish wheels are a sole contributing factor to the decline of Yukon River Chinook salmon. Fish wheels have been and continue to be a customary means of harvesting salmon in districts 4 and 5. Fishers in the Eagle area suggest that fish wheels by nature target smaller Cinook salmon that swim closer in to the shoreline thus allowing larger more fecund females to escape and spawn. Good set gillnet sites are limited in our fishing area both within and outside of federally managed waters. Fish wheels allow fishers to fish in areas where nets cannot be feasibly fished, and are more easily shut down during any necessary fishery closers. Chinook Salmon are not targeted for dog food in our fishing area and are considered to be for human consumption only. Trimmings and scraps from processing however, (guts, fins, and blood) may be fed to dogs. Ultimately, the whole fish is utilized. In addition, fish are not sold in our fishing area under customary trade or otherwise as they are valued too much as food.

Mike McDougall and Sonja Sager, Eagle

Oppose Proposal FP11-04. We, the subsistence fishers from Nulato, Yukon River District 4, oppose this proposal in its entirety. This proposal specifically targets subsistence fishers from districts 4 and 5. In addition to being discriminatory and biased, the proposal recommends eliminating 50 percent of the methods and means of harvest used by subsistence fishers in districts 4 and 5. This proposal blatantly

ignores the correlation between Chinook salmon entering the Yukon River and escapement numbers. A decrease in numbers at the mouth of the Yukon River will mean a decrease at the Yukon River headwaters. Methods and means of harvest are only alternatives that are used or not used based on the abundance or lack thereof. Unfortunately, it is the lack of harvestable numbers that is the problem. Elimination 50 percent of the methods and means of harvest has no correlation with numbers entering the Yukon River and escapement numbers. Periods of fishing and 'windows' for districts all along the Yukon River are the only regulations that must be implemented and will offer subsistence satisfaction for Yukon River fishers. The Federal Subsistence Board must regulate Yukon River fishers equally, not discriminately.

The Nulato Tribal Council and signed by 180 residents

Oppose Proposal FP11-04. I understand why there would be a desire by lower river fishermen to put forth proposals targeting up river fisheries. In light of all the proposals aimed at the lower river fisheries during the last two Alaska Board of Fisheries cycles it is understandable. But to paint all up river fish wheel fishermen with a broad brush as the ones who wrote the proposals targeting the lower river fishermen would be unfair. The use of fish wheels has been a tradition for a long period of time. Fish wheels are even licensed by the State as commercial fishing devices when there was commercial fishing (the last time in Y-4 district was in 1997). Certainly to assume that the majority of fish wheel fishermen are using fish wheels to practice customary and traditional selling of salmon is untrue.

Richard Burnham, Kaltag

Oppose Proposal FP11-04. We have had only two or three at most operating subsistence fish wheels in Ruby for the last few fishing seasons. We have had no commercial openings for at least nine years. Much of the fish caught in these fish wheels are shared within the community. Some restrictions on a fish wheel Chinook salmon harvest would be acceptable, but to shut fish wheels off from all other fish is highly unreasonable.

1st Chief Pat McCarty, 2nd Chief Don Honea Jr., and
Traditional Chief William McCarty Jr.,
Ruby Tribal Council, and Eight Residents of Ruby

Oppose Proposal FP11-04. Fish wheels are the best for getting the smaller, younger salmon. The water we are using our fish wheel in is shallow so that is the kind of fish we get. We have gladly complied with any requests to stop the wheel to let more fish go through, and we also didn't use the wheel when the runs were very poor. We are very interested in keeping the fish numbers up.

The David Helmer Family, Eagle

Oppose Proposal FP11-04. This proposal will put a hardship on the users if approved.

Koyukuk Tribal Council

Oppose Proposal FP11-04. This proposal is not based on scientific studies, which have clearly shown that fish wheels catch all age classes of fish and tend to catch smaller fish which helps to preserve the genetic integrity of the run. One of the main reasons is that fish wheels are not set to fish to the depths of a set net. Our wheel normally runs in five to seven feet of water while the larger Chinooks will often run at depths of ten feet or more. Another point in favor of fish wheels is that as the windows system becomes more prevalent it is so much easier to turn off and on a wheel instead of having to pull and reset a fish net.

Wayne and Scarlett Hall, Eagle

FP11-05 Executive Summary	
General Description	Proposal FP11-05 has two parts. It requests that the Federal Subsistence Board preclude customary trade of salmon in Yukon River Districts 4 and 5, and it requests that the Board preclude the use of salmon for dog food in Yukon River Districts 4 and 5, with the exception of whole Chinook salmon caught incidentally during a subsistence chum salmon fishery in the Koyukuk River drainage after July 10. *Submitted by Stanislaus Sheppard on behalf of the Mountain Village Working Group*
Proposed Regulation	*§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations of this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.* ***(iii) In Yukon River Districts 4 and 5, salmon may not be sold under customary trade.*** *§___. 27(c)(12) Transactions between a rural resident and others. In customary trade, a rural resident may trade fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.* ***(iii) In Yukon River Districts 4 and 5, salmon may not be sold under customary trade.*** *§___. 27(i)(3)(xxi) In the Yukon River drainage, Chinook salmon must be used primarily for human consumption and may not be targeted for dog food. Dried Chinook salmon may not be used for dog food anywhere in the Yukon River drainage.* ***In Yukon River Districts 4 and 5, salmon of any species may not be used for dog food. For the other portions of the Yukon River drainage, ~~W~~w****hole fish unfit for human consumption (due to disease, deterioration, deformities), scraps, and small fish (16 inches or less) may be fed to dogs. Also, whole Chinook salmon caught incidentally during a subsistence chum salmon fishery in the following time periods and locations may be fed to dogs:*

continued on next page

FP11-05 Executive Summary *(continued)*	
	(A) After July 10 in the Koyukuk River drainage; ~~*(B) After August 10, in Subdistrict 5D, upstream of Circle City.*~~
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	1. Support limitations on sale of subsistence-harvested salmon for cash that define "significant commercial enterprise," specify fish weight or number limits, and establish reporting requirements for cash sales of subsistence-harvested salmon. Regulations for customary trade may vary within regions but should be applied drainage-wide. 2. Oppose prohibiting use of salmon other than Chinook salmon for dog food in subdistricts 4 and 5. 3. Oppose restricting use of Yukon River Chinook salmon harvested incidental to other fisheries for dog food beyond that which is already provided by state regulation. 4. This issue should be addressed during a joint meeting of the three Regional Councils within the Yukon River drainage because this issue potentially affects subsistence users in the entire Yukon River drainage.
Written Public Comments	**1 Support** the __.27(c)(11) and (12) portion of Proposal FP11-05 **with modification** and **Oppose** the __.27(i)(3)(xxi) portion of Proposal FP11-05. **10 Oppose**

DRAFT STAFF ANALYSIS
FP11-05

ISSUES

Proposal FP11-05, submitted by Stanislaus Sheppard on behalf of the Mountain Village Working Group, has two parts. It requests that the Federal Subsistence Board preclude customary trade of salmon in Yukon River Districts 4 and 5, and it requests that the Board preclude the use of salmon for dog food in Yukon River Districts 4 and 5, with the exception of whole Chinook salmon caught incidentally during a subsistence chum salmon fishery in the Koyukuk River drainage after July 10.

DISCUSSION

The proponent states that precluding the sale of salmon under customary trade, and precluding the use of salmon for dog food, will increase the amount of subsistence-caught salmon available for human consumption, and will result in more salmon escaping to spawning grounds.

Existing Federal Regulation

> *§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.*
>
> *§___. 27(c)(12) Transactions between a rural resident and others. In customary trade, a rural resident may trade fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.*
>
> *§___. 27(i)(3)(xxi) In the Yukon River drainage, Chinook salmon must be used primarily for human consumption and may not be targeted for dog food. Dried Chinook salmon may not be used for dog food anywhere in the Yukon River drainage. Whole fish unfit for human consumption (due to disease, deterioration, deformities), scraps, and small fish (16 inches or less) may be fed to dogs. Also, whole Chinook salmon caught incidentally during a subsistence chum salmon fishery in the following time periods and locations may be fed to dogs:*
>
> > *(A) After July 10 in the Koyukuk River drainage;*
> >
> > *(B) After August 10, in Subdistrict 5D, upstream of Circle City.*

Proposed Federal Regulation

> *§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations of*

this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.

(iii) In Yukon River Districts 4 and 5, salmon may not be sold under customary trade.

§___. 27(c)(12) Transactions between a rural resident and others. In customary trade, a rural resident may trade fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.

(iii) In Yukon River Districts 4 and 5, salmon may not be sold under customary trade.

§___. 27(i)(3)(xxi) In the Yukon River drainage, Chinook salmon must be used primarily for human consumption and may not be targeted for dog food. Dried Chinook salmon may not be used for dog food anywhere in the Yukon River drainage. ***In Yukon River Districts 4 and 5, salmon of any species may not be used for dog food. For the other portions of the Yukon River drainage,*** *~~W~~whole fish unfit for human consumption (due to disease, deterioration, deformities), scraps, and small fish (16 inches or less) may be fed to dogs. Also, whole Chinook salmon caught incidentally during a subsistence chum salmon fishery in the following time periods and locations may be fed to dogs:*

(A) After July 10 in the Koyukuk River drainage;

~~(B) After August 10, in Subdistrict 5D, upstream of Circle City.~~

Regulatory History—Customary Trade

Title VIII of the 1980 Alaska National Interest Lands Conservation Act (ANILCA) recognized customary trade as a subsistence activity (ANILCA Sec. 803). Although undefined in ANILCA, the term *"*customary trade*"* was later defined in the implementing regulations as the *"*...exchange for cash of fish and wildlife resources regulated in this part, not otherwise prohibited by Federal law or regulation, to support personal or family needs, and does not include trade which constitutes a significant commercial enterprise" (36 CFR 242.4 and 50 CFR 100.4). The regulations also included the following prohibition: "No person may buy or sell fish, their parts, or their eggs which have been taken for subsistence uses, unless, prior to the sale, the prospective buyer or seller obtains a determination from the Federal Subsistence Board that the sale constitutes customary trade" (60 FR 31589 June 15, 1995). This prohibition was removed from regulations in 1999 (64 FR January 8, 1999).

By 2000, the Federal Subsistence Board recognized that Federal regulations regarding customary trade needed further clarification. The term "significant commercial enterprise" was not defined in regulation, and had the potential to confuse subsistence users and law enforcement personnel in deciding whether a particular transaction was permissible customary trade or an impermissible commercial enterprise. Without a more specific definition of *"*significant commercial enterprise,*"* law enforcement personnel concluded that the regulation was unenforceable. Additionally, there was a concern that allowing customary trade without further regulatory clarification would create a loophole for certain subsistence resources to become commodities on the commercial market, contrary to the intent of ANILCA.

In January 2003, after extensive public comment and careful review, the Board adopted regulations which provided a more enforceable regulatory framework for this long-standing subsistence practice. The regulations took effect on May 28, 2003 (68 FR 22308 April 28, 2003). With these regulations, the Board sought to accommodate customary and traditional practices (to the extent reasonably practicable) and to prevent abuses of the subsistence preference in the form of significant commercial transactions. The Board also recognized that it may be necessary to make future modifications to regulations in order to accommodate regional differences in customary trade.

In subsequent years, the Board reviewed and adopted two regional proposals defining upper limits for customary trade.[1] For the Bristol Bay Fishery Management Area, the Board limited the cash value per household of salmon exchanged in customary trade between rural residents to no more than $500.00 annually, and limited the cash value per household of salmon exchanged in customary trade between rural residents and others to no more than $400.00 annually. The Board also imposed a recording requirement for rural-to-others customary trade, but not for rural-to-rural customary trade. These regulations, proposed by the Bristol Bay Subsistence Regional Advisory Council, took effect on March 1, 2004 (69 FR 5026 February 3, 2004).

For the Upper Copper River District, the Board limited the total number of salmon per household exchanged in customary trade between rural residents to no more than 50% of the annual household harvest of salmon. The Board limited the cash value per household of salmon exchanged in customary trade between rural residents and others to no more than $500.00 annually. When taken together, customary trade to rural residents and to others may not exceed 50% of the annual household limit. Additionally, the Board imposed a recording requirement for both rural-to-rural customary trade and rural-to-others customary trade: customary trade sales must be immediately recorded on a customary traded recordkeeping form, the responsibility for which resides with the seller. These limits, proposed by Ahtna Inc., the Copper River Native Association, and the Chitina Native Corporation, took effect on April 1, 2005 (70 FR 13385 March 21, 2005).

Under Federal regulations, exchange of subsistence-caught fish, their parts, or their eggs for cash is currently allowed as described on page one of this analysis. Any exchange of fish parts or eggs requires some sort of initial processing. However, if fish are processed (that is, headed, frozen, dried, salted, smoked, canned, etc.), State health regulations may require that the processing meets State food health standards. Federal customary trade regulations may not exempt those involved from complying with State health regulations on the processing of foods. The difference between Federal subsistence and State health regulations may generate confusion among subsistence users, in part because small-scale sales of processed subsistence fish, allowed under Federal subsistence regulations, have not been the focus of State law enforcement intended to maintain State food health standards.

State regulations do not allow the exchange of subsistence-caught fish for cash, with the exceptions of herring roe on kelp in Southeast Alaska and subsistence-harvested finfish in the Norton Sound-Port Clarence area.

It is worth emphasizing that customary trade as defined by Federal regulation refers *only* to subsistence-caught fish or wildlife exchanged for cash, *provided such exchanges do not constitute a significant commercial enterprise*. Any exchanges of subsistence-caught fish for cash that rise to the level of significant commercial transactions are *not* customary trades, and are prohibited under current Federal regulation.

[1] The Board also reviewed and rejected or deferred a number of proposals restricting customary trade of salmon. See Appendix A.

Regulatory History—Salmon used for Dog Food

In 2001, the Federal Subsistence Board, following action by the State Board of Fish, adopted regulations requiring that in the Yukon River drainage, Chinook salmon are to be used primarily for human consumption and not for dog food, with the exceptions of fish unfit for human consumption and small fish (defined as "jack kings 16 inches or less") which may be fed to dogs (66 FR 10153 February 13, 2001).

The following year, the Board revised this regulation as shown on page one of this analysis. The revisions removed the term "jack kings" from the definition of small fish, and allowed whole Chinook salmon to be used as dog food if incidentally caught during a subsistence chum salmon fishery in the Koyukuk River drainage after July 10 and in Subdistrict 5D, upstream of Circle after August 10. These regulations have remained in effect to the present.

Customary Trade

In Alaska, subsistence foods and other wild resources are exchanged through barter, for cash, and, most commonly, through sharing between households. Wolfe et al. (2000) prepared a bibliography of some 121 studies of the distribution and exchange of wild resources in Alaska. Based on these studies, Wolfe et al. note that quantitative information on between-household sharing is reasonably robust, whereas quantitative information on barter and customary trade is mostly lacking. Community ethnographies often contain qualitative information about barter and customary trade, "but systematic information on frequency, volume, and prices is rarely provided" (Wolfe et al. 2000:3).

Since 2000, several studies of customary trade have been funded by the Federal Subsistence Board. These include Krieg et al. (2007), which describes sharing, barter, and customary trade in the Bristol Bay area; Magdanz et al. (2007), which describes customary trade and barter in the Seward Peninsula area; and Moncrieff (2007), which describes customary trade of salmon in three communities on the Yukon River—Alakanuk, Holy Cross, and Tanana.

Moncrieff (2007) interviewed 28 active fishers and elders from three communities on the Yukon River with knowledge of customary trade practices. Her results are relevant to the current proposal and are briefly summarized below.

In Alakanuk in 2004, Moncrieff and local research assistants interviewed seven study participants, three of whom had never sold subsistence-caught salmon. Interviewees indicated that a few Alakanuk villagers sold subsistence-caught salmon in limited quantities, which ranged from quart-sized bags of smoked salmon strips for $20.00 each to 5-gallon buckets of dried chum salmon for $200.00 each. One study participant noted that he had sold subsistence-caught salmon for 20 years, provided he had the extra fish, but in larger, albeit unspecified, quantities. Another participant mentioned that he traded with or sold salmon to people in a number of communities, including Hooper Bay, Chevak, Scammon Bay, Stebbins, and Anchorage. Only one of the seven study participants had bought subsistence-caught salmon within the past several years: a box of dried chum salmon for $40.00. The reasons Alakanuk study participants engaged in customary trade included the following: to help others who couldn't fish, to avoid wasting fish, and to raise cash to purchase household and subsistence supplies. In Alakanuk, customary trade appears to constitute a modest but important component of the local subsistence economy (Moncrieff 2007: 16–17).

In Holy Cross in 2004, Moncrieff and local research assistants interviewed eight study participants, seven of whom engaged in customary trade. Unlike Alakanuk villagers, people in Holy Cross often sold subsistence-caught salmon, including Chinook salmon strips and chum salmon split and half-dried.

Quantities of subsistence-caught salmon sold in customary trade varied year by year. One interviewee sold 18 salmon processed into six cases of pint jars. Other interviewees sold an average 30 to 40 pounds of salmon. Prices depended on species and quantity. Chinook salmon strips sold for $20.00 per quart bag or $16.00 to $20.00 per pound. Half-dried salmon bellies sold for $75.00 per case. Moncrieff notes that information about total yearly sales was difficult to obtain, but from the information gathered it appeared that study participants sold an average of $1,360 worth of salmon in customary trade. Cash from these sales was used to purchase gas and supplies for subsistence activities, household items, children's clothing, and to pay for utility bills. Moncrieff concludes that cash obtained through customary trade of salmon made further subsistence fishing possible, and provided small amounts of money for other expenses (Moncrieff 2007: 21–24).

In Tanana in 2005, Moncrieff and local research assistants interviewed 13 study participants, most of whom were active subsistence fishers. Of the 13 participants, six currently sold subsistence-caught salmon through customary trade and seven currently either did not sell or sold very small amounts of subsistence-caught salmon through customary trade. Among the seven less active participants in customary trade, only one had never sold fish. The others sold salmon in the past in amounts ranging from a few fish to 100 Chinook salmon. One interviewee had sold an average of 600 pounds for $6,000 annually, but in 2005 reserved most of his harvest to share with a large network of family and friends (Moncrieff 2007: 27–29).

The six active participants in customary trade each year sold fish to family and friends in Tanana, Manley Hot Springs, or Nenana. They also sold small amounts to people in Fairbanks, Salcha, Sitka, Minto, Minchumina, Ruby, Point Hope, and elsewhere. Most of the salmon were sold as strips or as dried fish, but were available in a variety of processed forms. Prices were fairly consistent for all fishers, and included the following:

Whole fish:	$1/pound
Fillets:	$2/pound
Half-dried:	$5/pound
Strips:	$15–$18/pound
Eating or dried fish:	$12–$18/pound
Canned strips:	$12–$15/tall can
Canned fresh fish:	$6/short can, $15/tall can, $8/jar

Moncrieff (2007: 28) did not report the salmon species associated with these sales nor the amounts earned from them, but noted that project participants used the income from customary trade to fund subsistence fishing activities.

Fishers interviewed in Moncrieff's study reported that they engaged in customary trade only if they first harvested sufficient fish for their own family's use and satisfied obligations to share fish with a network of extended family and friends. They did not subsistence fish primarily to sell fresh or processed salmon. Cash raised through customary trade appears to support other subsistence activities, and is used to pay for various household and other expenses.

Commercial or market-level transactions were not addressed in Moncrieff's report.

Based on Moncreiff's study, it is worth emphasizing that customary trade of subsistence-caught salmon takes a variety of forms, involves different kinds of social networks, and changes year-by-year,

depending upon a number of cultural, economic, and environmental factors. In general, customary trade of subsistence-caught salmon appears to increase the further upriver one travels on the Yukon (Moncrieff 2007). However, Moncrieff's study did not include the upper-most reaches of the Yukon River. Whether the pattern of increasing customary trade obtains further upriver is not known.

Two other studies of customary trade report results similar to Moncrieff (2007). Although focused on different regions, these reports, in conjunction with Moncreiff (2007), indicate similar patterns of customary trade. Some of the key findings from these studies include the following (Kreig et al. 2007; Magdanz et al. 2007):

- Customary trade is common but infrequent.
- Cash sales under customary trade are for relatively small sums of money, with a few exceptions.
- Customary trade is not part of the market economy. For example, prices for subsistence-caught fish and other resources exchanged under customary trade are determined by tradition, not by market forces (Krieg et al. 2007:90).

Recent Concerns

In 2008 and 2009, continued low salmon runs sparked renewed concerns about customary trade. The Yukon River Panel, an international body established under the Yukon River Salmon Agreement, met in December, 2008. Anticipating poor salmon runs in 2009, members of the Panel requested clarification from the Federal Subsistence Board regarding customary trade, specifically whether Federal regulations permitted sale of processed subsistence-caught fish for human consumption, whether there was any monitoring of subsistence-taken salmon in the Yukon, and whether there was any enforcement activity in the Yukon Management Area in 2007 and 2008.

In a reply dated February 20, 2009, the Board noted that Federal customary trade regulations "do not preempt State of Alaska food safety and health laws," and that such regulations "do not authorize the sale of processed fish by rural subsistence users who do not fulfill the requirements of Alaska Department of [Environmental] Conservation food safety laws." To address the issues of monitoring and enforcement, the Board forwarded the Yukon River Panel's request to Stanley Pruszenski, Special Agent-in-Charge of Law Enforcement of U.S. Fish and Wildlife Service Region 7, and to Gary Youngblood, Chief Ranger of the Gates of the Arctic National Park and Preserve and Yukon-Charley Rivers National Preserve.

In a letter to the Board dated March 13, 2009, Mr. Youngblood indicated that he had reviewed all of the Case Incident Reports for Yukon-Charley Rivers National Preserve for 2007 and 2008, but "was not able to locate any reference in those reports of issues or concerns dealing with customary trade." He further indicated that, based on discussions with his staff, there appeared to be "little opportunity within our jurisdictional boundaries for much customary trade." In his letter dated March 18, 2009, Mr. Pruszenski indicated that "We believe compliance with, and general support for, the management actions throughout major portions of the river are good." He cited the 2003 Final Rule (68 FR 22311 April 28, 2003) governing customary trade, in which the Board stated that it "does not believe that this rule will create an incentive for additional harvest of the resources nor result in additional fish being sold in the commercial markets." Mr. Pruszenski went on to note that "Service law enforcement programs have not prioritized monitoring this aspect of subsistence use."

The Fairbanks Fish and Game Advisory Committee (FFGAC) and the Eastern Interior Alaska Subsistence Regional Advisory Council were also concerned with customary trade in the context of low salmon runs.

The FFGAC and the Eastern Interior Council submitted to the Federal Subsistence Board in February, 2009 similar Special Action Requests to suspend all customary trade of Chinook salmon between rural residents and others. The FFGAC requested a suspension from June 2009 to June 2010 (FSA09-01), and the Council requested suspension from June 1, 2009 to April 1, 2010 (FSA09-02). The rationale to suspend customary trade in both Special Action Requests reads in part:

> Fishers in the lower Yukon, middle Yukon, and upper Yukon were supportive of limiting customary trade and believe the first priority is for rural residents to fish to feed their families. Even though customary trade may be a legal subsistence practice, many believe that selling fish to "others," especially when subsistence and escapement needs may not be met, should be stopped.

In its May 29, 2009 response, the Board determined that the requests did not meet the threshold for accepting a Special Action Request, and consequently denied them. The Board noted that low runs of Yukon River Chinook salmon were of longstanding conservation concern and that anticipated low 2009 runs were "being addressed through management actions that have been developed in coordination with fishers along the river." In addition, the Board emphasized that "[t]here was no evidence to indicate that customary trade allowed under Federal regulations has either led to or augmented declines in Yukon River Chinook salmon." The Board also pointed out that it treats all subsistence uses allowed under ANILCA as equally important, and that "there is no statutory or regulatory mechanism that expressly sets out a means for prioritizing amongst subsistence uses."

At the joint Western and Eastern Interior Alaska Subsistence Regional Advisory Council meetings on February 23–26, 2010, a number of concerns continued to be raised related to sales of subsistence-caught fish. Gene Sandone, representing the Yukon Delta Fisheries Development Association, noted that "more specific definition and standards and enforcement mechanisms are necessary to ensure enforceable limits on this rapidly growing trade" of subsistence-caught salmon, a statement supported by several Eastern and Western Interior Council members (WI&EIRAC 2010:148). One member of the Eastern Interior Council argued that customary trade "is completely unregulated, it's unrecorded, it's completely uncontrolled and in my view, it's completely unacceptable when we are having subsistence restrictions in place on the Yukon River." He went on to state that "This issue is going to make or break the recovery of our fisheries" (WI&EIRAC 2010:156).

Another Eastern Interior Council member, however, questioned the need for any further regulation on customary trade. "You have no commercial [fishing] anymore and now you're digging into customary trade. And what harm has it done, did it hurt the fisheries or is it going to? I'd like to know what's going on with that and find out from the people before we start making regulations, [and] rules." (EIRAC February 25, 2010:240).

The Chair of the Western Interior Council argued that abuses of the system need to be addressed: the problem "is when some people show up down in Anchorage with huge boxes full of smoked fish and it's all being traded at AFN. That's when things get out of whack." He also noted that trading fish for cash is "how fish is disseminated throughout the region away from the river." In addition, he said, the Western Interior Council recognizes sale of processed salmon as part of customary trade: "whether the Federal Government can tolerate it or the State can tolerate it, we consider that as customary use…it's just the way it works" (WI&EIRAC 2010:150–51).

Another member of the Western Interior Council mentioned his participation in the Customary Trade Task Force in 2001. He recalled that "there was a member from Ketchikan who said, well, I get my fish at AFN…And a lady from Nome says, well, we've got our fish from the Yukon for years." He also noted

that, where he lives, "a lot of the local residents on the Upper Kuskokwim are now buying their fish either from the Yukon or from downriver for subsistence needs. And then there are a lot of people that are working now that can't go out, but still depend on the [salmon] strips. So it really gets complicated when…the way people are getting their subsistence fish now is by paying those who are taking the time to go to camp" (WI&EIRAC 2010:151–52).

At its March, 2010 meeting, the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council discussed at length the issue of customary trade. A prominent problem was enforcement of existing regulations. The Council Chair mentioned the lack of adequate enforcement and specifically raised "concerns for enforcement on the customary trade that's developing into more of a commercial concern in the upper portions of the Yukon River." (YKRAC 2010:280). Another Council member also remarked on abuses to the system and stated: "If there was some way that we could really restrict customary trade to mean exactly what it's supposed to be….so we could restrict that and make it enforceable, then I'd be really, really happy and I know the other people would be too…" (YKRAC 2010:319).

Salmon used for dog food

In 1991, David Andersen (1992) researched the use of salmon for dog food in seven communities along or near the Yukon River, including Fort Yukon, Huslia, Kaltag, Manley Hot Springs, Russian Mission, St. Mary's and Tanana. In 2008, Andersen and Cheryl Scott (2010) conducted a similar study in these same seven communities. Their intention was to document the changes in the use of salmon for dog food between 1991 and 2008. Their findings include the following:

- The number of mushing households declined from 95 to 42. (Kaltag, which had 11 mushing households in 1991, had no mushers or sled dogs in 2008, and was dropped from data tables in Andersen and Scott 2010).
- The number of sled dogs declined from 1,363 to 671.
- The total pounds of fish harvested for sled dog food declined from 1,211,907 to 492,465.
- Of the fish fed to sled dogs, the percentage of salmon declined from 86.7% to 71.7%, while the percentage of non-salmon increased from 13.3% to 28.3%.
- In 2008, the use of sled dogs for sprint racing became the most frequent use, slightly ahead of hauling and transportation, as shown in the table below (Andersen and Scott 2010: 17):

Table 1. Use of Sled Dogs by Use Category, 1991 and 2008, With Surveyed Mushers Able to Identify Multiple Uses (Andersen and Scott 2010).

Use Category	**Percentage of Surveyed Mushers**	
	1991	**2008**
Transportation/Camping/Recreation	82%	63%
Hauling (wood, water, etc.)	56%	66%
Sprint Racing	54%	69%
Trapping	44%	22%
Watch Dog/ Guard Dog/ Bear Dog	44%	34%

Household Pets/ Scrap Dogs	29%	6%
Distance Racing	28%	13%
Breeding Dogs for Sale	27%	16%
Rent or Lease Dogs or Teams	21%	19%
Other Uses	13%	19%

Andersen and Scott (2010: 40) point out that the use of sled dogs in rural Yukon communities has been and continues to be directly linked with subsistence fishing:

> Fishing to feed dogs typically occurs as an extension of other subsistence or commercial fishing activities for families along the river. Fish represent an indispensable local source of good quality, low cost food for dog teams. Dogs, in turn, are used for winter transport and to support various subsistence, recreational, and racing activities. It is the availability of low cost food through fishing that makes the keeping of sled dogs in rural communities practical and possible. The connections between village sled dogs and fish are deeply rooted in both history and tradition, and the decision to have sled dogs in rural communities involves the full-time, year-round commitment to a lifestyle that is centered on fishing and dogs.

Andersen and Scott (2010: 54) also comment on the legal status of feeding subsistence-caught fish to dogs:

> Occasional questions from mushers and non-mushers alike regarding the legality of feeding subsistence-caught fish to dogs call for a brief review of relevant statutes. The inclusion of *transportation* in both the federal and state definitions of subsistence is widely interpreted as pertaining specifically to the maintenance of dog teams. Under the Alaska National Interest Lands Conservation Act (ANILCA), subsistence uses are defined as:
>
> > the customary and traditional uses by rural Alaska residents of wild renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or <u>transportation</u>; for the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade. (ANILCA Section 803). [emphasis added]

Under Alaska State law, subsistence uses means:

> the noncommercial, customary and traditional uses of wild, renewable resources by a resident domiciled in a rural area of the state for direct personal or family consumption, as food, shelter, fuel, clothing, tools, or <u>transportation</u>; for the making and selling of handicraft articles out of non-edible by-products of fish and wildlife resources taken for personal or family consumption and for the customary trade, barter, or sharing for personal or family consumption" (AS 16.05.940 (30)). [emphasis added]

Andersen and Scott (2010: 55) also point out that under ANILCA Section 804 the Federal Subsistence Board is directed to select amongst subsistence users, not uses, when shortages require such action:

> Under ANILCA there is no statutory or regulatory mechanism to prioritize amongst uses. To date, the Federal Subsistence Board has not distinguished or prioritized amongst recognized

> subsistence uses (i.e. subsistence for human food versus subsistence for use as dog food), basing its practice on the premise that all subsistence uses as defined in ANILCA qualify for the subsistence preference. Similarly, under state law, there has to date been no effort by the Alaska Board of Fisheries to attempt to define or differentiate between commercial and non-commercial dog teams. Thus, the maintenance of dog teams, regardless of how the dogs are used, currently qualifies as a subsistence use.

The only regulatory exception to this general statement is found at §___. 27(i)(3)(xxi), which requires that in the Yukon River drainage, Chinook salmon must be used primarily for human consumption and not targeted for dog food.

Two general points should be emphasized. First, both customary trade and customary and traditional uses of wild renewable resources for transportation purposes are included in the definition of subsistence. Second, if limitations based on conservation concerns are necessary, it may be appropriate to conduct an analysis under ANILCA Section 804, which requires the Board to select amongst subsistence users, not uses, based on the premise that all subsistence uses equally qualify for the subsistence preference.

Effects of the Proposal

The proposal seeks to limit customary trade of salmon under *§___*. 27(c)(11), which refers to customary trade between rural residents, and under *§___*. 27(c)(12), which refers to customary trade between rural residents and others. In both cases, the proposal would preclude customary trade of salmon in Yukon River Districts 4 and 5. Note that salmon species are not identified in the proposal, and the limitation refers to all species of salmon found in the Yukon River.

If adopted, the proposal would prohibit customary trade of salmon and thereby diminish the small amounts of cash generated by the sale of subsistence-caught salmon in Districts 4 and 5. However, the target of the proposal appears not to be legitimate customary trade, which, as described in the reports cited above, occurs in relatively limited quantities. Rather, the target of the proposal appears to be sales that may rise to the level of significant commercial enterprise. Such sales are already prohibited. The central problem appears to be enforcement of that prohibition. Further regulations limiting customary trade, which is recognized as a legitimate subsistence activity, may not be the appropriate avenue for curtailing sales that do not fall under the definition of customary trade.

The proposal also seeks to preclude the use of salmon of any species for dog food in Yukon River Districts 4 and 5. However, the use of sled dogs in rural Yukon communities is directly linked with subsistence fishing, which provides the bulk of sled dog food. The number of mushing households, and the number of dogs, has been in decline. Without subsistence-caught salmon, that trend would accelerate. Precluding subsistence-caught salmon for use as dog food would effectively end most use of sled dogs in the Yukon area.

Moreover, under ANILCA, all subsistence uses are equally permissible. The regulatory exception to this general statement is found at §___. 27(i)(3)(xxi), which requires that in the Yukon River drainage, Chinook salmon must be used primarily for human consumption and not be targeted for dog food.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP11-05.

Justification

The proposal would prohibit customary trade of salmon. Customary trade is defined by ANILCA as a subsistence activity. However, the target of the proposal appears not to be legitimate customary trade, but rather sales that may rise to the level of significant commercial enterprise. Such sales are already prohibited, although the threshold for a significant commercial enterprise has not been determined. The central issue appears to be enforcement of the prohibition, which remains problematic without a threshold determination. Further regulations limiting customary trade, however, which is recognized as a legitimate subsistence activity, may not be the most effective means to curtail sales that exceed the definition of customary trade.

The proposal also seeks to preclude the use of salmon of any species for dog food in Yukon River Districts 4 and 5. However, the use of sled dogs in rural Yukon communities is directly linked with subsistence fishing, which provides the bulk of sled dog food. The number of mushing households, and the number of dogs, has been in decline. Without subsistence-caught salmon, that trend would accelerate. Precluding subsistence-caught salmon for use as dog food may effectively end most use of sled dogs in the Yukon area.

Two general points mentioned above should be emphasized. First, both customary trade and customary and traditional uses of wild renewable resources for transportation purposes are included in the definition of subsistence. Second, if limitations based on conservation concerns are necessary, it may be appropriate to conduct an analysis under ANILCA Section 804, which requires the Board to select amongst subsistence users, not uses, based on the premise that all subsistence uses equally qualify for the subsistence preference.

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APPENDIX A

The Board has reviewed and rejected or deferred a number of proposals restricting customary trade of salmon.

The Board rejected Proposal FP04-02 to prohibit the customary sale of salmon from the Yukon when there is a designation of "stock of concern" (FSB 2003a:88). The Board reasoned that there was insufficient evidence about customary trade to warrant a restriction, that ANILCA provides for customary trade, that the proposal failed to recognized regional differences in customary trade, and that salmon run strength, which changes year to year, was not addressed.

The Board rejected Proposal FP04-03 to remove reference to salmon eggs as permissible under customary trade (FSB 2003a:95). The Board reasoned that removing reference to salmon eggs would not clarify regulatory language, contrary to the proponent's assertion that it would so clarify.

The Board deferred Proposal FP04-04 to prohibit the sale between rural residents and others of subsistence-caught salmon from Yukon River Districts 1, 2, and 3 and Kuskokwim River salmon (FSB 2003a:43). The proposal was on the consensus agenda, and the Board provided no commentary on it.

The Board rejected Proposal FP04-18 to prohibit the customary trade of subsistence-caught fish taken from Federal public waters on the Kenai Peninsula (FSB 2003b:15). The Board reasoned that ANILCA provides for customary trade, and that there was no evidence that such trade constituted a problem.

The Board rejected Proposal FP05-10 to establish limits on customary trade of salmon in the Cook Inlet Fishery Management Area (FSB January 2005). The proposal was on the consensus agenda, and the Board provided no commentary on it. However, the Southcentral Subsistence Regional Advisory Council recommended opposing the proposal because of low participation and harvest in the fishery. The Interagency Staff Committee and Alaska Department of Fish and Game concurred, which then put this proposal on the consensus agenda.

Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP11-05: Prohibit sale for cash, under customary trade,[1] to rural and non-rural residents of federal subsistence Chinook salmon harvested from Yukon River Fishery districts 4 and 5. Prohibit use of all salmon for dog food in districts 4 and 5, while allowing use of whole fish unfit for human consumption, scraps, or small fish (16 inches or less) in the remainder of the Yukon River drainage. In the Koyukuk drainage, restrict use of Chinook salmon incidentally caught during a subsistence chum salmon fishery for use as dog food to the time period after July 10.

Introduction: This proposal, submitted by Stanislaus Sheppard of the Mountain Village Working Group, seeks to prohibit sale of subsistence Chinook salmon for cash under existing federal regulations for customary trade and to limit use of salmon for dog food. State and federal regulations specifically allow customary trade of subsistence-harvested salmon and provide for use of salmon for dog food, but federal and state regulations differ on the definition of customary trade (i.e., sale of fish). State regulations generally prohibit sale of subsistence-harvested fish[2] while federal regulations allow for cash sales. Furthermore, under current state regulations in 18 AAC 34.005, all fish processed for commerce must be processed at a facility approved by Alaska Department of Environmental Conservation.[3]

Sale of subsistence-harvested fish, both processed and whole, is occurring in both urban and rural communities in Alaska, contrary to existing state and federal regulations. Discrepancies in state and federal regulations, plus state requirements regarding processing of fish to protect public health and safety, may leave some people vulnerable to citation under state and federal regulations. This is a significant issue for state resource managers, law enforcement agencies, and federal agencies that provide for the subsistence priority on federal lands and those waters where a federal subsistence management priority is claimed. In considering FP11-05, FP11-08, and FP11-09, the Federal Subsistence Board has the opportunity to adopt enforceable customary trade regulations that are based on the history and patterns of this use for this region of the state.

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[1] ***50 CFR 100.4 Definitions.***

Customary trade means exchange for cash of fish and wildlife resources regulated in this part, not otherwise prohibited by Federal law or regulation, to support personal and family needs; and does not include trade which constitutes a significant commercial enterprise.

[2] ***5 ACC 01.010 Methods, means, and general provisions***

(d) Unless otherwise specified in this chapter, it is unlawful to buy or sell subsistence-taken fish, their parts, or their eggs, except that it is lawful to buy or sell a handicraft made out of the skin or nonedible by-products of fish taken for personal or family consumption.

[3] ***18 AAC 34.005. Purpose and applicability***

(a) The purpose of this chapter is to provide for consumer protection and to protect public health by ensuring the processing, sale, and distribution of safe, wholesome, and properly labeled seafood products.
(b) The requirements of this chapter apply to
(1) persons who process seafood products to be sold as part of commerce and intended for human consumption;

Impact on Subsistence Users: It is not possible to accurately predict how this proposal will change harvest patterns or escapement of fish to the spawning grounds, because federal agencies lack information and data regarding existing levels of harvest and actual sales of Chinook salmon. Subsistence users in Districts 4 and 5 would have to secure other sources of food for their dogs, instead of Yukon River salmon harvested for subsistence under federal regulations. Because state and federal regulations differ, subsistence fishermen are vulnerable to prosecution when selling subsistence-harvested salmon on lands and waters outside the boundaries where federal subsistence jurisdiction is claimed. If adopted, this proposal would reduce the risk of citation for subsistence fishermen in the Yukon River drainage through established limitations on cash sales of subsistence-harvested salmon, a definition of "significant commercial enterprise," specified fish weight or number limits, and reporting requirements for cash sales of subsistence-harvested salmon.

Opportunity Provided by State: The department supports subsistence harvest and use of salmon consistent with existing state laws and regulations, including customary trade. However, 5 AAC 01.010 prohibits sale of subsistence-harvested fish, their parts, or their eggs unless otherwise specified in state regulation. There are only two exceptions listed in Chapter 5 of state regulations: Norton Sound-Port Clarence Area for salmon and Sitka Sound herring roe on kelp in Southeast Alaska.[4] Although state law allows harvest and use of finfishes such as salmon to feed dogs in support of transportation (i.e. AS 16.05.940(33)), the state prohibits targeting of Yukon River drainage Chinook salmon for dog food, with some exceptions.[5]

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. Since 2001, subsistence fishing time in the Yukon Area has been limited by a windows schedule, which was further restricted in 2008 and 2009 because of conservation concerns for Chinook salmon. Subsistence harvest levels for Chinook salmon have been within the amounts reasonably necessary for subsistence (ANS) ranges since 2001, except for 2002, 2008, and 2009. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005 being the three highest spawning escapement estimates on record. The escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on Canadian-origin stock by Alaskan fishermen decreased from an average of about 55% (1989–1998) to an average of about 44% from 2004 through 2008 (Howard et al. 2009). Although the subsistence harvest continues to remain stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60%, from an average of 100,000 annually (1989–1998) to the recent five-year

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[4] ***5 AAC 01.188 and 5 AAC 01.717***

[5] ***5AAC 01.240 Marketing and use of subsistence taken salmon***

(d) In the Yukon River drainage, king salmon must be used primarily for human consumption and may not be targeted for dog food. Dried king salmon may not be used for dog food throughout the Yukon River drainage, except that whole fish that are unfit for human consumption, scraps, and fish under 16 inches in length may be used to feed dogs. Whole king salmon caught incidentally during a subsistence chum salmon fishery in the following time periods and locations may also be fed to dogs:

(1) After July 10, in the Koyukuk River drainage;

(2) After July 20, in District 6 and the Tanana River Drainage

(3) *After August 10, in Subdistrict 5D, upstream of Circle City*

average (2005–2009) of nearly 23,000 fish. Considering all salmon species together, the overall total subsistence salmon harvest in the Yukon Area has declined by approximately 30% since 1990 (Fall et al. 2009:39).

Jurisdiction Issues: While standing on state and private lands (including state-owned submerged lands and shorelands), persons must comply with state laws and regulations and cannot sell subsistence-harvested fish, with two exceptions specified above. Federal subsistence regulations, particularly customary trade regulations, pertain only to fishing on and use of fish harvested on federal public lands and those waters where federal subsistence jurisdiction is claimed. The sale of subsistence fish harvested from all lands and waters (federal, state, or private) is restricted by state regulations except to the extent superseded by federal law on federal lands. The State of Alaska maintains jurisdiction of food safety and food processing regulations, regardless of where fish are harvested.

Other Issues: While the department supports prohibition of use of Yukon River Chinook salmon for dog food to the extent already in regulation, the department does not support prohibiting use of other salmon species as dog food. Such a prohibition would represent a significant and additional restriction to subsistence in the absence of a conservation concern.

The Alaska Department of Fish and Game supports adoption of enforceable federal customary trade regulations that specify limits on cash sales and establish reporting requirements. However, any restrictions or regulations that specify limits and reporting requirements should be applied drainage-wide, not just to specific districts as proposed.

Recommendations:

1. Support limitations on sale of subsistence-harvested salmon for cash that define "significant commercial enterprise," specify fish weight or number limits, and establish reporting requirements for cash sales of subsistence-harvested salmon. Regulations for customary trade may vary within regions but should be applied drainage-wide.
2. Oppose prohibiting use of salmon other than Chinook salmon for dog food in subdistricts 4 and 5.
3. Oppose restricting use of Yukon River Chinook salmon harvested incidental to other fisheries for dog food beyond that which is already provided by state regulation.
4. This issue should be addressed during a joint meeting of the three Regional Councils within the Yukon River drainage because this issue potentially affects subsistence users in the entire Yukon River drainage.

Cited References:

Fall, J.A., C. Brown, M.F. Turek, N. Braem, J.J. Simon, W.E. Simeon, D.L. Holen, L. Naves, L. Hutchinson-Scarbrough, T. Lemons, V. Ciccone, T.M. Krieg, and D. Koster. 2009. Alaska subsistence salmon fisheries 2007 annual report. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 346, Anchorage.

Howard K.G., S.J. Hayes, and D.F. Evenson. 2009. Yukon River Chinook salmon stock status and action plan 2010; a report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Special Publication No. 09-26, Anchorage.

WRITTEN PUBLIC COMMENTS

Support the __.27(c)(11) and (12) portion of Proposal FP11-05 **with modification** and **Oppose** the __.27(i)(3)(xxi) portion of Proposal FP11-05. If restrictions are made to subsistence fishing in any district during a run of salmon, the practice of selling for money whole salmon (or as is commonly practiced now, strips and canned strips) under the umbrella of customary trade should not be allowed in any district on the Yukon River. I don't oppose trading or bartering their parts in any district.

I assume the proponents want to eliminate the use of salmon for dog food. I oppose any proposal that would restrict the use of salmon for dog food. The use of dog teams is woven into the very fabric and history of this state. Fishing for, drying, and feeding salmon to sled dogs was and is as important to the subsistence lifestyle of people along the Yukon and its tributaries as any other activity. The sad part of this discussion is the number of salmon used to feed sled dogs has declined dramatically. Dave Anderson, who worked for the Subsistence Division of the Alaska Department of Fish and Game in Fairbanks, recently finished his final report on the status of sled dogs. His report documents the status and numbers of dog teams along the Yukon River and its tributaries from 1991 to the present. His findings are that there has been a dramatic decline in the total number of sled dogs as well as the numbers of dog teams. My feeling is that as long as there is still a sled dog pulling a dog sled somewhere along the Yukon, it should be able to eat a salmon taken from the Yukon River.

Richard Burnham, Kaltag

Oppose Proposal FP11-05. Customary trade has been in place long before any Fish and Wildlife or State Board of Fisheries and Game were ever established. There is not enough money in the budgets to enforce this proposal. This is the Native way of like, to share, and eventually get something in return.

Letter Signed by Thirty-seven Residents of Galena

Oppose Proposal FP11-05. You are going to tell us to cut our nets in half and with a warmer river the fish swim deeper so how can we even catch a fish with a short net? The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose FP11-05. All districts, with the exception of districts 4 and 5 would be allowed customary trade on harvested fish. Again, targeting one or two regions for something that is abused river-wide doesn't make sense. This proposal only enflames a situation where people are already skeptical of what's being planned for their summer fishing. One small group trying to deprive the two regions of their traditional and customary harvest needs.

The situation we see in villages and what residents are facing today is very troublesome. How they provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river enjoy, we must understand that this river and the people who live along this great river are one and the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy

and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we must understand the changes we see around us today: climate changes, water temperatures increasing, and changes in the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. I encourage the Federal Subsistence Board to look at the good that came when people along the Yukon River worked together, set aside their differences, and sought a common goal. Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing short of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

Oppose Proposal FP11-05. Since the beginning of the last century, it has been customary to trade fish among the people of the upper Yukon. For example, Biederman fish camp loaded bales of dried chum onto steamships all through the 1940s. Fishers on the upper river do not feed Chinook to their dogs, except scraps that are present in the preparation of the canning smoking process. The feeding of whole Chinook or dried Chinook is not a practice on the upper Yukon and should not be encourage at any date of the fishing season. It is a stock of concern, is intensely managed, and should only be food for people Feeding fall chum to dogs as winter feed, dried or frozen whole, has been a customary practice since time immemorial. It does not conflict with subsistence practices. During the last chum crash in the late 1990s, the upper river people in the Eagle area voluntarily did not fish for fall chums and for four years we truck in fish. This was a great hardship, but was done in recognition of the need to be conservation minded. We use our dog teams for subsistence activities such as trapping, wood and water hauling, and transportation. This proposal has no sound scientific reasoning and we are greatly opposed to it.

Don and Jan Woodruff, Eagle

Oppose Proposal FP11-05. It is my belief the Mountain Village Working Group has never fished in the districts 4, 5, or 6 and, therefore, has no idea of our subsistence life style. I notice that they didn't take any measures to reduce their take of subsistence catch fish, but did make proposals affecting Yukon River fishing districts 4, 5, and 6. I live on the Yukon River in District 4 and have always fished this district. As you know, it was our district that submitted proposal to reduce take of Chinook salmon last year (2009) which helped get Chinook salmon past the border in record numbers at Eagle, Alaska. I ask the Federal Subsistence Board to reject this proposal as it attempts to regulate subsistence fishing in our District 4.

Fred Huntington Sr., Second Chief, Louden Tribal Council

Oppose Proposal FP11-05. The Mountain Village Working Group (MVWG) is misinformed on the facts presented in this proposal. The first misinterpretation is that the fishermen in the Interior are cutting Chinook salmon for dog feed. There are so few openings and so few fish that these fish are prized and valued too highly to be fed to the dogs. Dogs don't care to eat Chinook salmon due to the high oil content.

The fishermen in Interior Alaska are not blaming the lower Yukon fishermen, they are blaming the commercial sales of king salmon and chum salmon for the shortages of fish making it to the spawning ground. MVWG states that the fishermen of the Interior are aggressively fish for dogs and customary trade which is not true. There is no commercial fishing in the Interior. Commercial fishing is a major culprit in the shortages of fish, selling the resource will only deplete the stocks faster. Commercial fishermen are aggressively fishing to line their pockets with monetary goals in mind. The Interior fishermen are fishing to feed their families and community members. The fishermen in the central part of

the state don't have the luxury, privilege, or pleasure of selling whole fish. The only districts that get to sell fish are Y-1 and Y-2. These fish leave the area and are gone once the sale is made.

Not all the fish caught are edible fish. These inferior fish are cut for dogs. The high quality fish are cut, cured, and dried to eat during the winter months. We are going through hard times in the Interior too but like it was stated before we can't sell fish. If we could sell whole fish, then we wouldn't have to cut them; it is easier to sell them, take the money, and be happy. The problem is commercial fish is depleting the fish. The ADF&G should be the target of MVWG, they are the ones who determine who get a commercial season. ADF&G could also give us a commercial season too. ADF&G caters to and gives Y-1 and Y-2 special privileges such as commercial seasons and now MVWG wants to take customary trade from us too? Money is killing the fisheries and commercialization will destroy the fish. We are not wiping out the fish in Y-5, there are fewer fishermen in Y-5 and we are allocated few fish as they disperse through Alaska.

James E. Roberts, Tanana Tribal Council

Oppose Proposal FP11-05**.** Using chum salmon for dog food is a customary and traditional use of this resource. Also, this proposal unfairly targets fishers of districts 4 and 5 who may have dog teams. Utilizing chum salmon as dog food has been a practice in our area for many generations. Several families in our fishing area utilize dog teams as a means of transport for hunting, fishing, trapping, hauling firewood *etc*. Given the increasing price of fuel, dog teams are becoming an even more viable option for engaging in the subsistence activities already mentioned and are currently undergoing a resurgence in our area. Dog team travel and care also provide an excellent means for passing on subsistence values to our children. In our view, harvest of chum salmon for our dogs and Chinook salmon for our selves, as part of a seasonal subsistence cycle, does not get much closer to the true root of what subsistence is.

Mike McDougall and Sonja Sager, Eagle

Oppose Proposal FP11-05. Our family uses the chum to feed our dogs. We could not feed them any other way. It would destroy our way of like if we couldn't fee the dogs the chum salmon, because we would have to get rid of these dogs. We spend much of the winter out dog mushing. We do not feed the Chinook salmon to the dogs. They are a delicacy for us. We only give the dogs the heads and guts.

The David Helmer Family, Eagle

Oppose Proposal FP11-05. This proposal will put a hardship on the users if approved.

Koyukuk Tribal Council

Oppose Proposal FP11-05. Chums have been the customary food for dog teams for as long as dog teams have been around. The teams here in Eagle are used for subsistence purposes of hauling wood, water, and general transportation, as well as recreation. The cost and difficulty of getting tons of food in over the road system is a huge hardship to most people. It would force many people to get rid of their teams, culling them however they can, and would help end the subsistence way of life as many people would not be able to continue because of the cost of fuel, cost of maintenance to equipment and cost of equipment in general. The subsistence way of life has slowly been forced to the wayside with just a few of us struggling to hold on.

Wayne and Scarlett Hall, Eagle

FP11-07 Executive Summary	
General Description	Proposal FP11-07 requests that the use of drift gillnets be prohibited for the harvest of salmon in Districts 4 and 5 of the Yukon Area, to allow more fish to escape to the spawning grounds. Both Federal and State regulations do not allow the use of drift gillnets for the harvest of salmon in District 5. Therefore, the proposal only applies to the use of drift gillnets for the harvest of salmon by Federally-qualified users in the Federal public waters of District 4 (Subdistricts 4A, 4B and 4C). *Submitted by Stanislaus Sheppard of Mountain Village Working Group*
Proposed Regulation	*§___.27(i)(3)(xv) In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets~~, except as follows~~:* *~~(A) In Subdistrict 4-A upstream from the mouth of Stink Creek, you may take king salmon by drift gillnets less than 150 feet in length from June 10 through July 14, and chum salmon by drift gillnets after August 2;~~* *~~(B) In Subdistrict 4-A downstream from the mouth of Stink Creek, you may take king salmon by drift gillnets less than 150 feet in length from June 10 through July 14.~~* *~~(C) In the Yukon River mainstem, Subdistricts 4B and 4C, with a Federal subsistence fishing permit, you may take Chinook salmon during the weekly subsistence fishing opening(s) by drift gillnets no more than 150 feet long and 35 meshes deep from June 10 through July 14.~~*
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	**Support with modification:** **Oppose** prohibition of drift gillnets in Subdistrict 4-A. **Support** prohibition of drift gillnets in subdistricts 4-B and 4-C.
Written Public Comments	**11 Oppose**

DRAFT STAFF ANALYSIS
FP11-07

ISSUES

Proposal FP11-07, submitted by Stanislaus Sheppard, Mountain Village Working Group, requests that the use of drift gillnets be prohibited for the harvest of salmon in Districts 4 and 5 of the Yukon Area, to allow more fish to escape to the spawning grounds. Both Federal and State regulations do not allow the use of drift gillnets for the harvest of salmon in District 5. Therefore, the proposal only applies to the use of drift gillnets for the harvest of salmon by Federally-qualified users in the Federal public waters of District 4 (Subdistricts 4A, 4B and 4C).

DISCUSSION

Current Federal and State regulations allow subsistence users to utilize drift gillnets to harvest salmon in the lower 500 miles of the Yukon River, from the mouth upstream through Subdistrict 4A near the village of Koyukuk **(see Federal Subsistence Fisheries Jurisdiction map)**. In Subdistricts 4B and 4C, only Federally-qualified users may utilize drift gillnets for the harvest of Chinook salmon from June 10 to July 14 **(Map 1)**. It should be noted that, if this proposal were adopted, Federally-qualified users would still be able to fish with drift gillnets for Chinook and chum salmon under State regulations in State waters in Subdistrict 4A.

Existing Federal Regulation

Yukon-Northern Area – Salmon

§___.27(i)(3)(xv) In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets, except as follows:

(A) In Subdistrict 4A upstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14, and chum salmon by drift gillnets after August 2;

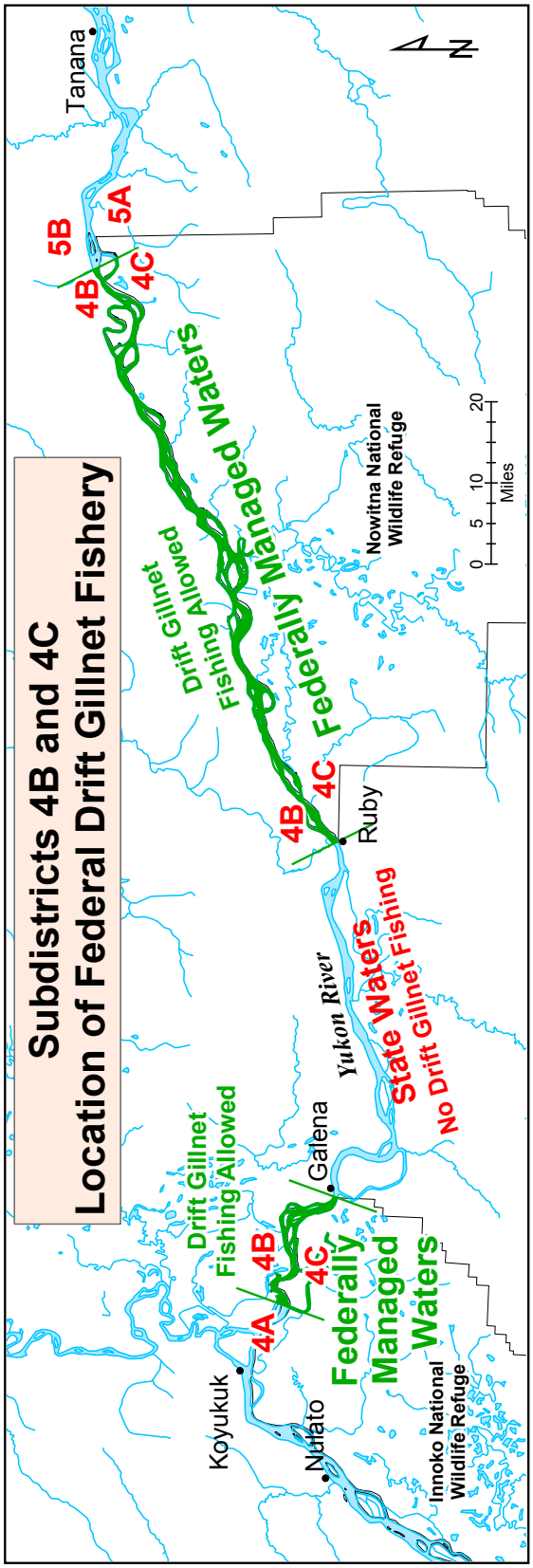
(B) In Subdistrict 4A downstream from the mouth of Stink Creek, you may take Chinook salmon by drift gillnets less than 150 feet in length from June 10 through July 14.

(C) In the Yukon River mainstem, Subdistricts 4B and 4C, with a Federal subsistence fishing permit, you may take Chinook salmon during the weekly subsistence fishing opening(s) by drift gillnets no more than 150 feet long and no more than 35 meshes deep from June 10 through July 14.

Proposed Federal Regulation

Yukon-Northern Area – Salmon

§___.27(i)(3)(xv) In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets~~, except as follows~~:


Subdistricts 4B and 4C
Location of Federal Drift Gillnet Fishery
Tanana
5B
5A
4B
4C
Drift Gillnet Fishing Allowed
Federally Managed Waters
Nowitna National Wildlife Refuge
0 5 10 20
Miles
4B
4C
Ruby
Yukon River
State Waters
No Drift Gillnet Fishing
Galena
Drift Gillnet Fishing Allowed
4B
4C
4A
Federally Managed Waters
Koyukuk
Nulato
Innoko National Wildlife Refuge
N

Map 1.

~~*(A) In Subdistrict 4-A upstream from the mouth of Stink Creek, you may take king salmon by drift gillnets less than 150 feet in length from June 10 through July 14, and chum salmon by drift gillnets after August 2;*~~

~~*(B) In Subdistrict 4-A downstream from the mouth of Stink Creek, you may take king salmon by drift gillnets less than 150 feet in length from June 10 through July 14.*~~

~~*(C) In the Yukon River mainstem, Subdistricts 4B and 4C, with a Federal subsistence fishing permit, you may take Chinook salmon during the weekly subsistence fishing opening(s) by drift gillnets no more than 150 feet long and 35 meshes deep from June 10 through July 14.*~~

Relevant State Regulations

Yukon-Northern Area – Salmon

5 AAC 01.220. LAWFUL GEAR AND GEAR SPECIFICATIONS. (a) Salmon may be taken only by gillnet, beach seine, a hook and line attached to a rod or pole, handline, or fish wheel, subject to the restrictions set out in this section, 5 AAC 01.210, and 5 AAC 01.225 – 5 AAC 01.249.

(d) In District 4, commercial fishers may not take salmon for subsistence purposes during the commercial salmon fishing season by gillnets larger than six-inch mesh after a date specified by emergency order issued between July 10 and July 31.

(e) In Districts 4, 5, and 6, salmon may not be taken for subsistence purposes by drift gillnets, except as follows:

1) In Subdistrict 4-A upstream from the mouth of Stink Creek, king salmon may be taken by drift gillnets from June 10 through July 14,and chum salmon may be taken by drift gillnets after August 2;

2) In Subdistrict 4-A downstream from the mouth of Stink Creek, king salmon may be taken by drift gillnets from June 10 through July 14;

3) No person may operate a drift gillnet that is more than 150 feet in length during the seasons described in (1) and (2) of this section.

Extent of Federal Public Waters

For purposes of this discussion, the phrase "Federal public waters" is defined as those waters described under 36 CFR 242.3 and 50 CFR 100.3. The Federal public waters addressed by this proposal are those portions of the Yukon River located within, or adjacent to, the external boundaries of the Innoko, Nowitna, Koyukuk and Kanuti National Wildlife Refuges in District 4 and the Yukon Flats National Wildlife Refuge and Yukon-Charley Rivers National Preserve in District 5 **(see Federal Subsistence Fisheries Jurisdiction map)**.

Regulatory History

State of Alaska

In November 1973, the Alaska Board of Fisheries (BOF) prohibited the use of drift gillnets for commercial fishing in the Yukon River upstream of the confluence with the Bonasila River. The Bonasila River is near the current boundary line between Districts 3 and 4. This action was based on the assessment that drift gillnet use was historically low in the middle and upper Yukon River drainage and the need to prevent possible gear conflicts in the future (ADF&G 2001).

Subsistence users were allowed to continue using drift gillnets throughout the Yukon River drainage until the 1977 season. In December 1976, the BOF prohibited the use of drift gillnets for subsistence fishing in the middle and upper Yukon Areas (Districts 4-6). The BOF discussions at that time indicated that the possible increase in the use of drift gillnets could seriously adversely impact both the conservation and allocation of middle and upper Yukon River salmon stocks, which were being harvested at maximum levels by increasing the harvest of salmon stocks currently being harvested at maximum levels and change the existing alloction to favor subsistence users in the middle and upper Yukon River (ADF&G 2001).

In 1981, drift gillnets were again allowed for subsistence salmon fishing in Subdistrict 4A upstream from Stink Creek. Then in 1995, the remainder of Subdistrict 4A, below Stink Creek, was reopened to the use of drift gillnets for subsistence fishing.

Proposals requesting to use drift gillnets for subsistence salmon fishing in Subdistricts 4B and 4C were submitted to the BOF by residents of those areas in 1987, 1989/90, 1991/92, 1993/94, 1997, 2001, and 2004. In 1994, the BOF questioned the need for drift gillnets to provide for adequate subsistence opportunity. State staff comments suggested that at that time it did not appear necessary (ADF&G 2001). The BOF stated that the Alaska Department of Fish and Game (ADF&G) could allow increased time for subsistence fishing with other gear types by Emergency Order, as an alternative, if subsistence needs were not being met. In January 2001 and 2004, the BOF again denied similar requests based on concerns of increased harvests and considered the proposals to be a new and expanding fishery that could target a stock of yield concern. In the fall of 2000, Yukon River Chinook and fall chum salmon were designated as stocks of "yield concern[1]" and summer chum salmon was designated as a stock of "management concern[2]".

[1]Yield concern: a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock's escapement needs. "Chronic inability" refers to the continuing or anticipated inability to meet expected yields over a four to five year period, which is roughly equivalent to the generation time of most salmon species. "Expected yields" refers to levels at or near the lower range of the recent historic harvests if they are deemed sustainable. A yield concern is less severe than a management concern, which refers to a stock that fails to consistently achieve biological escapement or optimal escapement goals (ADF&G and BOF 2000).

[2]Management concern: a concern arising from a chronic inability, despite use of specific management measures, to maintain escapements for a stock within the bounds of the SEG, BEG, OEG, or other specific management objectives for the fishery. "Chronic inability" means the continuing or anticipated inability to meet escapement objectives over a four to five year period, which is roughly equivalent to the generation time of most salmon species. A management concern is not as severe as a conservation concern, which refers to a stock that fails to consistently meet its sustained escapement threshold (SET) (ADF&G and BOF 2000).

Federal Subsistence Management Program

In March 2003, the Western Interior Alaska Regional Advisory Council (Council) submitted proposal FP04-05 (OSM 2003) to the Federal Subsistence Board (Board), which requested that the subsistence drift gillnet fishery on the Yukon River include Subdistricts 4B and 4C. The proposal requested that regulations allow Chinook salmon to be harvested by drift gillnets less than 150 feet in length from June 10 through July 14, and chum salmon to be harvested by drift gillnets after August 2. The State subsistence drift gillnet fishing area in Subdistrict 4A is about 16 miles downriver from Galena and is primarily utilized by the residents of the village of Koyukuk. However, fishers from Huslia, Galena, and Ruby also travel to Subdistrict 4A to drift gillnet fish because of the lack of legal drift gillnet fishing opportunities near their communities. The Council posited that spreading the fishing pressure to other areas would help relieve the competition for the few desirable fishing sites in Subdistrict 4A, especially near the village of Koyukuk, without increasing the harvest of Chinook salmon. Federal and State fisheries managers expressed concerns that establishing a Subdistrict 4B and 4C drift gillnet fishery had the potential for harvest expansion beyond the historic level and could lead to a shift in the stocks harvested (i.e. more Canada-bound fish). During deliberation at its Fall 2003 meeting, the Council supported its proposal, with modification, to include the conservation measure of limiting nets used for subsistence salmon fishing to a maximum of 7-inch stretch mesh, no deeper than 35 meshes. The Eastern Interior Alaska and Yukon-Kuskokwim Delta Subsistence Regional Advisory Councils opposed the original proposal to expand the use of drift gillnets. The proposal and the Council's recommendation to modify it were considered, but rejected, by the Board in December 2003.

In March 2004, the Council submitted proposal FP05-04 to the Board, which again requested expansion of the subsistence drift gillnet fishery on the Yukon River to include Subdistricts 4B and 4C, as well as District 5 (OSM 2005). At its Fall 2004 meeting, the Council recommended that the proposal only apply to Subdistricts 4B and 4C; that it be limited to the harvest of Chinook salmon from June 10 through July 14; the harvest of chum salmon after August 2; and that drift gillnets could only be used during the final 18 hours of the Federal subsistence fishing periods. The Council modified what they initially sought in their proposal to alleviate some of the concerns of Federal and State fisheries managers and the Eastern Interior Alaska Subsistence Regional Advisory Council.

In January 2005, the Board adopted FP05-04 with modification to allow the harvest of only Chinook salmon (and not chum salmon) by drift gillnet in the Federal public waters of Subdistricts 4B and 4C (**Figure 1**) during the final 18 hours of the weekly regulatory opening(s) under a Federal subsistence fishing permit.

During the 2007 fishing season, the State and Federal regular subsistence fishery in Subdistricts 4B and 4C was liberalized, by emergency order and special action, from two 48-hour openings per week to one 5-consecutive days opening per week beginning on July 1. In response, the Federal in-season manager liberalized the Federal drift gillnet fishing time (final 18 hours of the weekly regulatory openings) by a similar, pro-rated amount to two 22-hour periods per opening. On July 6, 2007, the State and Federal regular subsistence fishery in Subdistricts 4B and 4C was further liberalized to 7 days per week by emergency order and special action. The Federal drift gillnet fishing time was liberalized by a similar pro-rated amount to two 31-hour periods for the week of July 8.

In December 2007, the Board adopted FP08-15, which allowed the use of drift gillnets for Chinook salmon harvest during the entire weekly subsistence opening(s) in Subdistricts 4B and 4C. At the same time, the Board rejected FP08-16, which requested the elimination of the Federal drift gillnet fishery in Subdistricts 4B and 4C, finding no basis for such a request (OSM 2007).

Gear Used in the Middle Yukon River

Loyens (1966) describes the importance of salmon to the people of the Yukon River as "the staple in the native food supply…and that fishing was the most important subsistence activity" and it remains highly important today. Among salmon, Chinook salmon are foremost in importance for most people, followed by chum and coho salmon (Pope 1979).

Historically, the primary salmon fishing gear types were fish traps used together with fish fences, gillnets, and dip nets prior to the introduction of fish wheels around the turn of the twentieth century (Loyens 1966). Around 1910, people along the Yukon began to use the fish wheel almost exclusively in the middle and upper river areas, establishing large camps on the Yukon River (McFadyen Clark 1981).

Drift gillnets were historically used by the Deg Hit'an and Koyukon Athabaskan people in the middle Yukon as an alternative to fish traps or dip nets (Osgood 1940). Drift gillnets were primarily used to catch Chinook salmon and were deployed from a canoe or suspended between two canoes on the main river. During the 1950s, the use of drift gillnets became more common, facilitated in part by the introduction of power motors.

Drift gillnets have been used by some residents of Galena for many years. When drift gillnets were again allowed in the upper portion of Subdistrict 4-A in 1981, fishers from Galena began making the 16-mile trip downstream to drift for Chinook salmon. Typically, unrelated individuals fish together during the evenings for several hours at a time (Marcotte 1990). This method of salmon fishing can be effective for catching Chinook and fall chum salmon with economy of effort since separate trips are not needed to reset or pull gear at the beginning and ends of the open fishing periods (Marcotte 1990).

The most recent data shows that fish wheels comprise 7% of the reported combined subsistence and personal use gear types on the Yukon River, with set gillnets comprising 48% and drift gillnets comprising 37% (Busher et al. 2009:11 and **Table 1**). In areas which require subsistence permits in District 5 (Yukon River) and in District 6 (Tanana River), the primary gear types are fish wheels (20%) and set gillnets (80%). Gillnets have become the predominant gear type for salmon subsistence fishing. The current trend throughout the Yukon River is for an increasing use of drift gillnets and a decreasing use of set gillnets and fish wheels (Wolfe and Scott 2010).

Biological Background

The stated intent of the proposal is to allow more salmon to escape to the spawning grounds by prohibiting use of drift gillnets in Districts 4 and 5. As noted earlier, in Federal subsistence regulations this relates to gear allowed for Chinook salmon subsistence fishing in District 4. Status of Yukon River Chinook salmon stocks is fully described in the staff analysis for Proposal FP11-02.

Chinook Salmon Subsistence Harvests

Chinook salmon subsistence harvests have been approximately 50,000 fish annually in the Alaskan portion of the Yukon River over the past 20 years. Subsistence harvest levels of Chinook salmon declined in 2008 to approximately 43,700 fish (Busher et. al. 2009) and declined further in 2009 to approximately 33,000 fish (JTC 2010) due, in both years, to below average runs and resultant harvest restrictions.

More, detailed information on total harvest throughout the Alaska portion of the Yukon River can be found in the analysis of fisheries proposal FP11-02.

Table 1. Chinook salmon subsistence harvest totals in District 4 by community of residence, as estimated from postseason survey, returned permits and test fish projects, 1998–2008

Community	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	11-year Average
Anvik	1,025	776	205	608	708	1,286	1,588	1,206	958	1,321	1,433	1,010
Grayling	2,177	2,476	839	1,077	2,249	1,613	1,869	1,878	1,702	1,500	1,761	1,740
Kaltag	1,870	2,051	1,074	1,506	1,435	1,838	1,656	3,367	2,833	1,456	2,403	1,954
Nulato	4,147	1,799	1,083	2,127	1,773	2,531	5,199	2,749	2,707	2,431	1,250	2,527
Koyukuk	800	506	175	449	323	860	400	396	835	811	513	552
Galena	1,668	2,539	788	1,755	1,522	3,112	3,296	2,864	2,380	2,511	2,232	2,242
Ruby/Kokrines	3,891	777	1,577	2,033	954	631	1,620	1,193	304	1,594	637	1,383
District 4 Total (Excluding Koyukuk River)	***15,578***	***10,924***	***5,741***	***9,555***	***8,964***	***11,871***	***15,628***	***13,653***	***11,719***	***11,624***	***10,229***	***11,408***
												4-year Avg
Federal Drift Gillnet fishery, 4B & 4C								54	19	13	44	33
Percent of harvest by Galena and Ruby residents								1.33%	0.71%	0.32%	1.53%	0.95%
Percent of total Distrct 4 harvest								0.40%	0.16%	0.11%	0.43%	0.28%

Information in this analysis focuses on Chinook salmon subsistence harvest levels in District 4, where from 1998 to 2008, Chinook salmon subsistence harvests, excluding the Koyukuk River, averaged 11,408 fish annually (**Table 1**). The average Chinook salmon harvest during those same years was 2,242 fish in Subdistrict 4B (Galena) and 1,383 fish in Subdistrict 4C (Ruby) (Busher et. al. 2009).

Federal Drift Gillnet Fishery, Subdistricts 4B and 4C

The Federal drift gillnet fishery in 4B and 4C has been in place since 2005. The majority of Federally-qualified subsistence users fishing with drift gillnets in Subdistricts 4B and 4C are residents of Galena and Ruby. In the first five years of this fishery, an average of 35 permits have been issued per year; with an average of 7 permits actually fished. A total of 188 Chinook salmon have been harvested; an average of 38 fish per year (**Table 2**).

Table 2. Subdistricts 4-B and 4-C summary of federal permits issued, permittee post-season reporting, effort and harvest, 2005-2009.

					Reported Harvest	
Year	Number of permits issued	Number of permits returned	Total permits fished	Total hours fished	Chinook salmon	Chum salmon and other spp.
2005	70	64	9	60	54	1
2006	18	18	5	18	19	11
2007	12	12	4	28.5	13	0
2008	25	25	10	82	44	0
2009	14	14	5	29.5	58	8
TOTAL	**139**	**133**	**33**	**218**	**188**	**20***
AVERAGE	**35**	**34**	**7**	**40.5**	**38**	**4**

* All chum salmon

Analysis of harvest amounts for 2005-2008, the most recent years for which there are comparable subsistence harvest data for all of District 4, show that the amount of Chinook salmon harvest in the Federal drift gillnet fishery represents approximately 1% of the amount harvested by Galena and Ruby residents, and approximately 0.3% of the amount harvested in all of District 4 (excluding the Koyukuk River) for all gear types (**Table 1**).

Effects of the Proposal

If adopted, this proposal would eliminate the Federal subsistence drift gillnet fishery in Subdistricts 4B and 4C, and negate the Board's January 2005 action establishing the fishery. Federally-qualified subsistence users would no longer be able to use drift gillnet fishing gear in Subdistricts 4B and 4C. With low harvest to date, there would be minimal beneficial effect on Chinook salmon escapements.

The proposal would also prohibit the use of drift gillnets in Federal regulations in Subdistrict 4A. However, Federally-qualified users would still be able to fish with drift gillnets under State regulations.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP11-07.

Justification

The reported harvest from the Federal drift gillnet fishery has been very low and prohibiting the use of drift gillnets in Subdistricts 4B and 4C for conservation of Chinook salmon is not warranted. The Federal inseason manager closely monitors this fishery and has the authority to restrict or close the fishery when and if conservation concerns arise. Federally-qualified users have harvested an average of only 38 Chinook salmon per year in the first five years (2005-2009) of the Federal drift gillnet fishery, which is approximately 1% of the amount harvested for subsistence in Subdistricts 4B and 4C, and approximately 0.3% of the annual Chinook salmon subsistence harvest in District 4 (excluding the Koyukuk River) for all gear types.

Eliminating the use of drift gillnets to harvest salmon in Subdistrict 4A in Federal regulations would also not accomplish the proponent's objective, as Federally-qualified users would still be able to utilize drift gillnets under State regulations.

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Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP11-07: Prohibit use of drift gillnets in districts 4 and 5 of the Yukon River Management Area.

Introduction: Stanislaus Sheppard of the Mountain Village Working group submitted this proposal to prohibit use of drift gillnets in Yukon River districts 4 and 5 by federal subsistence users in order to allow more fish to escape to the spawning grounds. Federal subsistence regulations allow subsistence fishing with drift gillnets in District 4 (including subdistricts 4-A, 4-B, and 4-C) but not in District 5.

The creation in 2005 of the federal subsistence drift gillnet fishery in subdistricts 4-B and 4-C of the Yukon River by the Federal Subsistence Board expanded fishing opportunity on a fully utilized stock classified as a stock of yield concern. At the time, department staff were concerned that interest and harvest efficiency in this new fishery would result in additional pressure on a stock classified as a yield concern. Based on returned permits and reports prepared by the federal subsistence program, few fishermen use this gear type and few fish are harvested. State resource managers continue to monitor participation and harvest associated with this fishery. The Alaska Board of Fisheries reviewed this stock of concern designation in January 2010 and continued to support the classification.

The Alaska Board of Fisheries determined that drift gillnets are not a customary and traditional gear type used in subdistricts 4-B and 4-C, and experience with the fishery has shown that their use is problematic in this area due to river morphology and amount of large woody debris in the water column. Many sections of the river in subdistricts 4-B and 4-C are too shallow for efficient use of drift gillnets, and large woody debris can entangle nets, resulting in great cost to the fisherman. The department considers use of set gillnets and fish wheels as providing a meaningful federal subsistence priority. Concerns for potential impacts to other users, Canadian Chinook salmon stocks, and fisheries management are reasons the Yukon-Kuskokwim Delta and Eastern Interior Regional Advisory Councils, Alaska Board of Fisheries, Yukon River Delta Fisheries Association, and the department originally opposed the drift gillnet fishery in this area. Despite recent data that indicate this fishery is having limited impact on reducing fishing effort or harvests, the department remains concerned about an expanded drift gillnet fishery in subdistrict 4-B and 4-C on a stock of yield concern.

Impact on Subsistence Users: Adoption of this proposal would restrict federal subsistence fishermen from harvesting salmon using drift gillnets in subdistricts 4-A, 4-B, and 4-C where it is currently authorized by federal regulations on waters where federal jurisdiction is claimed. Because Subdistrict 4-A has large tributary streams with different salmon stocks, prohibiting drift gillnets in Subdistrict 4-A could have a negative impact on federal subsistence users fishing for Chinook and fall chum salmon. Prohibiting use of drift gillnets as a gear type for federal subsistence users in subdistricts 4-B and 4-C is not expected to reduce salmon harvest by many fish, if at all. Since establishment of the federal subsistence drift gillnet fishery in 2005, there has been relatively low fishing effort and harvest of Chinook salmon, based on returned permits

and reports prepared by the federal program. Thus, the impact upon federal subsistence users is expected to be minimal.

Opportunity Provided by State: Current state regulations are based on customary and traditional fishing patterns and gear types. The legal gear for the state subsistence salmon fishery in subdistricts 4-B and 4-C and District 5 includes fish wheels, hand lines, gillnet, and beach seine. Drift gillnets are not allowed in subdistricts 4-B and 4-C and District 5, but they are allowed in Subdistrict 4-A under state regulations.

Subsistence fishing time is based on the customary and traditional timing of fisheries and management strategies of the department. Subsistence openings correspond with timing of fish returns as they progress upstream through the system. Drift gillnets may be used from June 10 through July 14 for subsistence fishing in Subdistrict 4-A to target Chinook salmon, and chum salmon may be taken with drift gillnets after August 2.

Salmon may be harvested under state regulations throughout the majority of the Yukon River watershed, including a liberal subsistence fishery. Salmon may be harvested under state subsistence regulations throughout District 4 and subdistricts 5-A, 5-B, and 5-C during two 48-hour periods per week from June 15 through September 30, as established by emergency order. The subsistence fishery in Subdistrict 5-D is open 24 hours per day, seven days per week. In addition to the 48-hour state subsistence fishing periods, the state subsistence fishery is open during commercial fishing periods but not during the 24 hours prior to the opening of the commercial fishing season. State subsistence fishing periods are normally linked to abundance or commercial fishing periods and are conducted based on a schedule implemented chronologically, which is consistent with migratory timing as the salmon returns progress upstream. There are no household harvest limits for state subsistence fisheries in subdistricts 4 and 5. Amounts reasonably necessary for subsistence (5AAC 01.236 (b)), as determined by the Alaska Board of Fisheries in January 2001, have been met for Chinook salmon in the Yukon River drainage for six of the last nine years (below ANS in 2002, 2008, and 2009).

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The agreed-to escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005 being the three highest spawning escapement estimates on record. However, the escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on the Canadian-origin stock by Alaskan fishermen has changed from an average of about 55% (1989–1998) to an average of about 44% from 2004 through 2008 (Howard et al. 2009). Although the subsistence harvest continues to remain stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60%, from an average of 100,000 annually (1989–1998) to the recent five-year average (2005–2009) of nearly 23,000 fish.

Jurisdiction Issues: Individuals are responsible for knowing what gear type is allowed in a particular area. While standing on state and private lands (including state-owned submerged lands and shorelands), persons must comply with state laws and regulations regarding

subsistence harvest. Since a large percentage of the lands adjacent to the Yukon River are state or private lands, we request detailed maps that depict the boundaries within which federal regulations are claimed to apply. If this proposal is adopted, state and federal regulations will be the same for subdistricts 4-B and 4-C but will be different in Subdistrict 4-A.

The department continues to request correction of the general Yukon River map labeled "Federally Managed Waters" in the federal staff analysis. This label incorrectly implies the federal government manages more than federal subsistence fisheries. The State of Alaska manages for the sustainability of fish, including subsistence, commercial, sport, and personal use fisheries, in all waters except where waters are closed to non-federally qualified subsistence users. The state also manages other public uses and activities in these waters, which are not managed by the Federal Subsistence Board or federal land management agencies.

Recommendations: Support with modification:

1. Oppose prohibition of drift gillnets in Subdistrict 4-A.
2. Support prohibition of drift gillnets in subdistricts 4-B and 4-C.

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WRITTEN PUBLIC COMMENTS

Oppose Proposal FP11-07. We, the subsistence fishers from Nulato, Yukon River District 4, oppose this proposal in its entirety. This proposal specifically targets subsistence fishers from districts 4 and 5. In addition to being discriminatory and biased, the proposal recommends eliminating 50 percent of the methods and means of harvest used by subsistence fishers in districts 4 and 5. This proposal blatantly ignores the correlation between Chinook salmon entering the Yukon River and escapement numbers. A decrease in numbers at the mouth of the Yukon River will mean a decrease at the Yukon River headwaters. Methods and means of harvest are only alternatives that are used or not used based on the abundance or lack thereof. Unfortunately, it is the lack of harvestable numbers that is the problem. Elimination 50 percent of the methods and means of harvest has no correlation with numbers entering the Yukon River and escapement numbers. Periods of fishing and 'windows' for districts all along the Yukon River are the only regulations that must be implemented and will offer subsistence satisfaction for Yukon River fishers. The Federal Subsistence Board must regulate Yukon River fishers equally, not discriminately.

The Nulato Tribal Council and signed by 180 residents

Oppose Proposal FP11-07. There are only so many eddys where a set net can be used. If you take away drift-netting, some people will not even be allowed to get fish. The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose Proposal FP11-07. Stanislaus Sheppard, representing the Mountain Village Working Group, is proposing to do away with drift gillnets in districts 4, 5, and 6. His reason to prohibit such method is that the residents in these districts can fish with set gillnets and fish wheels. Yet, his proposal FP11-04 is set to do away with fish wheels in districts 4 and 5. What method is Stanislaus Sheppard proposing that people in these two districts use to fish?

The situation we see in villages and what residents are facing today is very troublesome. How they provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river enjoy, we must understand that this river and the people who live along this great river are one and the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we must understand the changes we see around us today: climate changes, water temperatures increasing, and changes in the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. I encourage the Federal Subsistence Board to look at the good that came when people along the Yukon River worked together, set aside their differences, and sought a common goal.

Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing short of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

Oppose Proposal FP11-07. Such a ban would effectively prevent the majority of Kaltag, Nulato, Koyukuk, and Galena residents from harvesting salmon. Drift netting is the prevalent method of harvest for these villages. The proponent incorrectly assumes that fishermen can switch to set nets or fish wheels. Set net sites on the middle Yukon are few and far between, and the sites that catch fish have been claimed. Fish wheels are challenging to build, difficult to position correctly, and require constant monitoring which most subsistence fishermen along the middle Yukon cannot afford. Drift netting is the most effective method because it allows multiple users to fish the same spot within a relatively short time frame. The proponent would have residents of districts 4 and 5 bear the brunt of a major conservation effort without such conservation effort for lower river districts. Sentiments such as this only inflame upriver versus downriver tensions and animosity.

Tim Bodony, Galena

Oppose Proposal FP11-07. We oppose this. Until OSM does the research about drift gill netting, district 4 should be allowed to continue this practice. Districts 5 and 6 do not drift gill net, so again this proposal has unsound reasoning.

Don and Jan Woodruff, Eagle

Oppose Proposal FP11-07. It is my belief the Mountain Village Working Group has never fished in the districts 4, 5, or 6 and, therefore, has no idea of our subsistence life style. I notice that they didn't take any measures to reduce their take of subsistence catch fish, but did make proposals affecting Yukon River fishing districts 4, 5, and 6. I live on the Yukon River in District 4 and have always fished this district. As you know, it was our district that submitted proposal to reduce take of Chinook salmon last year (2009) which helped get Chinook salmon pat the border in record number at Eagle, Alaska. I ask the Federal Subsistence Board to reject this proposal as it attempts to regulate subsistence fishing in our District 4.

Fred Huntington Sr., Second Chief, Louden Tribal Council

Oppose Proposal FP11-07. We have no commercial season in Y-5 so this shouldn't pose any problem on destroying the salmon runs. This proposal will have no impact and is redundant because this form of fishing is nonexistent. However, if ADF&G would like to allow drift net fishing, we would be happy to oblige and use this effective form of fishing. We feel this method would, however, further deplete the resource and hasten the total decimation of the salmon stocks. The large Canadian Chinook would also be targeted and we would like to have these fish for the future. This would really hurt the people dependant on subsistence in the Y-4 district. We are all in this together and we all need this resource.

James E. Roberts, Tanana Tribal Council

Oppose Proposal FP11-07. This proposal would only affect the drifting in Federal waters above Galena (Y-4B and 4C). The only other drifting that takes place above Y-3 takes place in State waters of Y-4A.

Richard Burnham, Kaltag

Oppose Proposal FP11-07. Our set net fishing sites are limited and fishing eddies are disappearing with the change in river patterns, depth, and flow making it more difficult for fishermen to have a spot to fish. To stop drift netting would put unfair and unequal hardship on fishermen who do not have set net site and would further restrict our already minimal king salmon harvest.

1st Chief Pat McCarty, 2nd Chief Don Honea Jr., and
Traditional Chief William McCarty Jr.,
Ruby Tribal Council, and Eight Residents of Ruby

Oppose Proposal FP11-07. Drifting is the only way a lot of people fish. There are not enough fish net spots to set nets in this area. This would cause turf wars that could have criminal results. This would lead to people cutting nets from certain spots and cause a lot of heart aches. This proposal is bad.

Letter Signed by Thirty-seven Residents of Galena

Oppose Proposal FP11-07. This proposal will put a hardship on the users if approved.

Koyukuk Tribal Council

FP11-08 Executive Summary	
General Description	Proposal FP11-08 requests that customary trade in the Yukon River Fisheries Management Area be prohibited in any year when Chinook salmon runs are insufficient to fully satisfy subsistence harvest needs and subsistence fisheries are restricted. As submitted, the prohibition would only affect customary trade between rural residents. *Submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council*
Proposed Regulation	*§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations of this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.* *(i) Bristol Bay Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Bristol Bay Fishery Management Area and exchanged in customary trade to rural residents may not exceed $500.00 annually.* *(ii) Upper Copper River District—The total number of salmon per household taken within the Upper Copper River District and exchanged in customary trade to rural residents may not exceed 50% of the annual harvest of salmon by the household. No more than 50% of the annual household limit may be sold under paragraphs___. 27(c)(11) and (12) when taken together. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rests with the seller.* ***(iii) If in any given year in the Yukon River Fisheries Management Area Chinook runs are insufficient to fully satisfy subsistence harvest needs and subsistence fisheries are restricted; customary trade will be prohibited.***
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	

continued on next page

FP11-08 Executive Summary *(continued)*	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	**Support a modified proposal** that requires reporting and regulates sales of subsistence harvested fish during all years, not just those of low salmon returns, adopts a definition of "significant commercial enterprise," and addresses education and enforcement issues.
Written Public Comments	**2 Support** **4 Oppose**

DRAFT STAFF ANALYSIS
FP11-08

ISSUES

Proposal FP11-08, submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council, requests that customary trade in the Yukon River Fisheries Management Area be prohibited in any year when Chinook salmon runs are insufficient to fully satisfy subsistence harvest needs and subsistence fisheries are restricted. As submitted, the prohibition would only affect customary trade between rural residents.

DISCUSSION

The proponent states that prohibiting customary trade in years of poor Chinook salmon runs "would have significant positive effects on fish populations as well as [on] the lawful subsistence fishers." The proponent also states that, under current regulations, when Chinook runs are low subsistence users are restricted but not subsistence uses. In the case of customary trade, the emphasis should be reversed and customary trade should be restricted before subsistence users are restricted. The proponent is particularly concerned with "numerous reports of Yukon River rural residents selling large numbers of Yukon Chinook salmon in the urban areas of our state."

Note that the proposal seeks to limit customary trade under *§___*. 27(c)(11), which refers to customary trade between rural residents. The proponent, however, is also concerned with customary trade between rural residents and others, which is governed under *§___*. 27(c)(12). The latter regulation reads in part: "In customary trade, a rural resident may trade fish, their parts, or their eggs…for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption." As it stands, the current proposal does not target all of the relevant regulations.

Existing Federal Regulation

> *§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.*
>
> > *(i) Bristol Bay Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Bristol Bay Fishery Management Area and exchanged in customary trade to rural residents may not exceed $500.00 annually.*
> >
> > *(ii) Upper Copper River District—The total number of salmon per household taken within the Upper Copper River District and exchanged in customary trade to rural residents may not exceed 50% of the annual harvest of salmon by the household. No more than 50% of the annual household limit may be sold under paragraphs___. 27(c)(11) and (12) when taken together. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rests with the seller.*

Proposed Federal Regulation

§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations of this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.

(i) Bristol Bay Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Bristol Bay Fishery Management Area and exchanged in customary trade to rural residents may not exceed $500.00 annually.

(ii) Upper Copper River District—The total number of salmon per household taken within the Upper Copper River District and exchanged in customary trade to rural residents may not exceed 50% of the annual harvest of salmon by the household. No more than 50% of the annual household limit may be sold under paragraphs___. 27(c)(11) and (12) when taken together. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rests with the seller.

(iii) If in any given year in the Yukon River Fisheries Management Area Chinook runs are insufficient to fully satisfy subsistence harvest needs and subsistence fisheries are restricted; customary trade will be prohibited.

Regulatory History

See Draft Staff Analysis FP11-05.

Customary Trade

See Draft Staff Analysis FP11-05.

Recent Concerns

See Draft Staff Analysis FP11-05.

Effects of the Proposal

The proposal seeks to limit customary trade under *§___*. 27(c)(11), which refers to customary trade between rural residents. However, in supporting statements, the proponent raises concerns about sales to those other than rural residents, which are governed under *§___*. 27(c)(12). If adopted as submitted, customary trade between rural residents and others would not be affected. In order to align the proposal with the apparent concern over the conduct of customary trade in urban centers of Alaska, the Subsistence Regional Advisory Council may choose to support this proposal with modification, the modification being the addition of *§___*. 27(c)(12), which addresses customary trade between rural residents and others.

If adopted, the proposal would prohibit *all* customary trade of *any* subsistence-caught fish between rural residents under the following condition: "If in any given year in the Yukon River Fisheries Management Area Chinook runs are insufficient to fully satisfy subsistence harvest needs and subsistence fisheries are restricted." The amount of cash exchanged in customary trade would thereby be diminished.

If this proposal is adopted, then a definition of when Chinook salmon runs are "insufficient to fully satisfy subsistence harvest needs," would need to be created. Although State subsistence regulations include amounts needed for subsistence, Federal subsistence regulations do not.

If adopted, the proposal would limit the ability of Federally qualified subsistence users to engage in customary trade under the conditions specified above. Presumably, non-Federally qualified subsistence users, as recipients, would also find their engagement in customary trade curtailed.

The total number of fish exchanged in customary trade is unknown; therefore, the effect of this proposal on fish populations is unknown.

Customary trade is included in the definition of subsistence. If limitations based on conservation concerns are necessary, it may be appropriate to conduct an analysis under ANILCA Section 804, which requires the Board to select amongst subsistence users, not uses, based on the premise that all subsistence uses equally qualify for the subsistence preference.

Alternative Considered

Federal subsistence fisheries regulations on customary trade are found in subsections dealing with sales between rural residents [c(11)], and between rural residents and others [c(12)]. Proposal FP11-08 would prohibit customary trade of Yukon River Chinook salmon when runs were very low, but would only apply to the rural-to-rural sales. Proposal FP11-09 would limit customary trade of Yukon River Chinook salmon to within the Yukon River Fishery Management Area, and stipulates provisions for limiting amounts and requiring reporting, but would only apply to the rural-to-others sales.

The common concern across both proposals appears to be better limiting sales of subsistence-caught Yukon River Chinook salmon that rise to the level of significant commercial enterprise. One alternative is to more closely parallel the approach adopted in regulation for the Bristol Bay Fishery Management Area, and for the Upper Copper River District, by stipulating a dollar limit on customary trade of Chinook salmon that more directly addresses significant commercial enterprise in the Yukon River. This would need to be specified in both c(11) and c(12), thereby addressing both rural-to-rural and rural-to-others sales.

Proposals FP11-08 and FP11-09 were submitted by one of the three Councils on the Yukon River, and would address the entire drainage. While it is within the purview of any of these Councils to propose river- wide limits, each Council is best able to characterize customary trade practices and traditions in its own portion of the large and diverse Yukon River drainage. Therefore, it may be more helpful for the Federal Subsistence Board to receive recommendations on appropriate limits from each of the three Councils for their areas of representation. The Board might find that the limits recommended for each area are similar, and a single amount could be specified throughout the drainage, simplifying regulations and aiding enforcement. A reporting system, if enacted, would likely need to be river-wide to be effective, and in this case each Council could recommend whether, and how, a river-wide reporting system should be instituted.

The regulatory framework for such recommendations would be as follows:

> *§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations of this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.*

(iii) Yukon River Fishery Management Area – Customary trade of Yukon River Chinook salmon between rural residents is limited as follows:

(A) ***In Districts 1, 2, and 3 below Holy Cross, ….*** *(YKDRAC)*
(B) ***In District 3 from Holy Cross upriver, and in District 4, …*** *(WIRAC)*
(C) ***In Districts 5 and 6, …*** *(EIRAC)*

These customary trade sales must be recorded as follows: … *(or not – Each Council to address for the entire river)*

§___.27(c)(12) Transactions between a rural resident and others. In customary trade, a rural resident may trade fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.

(iii) Yukon River Fishery Management Area – Customary trade of Yukon River Chinook salmon between rural residents and others is limited as follows:

(A)***In Districts 1, 2, and 3 below Holy Cross, ….*** *(YKDRAC)*
(B) ***In District 3 from Holy Cross upriver, and in District 4, …*** *(WIRAC)*
(C) ***In Districts 5 and 6, …*** *(EIRAC)*

These customary trade sales must be recorded as follows: … *(or not – Each Council to address for the entire river)*

This alternative provides a regulatory framework that would address both rural-to-rural and rural-to-others customary trade for the overall drainage, with recognition of variation in traditional patterns along the river, and addresses whether or not a river-wide reporting system is needed.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP11-08.

Justification

Customary trade is recognized as a legitimate subsistence activity under ANILCA. As defined by Federal subsistence management regulation, customary trade refers only to subsistence-caught fish or wildlife exchanged for cash, provided such exchanges do not constitute a significant commercial enterprise. Any exchanges of subsistence-caught fish for cash that rise to the level of significant commercial transactions are not customary trades; such commercial-level transactions are prohibited under current regulation. In other words, existing regulations governing customary trade prohibit turning subsistence foods into commodities for sale on the open market. Recent studies (Krieg et al. 2007; Magdanz et al. 2007; Moncreiff 2007) indicate that customary trade constitutes a small but vital component of a variety of local cultural and economic relations. These studies suggest that customary trade is infrequent and transacted for relatively small sums of money, which is often used to support other subsistence activities. Enacting regulations to further govern such trades appears unnecessary and intrusive.

There are, however, increasing reports of sales of subsistence-caught salmon that may not fit the definition of customary trade. Such sales appear to be the target of the 2009 Special Action Requests submitted by the Fairbanks Fish and Game Advisory Committee and the Eastern Interior Alaska Subsistence Regional Advisory Council. These sales also provided a topic for discussion at the February, 2010 Eastern and Western Interior Council meetings, as well as for the March, 2010 Yukon-Kuskokwim Delta Subsistence Regional Advisory Council meeting. Sales of subsistence-caught fish that rise to the level of commercial or market transactions, however, are not considered to be customary trade, and are prohibited. Enforcement of the prohibition is the central issue, not further restrictions on customary trade. However, the threshold for a significant commercial enterprise has not been determined. Enforcement of the prohibition remains problematic without a threshold determination.

In its argument for prohibiting customary trade in any year when Chinook salmon runs are insufficient to fully provide for subsistence harvest uses and fisheries are restricted, the proponent notes that "there were numerous reports of Yukon River rural residents selling large numbers of Yukon Chinook salmon in the urban areas of our state." Such sales may be between rural residents. More likely, however, such sales are between rural residents and others, which are governed under *§___*. 27(c)(12). As written, the proposal would prohibit customary trade between rural residents under certain conditions, but not between rural residents and others. Sales of Chinook salmon between rural residents and others may well form the higher percentage of sales about which the proponent expresses concern. The proposal does not address such sales.

The proposal does not explicitly target customary trade of subsistence-caught Chinook salmon. As written, it would preclude *all* customary trade of *any* subsistence-caught fish between rural residents *"*[i] f in any given year in the Yukon River Fisheries Management Area Chinook runs are insufficient to fully satisfy subsistence harvest needs and subsistence fisheries are restricted." If supported, the regulatory language should be made explicit.

In order to align the proposal with the apparent concern over the conduct of customary trade in urban centers of Alaska, the Subsistence Regional Advisory Council may choose to support this proposal with modification, the modification being the addition of *§___*. 27(c)(12), which addresses customary trade between rural residents and others.

Customary trade is included in the definition of subsistence. If limitations based on conservation concerns are necessary, it may be appropriate to conduct an analysis under ANILCA Section 804, which requires the Board to select amongst subsistence users, not uses, based on the premise that all subsistence uses equally qualify for the subsistence preference.

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Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP11-08: Prohibit customary trade of Chinook salmon harvested in the Yukon River Fisheries Management Area during years of insufficient Chinook salmon returns.

Introduction: The Yukon-Delta Regional Advisory Council submitted this proposal to prohibit customary trade[1] of Chinook salmon harvested in federal subsistence fisheries on the Yukon River during years when returns are insufficient to satisfy subsistence user needs and subsistence fishing restrictions are implemented. The intent was to curb sales of subsistence harvested Chinook salmon made into strips while other subsistence fisheries were closed due to insufficient returns. State regulations generally prohibit sale of subsistence harvested fish[2] while federal regulations allow for cash sales. State regulations at 18 AAC 34.005 require that all fish processed for commerce be processed at a facility approved by Alaska Department of Environmental Conservation.[3]

Sale of subsistence harvested fish, both processed and whole, is occurring in both urban and rural communities in Alaska, contrary to existing state and federal regulations. Discrepancies in state and federal regulations and state requirements regarding processing of fish to protect health and safety of the public may leave some people vulnerable to citation under state and federal regulations. This is a significant issue for state resources managers, law enforcement agencies, and federal agencies that provide for the subsistence priority on federal lands and those waters where federal subsistence jurisdiction is claimed. In considering FP11-05, FP11-08, and FP11-09, the Federal Subsistence Board has the opportunity to adopt enforceable customary trade regulations for the Yukon region that are based on the history and patterns of this use for this region of the state.

Impact on Subsistence Users: This proposal may reduce harvest of Chinook salmon for cash sale of Chinook salmon. It is not possible, however, to accurately predict how this proposal will affect changes in subsistence harvest patterns because federal agencies lack information and data regarding existing levels of harvest and actual sales of subsistence harvested Chinook salmon.

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[1] ***50 CFR 100.4 Definitions.***

Customary trade means exchange for cash of fish and wildlife resources regulated in this part, not otherwise prohibited by Federal law or regulation, to support personal and family needs; and does not include trade which constitutes a significant commercial enterprise.

[2] ***5 ACC 01.010 Methods, means, and general provisions***

(d) Unless otherwise specified in this chapter, it is unlawful to buy or sell subsistence-taken fish, their parts, or their eggs, except that it is lawful to buy or sell a handicraft made out of the skin or nonedible by-products of fish taken for personal or family consumption.

[3] ***18 AAC 34.005. Purpose and applicability***

(a) The purpose of this chapter is to provide for consumer protection and to protect public health by ensuring the processing, sale, and distribution of safe, wholesome, and properly labeled seafood products.
(b) The requirements of this chapter apply to
(1) persons who process seafood products to be sold as part of commerce and intended for human consumption;

Existing federal customary trade is limited to whole fish, unless processed fish are produced in compliance with Alaska Department of Environmental Conservation food safety rules. Because state and federal regulations differ, subsistence fishermen are vulnerable to prosecution when selling subsistence harvested salmon on lands and waters outside the boundaries where federal subsistence jurisdiction is claimed. Adoption of limitations on cash sales of subsistence harvested salmon for cash would remove the risk of citation for subsistence fishers in the Yukon River drainage, particularly regulations that define "significant commercial enterprise," specify fish weight or number limits, clarify where subsistence harvested fish may be sold under federal regulation, and establish reporting requirements for cash sales of subsistence caught salmon.

Opportunity Provided by State: The department supports subsistence harvest and use of salmon consistent with existing state laws and regulations including customary trade of this resource. However, 5 AAC 01.010 prohibits sale of subsistence caught fish, their parts, or their eggs unless otherwise specified in state regulation. Currently, there are only two exceptions listed in Chapter 5 of state regulations: Norton Sound-Port Clarence Area for salmon and Sitka Sound herring roe on kelp in Southeast Alaska.[4]

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. Since 2001, subsistence fishing time in the Yukon Area has been limited by a windows schedule, which was further restricted in 2008 and 2009 because of conservation concerns for Chinook salmon. Subsistence harvest levels for Chinook salmon have been within the amounts reasonably necessary for subsistence (ANS) ranges since 2001, except for 2002, 2008, and 2009. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005 being the three highest spawning escapement estimates on record. The escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on Canadian-origin stock by Alaskan fishermen decreased from an average of about 55% (1989–1998) to an average of about 44% from 2004 through 2008 (Howard et al. 2009). Although the subsistence harvest continues to remain stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60%, from an average of 100,000 annually (1989–1998) to the recent five-year average (2005–2009) of nearly 23,000 fish. Considering all salmon species together, the overall total subsistence salmon harvest in the Yukon Area has declined by approximately 30% since 1990 (Fall et al. 2009:39). Specifically, fall chum salmon harvests have fallen within ANS ranges only three times since 2001 (Fall et al. 2009:43).

Jurisdiction Issues: While standing on state and private lands (including state-owned submerged lands and shorelands), persons must comply with state laws and regulations and cannot sell subsistence harvested fish, with two exceptions as specified above. Federal subsistence regulations, particularly customary trade regulations, pertain only to fishing on and use of fish harvested on federal public lands and those waters where federal subsistence jurisdiction is claimed. Sale of subsistence fish harvested on all lands and waters (federal, state, or private) is limited by state regulations except to the extent superseded by federal law on

[4] ***5 AAC 01.188 and 5 AAC 01.717***

federal lands. The State of Alaska maintains jurisdiction of food safety and food processing regulations, regardless of where fish are harvested.

Other issues: The Alaska Department of Fish and Game supports adoption of enforceable federal customary trade regulations that specify limits on cash sales and establish reporting requirements. However, restrictions or regulations that specify limits and reporting requirements should be applied drainage-wide.

Violation of existing federal customary trade and state fish processing regulations is an enforcement problem that has significant implications for subsistence users and the public. More education on state and federal regulations and an enforceable definition on what constitutes a significant commercial enterprise are needed. We propose implementing a monitoring program to produce needed resource data. We request clarification of roles and responsibilities of federal and state enforcement agencies. The department proposes this issue be addressed during a joint meeting of the Regional Councils within the Yukon drainage because this issue potentially affects subsistence users in the entire Yukon River drainage.

Recommendation: Support a modified proposal that requires reporting and regulates sales of subsistence harvested fish during all years, not just those of low salmon returns, adopts a definition of "significant commercial enterprise," and addresses education and enforcement issues.

Cited References:

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WRITTEN PUBLIC COMMENTS

Support Proposal FP11-08. It really does not make sense to allow selling salmon strips while other users are not meeting their traditional and customary harvest needs.

The situation we see in villages and what residents are facing today is very troublesome. How they provide for their families and navigate the system that is in place to regulate the fisheries? To ensure we have the same opportunity to fish in our traditional and customary ways as others in the lower river enjoy, we must understand that this river and the people who live along this great river are one and the same. Everyone on this river will need to make sacrifices to ensure the salmon stock stays healthy and our traditional and customary salmon harvest is enjoyed by future generations. As we consider the sacrifices we will make, we must understand the changes we see around us today: climate changes, water temperatures increasing, and changes in the quality of fish. This is being discussed more openly by people who count on these resources to see them through the winter months, way after fishing is over.

It is better to start making small sacrifices now than wait until it is too late. A full salmon season closure may be the only option to protect the salmon stock and allow a good number for escapement into the spawning grounds. I encourage the Federal Subsistence Board to look at the good that came when people along the Yukon River worked together, set aside their differences, and sought a common goal. Maintaining a healthy salmon stock in the Yukon River rests with us as the primary users of the valuable resource and nothing short of working together will enable us to see the long term benefits.

Council of Athabascan Tribal Governments (James Kelly, Acting Natural Resource Director)

Support Proposal FP11-08. We approve and commend the Delta, Eastern, and Western regional councils for taking the lead and proposing a sound reasoned approach to the customary trade and point-of-sale fish record. Catch and financial reporting should be activated to document any customary trade.

Don and Jan Woodruff, Eagle

Oppose Proposal FP11-08. You need to do a better job at looking at the big picture. The subsistence fisherman is only one small part of that picture. Why is the river warmer than in the past? Why do the returning numbers still decline? What is happening to the fish out in the ocean? What is happening to the ocean? And why is the commercial fish industry allowed to have so much waste.

The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose Proposal 11-08. This proposal is another based on unfounded hearsay reports. The facts are plain and simple. The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council states these accusations based on reports of questionable origin. It states that the Yukon River is becoming the king salmon strip capital of the world. Where else on earth can people get this vital cultural food? Cabela's sells fish in the catalog but not of the quality that indigenous people need and want. These rights are

granted in ANILCA and that is the law; congress gave these rights. The problem we are having her is too much commercial fish and depletion of salmon stocks. This also states that this is an expanding trade, but the fact is fewer people fish than before. Everyone is hunting on the river, not just one group of people, all groups of people are having a hard time. Some groups are lucky enough to sell whole fish and are trying to blame the fish shortage of less fortunate fishermen who cannot sell whole fish. Marshall isn't the only village hurting by these salmon shortages, all villages are hurt by this. It states that thousands are being prepared while people are starving in one village. Look at the quotas in each district and then say who is getting the biggest share of resource. Blaming up river fishermen for the lack of fish in Marshall is just plain misguided. The fact is districts are open at different times and the folks cutting fish are just getting some for the first time. Everyone is fishing subsistence in Y-5 to state the fact correctly. There are no commercial openings, just subsistence. Y-1 and Y-2 are just trying to sell all the fish and blame other groups. What makes this group more special than others is that they can spread rumors for their own lack of conservation. If they want to openly violate the rules, then that shows ignorance on many fronts. This also states that this will have more positive effects than gear restrictions. The gear restrictions are put in place because a species is being wiped out by specialized double-deep nets and larger mesh. These are the nets that are killing off the large Chinook of Canadian origin. When there are no more large kings to catch then the restriction nets will kill off the smaller kings. Too much commercial fish has been sold for money. Monetary goods or a sustainable yield for the future is the real question. We all have to adapt, adjust, or improvise; blaming others isn't going to get us any where and we just have to be conservative or we will really have something to cry about.

James E. Roberts, Tanana Tribal Council

Oppose Proposal FP11-08. This proposal is unreasonable for customary trade as some villages have no fish and will trade us for red game meat. A tracking system would be complicated and unenforceable.

1st Chief Pat McCarty, 2nd Chief Don Honea Jr., and
Traditional Chief William McCarty Jr.,
Ruby Tribal Council, and Eight Residents of Ruby

Oppose Proposal FP11-08. This proposal should read "if in any given year that the number of fish is insufficient to fully satisfy the subsistence harvest, commercial fishing will not be allowed. Commercial fishing should be cut off for at least two years to bring the fish population back to where it should be.

Letter Signed by Thirty-seven Residents of Galena

FP11-09 Executive Summary	
General Description	Proposal FP11-09 requests that the Federal Subsistence Board limit the customary trade of Chinook salmon in the Yukon River Management Area and requires a customary trade recordkeeping form. The proposal also requests that the Board impose a geographic constraint to the customary trade of Chinook salmon caught in the Yukon River Management Area: such trade, including the delivery of fish to a purchaser, should only occur in the Yukon River Management Area. *Submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council*
Proposed Regulation	*See the analysis for the proposed regulation.*
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
ADF&G Comments	**Support**
Written Public Comments	**1 Support** **5 Oppose**

DRAFT STAFF ANALYSIS
FP11-09

ISSUES

Proposal FP11-09, submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council, requests that the Federal Subsistence Board limit the customary trade of Chinook salmon in the Yukon River Management Area and requires a customary trade recordkeeping form. The proposal also requests that the Board impose a geographic constraint to the customary trade of Chinook salmon caught in the Yukon River Management Area: such trade, including the delivery of fish to a purchaser, should only occur in the Yukon River Management Area.

DISCUSSION

The proponent states that limiting the sale of Chinook salmon under customary trade, and requiring the use of a customary trade recordkeeping form, would have two consequences. First, the proposed regulation would curtail abuses of customary trade by eliminating commercial transactions "operating under the guise of customary trade." Second, the proposed regulation would provide an "enforcement or tracking mechanism to ensure that [customary trade] sales are limited to fish that have been legally taken in federal subsistence designated waters." The proposed geographic constraint would preclude sales of Yukon Chinook salmon under customary trade outside of the Yukon River Management Area.

Note that the proposal seeks to limit customary trade under *§___*. 27(c)(12), which refers to customary trade between rural residents and others. The proponent, however, is also concerned with rural-to-rural customary trade, which is governed under *§___*. 27(c)(11). The proposed geographic constraint limits customary trade of Chinook salmon to the Yukon River Management Area, which is mostly rural. As submitted, the current proposal does not target all of the relevant regulations.

Existing Federal Regulation

> *§___.27(c)(12) Transactions between a rural resident and others. In customary trade, a rural resident may trade fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.*
>
> > *(i) Bristol Bay Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Bristol Bay Fishery Management Area and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed $400.00 annually. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rest with the seller.*
> >
> > *(ii) Upper Copper River District—The total number of salmon per household taken within the Upper Copper River District and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed $500.00 annually. No more than 50% of the annual harvest of salmon by the household. No more than 50% of*

the annual household limit may be sold under paragraphs___. 27(c)(11) and (12) when taken together. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rests with the seller.

Proposed Federal Regulation

§___.27(c)(12) Transactions between a rural resident and others. In customary trade, a rural resident may trade fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.

(i) Bristol Bay Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Bristol Bay Fishery Management Area and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed $400.00 annually. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rest with the seller.

(ii) Upper Copper River District—The total number of salmon per household taken within the Upper Copper River District and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed $500.00 annually. No more than 50% of the annual harvest of salmon by the household. No more than 50% of the annual household limit may be sold under paragraphs___.27(c)(11) and (12) when taken together. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rests with the seller.

(iii) ***a) In the Yukon River Management Area, the customary trade of subsistence-taken***

Chinook salmon is permitted only as specified in this section. A person who conducts a customary trade in subsistence-taken finfish under this section must

1. Obtain a customary trade recordkeeping form from the USFWS before the person conducts the customary trade, and accurately record the cash sale on the form immediately after the sale occurs; the form requires the reporting of (A) the date of each sale; (B) the buyer's name and address; (C) the species and amount of finfish sold; (D) the specific location where the finfish were harvested; (E) the dollar amount of each sale; (F) the form and processing used; and (G) any other information the federal agency requires for management or enforcement purposes.

2. Return the customary trade recordkeeping form to the USFWS as prescribed by the USFWS on the form;

3. Display the customary trade recordkeeping form upon request by a local representative of any federal fishery management agency or law enforcement official form the federal government.

b) A person may not sell more than 200 pounds of unprocessed, whole or XX pounds of fillets, or XX pounds of strips, or XX XX-ounce jars of subsistence-taken Chinook salmon per household under this section in a calendar year.

c) A person who receives subsistence-taken finfish in exchange for cash in a customary trade may not resell the fish.

d) A person may not sell subsistence-taken fish to fishery business.

e) A sale or purchase of finfish authorized under this section, including the delivery of fish to a purchaser, may occur only in the Yukon River Fisheries Management Area.

Regulatory History—Customary Trade

See Draft Staff Analysis FP11-05

Customary Trade

See Draft Staff Analysis FP11-05

Recent Concerns

See Draft Staff Analysis FP11-05

Customary Trade Reporting Requirement

As noted in the Draft Staff Analysis FP11-05, the Federal Subsistence Board reviewed and adopted two regional proposals defining the upper limits for customary trade, one for the Bristol Bay Fishery Management Area, and the other for the Upper Copper River District. Both of these proposals, submitted by proponents within their respective regions, resulted in regulations for a customary trade recordkeeping form, shown in Appendix A.

Use of the recordkeeping form appears to be limited. Michelle Ravenmoon (2010, pers. comm.), subsistence coordinator for Lake Clark National Park and Preserve, reports that no customary trade reporting forms have been distributed for the Bristol Bay Fishery Management Area since the February 2004 regulation was published requiring use of such a form.

Molly McCormick (2010, pers. comm.), fisheries biologist for Wrangell St. Elias National Park and Preserve, reports fewer than six customary trade reporting forms have been distributed for the Upper Copper River District in any one year since the March 2005 regulation was published requiring use of such a form.

Geographic Constraints on Customary Trade

Limiting the customary trade of Yukon River Chinook salmon to the confines of the Yukon River Management Area would effectively curtail customary trade in urban centers such as Anchorage. This geographic constraint would apply to both the selling and purchasing of subsistence-caught Chinook salmon. Geographic limits on customary trade were not anticipated in ANILCA and have not been implemented in other regions. ANILCA, however, does not appear to preclude the imposition of geographic limits to customary trade.\

Effects of the Proposal

If adopted, the proposal would limit customary trade of unprocessed subsistence-caught Chinook salmon to no more than 200 pounds per household per calendar year. Adopting such a limitation would diminish the amount of cash generated by the sale of subsistence-caught Chinook salmon.

Such sales, subject to a geographic constraint, could occur only within the Yukon River Management Area, effectively eliminating customary trade of subsistence-caught Chinook salmon between rural residents and others, allowed under *§*___.27(c)(12). The possible exception would be customary trade to residents in Fairbanks, an urban center in the Yukon River Management Area.

The proponent, however, is also concerned with rural-to-rural customary trade, which is governed under *§*___. 27(c)(11). As submitted, the proposal does not address *§*___. 27(c)(11).

Although Federal customary trade regulations allow the exchange for cash of fish, their parts, or their eggs, the portion of the proposal that would allow the sale of salmon processed using customary and traditional methods may fall outside the scope of the Federal subsistence program. Food health issues, including fish processing, are controlled by the State of Alaska. The customary trade regulations may not exempt anyone from complying with State health regulations for processing foods for sale. The portion of the proposed language to allow the sale of salmon as fillets, strips, or jarred, may mislead users to think that they could sell processed fish without meeting required health standards.

The portions of the proposal that refer to reselling fish obtained in customary trade and to selling subsistence-caught fish to fishery businesses replicate current regulations that prohibit such actions and are unnecessary. These issues are already addressed in Federal subsistence regulation.

The proposal also seeks a reporting requirement. If adopted, the reporting requirement may have a negligible effect, based on other areas where reporting requirements have been implemented. Bristol Bay and the Upper Copper River have such reporting requirements. The number of recordkeeping forms requested and returned remains very small in the Upper Copper River, while no recordkeeping forms have been requested in the Bristol Bay Area. Similar limited use of the recordkeeping form may occur in the Yukon River Management Area.

The target of the proposal appears not to be legitimate customary trade, but sales that may rise to the level of significant commercial enterprise. Such sales are already prohibited, although the threshold for a significant commercial enterprise has not been determined. The central issue appears to be enforcement of the prohibition, which remains problematic without a determination of what constitutes a significant commercial enterprise. Further regulations limiting customary trade, however, which is recognized as a legitimate subsistence activity, may not be the most effective means to curtail sales that exceed the definition of customary trade.

In order to align the proposal with the apparent concern over the conduct of customary trade in rural areas, the Subsistence Regional Advisory Council may choose to support this proposal with modification, the modification being the addition of *§*___. 27(c)(11), which addresses customary trade between rural residents.

Customary trade is included in the definition of subsistence. If limitations based on conservation concerns are necessary, it may be appropriate to conduct an analysis under ANILCA Section 804, which requires the Board to select amongst subsistence users, not uses, based on the premise that all subsistence uses equally qualify for the subsistence preference.

Alternative Considered

Federal subsistence fisheries regulations on customary trade are found in subsections dealing with sales between rural residents [c(11)], and between rural residents and others [c(12)]. Proposal FP11-08 would prohibit customary trade of Yukon River Chinook salmon when runs were very low, but would only apply to the rural-to-rural sales. Proposal FP11-09 would limit customary trade of Yukon River Chinook salmon to within the Yukon River Fishery Management Area, and stipulates provisions for limiting amounts and requiring reporting, but would only apply to the rural-to-others sales.

The common concern across both proposals appears to be better limiting sales of subsistence-caught Yukon River Chinook salmon that rise to the level of significant commercial enterprise. One alternative is to more closely parallel the approach adopted in regulation for the Bristol Bay Fishery Management Area, and for the Upper Copper River District, by stipulating a dollar limit on customary trade of Chinook salmon that more directly addresses significant commercial enterprise in the Yukon River. This would need to be specified in both c(11) and c(12), thereby addressing both rural-to-rural and rural-to-others sales.

Proposals FP11-08 and FP11-09 were submitted by one of the three Councils on the Yukon River, and would address the entire drainage. While it is within the purview of any of these Councils to propose river- wide limits, each Council is best able to characterize customary trade practices and traditions in its own portion of the large and diverse Yukon River drainage. Therefore, it may be more helpful for the Federal Subsistence Board to receive recommendations on appropriate limits from each of the three Councils for their areas of representation. The Board might find that the limits recommended for each area are similar, and a single amount could be specified throughout the drainage, simplifying regulations and aiding enforcement. A reporting system, if enacted, would likely need to be river-wide to be effective, and in this case each Council could recommend whether, and how, a river-wide reporting system should be instituted.

The regulatory framework for such recommendations would be as follows:

> *§___. 27(c)(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations of this part, for cash from other rural residents. The Board may recognize regional differences and regulate customary trade differently for separate regions of the State.*
>
> > ***(iii) Yukon River Fishery Management Area – Customary trade of Yukon River Chinook salmon between rural residents is limited as follows:***
> >
> > ***(A) In Districts 1, 2, and 3 below Holy Cross, ….*** *(YKDRAC)*
> > ***(B) In District 3 from Holy Cross upriver, and in District 4, …*** *(WIRAC)*
> > ***(C) In Districts 5 and 6, …*** *(EIRAC)*
> >
> > ***These customary trade sales must be recorded as follows: …*** *(or not – Each Council to address for the entire river)*
>
> *§___.27(c)(12) Transactions between a rural resident and others. In customary trade, a rural resident may trade fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board*

may recognize regional differences and regulate customary trade differently for separate regions of the State.

(iii) Yukon River Fishery Management Area – Customary trade of Yukon River Chinook salmon between rural residents and others is limited as follows:

(A) In Districts 1, 2, and 3 below Holy Cross, …. *(YKDRAC)*
(B) In District 3 from Holy Cross upriver, and in District 4, … *(WIRAC)*
(C) In Districts 5 and 6, … *(EIRAC)*

These customary trade sales must be recorded as follows: … *(or not – Each Council to address for the entire river)*

This alternative provides a regulatory framework that would address both rural-to-rural and rural-to-others customary trade for the overall drainage, with recognition of variation in traditional patterns along the river, and addresses whether or not a river-wide reporting system is needed.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP11-09.

Justification

The proposal would limit customary trade of Chinook salmon to no more than 200 pounds of unprocessed fish per household per year and thereby diminish the small amounts of cash generated by the sale of subsistence-caught Chinook salmon. Customary trade, subject to a geographic constraint, could only occur within the Yukon River Management area, effectively eliminating customary trade between rural residents and others, allowed under *§*___.27(c)(12), with the possible exception of customary trade to residents of Fairbanks. This geographic constraint would apply to both the selling and purchasing of subsistence-caught Chinook salmon.

The target of the proposal is not legitimate customary trade, but sales that may rise to the level of significant commercial enterprise. Such sales are already prohibited. The central problem appears to be enforcement of that prohibition. Further regulations limiting customary trade, which is recognized as a legitimate subsistence activity, may not be the appropriate avenue for curtailing sales that exceed the definition of customary trade.

The portion of the proposal that would allow the sale of salmon processed using customary and traditional methods falls outside the scope of the Federal subsistence program. Food health issues, including fish processing, are controlled by the State of Alaska. The customary trade regulations do not exempt anyone from complying with State health regulations for processing foods for sale. The portion of the proposed language to allow the sale of salmon as fillets, strips, or jarred, may mislead users to think that they could sell processed fish without meeting required health standards.

The portions of the proposal that refer to reselling fish obtained in customary trade and to selling subsistence-caught fish to fishery businesses replicate current regulations that prohibit such actions and are unnecessary. These issues are already addressed in Federal subsistence regulation.

The proposal also seeks a reporting requirement. Bristol Bay and the Upper Copper River have such reporting requirements. The number of recordkeeping forms requested and returned remains very small

in the Upper Copper River, while no recordkeeping forms have been requested in the Bristol Bay Area. Similar limited use of the recordkeeping form may occur in the Yukon River Management Area.

Customary trade is included in the definition of subsistence. If limitations based on conservation concerns are necessary, it may be appropriate to conduct an analysis under ANILCA Section 804, which requires the Board to select amongst subsistence users, not uses, based on the premise that all subsistence uses equally qualify for the subsistence preference.

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Wolfe, R. J., B. L. Davis, S. Georgette, and A W. Page, 2000. Sharing, Distribution, and Exchange of Wild Resources: An Annotated Bibliography of Recent Sources. ADF&G Div. Of Subsistence. Tech. Paper No 326. Juneau, Alaska. 58 pages.

YKRAC 2010. Transcripts of the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Meeting, March 2-4, 2010 in Bethel, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

APPENDIX A

Federal Subsistence Customary Trade Record Keeping Form

OMB Control No. 1018-0075
Expires: 01/31/2013

Description: Season:

Applicant's Name (First, Middle Initial, Last)	Date of Birth	Permit #
Mailing Address		Physical Address
City, State, Zip Code		Community of Primary Residence
AK Drivers License # or other acceptable ID	Telephone Number(s)	Date Permit Issued (mm/dd/yy)
Applicant's Signature X		Issuing Agent (Print)

I certify that I am a rural resident as defined by 50 CFR 100.4 and 36 CFR 242.4. I have read and understand the conditions on the permit and agree to comply with them and applicable regulations as found in 50 CFR 100 and 36 CFR 242.

Household members designated to fish with this Permit (must be Federally-qualified subsistence users)

Name _____ DOB _____ Name _____ DOB _____
Name _____ DOB _____ Name _____ DOB _____
Name _____ DOB _____ Name _____ DOB _____

Federal Subsistence Fishing Permit # for Applicant: _____

Federal Subsistence Customary Trade Report ☐ Check here if no sales took place **Report Due by:**

Date of Sale	Buyers Name	Buyers Address	Species	Number of Total Fish:			Dollar Amount
				Fish	Fish Parts	Eggs	

In accordance with the Privacy Act (5 U.S.C. 552a) and the Paperwork Reduction Act (44 U.S.C. 3501), please note the following information. This information collection is authorized by the Alaska National Interest Lands Conservation Act and associated regulations. The Federal Subsistence Board will use this information to manage fish and wildlife resources for subsistence uses. It is our policy not to use your name for any other purpose. We will maintain this information in accordance with the Privacy Act. Your response is voluntary, but is required to obtain or retain a benefit. We may not conduct or sponsor and you are not required to respond to an information collection unless it displays a currently valid OMB control number. OMB has approved this information collection and assigned OMB Control No. 1018-0075. We estimate it will take you about 15 minutes to complete the application and record your harvest. This burden estimate includes time for reviewing instructions, gathering data, and completing and reviewing the form. You may direct comments regarding the burden estimate or any other aspect of the form to the Service Information Collection Clearance Officer, Fish and Wildlife Service, Mail Stop 222, Arlington Square, Department of the Interior, 1849 C Street, NW, Washington D.C. 20240.

FWS Form 3-2379
10/09

Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP11-09: Establish reporting requirements and limits for customary trade of Chinook salmon harvested in Yukon River federal subsistence fisheries.

Introduction: The Yukon-Kuskokwim Delta Regional Advisory Council proposal requests establishment of reporting requirements and limits for customary trade[1] of Chinook salmon harvested in federal subsistence fisheries in the Yukon River Management Area. The proposal requests that a federal customary trade record be established with defined report requirements, presentation to federal agency staff upon request, sales limitations, prohibits resale of fish sold, prohibits sale of fish to a fishery business, and restricts sales and delivery of fish only within the Yukon River Fisheries Management Area. This proposal is modeled directly after state regulations pertaining to customary trade in finfish in Norton Sound (5 AAC 01.188). State regulations generally prohibit sale of subsistence harvested fish[2] while federal regulations allow cash sales. Furthermore, under current state regulations at 18 AAC 34.005, all fish processed for commerce must be processed at a facility approved by Alaska Department of Environmental Conservation.[3]

Sale of subsistence harvested fish, processed and whole, is occurring in urban and rural communities in Alaska contrary to existing state and federal regulations. Discrepancies in state and federal regulations and state requirements regarding processing of fish to protect public health and safety may leave some people vulnerable to citation under state and federal regulations. This is a significant issue for state resource managers, law enforcement agencies, and federal agencies that provide a subsistence priority on federal lands and those waters where a federal subsistence jurisdiction is claimed. FP11-05, FP11-08, and FP11-09 provide an opportunity for the Federal Subsistence Board to adopt enforceable customary trade regulations for the Yukon region that are based on the history and patterns of this use.

Impact on Subsistence Users: If this proposal is adopted, federal subsistence users would be required to obtain a federal customary trade record-keeping form and keep accurate records of Chinook salmon sold, including the date of each sale, buyer's name and address, amount of Chinook salmon sold, specific location where the Chinook salmon were harvested, dollar amount of each sale, type of processing used, and any other information the federal agency requires for

---

[1] ***50 CFR 100.4 Definitions.***

Customary trade means exchange for cash of fish and wildlife resources regulated in this part, not otherwise prohibited by Federal law or regulation, to support personal and family needs; and does not include trade which constitutes a significant commercial enterprise.

[2] ***5 ACC 01.010 Methods, means, and general provisions***

(d) Unless otherwise specified in this chapter, it is unlawful to buy or sell subsistence-taken fish, their parts, or their eggs, except that it is lawful to buy or sell a handicraft made out of the skin or nonedible by-products of fish taken for personal or family consumption.

[3] ***18 AAC 34.005. Purpose and applicability***

(a) The purpose of this chapter is to provide for consumer protection and to protect public health by ensuring the processing, sale, and distribution of safe, wholesome, and properly labeled seafood products.

(b) The requirements of this chapter apply to

(1) persons who process seafood products to be sold as part of commerce and intended for human consumption;

management or enforcement purposes. Federal subsistence fishermen will be required to return the customary trade record keeping form as prescribed on the form, as well as display the form upon request by a federal agency or law enforcement official. It would restrict federal subsistence fishermen's customary trade activities to 200 pounds of unprocessed, whole, or an amount in pounds to be determined of Chinook salmon fillets, strips, or an amount to be determined in jars of subsistence-harvested Chinook salmon per household in a calendar year. Additionally, this proposal would clarify that a person who receives subsistence-harvested Chinook salmon in exchange for cash in a customary trade is not allowed to resell the fish and that a person is not allowed to sell subsistence-harvested fish to a fishery business. Finally, if adopted, it would limit the sale or purchase of Chinook salmon under customary trade regulations, including delivery of fish to a purchaser, to only occur within the Yukon River Fisheries Management Area.

This proposal may reduce subsistence harvest of Chinook salmon intended for cash sale of whole (unprocessed) and processed Chinook salmon. It is not possible, however, to accurately predict how this proposal will affect changes in subsistence harvest patterns because federal and state agencies lack information and data regarding existing levels of harvest and actual sales of subsistence-harvested Chinook salmon. However, the proposal would result in monitoring the customary trade of subsistence-harvested Chinook salmon in the Yukon River area such that the actual effects of customary trade can begin to be measured.

Because state and federal regulations differ, subsistence fishermen are vulnerable to prosecution when selling subsistence harvested salmon on lands and waters outside of boundaries where federal jurisdiction is claimed. Adoption of limitations on cash sale of subsistence harvested salmon that define "significant commercial enterprise," specify fish weight or number limits, clarify where subsistence harvested fish may be sold under federal regulations, and establish reporting requirements for cash sales of subsistence harvested salmon would remove the risk of citation for subsistence fishermen in the Yukon River drainage.

Opportunity Provided by State: The department supports subsistence harvest and uses of salmon consistent with existing state laws and regulations, including customary trade of this resource. However, 5 AAC 01.010 prohibits sale of subsistence harvested fish, their parts, or their eggs unless otherwise specified in state regulation. Currently, there are only two exceptions listed in Chapter 5 of state regulations: Norton Sound-Port Clarence Area for salmon and Sitka Sound herring roe on kelp in Southeast Alaska[4].

Conservation Issues: The Yukon River Chinook salmon stock is currently classified as a stock of yield concern. Since 2001, subsistence fishing time in the Yukon Area has been limited by a windows schedule, which was further restricted in 2008 and 2009 because of conservation concerns for Chinook salmon. Subsistence harvest levels for Chinook salmon have fallen within the amounts reasonably necessary for subsistence (ANS) ranges since 2001, except for 2002, 2008, and 2009. A majority of the Yukon River drainage escapement goals have been met or exceeded since 2000, including the Chena and Salcha rivers, which are the largest producers of Chinook salmon in the United States portion of the drainage. The escapement objective for the Canadian mainstem was met every year from 2001 through 2006, with 2001, 2003, and 2005

[4] ***5 AAC 01.188 and 5 AAC 01.717***

being the three highest spawning escapement estimates on record. The escapement objective for the Canadian mainstem was not met in 2007 and 2008. Exploitation rate on the Canadian-origin stock by Alaskan fishermen declined from an average of about 55% (1989–1998) to an average of about 44% from 2004 through 2008 (Howard et al. 2009). Although subsistence harvest continues to remain stable at nearly 50,000 Chinook salmon annually, commercial harvests have decreased over 60%, from an average of 100,000 annually (1989–1998) to the recent five-year average (2005–2009) of nearly 23,000 fish. Considering all salmon species together, the overall total subsistence salmon harvest in the Yukon Area has declined by approximately 30% since 1990 (Fall et al. 2009:39). Specifically, fall chum salmon harvests have fallen within ANS ranges only three times since 2001 (Fall et al. 2009:43).

Jurisdiction Issues: While standing on state and private lands (including state-owned submerged lands and shorelands), persons must comply with state laws and regulations and cannot sell subsistence harvested fish with two exceptions as specified above. Federal subsistence regulations, particularly customary trade regulations, pertain only to fishing on and use of fish caught on federal public lands and those waters where federal subsistence jurisdiction is claimed. Sale of subsistence fish harvested from all lands and waters (federal, state, or private) is limited by state regulations except to the extent superseded by federal law on federal lands. The State of Alaska maintains jurisdiction of food safety and food processing regulations regardless of location of harvest.

Other Issues: Adoption of this proposal may provide enforceable customary trade regulations, including limits and reporting requirements. Adoption of enforceable federal customary trade regulations that specify limits on cash sales and establish reporting requirements is needed because violation of existing state and federal customary trade and fish processing regulations is an enforcement problem that has significant implications for subsistence users and the public. More education on state and federal regulations and an enforceable definition of "significant commercial enterprise" are needed. This issue should be addressed during a joint meeting of the Regional Councils within the Yukon drainage because this issue potentially affects subsistence users in the entire Yukon River drainage.

Recommendation: Support.

Cited References:

Fall, J.A., C. Brown, M.F. Turek, N. Braem, J.J. Simon, W.E. Simeon, D.L. Holen, L. Naves, L. Hutchinson-Scarbrough, T. Lemons, V. Ciccone, T.M. Krieg, and D. Koster. 2009. Alaska subsistence salmon fisheries 2007 annual report. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 346, Anchorage.

Howard K.G., S.J. Hayes, and D.F. Evenson. 2009. Yukon River Chinook salmon stock status and action plan 2010; a report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Special Publication No. 09-26, Anchorage.

WRITTEN PUBLIC COMMENTS

Support Proposal FP11-09. Sound reasoning.

Don and Jan Woodruff, Eagle

Oppose Proposal FP11-09. You need to do a better job of at looking at the big picture. The subsistence fisherman is only one small part of that picture. Why is the river warmer than in the past? Why do the returning numbers still decline? What is happening to the fish out in the ocean? What is happening to the ocean? And why is the commercial fish industry allowed to have so much waste.

The fishing season of 2009 was made very difficult with the restrictions that were cast upon the subsistence fisherman. We had to work really hard to get any fish. We were told that the numbers were low and Canada needed to have a certain number of fish reach their waters. We had to watch the first pulse go by before we could fish. You restricted the amount of time we were allowed to have our nets in the water. When the fish reached Canada they had more than expected. Between the strong arm of Canada and the loud and strong lobby of the commercial fish industry the subsistence fisherman is being endangered. Why are you proposing to put more restrictions on the lowly subsistence fisherman if last year's restrictions allowed more than enough fish to make it to Canada? Thank you for the opportunity to speak out.

Alyson Esmailka, Galena

Oppose Proposal FP11-09. The intent is good but the collaborating information is vague and confusing. The proposal states that people of Marshall were cited for fishing during the closed Chinook salmon season on the first pulse while other fishermen along the Yukon River were allowed to sell fish under customary trade. Being cited during closed season is different from fishing during open season and selling under customary trade. I do agree that during times where people are restricted by opening and closures during the first and second pulse, they should not be able to sell whole or parts of a salmon under customary trade. But again we will need to have more discussions on this change. I only represent myself on this issue.

James Kelly

Oppose Proposal FP11-09. This proposal has far reaching implications based on hearsay and no factual evidence is presented. Does the USFWS want to go through all of this hassle to prosecute a few individuals trying to cover the expense of fishing. The problem presented here is a product of mismanagement of a once viable commercial season. Y-5 has no commercial season to speak of. With no commercial season, how are these fishermen going to cover the cost of gas, food, and supplies? Y-5 does not have the option of drift net fishing and fishermen have to use camps to live in. In other words, we can't just pack up our nets and fish and go home. The best fishing spots are 35 to 40 miles away from the community. The lack of a commercial season has forced fishermen to do this to make ends meet. No one is getting rich selling fish here in Y-5; they are, however, trying to get their money back and preserve their heritage and rights granted by the congress of the United States. There are fewer people fishing for Chinook in Y-5 today than previously. When there was a commercial season, we sold whole fish. With fewer fishermen in Y-5, more fish are getting to the spawning grounds to replenish the limited resource.

The proposal states that this is a rapidly growing trade. These accusations are unfounded; fewer people are fishing and processing salmon. The demand has gone up but the supply has dwindled. The belief that large numbers of salmon are sold in the urban area of the state is also misleading. The largest sellers of salmon to urban areas are the privileged few who get to sell commercially.

The bizarre situation in Marshall of residents fishing closed season is not consistent with the geography of Alaska. Some districts are open while others are closed. Up river districts are just getting the fish while the defiance is going on. Fishing in closed season just hurts the future of salmon.

This proposal also states that this will have a bigger impact on the future salmon runs than restrictions of net sizes. These restrictions are being put in place to save the large Chinooks and this is the positive effect desired by all subsistence users.

James E. Roberts, Tanana Tribal Council

Oppose Proposal FP11-09. This proposal is unreasonable for customary trade as some villages have no fish and will trade us for red game meat. A tracking system would be complicated and unenforceable.

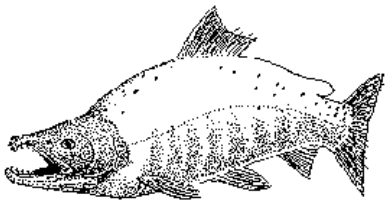
1st Chief Pat McCarty, 2nd Chief Don Honea Jr., and
Traditional Chief William McCarty Jr.,
Ruby Tribal Council, and Eight Residents of Ruby

Oppose Proposal FP11-09. There is not enough money in any agency budget to enforce this tick-tack kind of regulation. It will make all the subsistence users criminals when they share their catch. I cannot name a singe Native person who cannot share what she/he has. Whoever thought of this is crazy.

Letter Signed by Thirty-seven Residents of Galena

PRIORITY INFORMATION NEEDS

FEDERAL SUBSISTENCE FISHERIES



2012 FISHERIES RESOURCE MONITORING PROGRAM

Office of Subsistence Management
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska 99503-6199

1-800-478-1456 or 907-786-3888 Voice
907-786-3612 Fax

July 23, 2010

The Office of Subsistence Management (OSM) invites the submission of proposals for fisheries investigation studies to be initiated under the 2012 Fisheries Resource Monitoring Program (Monitoring Program). Taking into account funding commitments for ongoing projects, we anticipate approximately $2.7 million available in 2012 to fund new monitoring and research projects that provide information needed to manage subsistence fisheries for rural Alaskans on Federal public lands. Funding may be requested for up to four years duration.

Although all proposals addressing subsistence fisheries on Federal public lands will be considered, the 2012 Request for Proposals is focused on priority information needs. The Monitoring Program is administered by region, those being the Northern, Yukon, Kuskokwim, Southwest, Southcentral, and Southeast regions. Strategic plans developed by workgroups of Federal and State fisheries managers, researchers, Regional Advisory Council members and other stakeholders, have been completed for three of the six regions: Southeast, Southcentral (excluding Cook Inlet Area), and Southwest Alaska. These plans identify prioritized information needs for each major subsistence fishery and can be viewed on or downloaded from OSM's website: http://alaska.fws.gov/asm/index.cfml. Independent strategic plans were completed for the Yukon and Kuskokwim regions for salmon in 2005, and jointly for whitefish in 2010. For the Northern Region and the Cook Inlet Area, priority information needs were developed with input from Regional Advisory Councils, the Technical Review Committee, Federal and State managers and staff from OSM.

This document summarizes priority information needs for 2012 for all six regions and a multi-regional category that addresses priorities that may extend to more than one study region. Investigators preparing proposals for the 2012 Monitoring Program should use this document and relevant strategic plans, and the Request for Proposals, which provides foundational information about the Monitoring Program, to guide proposal development. While Monitoring Program project selections may not be limited to priority information needs identified in this document, proposals addressing other information needs must include compelling justification with respect to strategic importance.

Monitoring Program funding is not intended to duplicate existing programs. Agencies are discouraged from shifting existing projects to the Monitoring Program. Where long-term projects can no longer be funded by agencies, and the project provides direct information for Federal subsistence fisheries management, a request to the Monitoring Program of up to 50% of the project cost may be submitted for consideration. For Monitoring Program projects for which additional years of funding is being requested, investigators should justify continuation by placing the proposed work in context with the ongoing work being accomplished. For projects with broad overlap of Federal and State management authority, a substantial match in funding must be included in order to be considered for Monitoring Program funding.

Because cumulative effects of climate change are likely to fundamentally affect subsistence fishery resources, their uses, and how they are managed, investigators are requested to consider examining or discussing climate change effects as a component of their project. Investigators conducting long-term stock status projects will be required to participate in a standardized air and water temperature monitoring program. Calibrated temperature loggers and associated equipment, analysis and reporting services, and access to a temperature database will be provided. Finally, proposals that focus on the effects of climate change on subsistence fishery resources and uses, and that describe implications for subsistence management, are specifically requested. Such proposals must include a clear description of how the project would measure or assess climate change impacts to subsistence fishery resources, uses, and management.

Projects with an interdisciplinary emphasis are encouraged. The Monitoring Program seeks to combine ethnographic, harvest monitoring, traditional ecological knowledge, and biological data to aid in finding effective management approaches to fisheries. Investigators are encouraged to combine interdisciplinary methods, theories, and data to address information needs. Consideration should be given to the cultural context of key research topics.

Collaboration and cooperation with rural communities is encouraged at all stages of research planning and implementation of projects that directly affect those communities. The Request for Proposals describes the collaborative process in community-based research and in building partnerships with rural communities.

The following sections provide specific regional and multi-regional priority information needs for the 2012 Monitoring Program. They are not listed in priority order.

Northern Region Priority Information Needs

The Northern Region is divided into three areas which reflect the geographic areas of the three northern Regional Advisory Councils (Seward Peninsula, Northwest Arctic, and North Slope). Together, the three areas comprise most of northern Alaska, and contain substantial Federal public lands. Since 2001, the three northern Regional Advisory Councils have identified important fisheries issues and information needs for their respective areas. The Seward Peninsula and Northwest Arctic Councils have identified salmon and char fisheries as being the most important fisheries for their areas. The North Slope Council identified char, whitefish, and Arctic grayling fisheries as most important for its area. In addition, the effects of climate change on subsistence fishery resources has been identified as a priority research need. The Multi-regional priority information needs section at the end of this document includes climate change research needs.

For the Northern Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Baseline harvest assessment and monitoring of subsistence fisheries in the Northwest Arctic and North Slope regions.
- Historic trends and variability in harvest locations, harvests and uses of non-salmon fish.
- Iñupiaq taxonomy of fish species, Iñupiaq natural history of fish, land use, place name mapping, species distribution, and methods for and timing of harvests. Species of interest include sheefish, northern pike, or other subsistence non-salmon fish in the Northwest Arctic region.
- Spawning distribution, timing, and stock structure of Selawik River whitefish species.

Yukon Region Priority Information Needs

Since its inception, the Monitoring Plan for the Yukon Region has been directed at information needs identified by the three Yukon River Regional Advisory Councils (Yukon-Kuskokwim Delta, Western Interior, and Eastern Interior) with input from subsistence users, the public, Alaska Native organizations, Federal and State agencies, and partner agencies and organizations. The U.S./Canada Yukon River Salmon Joint Technical Committee Plan has been used to prioritize salmon monitoring projects in the Alaskan portion of the Yukon River drainage. Additionally, a research plan for whitefish has identified priority information needs for whitefish species in the Yukon and Kuskokwim river drainages.

For the Yukon Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Reliable estimates of Chinook and chum salmon escapements (e.g., weir and sonar projects).
- Effects on salmon stocks and users of fishery management practices implemented to conserve Chinook salmon (e.g. gillnet mesh size, gillnet depth, and windowed openings).
- Methods for including "quality of escapement" measures in establishing Chinook salmon spawning goals and determining the reproductive potential of spawning escapements.
- Trends in Yukon River Chinook salmon production relative to other spawning stocks of the Bering Sea and Gulf of Alaska.
- Contemporary economic strategies and practices in the context of diminished salmon runs. Topics may include an evaluation of barter, sharing, and exchange of salmon for cash, as well as other economic strategies and practices that augment and support subsistence activities. Of particular interest are distribution networks, decision making, and the social and cultural aspects of salmon harvest and use.
- Description of the use of gillnets to harvest salmon species by residents of the Yukon River drainage.
- Location and timing of Bering cisco spawning populations in the Yukon River drainage.
- Complete genetic baseline sampling and population marker development for sheefish spawning populations in the Yukon River drainage.
- Harvest, use, and associated contextual information for whitefish by species in lower Yukon River drainage communities.

Kuskokwim Region Priority Information Needs

Since 2001, the Yukon-Kuskokwim Delta and Western Interior Regional Advisory Councils, with guidance provided by the Kuskokwim Fisheries Resource Coalition, have identified a broad category of issues and information needs in the Kuskokwim Region. These include collection and analysis of traditional ecological knowledge; harvest assessment and monitoring; salmon run and escapement monitoring; non-salmon fish population monitoring; and marine/coastal salmon ecology. Additionally, a research plan for salmon and a research plan for whitefish have been used to prioritize monitoring projects for salmon and whitefish. These were reviewed to ensure that remaining priority information needs were considered.

For the Kuskokwim Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Reliable estimates of Chinook, chum and coho salmon escapement (e.g. weir projects).
- Harvest, use, and associated contextual information for whitefish by species in upper Kuskokwim River drainage communities. Communities of interest include McGrath, Telida, Nikolai, Takotna, and Lime Village.

- Traditional ecological knowledge of whitefish by species in central Kuskokwim River drainage communities. Communities of interest include Upper Kalskag, Lower Kalskag, Aniak, Chuathbaluk, Red Devil, Sleetmute, Stony River, and Crooked Creek. The findings from this research will supplement harvest and use information from previous research.

- Harvest, use, and associated contextual information for whitefish by species in lower Kuskokwim River drainage communities. Specific groups of communities of interest are Kwethluk, Akiachak, Napaskiak, and Tuluksak, or Chefornak, Kipnuk, Kongiganak, and Kwigillingok.

- Broad whitefish population assessment, including distribution and age structure.

- Location and timing of Bering cisco spawning populations in the Kuskokwim River drainage.

- Complete genetic baseline sampling and population marker development for sheefish spawning populations in the Kuskokwim River drainage.

- Status of sheefish spawning population in Highpower Creek, an upper tributary of the Kuskokwim River (this could be part of the genetic baseline study listed directly above).

Southwest Region Priority Information Needs

Separate strategic plans were developed for the Bristol Bay-Chignik and Kodiak-Aleutians areas, corresponding to the geographic areas covered by the Bristol Bay and Kodiak/Aleutians Regional Advisory Councils. These strategic plans were reviewed to ensure that remaining priority information needs were considered.

For the Southwest Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Trends in whitefish harvest and use from Lake Clark communities.

- Environmental, demographic, regulatory, cultural, and socioeconomic factors affecting harvest levels of salmon for subsistence use in the Kodiak Area. Researchers should consider evaluating factors influencing use patterns and describing the socioeconomic impacts of other fisheries.

- Harvest of salmon for subsistence use by residents of the Aleutian Islands Area, including current and traditional harvest methods and means by species, and current and traditional uses and distribution practices.

Southcentral Region Priority Information Needs

A strategic plan was developed for Prince William Sound-Copper River and an abbreviated strategic planning process was employed for Cook Inlet. These sources were reviewed to ensure that remaining priority information needs were considered.

For the Southcentral Region, the 2012 Request for Proposals is focused on the following priority information need:

- Historical and current subsistence use areas for harvest of salmon and non-salmon fish species by residents of Ninilchik, Hope, and Cooper Landing. Research should including intensity of use and use on Federal public lands and waters.

Southeast Region Priority Information Needs

A strategic plan was developed for Southeast Region in 2006 and was reviewed to ensure that priority information needs are identified. The 2012 Request for Proposals is focused on priority information needs for sockeye salmon and steelhead trout. It should be noted that current Department of Agriculture funding levels for the monitoring program in Southeast Alaska are fully committed to continuation of projects initiated in 2010. However, this request for proposals includes solicitation for the Southeast Region so as to maintain options for 2012 should additional funding become available.

For the Southeast Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Reliable estimates of sockeye salmon escapement. Stocks of interest include: Gut Bay, Red, Kah Sheets, Salmon Bay, Sarkar, Lake Leo, and Hoktaheen.

- In-season subsistence harvest of sockeye salmon. Stocks of interest include: Hatchery Creek, Gut Bay, Red, Kah Sheets, Salmon Bay, Sarkar, Kanalku, and Hoktaheen.

- Contribute to the genetic stock identification baseline of Chatham Strait sockeye salmon.

- Reliable estimates of steelhead escapement, especially for systems on Prince of Wales Island.

Multi-Regional Priority Information Needs

The Multi-regional category is for projects that may be applicable in more than one region. For the Multi-Regional category, the 2012 Request for Proposals is focused on the following priority information needs:

- Changes in subsistence fishery resources and uses, in the context of climate change where relevant, including but not limited to fishing seasons, species targeted, fishing locations, harvest methods and means, and methods of preservation. Include management implications.

- An indexing method for estimating species-specific whitefish harvests on an annual basis for the Kuskokwim and Yukon drainages. Researchers should explore and evaluate an approach where sub-regional clusters of community harvests can be evaluated for regular surveying with results being extrapolated to the rest of the cluster, contributing to drainage-wide harvest estimates.

- Evaluation of conversion factors used to estimate edible pounds from individual fish, and from unorthodox units such as tubs, sacks, or buckets.

UPDATE ON THE BROWN BEAR CLAW HANDICRAFT WORKING GROUP

The Brown Bear Claw Handicraft Working Group met on July 29, 2010 in Anchorage. Representatives of seven of the ten Regional Advisory Councils participated in person, and representatives of Eastern and Southcentral Regional Advisory Councils participated by teleconference. Staff from Alaska Department of Fish and Game and Federal agencies also attended. The meeting, chaired by Larry VanDaele with ADF&G and Helen Armstrong, OSM, was held in the OSM Board Room and lasted most of the day.

To begin with, discussion focused on a central question, namely, whether or not there is a need for changes to regulations that allow the sale of handicrafts that incorporate brown bear claws; and if so, can a regulation or regulations be developed that would be non-burdensome for subsistence users.

Other related questions had to do with existing laws or requirements that may affect subsistence users wanting to sell handicrafts that incorporate bear claws, including:

- CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement created to ensure that international trade in wild animals and their parts does not threaten the survival of the species worldwide. Although brown bears are not endangered in Alaska, they are listed as endangered in the lower 48 states of the U.S. and worldwide. Therefore, products from brown bears require CITES permits for international trade (as well as black and polar bears). Under CITES, both tag numbers and permits can be issued.
    - When a bear is sealed, a CITES tag number is attached to the bear hide.
    - A CITES permit is needed to take a handicraft that includes a brown bear part, such as a claw, into another country. To do that, a CITES tag number would need to be provided to a law enforcement officer to get a CITES permit (cost is $25). This is the responsibility of the buyer, not the seller, unless the seller is exporting the item out of the country (in which case they are required to pay for an export license).
- Sealing of brown bears was also discussed; of particular concern was where bears could be sealed. The existing Federal regulations require modification to allow brown bears to be sealed in villages rather than regional centers. ADF&G representatives assured the Council members that subsistence users would not have to leave the community to get a bear sealed.

Following this discussion, the working group discussed options with regard to regulatory action to bring to the Federal Subsistence Board. The working group was in consensus that:

- Deferred Proposal WP08-05 should be rejected by the Federal Subsistence Board. State representatives at the working group meeting concurred that the Deferred Proposal WP08-05 should be rejected.
- A new proposal should be submitted. The new proposed regulation would require sealing the brown bear if the subsistence user intends to sell a handicraft incorporating the claw(s). A CITES tag number, which is provided when the hide is sealed, would then accompany the handicraft. The new proposal would be submitted by OSM staff.

- Further details regarding how a CITES tag number would accompany a handicraft (a certificate or sticker or some other mechanism) are being developed by staff. These details will be provided to the working group at a later date and will be included in the proposal when it is submitted.

- The proposed regulation would apply only to Federally qualified subsistence users who sell handicrafts incorporating brown bear claw(s). There would be no change for those who take brown bears, make handicrafts for personal use, and do not intend to sell such a handicraft.

- Further details for the proposed regulation still need to be developed addressing how the CITES tag number would accompany the handicraft as well as changes to the regulations regarding the ability to seal the hide in villages rather than regional centers. The working group reached consensus on the following language (additions are bolded). For Federally qualified subsistence users:

  You may sell handicraft articles made from the skin, hide, pelt, or fur of a brown bear (including claws) taken from Units 1-5, 9A-C, 9E, 12, 17, 20, 22, 23, 24B (only that portion within Gates of the Arctic National Park), 25, and 26.

  If you intend to sell a handicraft incorporating a brown bear claw(s), the hide must be sealed, which includes a CITES tag number. The CITES tag number must accompany the handicraft.

The analysis of this proposal will be presented to all Councils for their recommendations at the fall 2011 meetings, and will be considered by the Federal Subsistence Board at its January 2012 meeting.

QUESTIONS AND ANSWERS REGARDING THE BROWN BEAR CLAW HANDICRAFTS WORK GROUP

Why was this working group formed?

At the May 2008 Federal Subsistence Board meeting, the idea of a working group was suggested by the State as a way to address some of their concerns with Federal regulations that allow the sale of handicrafts that include brown bear claws. The Federal Subsistence Board endorsed the formation of a working group, and clarified that its membership needed to include representatives of the Regional Advisory Councils. The Federal Board also deferred action on a statewide proposal submitted by Alaska Department of Fish and Game (ADF&G) that addressed Federal regulations, pending the outcome of the working group.

What is the charge of the working group?

The draft charge of the working group was developed at a meeting of State and Federal staff in January 2009. The charge is as follows:

> Develop a method(s) to recommend to the Federal Subsistence Board and the Board of Game for tracking brown bear claws made into handicrafts that is enforceable and culturally sensitive, commensurate with the need to provide conservation of this wildlife resource.

Who is in the working group and how often has it met?

The brown bear claws handicraft tracking working group includes representatives of the ADF&G, Alaska Wildlife Troopers, Office of Subsistence Management, US Fish and Wildlife Service, US Forest Service, and nine of the ten Regional Advisory Councils. Federal and state agency staff met five times between January and August 2009, but Council representatives were only able to attend one of these meetings by teleconference (June 2009). The working group met again in July 2010.

What is currently allowed under Federal subsistence regulations with regard to brown bear parts?

Under Federal subsistence regulations, Federally qualified subsistence users may sell handicraft articles made from the skin, hide, pelt or fur of a brown bear (including claws) taken from Units 1-5, 9A-C, 9E, 12, 17, 20, 23, 24B (only that portion within Gates of the Arctic National Park), 25 and 26. In Units 1-5, Federally qualified subsistence users may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew or skulls of a brown bear taken in Units 1, 4 or 5. Raw claws may not be sold to anyone, including other subsistence users.

Will the working group change Federal Subsistence regulations?

Only the Federal Subsistence Board can change Federal subsistence regulations, and it is not the goal of the working group to rescind Federal regulations that allow for the sale of handicrafts that incorporate brown bear claws. The working group is looking for a non-burdensome way to track legally harvested claws that protects the artist, the buyer, and the resource, and is supported by the Councils.

If the working group can devise a way to track brown bear claws used in handicrafts, how would this protect subsistence users?

Illegally-harvested brown bears are resources that are being taken away from subsistence users. In some cases, poaching for bear parts is incorrectly attributed to legitimate hunters, unfairly affecting peoples' opinions of hunting and subsistence. Developing a mechanism to track legally harvested claws could protect handicraft makers by showing the claws that are used were legally harvested. It could also protect the buyer by developing a mechanism to document and track, which will allow buyers to legally import the handicrafts into other states and countries. This will protect the resource and enhance the value of legitimately obtained handicrafts by making the legal claws identifiably separate from the illegal claws on the market.

What are some of the concerns over the sale of brown bear claws in Alaska?

Although brown bear populations are generally healthy and productive in Alaska, this is not the case in other parts of the United States and the world. There is a demand for bear parts in foreign and domestic markets that poachers and traffickers fill by obtaining brown bears for their parts (primarily paws, claws and gall bladders) and shipping them to illegal markets. These illegal activities threaten populations of brown bears in other parts of the US and world and could eventually affect Alaskan bear populations.

What drives the illegal trade in brown bears and their parts?

Prices for individual claws are highly variable. There have been reports of brown bear paw soup costing $800 per bowl in Asia, and brown bear claw necklaces costing over $3,000. These high prices drive the trade in illegal brown bear parts. In the past ten years, agents from US Fish and Wildlife Service and the Alaska Wildlife Troopers have documented over 150 cases where they have found dead bears with

only the claws, paws or gall bladders removed. These cases do not reflect findings by other enforcement agencies that have different ways of organizing individual cases. Illegal harvests are considered poaching and are not reflective of the legal harvests of subsistence users.

What options are there for tracking claws?

The Brown Bear Claw Working Group is looking at existing programs that track animal parts in different countries using such mechanisms as tags, seals, stickers or permits that stay with the animal part. While a technical solution such as individually identifiable microchips inserted in each claw would be possible, such marking and tracking is not wide spread, and such marking of individual claws might not be effective on a global scale.

Would it work to have documentation for claws?

We think so, as long standing programs for other resources have worked.
CITES (Convention of International Trade of Endangered Species) has an established and successful documentation and tracking program to track the legal and illegal movement of threatened or endangered species. Alaska brown bears are already protected under CITES and between 1975-2003, there were over 6,500 reports of legal brown bear claw exports.

To take advantage of this program, the Federal Subsistence Management Program could use the existing ADF&G procedures for sealing when the hunter plans on using the claws for making a handicraft to sell in the future. The existing ADF&G procedures is to attach a CITES tag to the bear hide when the bear is sealed. The appropriate forms to document and track brown bear claws taken by Federally qualified subsistence users could be incorporated into the sealing process when the hide is sealed, thereby minimizing paperwork and burden on the hunter. A numbered sticker or permit could then be issued and would stay with the handicraft as proof the claws came from a legally harvested Alaskan brown bear. The Federal government manages CITES permit distribution.

The handicrafts made from brown bear claws legally harvested in Alaska by Federally qualified subsistence users should be distinct from all other sources of brown bear claws to identify that the handicrafts came from sustainably managed bear populations and from Federally protected Alaskan subsistence users. This will protect the resource and enhance the value of legitimately obtained handicrafts. Possession of a CITES permit would allow the buyer to legally take brown bear claw handicrafts into other countries.

In which units is sealing of brown bear currently not required?

Sealing brown bear skins and skulls harvested by Federally qualified subsistence users on Federal public lands is not required (unless you remove the skin or skull from the unit) in Units 5, 9B, 17, 18, portions of 19A, 19B (downstream of and including the Aniak River drainage), 21D, 22 (except 22C), 23 (except the Baldwin Peninsula north of the Arctic Circle), 24, and 26A. *These are the only units or portions of units where new sealing requirements would have an effect, and only when the intent is to sell the brown bear claw handicraft.*

In which units would the proposed regulation have no effect?

The proposed regulations would have no effect on those units where sealing is already required. These units are: 1-4, 6-8, 9A, 9C—9E, 10-16, portions of 19A, 20, 21A—C, 21E, 22C, 25, 26B and 26C.

UPDATE ON SALMON BYCATCH IN THE BERING SEA/ALEUTIAN ISLANDS POLLOCK FISHERY

Chinook Salmon Bycatch Management

- Consistent with the briefing provided to the Regional Advisory Councils in Winter 2010, the rulemaking process was concluded on the Chinook salmon bycatch issue in the Spring of 2010.

- Bycatch limits established for Chinook salmon were 60,000 if the fishery participants form one or more incentive plan agreements, or 47,591 if there are no incentive plan agreements. Full details of the Record of Decision can be found at: http://alaskafisheries.noaa.gov/sustainablefisheries/bycatch/salmon/chinook/feis/amd91rod_0510.pdf

Chum Salmon Bycatch Management

- June 2010: In Sitka, the North Pacific Fishery Management Council (NPFMC) finalized management alternatives for staff analysis.

- June-December 2010: Preparation by NPFMC staff of the analysis for preliminary review.

- Mid-January 2011: Preliminary review draft to be available.

- Early-February 2011: In Seattle, NPFMC to review preliminary data/analysis.

- February-March 2011: NPFMC members and staff plan to attend five Federal Subsistence Regional Advisory Council meetings, give presentations on the proposed chum salmon bycatch management measures and solicit public comments.

- June 2011: In Nome, the NPFMC to select the preliminary preferred alternative, which must be within the range of alternatives analyzed.

- October 2011 (tentative): In Anchorage, NPFMC final action to select final preferred alternative, which will be provided to the Secretary of Commerce for decision. Rule making process to follow.

- January 2012 (tentative): Chum salmon management measures implemented in the Bering Sea/Aleutian Islands Pollock fishery.

BRIEFING ON THE NEW FEDERAL SUBSISTENCE PERMIT SYSTEM

The Federal Subsistence Management Program issues permits to Federally qualified subsistence users where specified in regulations.

- Recognizing limitations of the existing system, beginning in February 2010, a new Federal Subsistence Permit System (FSPS) was developed and the wildlife harvest component was brought on line in mid-April.

OSM staff undertook the project to improve efficiencies by:

- Building the latest security measures into the new FSPS in order to protect personal information of permit holders as well as the integrity of the harvest data
- Allowing for in-season tracking of harvests, thereby allowing for more responsive in-season management and conservation of species
- Standardizing terminology and improving accuracy of the issued permits and also harvest reporting data subsequently entered and managed within the system
- Allowing Federal managers to generate tailored, functional reports to provide staff biologists and anthropologists with solid basis for subsequent regulatory analyses and actions
- Streamlining the process of issuing permits to Federally qualified users, as well as tracking the returns of the harvest information reports.

Since April, OSM personnel have trained more than 96 Federal agency staff how to issue permits using the new system

- More than 3,200 permits have been issued since then

Feedback from users is overwhelmingly positive:

- Public users – much quicker process to receive permits, less time waiting in line
- Agency staff – far more useful than before

What's in store for the future?

- The fisheries management component of the permit system is under development and is expected to be available for use in the 2011 season.
- Web based harvest reporting

Winter 2011 Regional Advisory Council Meeting Calendar

February 15–March 24, 2011 current as of 08/02/10

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Feb. 13	*Feb. 14*	*Feb. 15* *Window Opens*	*Feb. 16*	*Feb. 17*	*Feb. 18* **NWA—Kotzebue**	*Feb. 19*
Feb. 20	*Feb. 21* ***HOLIDAY***	*Feb. 22*	*Feb. 23* **YKD—Bethel**	*Feb. 24*	*Feb. 25*	*Feb. 26*
Feb. 27	*Feb. 28*	*Mar. 1* **EI—Tanana** **WI—Galena**	*Mar. 2*	*Mar. 3*	*Mar. 4*	*Mar. 5*
Mar. 6	*Mar. 7* **NS—Barrow**	*Mar. 8*	*Mar. 9* **BB—Naknek**	*Mar. 10*	*Mar. 11*	*Mar. 12*
Mar. 13	*Mar. 14*	*Mar. 15* **SP—Nome**	*Mar. 16* **SC—Anchorage**	*Mar. 17*	*Mar. 18*	*Mar. 19*
Mar. 20	*Mar. 21*	*Mar. 22* **SE—Sitka** **K/A—Kodiak**	*Mar. 23*	*Mar. 24* *Window Closes*	*Mar. 25*	*Mar. 26*

Fall 2011 Regional Advisory Council Meeting Window

August 30–October 15, 2011 current as of 08/04/10

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Aug. 21	*Aug. 22* WINDOW OPENS	*Aug. 23* NS—TBA	*Aug. 24*	*Aug. 25*	*Aug. 26*	*Aug. 27*
Aug. 28	*Aug. 29*	*Aug. 30*	*Aug. 31*	*Sept. 1*	*Sept. 2*	*Sept. 3*
Sept. 4	*Sept. 5* **HOLIDAY**	*Sept. 6*	*Sept. 7*	*Sept. 8*	*Sept. 9*	*Sept. 10*
Sept. 11	*Sept. 12*	*Sept. 13*	*Sept. 14*	*Sept. 15*	*Sept. 16*	*Sept. 17*
Sept. 18	*Sept. 19*	*Sept. 20*	*Sept. 21*	*Sept. 22*	*Sept. 23*	*Sept. 24*
Sept. 25	*Sept. 26*	*Sept. 27*	*Sept. 28*	*Sept. 29*	*Sept. 30* END OF FY2011	*Oct. 1*
Oct. 2	*Oct. 3*	*Oct. 4*	*Oct. 5*	*Oct. 6*	*Oct. 7*	*Oct. 8*
Oct. 9	*Oct. 10* **HOLIDAY**	*Oct. 11*	*Oct. 12*	*Oct. 13*	*Oct. 14* WINDOW CLOSES	*Oct. 15*

Federal Subsistence Board
1011 E. Tudor Rd., MS 121
Anchorage, Alaska 99503-6199

U.S. FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

U.S. FOREST SERVICE

FWS/OSM 10058/AW

JUL 1 2010

Mr. R. Weaver Ivanoff, Chair
Seward Peninsula Subsistence
Regional Advisory Council
Post Office Box 311
Unalakleet, Alaska 99684

Dear Mr. Ivanoff:

Enclosed with this letter is a report of the Federal Subsistence Board's actions at its May 18-20, 2010, meeting regarding proposed changes to subsistence wildlife regulations. The Board used a consensus agenda on those proposals where the Regional Advisory Council(s), the Interagency Staff Committee, and the Alaska Department of Fish and Game were in agreement. The Board adopted the consensus agenda at the conclusion of the meeting. Details of these actions and the Board's deliberations are contained in the meeting transcripts. Copies of the transcripts may be obtained by calling our toll free number, 1-800-478-1456, and are available online at the Office of Subsistence Management website, http://alaska.fws.gov/asm/index.htm.

The Federal Subsistence Board appreciates the Seward Peninsula Subsistence Regional Advisory Council's active involvement in and diligence with the regulatory process. The ten Regional Advisory Councils continue to be the foundation of the Federal Subsistence Management Program, and the stewardship shown by the Regional Advisory Council chairs and their representatives at the Board meeting was noteworthy.

If you have any questions regarding the summary of the Board's actions, please contact Alex Nick, 1-907-543-1037.

Sincerely,

/S/ Michael R. Fleagle

Michael R. Fleagle, Chair

Enclosure

cc: Seward Peninsula Subsistence Regional Advisory Council members
Peter J. Probasco, OSM

FEDERAL SUBSISTENCE BOARD ACTION REPORT
MAY 18-20, 2010

Note to Reader: 1) Changes to regulatory language are shown by strikeout ~~lettering~~ for deleted language and bolded **lettering** for new language. 2) The consensus agenda is comprised of proposals for which the Office of Subsistence Management, Regional Advisory Council(s), the Interagency Staff Committee, and the Alaska Department of Fish and Game agree on a recommended action. The Federal Subsistence Board does not address consensus agenda proposals individually unless requested to do so at the meeting.

STATEWIDE PROPOSALS

Proposal WP10-01

DESCRIPTION: Proposal WP10-01, submitted by the USFWS, Office of Subsistence Management (OSM), requests the addition of a definition for "drawing permit" to the Federal subsistence management regulations.

COUNCIL RECOMMENDATION/JUSTIFICATION:
Southeast Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal is housekeeping and provides clarity for a term in common use.
Southcentral Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal would not negatively affect subsistence users.
Kodiak/Aleutians SRAC: Support with modification as described in the OSM conclusion.
Bristol Bay SRAC: Support with modification as described in the OSM conclusion.
Yukon-Kuskokwim Delta SRAC: Support with modification as described in the OSM conclusion. This is a housekeeping proposal to clarify random drawing.
Western Interior Alaska SRAC: Support with modification as described in the OSM conclusion.
Seward Peninsula SRAC: Support with modification as described in the OSM conclusion. The Council agrees with clarifying definitions for "drawing permits."
Northwest Arctic SRAC: Support. The Council supported the proposal because subsistence is a way of life and there are concerns about having to use a drawing permit.
Eastern Interior Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal is housekeeping and would simplify and clarify regulations.
North Slope SRAC: Support. Subsistence is a way of life and there are concerns about having to use a drawing permit.

BOARD ACTION/JUSTIFICATION: **Adopted with modification**, as recommended by eight councils to read, *"Statewide-General Regulations §__.25(a) Definitions.* ***Drawing permit—a permit issued to a limited number of Federally qualified subsistence users selected by means of a random drawing.****"* The definition clarifies a term that is used in the Federal subsistence hunting regulations and does not affect fish and wildlife populations, subsistence uses or other

uses. The modified wording simplifies the definition and makes it clear that drawing permits are based on a random drawing for all similarly situated Federally qualified subsistence users.

Proposal WP10-02

NOTE: The status of Proposal WP10-02 (deferred proposal WP08-05) was presented to all Regional Advisory Councils during the winter 2010 cycle of meetings. This proposal was further deferred until the assigned State-Federal workgroup completes its work and presents its findings to the Board in January 2011. The Southeast Alaska SCRAC was the only council that took action on the proposal.

COUNCIL RECOMMENDATION/JUSTIFICATION:
Southeast Alaska SRAC: Support use of brown bear parts for handicrafts. There is no evidence to indicate the need for a bear handicrafts workgroup or a need to limit or restrict the use of brown bear parts. There is no need to defer action.

BOARD ACTION/JUSTIFICATION: The Board did not address this proposal, preferring instead to wait until the workgroup has completed its work.

Proposal WP10-03

DESCRIPTION: Proposal WP10-03, submitted by the Office of Subsistence Management, requests the addition of a general provision in Federal subsistence management regulations to allow the harvest of fish and wildlife by participants in a cultural or educational program.

COUNCIL RECOMMENDATION/JUSTIFICATION:
Southeast Alaska SRAC: Support with modification as described in the OSM conclusion. The Council favors removing confusing language regarding the ceremonial use of fish and wildlife. However, it is unclear to the Council how OSM would define an educational camp. The Council favors simplifying regulations that do not include hard timelines and that provide flexibility in the number of animals that can be taken.
Southcentral Alaska SRAC: Support with modification to read *"~~§___.27(e)~~ §___.25(g) Cultural/educational program permits. ~~(2)~~**(1)** ~~The U.S. Fish and Wildlife Service Office of Subsistence Management may issue a permit to harvest fish for a qualifying cultural/educational program to an organization that has been granted a Federal subsistence permit for a similar event with the previous 5 years.~~ A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the* ***Federal Subsistence Board through the*** *Office of Subsistence Management* ***and should be submitted*** *60 days prior to the earliest desired date of harvest. ~~Permits will be issued for no more than 25 fish per culture/education camp~~. ~~Appeal of a rejected request can be made to the Federal Subsistence Board. Application for an initial permit for a qualifying cultural/educational program, for a permit when the circumstances have change significantly, when no permit has been issued within the previous 5 years, or when there is a request for harvest in excess of that provided in this paragraph (e)(2), will be considered by the Federal Subsistence Board.~~* ***Harvest must be reported and any animals harvested will be***

counted against any established Federal harvest quota for the area in which it is harvested. (2) A permit to harvest fish, wildlife, or shellfish for a qualifying culture/educational program which has been granted a Federal subsistence permit for a similar event with the previous 5 years may be issued by the Federal in-season manager (for fisheries) or the Federal local land manager (for wildlife). Requests for follow-up permits must be submitted to the in-season or local land manager and should be submitted 60 days prior to the earliest desired date of harvest." These amendments provide more clarity, especially with respect to harvest limits. The proposal will not affect existing culture camps and is consistent with existing regulations.
Kodiak/Aleutians SRAC: Support with modification as described in the OSM conclusion. The modified proposal will simplify the process.
Bristol Bay SRAC: Support with modification as described in the OSM conclusion. The proposal would simplify the current regulations to reduce confusion among the public and Federal managers.
Yukon-Kuskokwim Delta SRAC: Support with modification as described in the OSM conclusion. This is a housekeeping proposal; adding general provisions in the regulations would clarify subsistence management regulations.
Western Interior Alaska SRAC: Support with modification as described in the OSM conclusion.
Seward Peninsula SRAC: Support with modification as described in the OSM conclusion.
Northwest Arctic SRAC: Support with modification as described in the OSM conclusion. It is very important to provide opportunity for cultural/educational programs permits.
Eastern Interior Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal supports subsistence uses of wildlife and retains the ability to obtain permits with less than a 60-day notice. The Council suggested further simplification by asking the Federal Subsistence Management Program to work with the Alaska Department of Fish and Game to develop a joint Federal-State permit.
North Slope SRAC: Support with modification as described in the OSM conclusion. It is very important to provide opportunity for cultural/educational programs permits.

BOARD ACTION/JUSTIFICATION: **Adopted with modification**, as recommended by nine councils, to read, ***§____.25(g) Cultural/educational program permits (1) A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the Federal Subsistence Board through the Office of Subsistence Management and should be submitted 60 days prior to the earliest desired date of harvest. Harvests must be reported and any animals harvested will count against any established Federal harvest quota for the area in which it is harvested. (2) Requests for follow-up permits must be submitted to the in-season or local manager and should be submitted 60 days prior to the earliest desired date of harvest.***

The harvest of fish and wildlife by participants in cultural and educational programs is generally allowed in the Federal Subsistence Management Program regulations. Proposal WP10-03 will further clarify for fish and wildlife manager, Office of Subsistence Management staff, members of the Interagency Staff Committee, and members of the Federal Subsistence Board the cultural and educational permit regulations.

Proposal WP10-04

DESCRIPTION: Proposal WP10-04, submitted by the Office of Subsistence Management, would remove Units 6, 12, 20A, 20B, 20C east of the Teklanika River, 20D, and 20E from the areas for which the Assistant Regional Director for Subsistence Management has the delegated authority to open close or adjust Federal subsistence lynx seasons and to set harvest and possession limits.

COUNCIL RECOMMENDATION/JUSTIFICATION:
Southeast Alaska SRAC: No action taken.
Southcentral Alaska SRAC: Support with modification as described in the OSM conclusion. The proposed action would not impact subsistence users and there are no conservation concerns for the lynx population.
Kodiak/Aleutians SRAC: No action taken. The Council did not want to take action on a proposal that would affect another region.
Bristol Bay SRAC: Support with modification as described in the OSM conclusion. The Council supports Federal and State alignment of regulations that enhance the management of resources, reduce confusion for the public, and allow subsistence uses to continue.
Yukon-Kuskokwim Delta SRAC: Support with modification as described in the OSM conclusion. This is a housekeeping proposal and has no impact on the Yukon-Kuskokwim Delta Region.
Western Interior Alaska SRAC: Support with modification as described in the OSM conclusion.
Seward Peninsula SRAC: No action taken. The proposed action would not affect the Seward Peninsula Region.
Northwest Arctic SRAC: Oppose.
Eastern Interior Alaska SRAC: Support. This proposal could be considered housekeeping in that the ability to adjust seasons is still possible and this change would simplify regulations.
North Slope SRAC: Support with modification to delete the regulatory language found in §___.26(f)(3) and delegate the authority to open, close, or adjust Federal lynx seasons and to set harvest and possession limits for lynx via a delegation of authority letter only.

BOARD ACTION/JUSTIFICATION: **Adopted with modification** to delete the regulatory language found in *§__.26 (f)(3),* and delegate the authority to open, close, or adjust Federal lynx seasons and to set harvest and possession limits for lynx via a delegation of authority letter only, consistent with five of the Councils' recommendations.

Proposal WP10-05

DESCRIPTION: Proposal WP10-05, submitted by the Office of Subsistence Management, seeks to update, clarify, and simplify the regulations regarding accumulation of harvest limits for both fish and wildlife.

COUNCIL RECOMMENDATION/JUSTIFICATION:
Southeast Alaska SRAC: Support. This proposal is housekeeping and necessary to accommodate previous changes to Federal regulations.

Southcentral Alaska SRAC: Support. This is a housekeeping proposal that would not affect fish and wildlife populations and subsistence users.
Kodiak/Aleutians SRAC: Support.
Bristol Bay SRAC: Support. The proposal will not impact subsistence users and will not affect fish and wildlife populations.
Yukon-Kuskokwim Delta SRAC: Support. This is a housekeeping proposal that would benefit subsistence users.
Western Interior Alaska SRAC: Support.
Seward Peninsula SRAC: Support. The Council agrees with simplifying and clarifying wording for accumulations of harvest limits. This proposal does not affect the Seward Peninsula Region.
Northwest Arctic SRAC: Oppose. The Council expressed concerns about the State management program in relation to the Federal program.
Eastern Interior Alaska SRAC: Support. This proposal is housekeeping and would clarify current regulations.
North Slope SRAC: Support. This proposal does not change Federal subsistence regulations for the North Slope Region concerning accumulation of harvest limits or the timeframe for harvest limits.

BOARD ACTION/JUSTIFICATION: **Adopted**, as recommended by nine of the Councils. This action will simplify the regulations.

SEWARD PENINSULA REGION

Proposal WP10-72

DESCRIPTION: Proposal WP10-72, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests that the closure to harvest coyotes on Federal public lands be rescinded.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. Closure is not needed due to the limited number of coyotes with Unit 22. Rescinding the hunting and trapping closures for taking coyote in Unit 22 would allow Unit 22 residents to hunt or trap a coyote opportunistically under State regulations.

BOARD ACTION/JUSTIFICATION: **Adopted with modification**, consistent with the intent of the Seward Peninsula Subsistence Regional Advisory Council. The Board agreed with the justification offered by the Council. The regulation will read:

Unit 22—Coyote Hunting ***No Federal open season***
~~*Federal public lands are closed to the taking of coyote*~~

Unit 22—Coyote Trapping ***No Federal open season***
Coyote, incidentally taken with a trap or snare ~~*intended for red fox or wolf*~~ *may be used for subsistence purposes*

Proposal WP10-73

DESCRIPTION: Proposal WP10-73, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests expansion of the customary and traditional use determination for muskoxen in all of Unit 22D to add residents of Units 22B west, 22C, and 22E to the current customary and traditional use determination which only includes residents of Unit 22D.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support WP10-73 with modification as described in the OSM conclusion. Adopting this proposal with the OSM recommended modifications would recognize the customary and traditional uses of the residents of Unit 22B, 22C, and 22E for muskoxen in all of Unit 22D. It also would eliminate the division in customary and traditional use determination areas. The Council recognized the importance of allowing others to come into traditional use areas to hunt muskoxen.

BOARD ACTION/JUSTIFICATION: **Adopted with modification**. This proposal was on the consensus agenda. The regulation will read:

Unit 22D—Muskox	Customary and traditional use determination
Unit 22D, ~~that portion within the Kougarok, Kuzitrin, and Pilgrim river drainages~~	*Rural residents of Units **22B, 22C**, 22D (excluding St. Lawrence Island) ~~and White Mountain~~, **and 22E***
~~Unit 22D—remainder~~	*~~Rural residents of Unit 22D excluding St. Lawrence Island~~*

Proposal WP10-74

DESCRIPTION: Proposal WP10-74, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests that the closure of Federal public lands to the harvest of muskoxen in Unit 22E be rescinded.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. Rescinding the Federal closure on muskox in Unit 22E would give an opportunity meet the harvest quota either under Federal or State regulations on Federal public lands in Unit 22E with minimal impact to the muskox population. Harvest quotas are rarely met in Unit 22E and there is a harvestable surplus of muskoxen to allow for both a Federal and State harvest.

BOARD ACTION/JUSTIFICATION: **Adopted**. This proposal was on the consensus agenda.

Proposal WP10-75

DESCRIPTION: Proposal WP10-75, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests that the harvest of cow muskoxen be allowed for the entire season August 1—March 15, not only the period from January 1-March 15, in Unit 22E.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. The muskox population is increasing in Unit 22E. Adopting a cow harvest is supported because there is a harvestable surplus of cow muskoxen in Unit 22E. Minimal impact on the muskox population is expected because the number of muskoxen that have been harvested in the past has been quite low. The harvestable surplus has not been met in the past.

BOARD ACTION/JUSTIFICATION: **Adopted**. This proposal was on the consensus agenda.

Proposal WP10-76

DESCRIPTION: Proposal WP10-76, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests the addition of Unit 22 to the list of areas from which the skin, hide, pelt or fur, including claws, of brown bears harvested under Federal subsistence regulations can be used to make handicrafts for sale.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. Adopting this proposal would allow subsistence users to more fully utilize brown bears harvested under Federal subsistence management regulations. The Council knows that the Brown Bear Handicraft Working Group is still working on this issue, but continued to support this proposal. The Council noted that the subsistence users in Unit 22 should be able to use brown bear parts for handicrafts. The Council also recognized that there are very few brown bears harvested in Unit 22 under Federal subsistence management regulations.

BOARD ACTION/JUSTIFICATION: **Adopted**, as recommended by the Seward Peninsula Subsistence Regional Advisory Council. This action is consistent with the provisions of ANILCA Section .803. It does not change the harvest limit so will have little or no effect on bear populations or other users, and it will allow increased use of brown bears already harvested.

Proposal WP10-77

DESCRIPTION: Proposal WP10-77, submitted by the National Park Service, requests that the Federal hunt areas for muskoxen within Unit 22D remainder be aligned with the State hunt areas by establishing a Kougarok, Kuzitrin, and Pilgrim river drainages hunt area.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support with modification as described in the OSM conclusion. Adopting this proposal would align Federal and State hunt areas in Unit 22D remainder, which would allow flexibility in Federal management and would allow

Federally-qualified users an opportunity to hunt in Unit 22D consistent with the opportunity already provided by the State.

BOARD ACTION/JUSTIFICATION: **Adopted with modification**. This proposal was on the consensus agenda. The regulation will read:

Unit 22D—Muskoxen

> ***That portion within the Kuzitrin River drainages—1 muskox by Federal permit or State Tier I subsistence registration permit; however, cows may only be taken during the period Jan. 1-Mar. 15. Federal public lands are closed to the taking of muskox except by Federally qualified subsistence users hunting under these regulations. Annual harvest quotas and any needed closures will be announced by the Superintendent of the Bering Land Bridge National Preserve, in consultation with ADF&G and BLM.***

Proposal WP10-78

DESCRIPTION: Proposal WP10-78, submitted by the Native Village of Wales, requests that the special provision to allow the harvest limit of one muskoxen and one bull moose for the Kingikmiut Dance Festival increase to three muskoxen in addition to one bull moose to occur within the regularly established season (one muskox between August 1—March 15; cows allowed from January 1—March 15 and one bull moose between August 1—December 31) in Unit 22E.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. Extending the moose and muskox harvest seasons and increasing the harvest limit for the Kingikmiut Dance Festival would allow for enough meat for the festival.

BOARD ACTION/JUSTIFICATION: **Adopted**, as recommended by the Seward Peninsula Subsistence Regional Advisory Council. The muskoxen and moose populations are able to support this limited harvest.

Proposal WP10-79

DESCRIPTION: Proposal WP10-79, submitted by the Native Village of Wales, requests that the harvest limit of one bull moose be changed to one antlered-bull and that the harvest season be extended from August 1—December 31 to August 1—March 15.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. It is important to educate people about this change in hunt season and it should help toward eliminating the inadvertent harvest of cows. This change should provide additional harvest opportunity.

BOARD ACTION/JUSTIFICATION: **Adopted**. This proposal was on the consensus agenda.

Proposal WP10-80

DESCRIPTION: Proposal WP10-80, submitted by the Stebbins Community Association, requests that the winter moose season in Unit 22A remainder be shifted from January 1—31 to January 15—February 15. The shift in season timing would better allow the communities of Stebbins and St Michael to meet their subsistence needs.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. The lack of daylight and inclement weather makes it difficult to take advantage of the winter moose season. The season shift to a later date would provide a better opportunity to subsistence users for harvesting moose.

BOARD ACTION/JUSTIFICATION: **Adopt with modification**. The extended season will allow for fluctuation is weather conditions and provide additional opportunity; the antlered bull hunt will continue to protect cows. The regulation will read:

Unit 22A—Moose

*Unit 22A remainder—1 bull. However during the period Jan. 1 ~~Jan. 31~~ -**Feb. 15**, only an antlered bull may be taken. Federal public lands are closed to the taking of moose except by residents of Unit 22A hunting under this regulation.*	*Aug. 1-Sept. 30* *Jan.1 ~~Jan. 31~~ **Feb. 15***

Proposal WP10-81

DESCRIPTION: Proposal WP10-81, submitted by the Alaska Wildlife Alliance, seeks to lower the wolf harvest limit in Unit 22.

COUNCIL RECOMMENDATION/JUSTIFICATION:
Seward Peninsula SRAC: Oppose. There are a lot of wolves in Unit 22 and the wolf population appears to be increasing. Wolves are an important subsistence resource in Unit 22. There is no need to limit the harvest of wolves.
Yukon-Kuskokwim Delta SRAC: Oppose. The wolf population in Unit 22 remainder is healthy and growing. The OSM conclusion indicates that wolves have been an important subsistence resource in Unit 22.

BOARD ACTION/JUSTIFICATION: **Rejected**. This proposal was on the consensus agenda.

Proposal WP10-108

DESCRIPTION: Proposal WP10-108, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests that the closure of Federal public lands for the taking of muskoxen, except by Federal-qualified subsistence users in Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek, be removed.

COUNCIL RECOMMENDATION/JUSTIFICATION: Support. The musk ox population has increased in Unit 22D, and opening hunts on federal lands will give more opportunity for harvest. There is a quota system in place which should address any conservation concerns. Brevig Mission and Teller do not use Unit 22D southwest (on the road system) too much, mostly use the other areas.

BOARD ACTION/JUSTIFICATION: **Adopted**. This proposal was on the consensus agenda.